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Miami-Dade County

American Dream Miami & The Graham Project

Transportation Impact Analysis for CDMP Amendment

Appendices

October 10, 2016

Leftwich Consulting Engineers, Inc.

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Miami-Dade County

Appendix I

October 10, 2016

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APPENDIX I-A:
METHODOLOGY COMMENT RESPONSES

APPENDIX I-A1:
CDMP TIA Methodology Technical Memorandum (TM) for American Dream Miami_090315

American Dream Miami
MIAMI-DADE COUNTY, FLORIDA

TECHNICAL MEMORANDUM
Methodology for Transportation Impact Analysis (TIA) for Comprehensive Development Master Plan (CDMP) Amendment

Prepared by:
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Orlando, Florida 32826

September 3, 2015

1.0 INTRODUCTION

This Technical Memorandum was prepared on behalf of International Atlantic, LLC ("the Applicant") in order to detail assumptions being proposed for a future Traffic Impact Analysis (TIA) associated with American Dream Miami ("the Project") in Miami-Dade, Florida. The Applicant will be proposing to undergo a standard amendment to Miami-Dade Comprehensive Development Master Plan (CDMP). As such, a TIA will be submitted in accordance with the County's *Instructions for Preparing Applications* document, dated April 2015. This Memorandum sets forth some key areas where a different methodology is deemed to be more appropriate in relation to the Project. **Figure 1** shows the proposed location of American Dream Miami.

2.0 STUDY AREA

The study area for the TIA will be defined in terms of degree of project traffic impacts on the surrounding roadway networks. Specifically, the TIA analysis will extend to all State and County roadways where external trips from the Project are forecast to be equivalent to or greater than five percent (5%) of the maximum service volume (MSV) at the adopted level of service (LOS) standard for each facility. Local collectors roadways proximate to the Project will also be included.

3.0 ANALYSIS YEARS

Analysis years for the CDMP TIA are proposed as follows:

- Existing Year 2015
- Short-term Year 2020 - to correspond to preliminary Project build-out schedule
- Long-term Year 2040 - to correspond with Miami-Dade 2040 Regional Long Range Transportation Plan (LRTP)

4.0 EXISTING CONDITIONS (Year 2015)

Existing operating conditions will be determined for the PM peak hour by comparing non-directional count data for the Year 2015 to the associated LOS volume standards and MSV for each facility.

For traffic counts, the TIA will reference FDOT *Florida Traffic Information* (FTI) website count data for State roadways and Miami-Dade Concurrency and Count Databases for County roadways. Where Year 2015 data does not exist, volumes will be extrapolated from historical volumes or one percent (1%), whichever is greater. Otherwise, traffic count data will be collected in the field. PM peak hour traffic volumes will be determined from daily count data by application of an available peak hour intensity factor (K factor) in the event peak hour counts are not directly available.

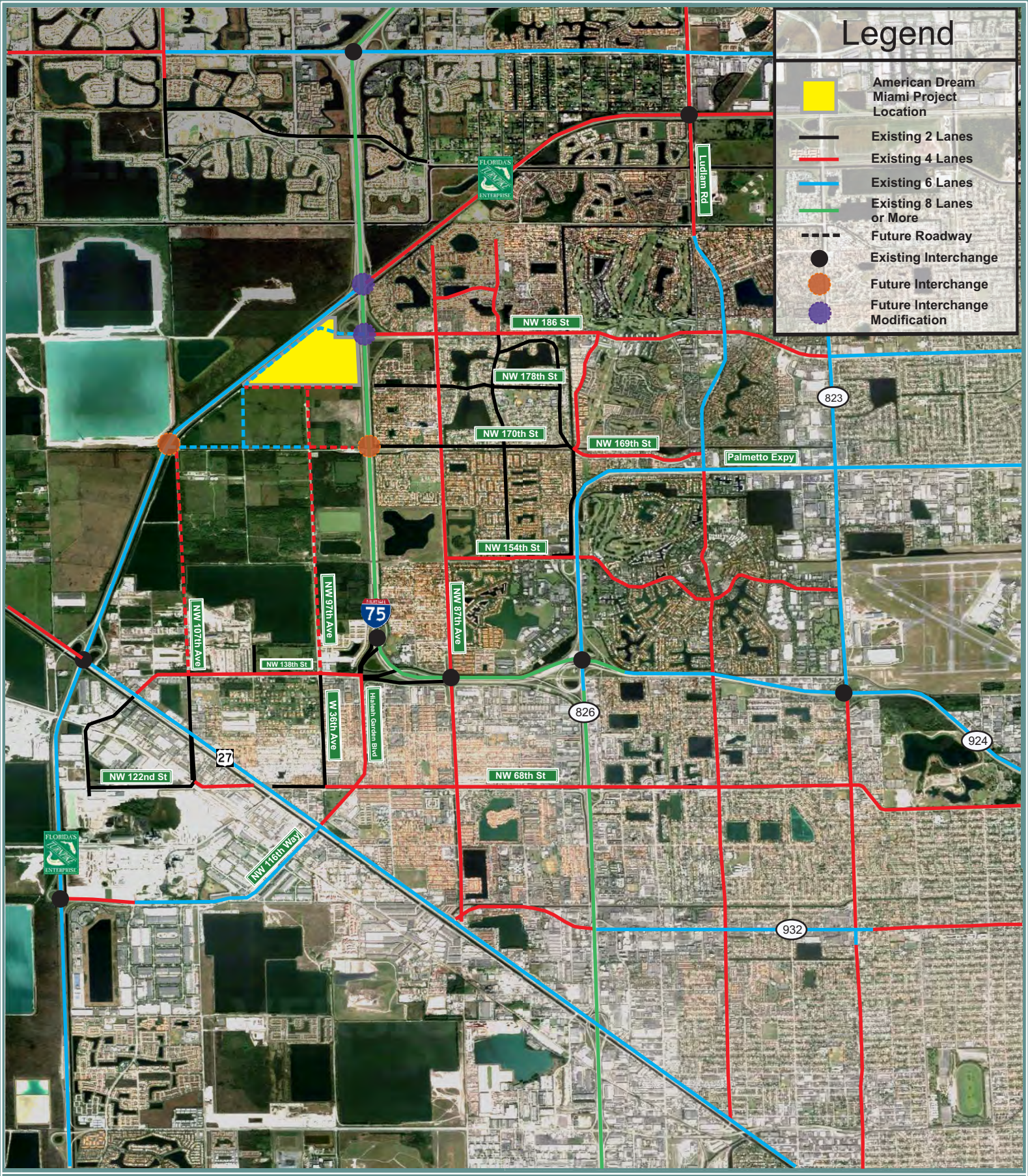
For service volumes and MSV, an inventory of roadway characteristics will be performed in order to identify existing number of traffic lanes, geometries, adopted standards, and other features necessary to determine volume standards on study area roadways. All projects funded for construction in the next three years will be assumed in place for existing conditions. The latest generalized FDOT LOS tables from the *Quality/Level of Service Handbook* will be referenced for State roadways and the Miami-Dade Concurrency Database will be referenced for County roadways. Otherwise, FDOT's LOSPLAN software will be used to derive service volumes as needed.

5.0 BACKGROUND TRAFFIC (Years 2020 & 2040)

Background (non-project) traffic conditions will be analyzed for the Years 2020 (Short-term) and 2040 (Long-term) to assess roadway segment LOS prior to applying project trips to the study area roadway network. Background LOS will be determined for the PM peak hour by comparing non-directional volumes for the future years to the associated LOS volume standards and MSV for each facility.

Cost-feasible roadway improvements in the study area will be assumed in place for the respective future year analyses. The TIA will reference Miami-Dade Metropolitan Planning Organization (MPO) Adopted 2015 Transportation Improvement Program (TIP) and planned roadway improvements listed in the Adopted 2040 LRTP, as well as other applicable work programs. Additionally, access roadways and interchange ramps assumed for the Project will be included in the respective future roadway networks. **Figure 2** includes a preliminary access plan for the Project which may be subject to change in the TIA as project access needs are further analyzed.

Background year volumes will be derived by applying linear growth from historical count data or one percent (1%) annual growth, whichever is greater. For the Year 2020, committed trips provided in the Miami-Dade County's Concurrency Database will be used if greater than linear growth. Additionally, background traffic patterns from regional model runs may be reviewed to anticipate the impact of future cost-feasible infrastructure improvements on background traffic patterns. Any deviation in growth projections as a result of future infrastructure will be documented and discussed in the TIA.



Project Location Map

American Dream Miami

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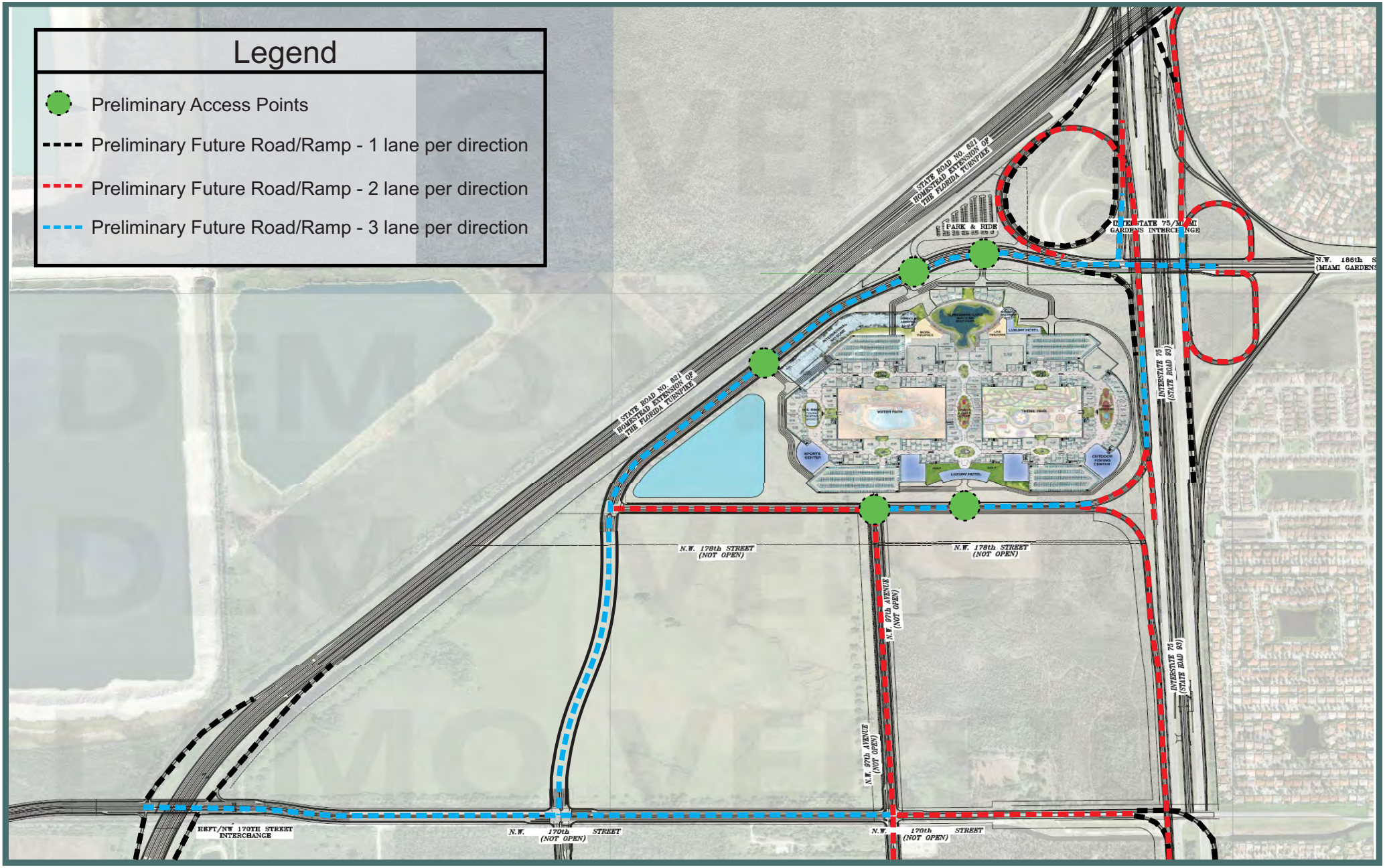
NTS

Figure:

1



Preliminary Access Plan

American Dream Miami

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Figure:

2

6.0 TRIP GENERATION

The American Dream Miami project is a unique attraction. At approximately 6,200,000 gross square feet, of which 3,500,000 square feet is leasable retail area, it will be the largest self-contained shopping/entertainment experience in the country. In addition to shopping, the project is envisioned to include a theme park, a water park, a movie theater complex, restaurants, hotel, and other attractions intended to capture trips for an extended stay.

The most representative land use category published in the Institute of Transportation Engineers (ITE) *Trip Generation Handbook* which could be used to forecast trips for the Project is ITE Code 820/Shopping Center. However, even as the fitted curve for ITE 820 shows larger shopping centers generate less external traffic per gross leasable area, the data available does not include any sample sizes which are comparable to the Project. Additionally, shopping centers do not typically have the theme park/water park element and other unique venues envisioned for American Dream Miami. Therefore, use of ITE Code 820 rates will likely underestimate the trip duration and capture behavior at the Project, which would overestimate the amount of external trips generated. As recommended by ITE methodology, a more representative site was identified to take collect data from for determination of trip generation behavior.

The Mall of America (MOA) in Bloomington, Minnesota was found to be the most representative site available to observe trip rates for use with American Dream Miami. MOA is operated by the same developer who is planning American Dream Miami and with similar scale and unique concept and mix of land uses as shown in **Table 1**. The Applicant proposes use of count data at MOA to determine trip generation characteristics for the Miami Project.

Table 1: Size and Land Use Comparison of the Project and MOA

Variable	MOA	American Dream
Gross Leasable Area of Retail (GLA)	2,581,582 sf	3,500,000 sf
Gross Floor Area (GFA)	4,404,698 sf	6,200,000 sf
% GLA of GFA	59%	56%

The Applicant recently completed external traffic counts at MOA in June 2015 and again in August 2015 and seasonally adjusted. Complete documentation of data and calculations will be provided to Miami-Dade County for review with the CDMP TIA. A preliminary summary of findings for MOA trip rates are provided in **Table 2.**

Table 2: Preliminary MOA External Trip Generation Rates

Period	Traffic Count (June 2015)	Trip Rate (June 2015)	Traffic Count (August 2015)	Trip Rate (August 2015)	Trip Rate Average
Weekday	49,408	19.14	49,800	19.29	19.21
PM Peak Hour	3,347	1.30	4,173	1.62	1.46

Notes:
- Traffic counts are in units of external vehicle trips per period and were averaged and seasonally adjusted.
- Rates shown in units of external vehicle trips per period per 1,000 square feet of GLA.

Based on MOA trip rates, a preliminary trip generation forecast was performed for American Dream Miami at build-out. No internal capture rate was applied as MOA trip rates are based on external trips (similar to ITE's treatment of Shopping Center). An upward adjustment of 10.8% of net external trips was applied to American Dream to account for light rail transit ridership at MOA (currently unplanned in Miami). A pass-by trip reduction was applied due to project trips in the background traffic to derive the new external trip forecast for the Project. The percent reduction was derived from the ITE fitted curve equation for Land Use 820 (Shopping Center) as provided in ITE's *Trip Generation Handbook*. **Table 3** shows a preliminary summary of Daily and PM Peak Hour trip generation for American Dream Miami.

Table 3: Preliminary Trip Generation Summary for American Dream Miami

Land Use	ITE Code	Size	Units	Trip Rates		Trip Forecast	
				Daily	PM Peak	Daily	PM Peak
Entertainment/Retail (GLA)	-	3,500	KSF	19.21	1.46	67,251	5,098
Total Generated Trips (pre-LRT adjustment)						**67,251**	**5,098**
PM Internal Capture =	0.0%					0	0
Net External Trips (pre-LRT adjustment)						**67,251**	**5,098**
LRT Adjustment =	10.8%	of net external trips				3,540	268
Net External Trips						**70,791**	**5,366**
Passerby Trips =	14.0%	of net external trips				9,911	751
New External Trips						**60,880**	**4,615**

Notes:
- Rates shown in units of external vehicle trips per period per 1,000 square feet of Retail GLA where American Dream consists of 3,500 ksf Retail GLA of 6,200 ksf GFA including entertainment plus hotel.
- Surveys at MOA show 10.8% LRT trips. This % added back into ADM with MOA auto occupancy of 2.3 applied.
- Pass-by percentage calculate per ITE fitted curve for Shopping Center.

For comparison, the CDMP TIA will provide a trip generation forecast to estimate maximum trip generation from the current CDMP Land Use Plan map designations for the land parcels to be affected by the amendment.

7.0 TRIP DISTRIBUTION AND ASSIGNMENT

Distribution of forecasted project trips generated by American Dream Miami will be determined with the use of an adopted region travel demand model based on the Florida Standard Urban Transportation Model Structure (FSUTMS). Adopted cost-feasible roadway networks and socio-economic (SE) data for Years 2020 and 2040 will be used for the model runs.

The Project data will be distributed into one or more traffic analysis zones (TAZ) that will be situated within the roadway network in a manner to appropriately represent the project's land uses and access points. Any roadways and interchange ramps assumed for access to the project will be coded into the cost-feasible networks. The loaded 2020 and 2040 models will then be run to distribute person-trips for all model trip purposes between allocated trip origins and destinations.

From the loaded run output files, project trip distribution percentages will be abstracted and checked to ensure the values are reasonable. The percent distribution will be taken with respect to the total external project trips assigned by the model at a screenline established outside of the area where any internalization is occurring in the model. Therefore, the Project trip distribution at the screenline will represent all external trips from the Project and will sum to 100%. Project trips will then be assigned to the corresponding study area roadway segments based on the resulting distributions.

8.0 SHORT-TERM (Year 2020) & LONG-TERM (Year 2040) ANALYSIS

Project trips will be added to the forecasted background traffic to obtain the total future roadway segment volumes to conduct the Short-term (Year 2020) and Long-term (Year 2040) LOS analysis. Total link volumes (background plus project traffic) will be compared to service volumes standards and MSV to determine future operating conditions for roadway segments within the study area. These analyses will first be performed assuming the Project is built with maximum allowable impact using the current CDMP land use designations. Then, the analyses will assume the Project is built as proposed. The impact of the proposed amendment change on LOS will be summarized by comparison of the "Without Amendment" scenarios to the "With Amendment" scenarios for roadways within the study area. Roadway segments with volumes that exceed adopted MSV in the future years will be clearly identified in the TIA.

9.0 MITIGATION ANALYSIS

As needed, a mitigation analysis will be included in the TIA to address the need for new facilities or improvement to existing facilities which may be required to mitigate project impacts as a result of the proposed amendment. Recommended mitigation will include consideration of maintaining adopted LOS on study area roadways where LOS was not forecast to be exceeded in the "Without Amendment" scenarios. Consideration of any mitigation measures will also include a range of options to address any safety and mobility needs for the Short-term (Year 2020) and Long-term (Year 2040) time frames.

APPENDIX I-A2:
American Dream Miami Trip Generation Summary_09172015

AMERICAN DREAM MIAMI TRIP GENERATION SUMMARY

09/17/15

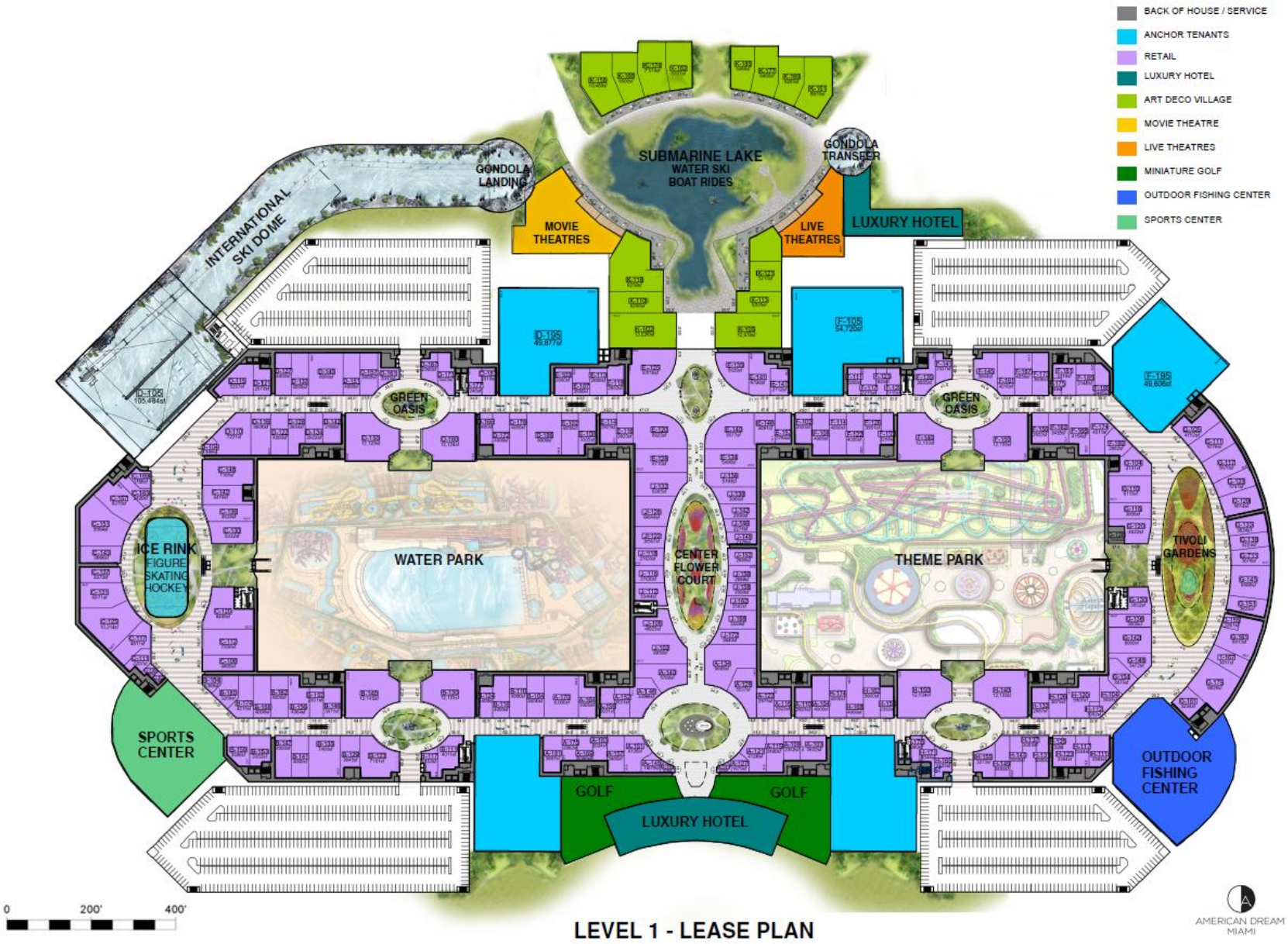
To be Considered…

1. What is American Dream Miami (ADM)?
2. What guidance/data does ITE provide for use in forecasting trips for ADM?
3. Are there any adjustments that should be made to improve the forecast?
4. Has the best data available been used to achieve the ADM forecast?

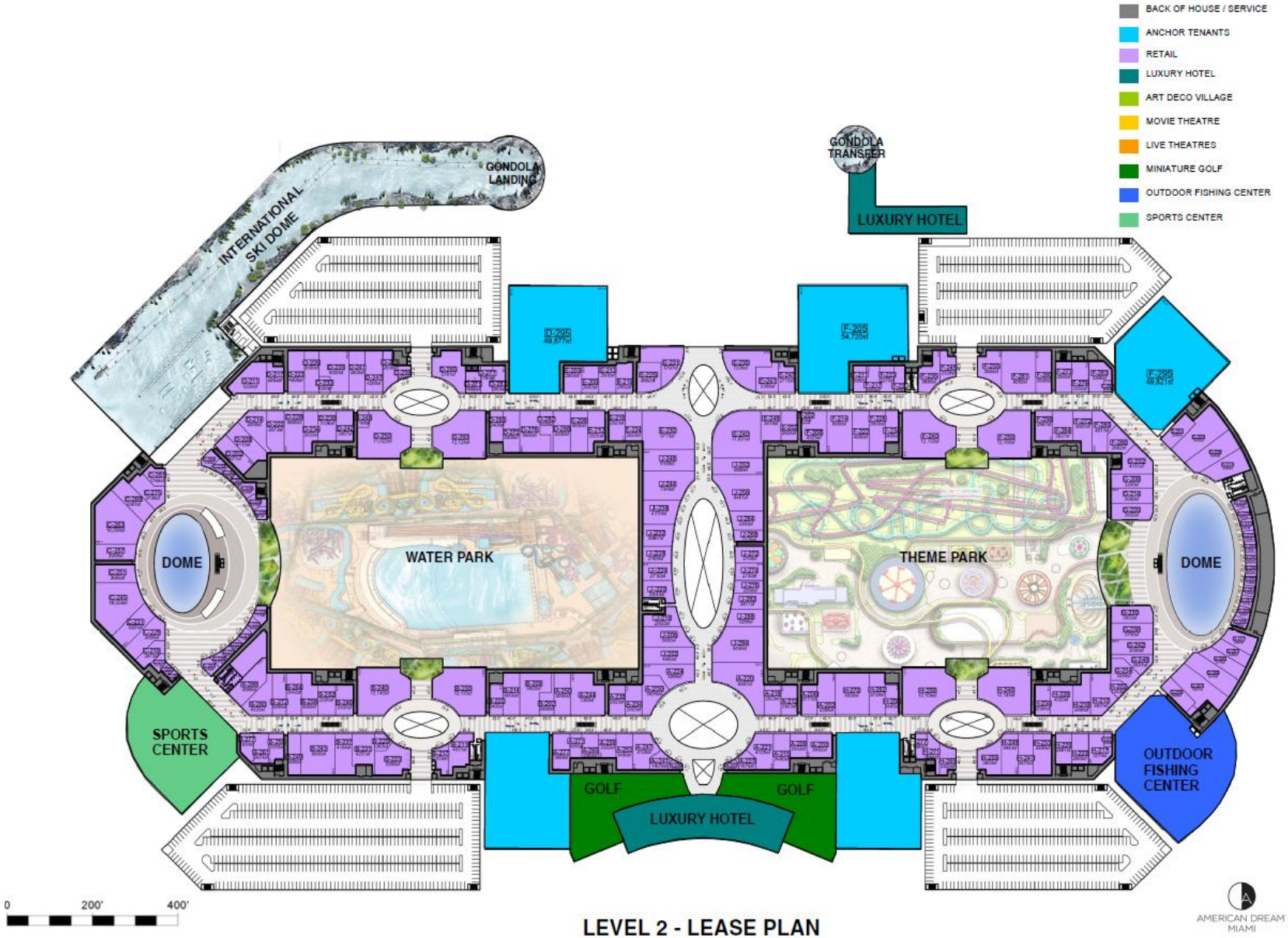
What is American Dream Miami?

- It's a tourist attraction…a job center…a shopping destination…an entertainment complex…It's **unique**.
- 6,200,000 square feet gross floor area (GFA) plus hotel
- 3,500,000 square feet gross leasable area (GLA) of retail
- 2,700,000 square feet of entertainment and common space use, including:
  - Indoor Theme Park
  - Indoor Water Park
  - Sports Complex
  - Theaters (Movie & Live Action)
  - Other Unique Exhibits and Attractions

What is American Dream Miami?



What is American Dream Miami?



What Guidance from ITE?

- **Trip rates** derived from count data from (primarily) single-use, free-standing sites
- Methodology for estimating **internal capture** of Mixed-Use Development
- Methodology for estimating **pass-by** trips for (primarily) retail uses
- **Cautionary notes** for the appropriate use of ITE data and guidance

Potential Trip Rates for ADM

- For the **retail** portion, ITE Code 820 (Shopping Center)?
  - Integrated uses (ex: retail, office, movie theaters, restaurants, post offices, banks, health clubs) developed and managed as a unit
  - 302 sites for Daily, 426 sites for PM Peak
  - Sites range from 1,700 to 2,200,000 sf (only 2 sites > 2 msf for PM Peak)
  - Fitted curve equations show that as sites increase in size, trip rate decreases
  - All rates determined with respect to GLA

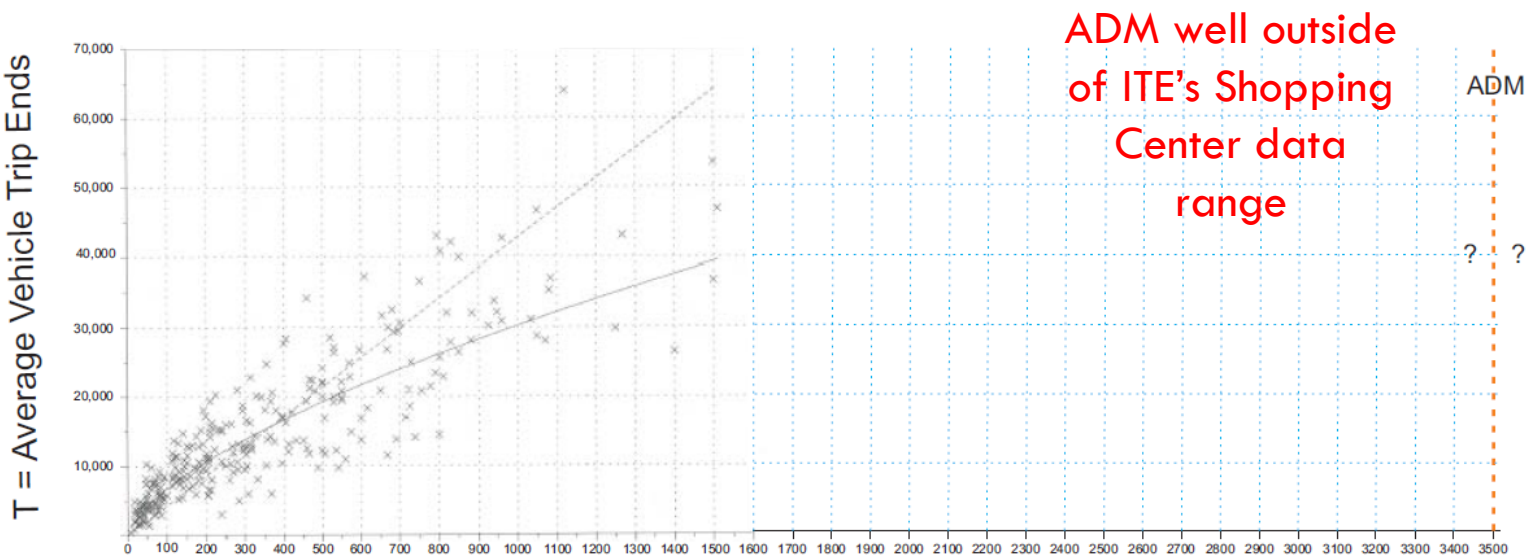
Potential Trip Rates for ADM

- Issues w/ applying Shopping Center:
  - ITE's description doesn't quite match (ADM not a traditional shopping center site)
    - Self-contained
    - Tourist attraction
    - Specialty retail uses
    - More internal capture possibilities
    - Longer durations per visit expected
    - Not a typical retail trip
  - ADM is well outside of the range of sizes from ITE sites (size matters)…

Potential Trip Rates for ADM

Shopping Center
(820)

Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Leasable Area
On a: Weekday



X Actual Data Points —— Fitted Curve ----- Average Rate

Potential Trip Rates for ADM

- For the **entertainment** portion…
  - ITE Code 414 (Water Slide Park)?
    - Limited data, small sites, description doesn't match well
  - ITE Code 431 (Mini Golf Course)?
    - 1 sample, free-standing site
  - ITE Code 435 (Multipurpose Recreational Facility)?
    - Limited data, small sites
  - ITE Code 441 (Live Theater)?
    - 1 sample (from NY in 1979)
  - ITE Code 445 (Multiplex Movie Theater)?
    - Limited data, description doesn't match well
  - ITE Code 466 (Snow Ski Area)?
    - Limited to facilities in the mountains w/ real snow
  - ITE Code 480 (Amusement Park)?
    - Limited data, free-standing sites

ITE Internal Capture for ADM?

- ITE methodology for predicting internal capture for mixed-use sites based on NCHRP Report 684:
  - Only 6 site surveys ranging from 7 to 300 acres
  - Representative in a range from 0.5 to 3 msf of development
  - No data from fully self-contained development
  - No data for significant entertainment included in the land use mix (mostly movie theaters)
  - Not appropriate methodology for developments that differ significantly from those surveyed

Conclusion on use of ITE Data

- ITE trip rates are not ideal in estimating trips for ADM due to:
  - Large size of retail component
  - Limited data for entertainment components
  - ITE rates based on data from free-standing sites and with other parameters inconsistent with ADM
- ITE internal capture methodology are not ideal for ADM due to:
  - Large size of project
  - Limited data for unique land use mix
  - No data for a fully self-contained development like ADM

So, what does ITE suggest?

"…***<u>data should be collected and used to estimate trip generation</u>*** *under the following circumstances:*

- *…study site not covered by land use description…; OR*
- *…study site not within range of data points; OR*
- *…database has insufficient number of data points; OR*
- *…study site may have different trip-making characteristics than the baseline sites…"*

We contend that all of these circumstances apply and that better data is available for use in forecasting trips for ADM.

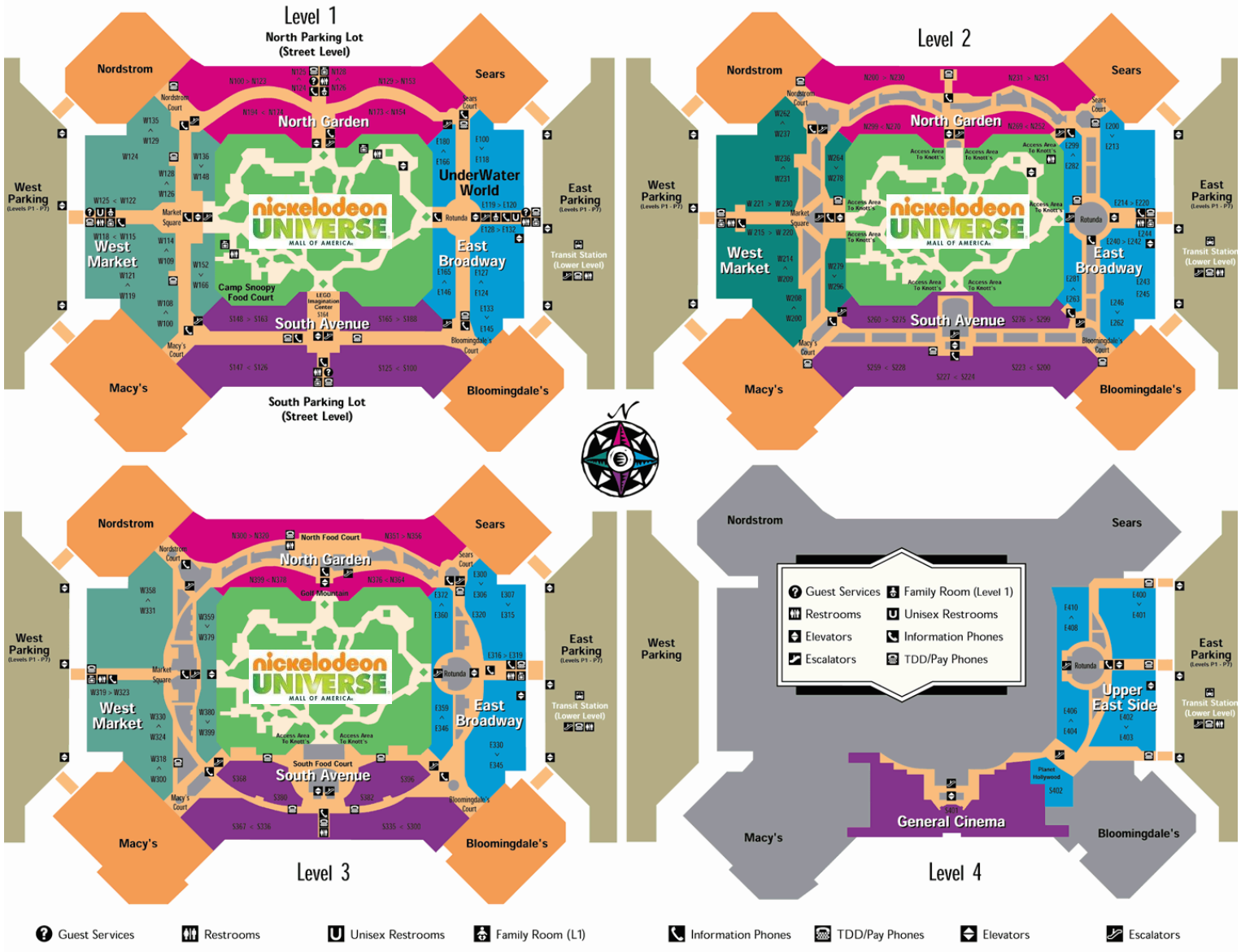
What is the best data source?

- A development of similar:
  - Size
  - Land Use Mix
  - Site Design (distance/travel mode between uses)
  - Customer Base/Trip Types
  - Uniqueness/Vision

What is Mall of America?

- It's a tourist attraction…a job center…a shopping destination…an entertainment complex…It's **unique**.
- 4,400,000 square feet gross floor area (GFA) plus hotel
- 2,600,000 square feet gross leasable area (GLA) of retail
- 1,800,000 square feet of entertainment and common space use, including:
  - Indoor Theme Park
  - Aquarium
  - Comedy House
  - Movie Theater
  - Other Unique Exhibits and Attractions

What is Mall of America?



MOA vs. ADM

Variable	MOA	ADM
Gross Leasible Area (GLA) in sf	2,581,582	3,500,000
Gross Floor Area (GFA) in sf	4,404,698	6,200,000
% GLA of GFA	59%	56%

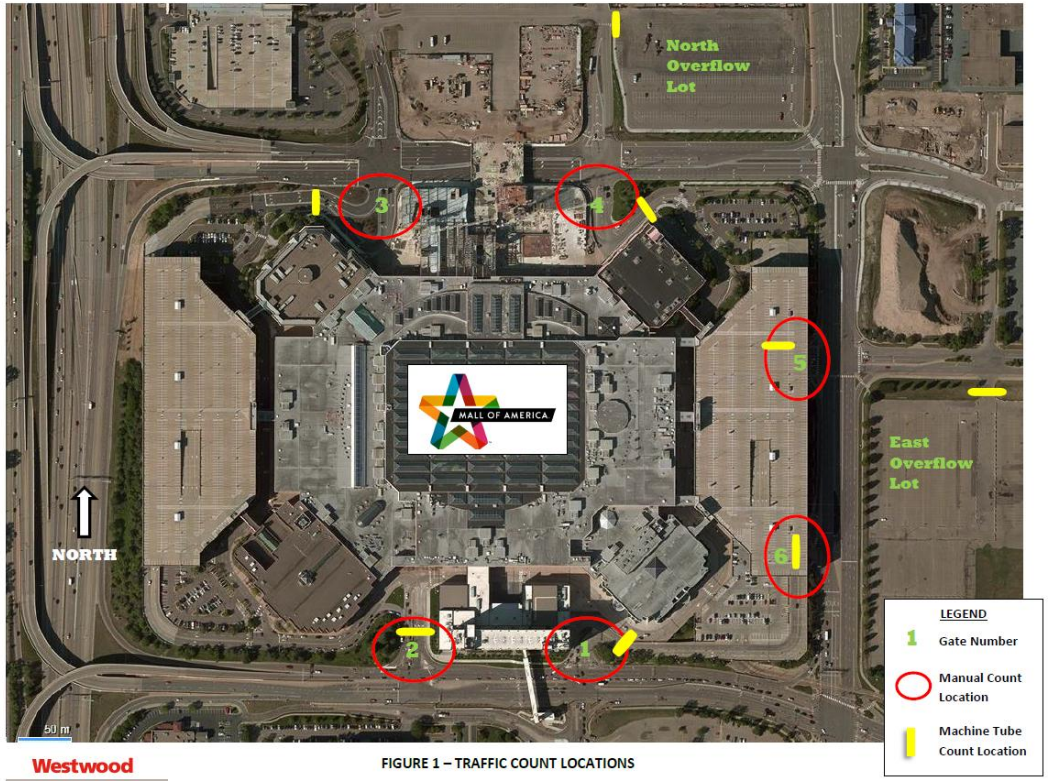
MALL OF AMERICA		Retail (GLA)	Entertainment	Common
1. (a) Retail Mall GLA	1,888,898	1,888,898		
1. (b) Retail Anchor Dept Stores	692,684	692,684		
2. Nickelodeon Universe	275,600		275,600	
3. Sea Life Aquarium	44,827		44,827	
4. Lego	6,180		6,180	
5. Movie Theaters	64,087		64,087	
6. Aces Flight Simulator	1,792		1,792	
7. House of Comedy	8,015		8,015	
8. Moose Mountain Golf	11,055		11,055	
9. Amazing Mirror Maze	2,554		2,554	
10. Barbie the Dreamhouse	30,346		30,346	
11. CSI the Experience	11,681		11,681	
12. Star Trek the Exhibition	15,642		15,642	
13. Common/stairs/mech/BOH/etc	950,713			1,351,337
14. Hotel (506 rooms)	386,690			
SUBTOTALS		2,581,582	471,779	1,351,337
TOTAL GROSS BUILDING AREA (sf) less Hotel				4,404,698

"CORRECTED AFTER MEETING"

AD MIAMI		Retail (GLA)	Entertainment	Common
1. Retail (sf)	3,500,000	3,500,000		
2. Theme Park (sf)	370,000		370,000	
3. Water Park (sf)	370,000		370,000	
4. Tivoli Garden (sf)	35,000		35,000	
5. Submarine Lake (sf)	110,000		110,000	
6. Art Deco Village (sf)	120,000		120,000	
7. Movie Theaters (sf)	35,000		35,000	
8. Live Venue (sf)	25,000		25,000	
9. Ski Slope (sf)	200,000		200,000	
10. Sports Center (sf)	75,000		75,000	
11. Outdoor Fishing (sf)	65,000		65,000	
12. Miniature Golf (sf)	95,000		95,000	
13. (a) Common Area (sf)	600,000			600,000
13. (b) Common Area - BOH (sf)	600,000			600,000
14. Hotel (2,000 keys)				
SUBTOTALS (sf)		3,500,000	1,500,000	1,200,000
TOTAL GROSS BUILDING AREA (sf) less Hotel				6,200,000

MOA Data Collection Methodology

- Collected counts at external stations and developed external trip rates per GLA of retail (similar to ITE's treatment of Shopping Center) per period (Daily, PM)
- Stationed counters and/or personnel at external stations for 72 hours to get 3-day averages for weekday rates
- Adjusted the counts for seasonal variability based on data from video feeds



Westwood

FIGURE 1 – TRAFFIC COUNT LOCATIONS

MOA Data Collection Methodology

- Two independent count programs:
  - June 2015 Westwood
  - August 2015 Kimley»Horn
- The seasonally adjusted external trip rates per GLA per period were averaged from the two independent reports

Period	Traffic Count (June 2015)	Trip Rate (June 2015)	Traffic Count (August 2015)	Trip Rate (August 2015)	Trip Rate Average
Weekday	49,408	19.14	49,800	19.29	19.21
PM Peak Hour	3,347	1.30	4,173	1.62	1.46

ADM Trip Generation

- Applied MOA rates to ADM
- Internal capture built into the external trip rate (similar to ITE's treatment of Shopping Center)
- Using MOA rates likely conservative for ADM b/c:
  - ADM is larger than MOA (ITE shows as GLA increases, rates decrease)
  - W-F counts instead of T-Th for weekday rates (Friday produces higher counts)
  - Proportion of hotel/tourists expected to be greater at ADM to capture more trips onsite
  - Vehicle Occupancy expected to be higher at ADM to mirror Florida theme park type trip behaviors

Land Use	ITE Code	Size	Units	Trip Rates		Trip Forecast	
				Daily	PM Peak	Daily	PM Peak
Entertainment/Retail (GLA)	-	3,500	KSF	19.21	1.46	67,251	5,098
Total Generated Trips (pre-LRT adjustment)						**67,251**	**5,098**
PM Internal Capture =	0.0%					0	0
Net External Trips (pre-LRT adjustment)						**67,251**	**5,098**

ADM Trip Generation

- Transit Adjustment for Light Rail
  - MOA has LRT access with various sources indicating a MOA visitor ridership between 3% to 11%
  - ADM will not have a LRT system for mode split
  - From a 2012 survey at MOA, LRT indicated 10.8% ridership:

Travel Class	Travel Mode	Mode Total	Class Total	% Class
Standard Vehicle Trip	Private Vehicle Park	183	**201**	**75.0%**
	Private Vehicle Drop	2		
	Private Vehicle Short Term	1		
	Limo	2		
	RV	1		
	Rental Vehicle Park	11		
	Taxi	1		
Transit - Non-Rail	Public Bus	11	**11**	**4.1%**
Transit - Rail	Light Rail	29	**29**	**10.8%**
Other Vehicle Trip	Hotel Shuttle	18	**23**	**8.6%**
	Senior Shuttle	2		
	Charter Bus	3		
Non-Vehicle Trip	Bicycle	2	**4**	**1.5%**
	Walk	2		
		268	**268**	**100.0%**

ADM Trip Generation

- Transit Adjustment for Light Rail (cont'd)
  - ADM is being planned to achieve all alternative mode splits at MOA with the exception of LRT
  - ADM trip generation was adjusted up to include the 10.8% person-trip LRT ridership into the external vehicle count at Florida theme park vehicle occupancy rates
- Pass-by reduction was calculated per ITE's Shopping Center fitted curve equation to account for vehicles in the background traffic of adjacent freeways (best data available).

ADM Trip Generation

"CORRECTED AFTER MEETING"

Land Use	ITE Code	Size	Units	Trip Rates		Trip Forecast	
				Daily	PM Peak	Daily	PM Peak
Entertainment/Retail (GLA)	-	3,500	KSF	19.21	1.46	67,251	5,098
Total Generated Trips (pre-LRT adjustment)						**67,251**	**5,098**
PM Internal Capture =	0.0%					0	0
Net External Trips (pre-LRT adjustment)						**67,251**	**5,098**
LRT Adjustment =	10.8%	of net external trips				4,682	355
Net External Trips						**71,933**	**5,453**
Passerby Trips =	14.0%	of net external trips				10,071	763
New External Trips						**61,862**	**4,690**

In Summary…

1. What is American Dream Miami (ADM)?

A unique self-contained attraction with large retail and entertainment components plus hotel, dining and other attractions. It is dissimilar to a typical shopping center that ITE has data for, and its components are also difficult to match up with data available from ITE.

2. What guidance/data does ITE provide for use in forecasting trips for ADM?

ITE recommends data collection at similar sites for ADM instead of using ITE data due to dissimilar land use descriptions, the size of the ADM falling outside of the ranges of ITE data, lack of data for some uses, and overall differences in variables that will affect trip-making characteristics. Additionally, there are limitations in the data used to derive ITE's internal capture methodology that discourage its use for ADM's trip generation forecast.

3. Are there any adjustments that should be made to improve the forecast?

The trip generation presented for ADM using MOA rates is likely conservative. One adjustment that is proposed is an adjustment for the LRT opportunity at MOA that will not be available at ADM.

4. Has the best data available been used to achieve the ADM forecast?

Yes. MOA is the most similar facility existing today to the proposed ADM. Two independent counts programs were conducted, per ITE guidance, to derive the MOA trip rates for use at ADM. A logical adjustment was made for LRT and ITE's pass-by reduction was utilized where no alternative data exists.

APPENDIX I-A3:
CDMP TIA Methodology Comment Set Response _101615

AMERICAN DREAM MIAMI
MIAMI-DADE CDMP TIA METHODOLOGY
COMMENT SET & RESPONSES
October 16, 2015

Introduction to CDMP TIA Methodology Comment Responses

Attached are the responses to comments received from eleven (11) reviewing agencies and interested parties on the proposed traffic study methodology for the CDMP amendment. Comments were received from Miami Dade County, FDOT Districts 4 and 6, Florida's Turnpike, MDX, Broward County, SFRPC, and the cities of Hialeah, Hialeah Gardens, Miami Lakes, and Miramar. The comments and responses were numerous while many pertained to the same topic. Accordingly, to allow the follow-up methodology meeting on October 23, 2015 to be focused and efficient we will provide a presentation which groups these comments and the Applicant response.

As we review the CDMP methodology comments and responses it is helpful to keep in mind all the traffic studies that are yet to be performed related to this project. Many of the answers that will not come from the CDMP traffic study will come from other subsequent studies. For example, after the CDMP traffic study is completed, an additional traffic study will be prepared for Miami-Dade County that generally follows the guidelines for the Response to Question-21 of a DRI. Since the CDMP also follows most of these guidelines, including the limits of the study area, the DRI type traffic study will use and expand the CDMP traffic study to also include key intersections, and interchanges that are located along significantly impacted roadways as identified from the CDMP analysis.

In addition to these two traffic studies, the interchanges themselves must undergo State and Federal studies including but not limited to; Reevaluations of the interchange analysis included in the I-75 PD&E, Interchange Access Requests (IAR), and Turnpike Interchange Justification Reports (TIJR). All these studies will be reviewed and coordinated by the FDOT and FHWA, and are very comprehensive with detailed State and Federal guidelines.

With the foregoing in mind the ADM team is hopeful that we can address all significant methodology items pertaining to the CDMP at the follow-up methodology meeting in October 23, 2015. We anticipate that additional follow up information will continue to be exchanged while the CDMP TIA is in progress, along with addressing review comments pursuant to the submittal of the CDMP TIA.

Miami-Dade County Traffic Engineering Division - September 23, 2015

1. Due to its proximity to the County line, the project needs to be coordinated with Broward County.

   LC: Broward County was notified of the project by the SFRPC and was represented at the methodology meeting.

2. The consultant needs to show the limits of the study area on a map by delineating where the proposed 5% maximum service volumes would terminate. In addition, the study boundary may be adjusted to include roadway corridors as specified by the County.

   LC: The study area provided in the CDMP TIA will be driven by the final trip generation, which is currently under review by all reviewing agencies, and the trip distribution from model runs which have not yet been performed. Therefore, a definitive boundary is premature at this time. Per the requirement of the CDMP, the study area will extend to all roadways where external project trips from the project are forecast to be equivalent to or greater than 5% of the MSV for each facility.

3. Upon further review, directional volumes should be requested based on the County's knowledge of the local surface roadways that would be impacted.

   LC: We will provide total and directional volumes in the TIA as requested. However, the CDMP TIA must also satisfy the minimum requirements of the CDMP adopted guidelines.

4. At a minimum, 3-day counts need to be collected on the major roadways. From this data, the peak hour can be determined. Use of the K factor should be avoided to calculate the peak hour volumes. All effort should be made to collect actual traffic counts.

   LC: Existing traffic counts will primarily be derived from existing County and FDOT databases and supplemented with three day counts where insufficient reliable data is available.

5. In addition to PM peak hour volumes, AM peak hour volumes may be required for roadway segments where a school exists.

   LC: Note that any AM peak hour generation from the project would be a small fraction of the PM peak hour. However, AM peak hour data will be collected and analyzed for any specific school zones identified. A note of caution that where roadway segments have school zones the speed limit is generally reduced and level of service calculations will be inconclusive.

6. The following sentence needs to be revised: "All projects funded for construction in the next <u>5</u> years will be assumed in place for <u>short-term 2020</u> conditions." The existing traffic analysis should only use the existing roadway condition.

   LC: The intent of showing "All projects funded for construction in the next 3 years" in the existing analysis was to account for additional system capacity under construction or soon to be under construction. In light of the preference to exclude these projects in the existing condition analysis, the CDMP TIA will exclude them in the existing analysis. For future year

background conditions (Years 2020 and 2040), the CDMP TIA will include all planned cost feasible improvements consistent with the CDMP TIA instructions.

7. The Adopted TIP year is 2016 instead of 2015.

   LC: The most recent adopted plans will be utilized in the CDMP TIA.

8. Although I-75 and the HEFT provide the main access to the project, it is required that the background growth rate be calculated separately for expressways vs. surface roadways since these have different characteristics.

   LC: Each roadway link in the study area will be analyzed individually in the CDMP TIA as proposed in the Methodology Statement.

9. Background traffic patterns from regional model runs should be reviewed for 2020 and are required for 2040.

   LC: Model runs will be performed and reviewed for 2020 Short Term and 2040 Long Term conditions as proposed in the Methodology Statement.

10. Due to the magnitude of the project, a detailed land use trip generation calculation should be conducted with ITE LUC 820/Shopping Center only being applied to the retail/services component. The rest of the breakdown should be comprised of hotel and entertainment land use codes. Furthermore, a more detailed description of the attractions is required.

    LC: The Applicant's presentation addressed the trip generation proposal in the methodology meeting. The trip generation will be based on ITE's recommendation to derive trip generation forecasts from count data at the most comparable land use available which is the Mall of America in Bloomington, MN (Minneapolis/St Paul Metropolitan Area).

11. A detailed breakdown of the existing land use for the Mall of America (MoA) in Bloomington, Minnesota is necessary in order to compare this with the proposed project. Also, the trip generation rate produced by MoA should be compared with the detailed land use trip generation calculation for American Dream Mall as requested in the previous comment. A section documenting the proposed trip generation should be added to the methodology as well.

    LC: This breakdown of land uses was provided at the methodology meeting and was provided to the County and every other party that requested it. The CDMP TIA will have the PowerPoint attached describing the details being requested.

12. Is the pass-by percentage being applied on the entire project or just the retail component? If it is deemed that the ITE trip generation rate is not applicable to this unique project, then the same argument can be made for the use of the pass-by percentage and would require one to be calculated from a study of the MoA. Otherwise, this pass-by percentage should be 0%.

    LC: Consistent with providing a trip generation forecast based on the best available data (ITE's recommendation), the fitted curve equation for Shopping Center was used to forecast pass-

by trips using only GLA of the retail square footage portion of ADM. Due to the inverse relationship of GLA to pass-by percentage from the equation, the resulting 14% pass-by is much lower than the rate from a more traditional sized shopping center. This appears to be a realistic assumption based on the hundreds of thousands of commuters on the two adjacent freeways who will pass by the project at build-out. These trips may be work trips for a commuter making a quick shopping or dining stop during their regular commute. It may be a new carpool stop for an employees from a vehicle already in the background traffic. It could be for a delivery to the project from a vehicle on a pre-existing route. It could be from commuters on business travel or vacation who are curious about ADM and make an unplanned stop.

13. It is recommended to coordinate with Miami-Dade Transit Department to include/add any bus routes that would service the project. This would predicate the need for a modal choice 'step' in the model.

    LC: We have substantial reliable mode choice data from the MOA from Year 2005 and again in 2012 from the Cambridge Systematics Special Generator study. At this time we must be conservative so as not to understate the trip impacts. Any further increase in transit will be desired and the Applicant will work with Miami Dade County Transit toward that end throughout the approvals and throughout the life of the project.

    Notwithstanding, the traffic impact analysis methodology needs to be revised in order to follow the Development of Regional Impact (DRI) review process as outlined in the Florida Department of Transportation (FDOT) Transportation Site Impact Handbook April 2014. Please note that a DRI is defined by Section 380.06(1), Florida Statutes (FS.), as any development which, because of its character, magnitude or location, would have a substantial effect on the health, safety or welfare of citizens in more than one county, in this case Miami-Dade and Broward counties. Thresholds which determine when a development should undergo the DRI review process can be found in Section 380.0651, F.S., and Chapter 28-24, Florida Administrative Code (F.A.C.).

    LC: The ADM is located within a DULA and as such is exempt from DRI review. However, the Applicant has committed to generally follow the DRI study guidelines to fully address impacts.

    In addition, a review was also made of the Mall of America Special Generator Survey that was submitted separately for the surrogate shopping destination, MoA, as follows:

1. The size of the surrogate site is stated as 4.2 million sq. ft. with a variety of entertainment and non-shopping/retail attractions. Any proposed similar site in the County should consider the effect of the size and variety of uses with the project.

   LC: The Applicant's presentation addressed the trip generation proposal in the methodology meeting. These adjustments have been made as presented at the meeting.

2. The survey listed 30% out-of-region visitors for the surrogate site as shown on page 1-1 and summarized on pages 3-6 and 3-7. This percentage may differ for a similar type of shopping

mall in Miami-Dade County; therefore, the results need to be adapted accordingly for local and regional differences.

LC: Given the tourist characteristics of Miami-Dade County and Broward County the "out of region" visitors are not expected to decrease below MOA levels. At this time the MOA provides the best comparable data and local adjustments would at best constitute a guess in the absence of data. The Sawgrass Mills Mall in Sunrise has a high percentage of foreign visitors from Europe and South America (Miami Herald) and we assume that will be the same for ADM.

3. The "Primary Reason to Visit the MoA" is shown in Figure 3.3 on page 3-5 differs with similar information provided in Appendix A, Table A.1 and A.3. We need the clarification.

   LC: This Applicant did not commission the Cambridge Systematics report; it was done independently for the Minneapolis MPO. Therefore, we cannot clarify any inconsistencies with any authority.

4. Figure 3.14 on page 3-14 and Table A.19 in Appendix A show a difference in the information for the "Unreported/Did not report" percentage (i.e. 14% and 25%, respectively.)

   LC: See response to comment 3 above.

5. The surrogate site is served by a light rail line and public bus transit as indicated in Table A.10, with the percentage contributions at 11% and 4%, respectively. These transit capture percentages need to be verified for use with a similar site in Miami-Dade County.

   LC: The Applicant's trip generation presentation from the methodology meeting described how the percentage of LRT ridership from MOA was added back into the trip generation forecast for ADM and converted to vehicular trips.

6. There was no seasonal variation indicated for the number of visitors collected in the survey. Therefore, any trip generation information used from this survey will also require a seasonal variation adjustment.

   LC: The Applicant's trip generation presentation from the methodology meeting described that the MOA trip rates were "annualized" based on continuous data collected at the entry point of MOA. Seasonal data is available and will be provided with the CDMP TIA.

Broward County Planning and Development Management Division - October 2, 2015

1. The trip generation proposed indicates a PM peak hour trip generation rate representing approximately 7.58% of total daily traffic. This implies that the hourly trip generation is relatively constant throughout the operating hours of the mall. Given the unique characteristics of the project, the traffic consultant should review the hourly trip generation totals from the Mall of America site and, if appropriate, utilize that data to better model the hourly trip-making patterns throughout the day.

   LC: As described in the Methodology Statement and within the presentation provided at the methodology meeting, the weekday trip rates provided in the Methodology Statement were derived from two independent counts programs. Each effort (one in June 2015 and one in August 2015) involved collecting traffic counts at MOA over 72 hours. This data was averaged over the 3 days and seasonally adjusted. The two studies were reviewed for accurate procedure, variability and reasonableness before the resulting rates from the two studies were averaged together as shown in the Methodology Statement. The data indicated a traditional relationship of PM peak hour project generation occurring within the PM peak hour of adjacent traffic (between 4PM – 6PM). Complete documentation of the count data will be provided for review with the CDMP TIA.

2. South Florida has distinct trip-making characteristics that vary depending on whether it is peak season during the winter months, or whether it is during the summer months when school is out of session and more summer vacation trip-making occurs. These characteristics will influence winter peak season versus summer vacation period trip-making to this site given its unique theme park characteristics. The consultant should include the two distinct seasonal scenarios in its traffic analysis.

   LC: The trip rates provided in the Methodology Statement were seasonally adjusted to continuous data from video feeds at the MOA access points. Consistent with ITE recommended practice, these rates are intended to provide reviewers a trip generation estimate for a typical day.

3. The trip lengths for this particular site are most likely longer than the trip lengths that would be derived from typical regional shopping center trip-distribution curves. The traffic consultant should present their methodology with regard to trip-length as this could influence the radius of the impact area. In particular, the traffic analysis should, at a minimum, evaluate impacts along Miramar Parkway and Pines Boulevard, two heavily congested arterials; and adjacent local roads, such as Flamingo Road/NW 67 Avenue, that traverse between Broward and Dade Counties.

   LC: It is acknowledged that a significant portion of ADM trips will originate from outside of the local area as a result of the uniqueness of the trip purpose. This behavior will likely reduce the percentage of project traffic on local roadways when compared to a more traditional shopping center. The Methodology Statement proposes to utilize adopted travel demand models to derive project distribution for ADM, however, it allows that the output will be subject to a check for reasonableness. This leaves the CDMP TIA open to considering adjustments to the trip distribution as logic dictates. Per the requirement of the CDMP, the study area will extend to all roadways where external project trips from the project are forecast to be

equivalent to or greater than 5% of the MSV for each facility. Likely, this requirement will deem portions of Miramar Parkway and/or Pines Boulevard within the study area.

In addition, the following comments are specific to the Technical memorandum dated September 3, 2015 that was provided for our review:

1. The total gross area of the project (6.2 million sq. ft.) excludes the proposed hotel use shown on the conceptual plan.

   LC: The external trip generation rates from MOA (and proposed for ADM) were derived with respect to the gross leasable area of the retail portion consistent with how ITE treats the Code 820 Shopping Center use. The gross area for the retail and entertainment portions is provided to show the similarity of retail/entertainment mix at MOA versus ADM and, therefore, the appropriateness for use of the rates at ADM. Availability of hotel for overnight guests is complimentary to the trip demand driven by the retail/entertainment components.

2. The trips generated by "2000 room keys" were not included in the "Net External Trips" in Table 3.

   LC: The external trip generation rates from MOA (and proposed for ADM) have the complimentary hotel traffic built into the trip rates. They are derived from counts at the external stations at MOA.

3. As noted above, if the hotels are not built at same time or ahead of the theme park and commercial uses, then the impact on roadways will be much higher than forecast.

   LC: The hotel uses will complement the demand for trips driven by the retail and entertainment portions of the project, not the other way around. ADM is far removed from the airport, business district, beaches and other tourist attractions in the area. There will be negligible demand to stay at an ADM hotel without the retail and entertainment portions of the project.

4. Given the location of the project and the project's access from major freeways, the pass-by percentage appears to be overestimated. Also, the ITE fitted curve equation for pass-by trips for Land Use Code 820 is subject to the same limitations as the ITE trip generation rate for Land Use Code 820, and may overestimate the percentage of pass-by trips.

   LC: [Duplicated from response to Miami-Dade County Traffic Engineering 9/23/15, #12] Consistent with providing a trip generation forecast based on the best available data (ITE's recommendation), the fitted curve equation for Shopping Center was used to forecast pass-by trips using only GLA of the retail square footage portion of ADM. Due to the inverse relationship of GLA to pass-by percentage from the equation, the resulting 14% pass-by is much lower than the rate from a more traditional sized shopping center. This appears to be a realistic assumption based on the hundreds of thousands of commuters on the two adjacent freeways who will pass by the project at build-out. These trips may be work trips for a commuter making a quick shopping or dining stop during their regular commute. It may be a new carpool stop for an employees from a vehicle already in the background traffic. It could be for a delivery to the project from a vehicle on a pre-existing route. It could be from

commuters on business travel or vacation who are curious about ADM and make an unplanned stop.

5. The number of trips added due to the light rail transit adjustment factor do not equal 10.8%.

   LC: Visitor Average Vehicle Occupancy (AVO) at MOA has been reported as 2.3 persons/vehicle. The trip generation summary shown in the Methodology Statement assumes an AVO of 4.0 persons/vehicle to rival data at theme parks in Florida. The adjusted external trips for the LRT adjustment in the CDMP TIA will be corrected to display 4,682 trips.

6. There are several references to the Miami-Dade LRPT and Miami-Dade Concurrency and Count Databases. Since traffic impacts north of the site will extend into Broward County, reference to the Broward County LRTP and corresponding data should be added.

   LC: Acknowledged. The study area will extend to all roadways where external project trips from the project are forecast to be equivalent to or greater than 5% of the MSV for each facility. Likely, this requirement will include portions of Broward County. The CDMP TIA will reference the appropriate sources for data associated with Broward County.

Florida's Turnpike Enterprise, Pompano Operations Center - October 1, 2015

1. We concur with the County's request for the applicant to prepare a methodology that is consistent with the Site Impact Handbook (due to correlation in size to a "DRI"). At a minimum, a methodology of this type would identify PM peak hour traffic for both directions (not the identified two-way volumes). However, it is requested that the applicant develop both AM and PM peak hour traffic and any associated data collection. This methodology would be comparable with a typical interchange access request.

   LC: The ADM is located within a DULA and as such is exempt from DRI review. However, the Applicant has committed to generally follow the DRI study guidelines to fully address impacts as part of the CDMP TIA. The TIA will present an AM peak hour trip generation summary to show that project trip generation in the traditional AM peak period for adjacent traffic (7am – 9am) is only estimated to be roughly 20% of the project PM peak generation. As such, the PM peak hour analysis will control, making an AM peak analysis moot. However, the Applicant will address specific concerns in the AM peak if there is an established need.

2. The applicant should provide re-assess seasonality to be more specific to patterns expected in South Florida. The County has received other proposals for development of entertainment/water park land uses, such as the Miami Wilds. Information contained these proposals included local vs. national attendance at various "entertainment/attraction" type venues. Some of this information may be of use to the applicant in determining the applicability of seasonality and location differences.

   LC: [Duplicated from Broward County Traffic Engineering 10/2/15, #9]. The trip rates provided in the Methodology Statement were seasonally adjusted to continuous data from video feeds at the MOA access points. Consistent with ITE recommended practice, these rates are intended to provide reviewers a trip generation estimate for a typical day.

3. The applicant should confirm that all of the Mall of the America comparative land uses existed and where operational during the data collection. Recent aerials show construction in the area.

   LC: The trip rates provided in the Methodology Statement were derived from two independent counts programs which only included MOA Phase 1 traffic. There were no significant vacancies at the time. Construction is associated with Phase 2 and was having no effect on Phase 1 operations during the data collection. Complete documentation of the count data and methodology will be provided with the CDMP TIA.

4. The calculation of pass-by percent should also be checked for reasonableness against the available traffic, to assure that it represents a conservatively low percentage of that traffic.

   LC: Consistent with providing a trip generation forecast based on the best available data (ITE's recommendation), the fitted curve equation for Shopping Center was used to forecast pass-by trips using only GLA of the retail square footage portion of ADM. Due to the inverse relationship of GLA to pass-by percentage from the equation, the resulting 14% pass-by is much lower than the rate from a more traditional sized shopping center.

5. The applicant proposes a light rail transit adjustment of 10.8 percent, however, no light rail transit is planned for the area. At best, bus rapid transit may be available via the I-75 Express lanes. It is suggested that the LRT adjustment be renamed to Transit adjustment. Also, more research should be performed to determine the appropriate mode split adjustment considering the location and proximity to existing and future transit service.

   LC: It's acknowledged that no LRT is planned for ADM. The adjustment for light rail was additive to the ADM trip generation estimate because MOA has LRT.

6. The methodology mentions the approved LRTP model will be used. More detail should be provided regarding the model version and source of the background network and land use. The Florida's Turnpike has a model version which includes refinements for this area (updated land use and Turnpike facility coding) which may provide improved forecasts.

   LC: The Applicant has reviewed all of the recent regional models and refinements available for the area for most realistic volume forecasts for 2040. We tend to agree that the Turnpike's version of SERPM 6 w/ SERPM 7 socioeconomic data is one of the better options to use for the CDMP TIA and will likely recommend its use to Miami-Dade County.

South Florida Regional Planning Council, dated October 2, 2015

1. Existing Conditions – Weekend Analysis
   The TIA methodology will use non-directional count data for pm peak conditions to determine existing year (2015) level-of-service (LOS) conditions for the major roadways of the study area. While the weekday pm-peak period is the LOS standard for the County and State jurisdictions, it is well understood that shopping centers and entertainment uses peak on Saturday afternoons (not accounting for seasonal variations). The ADM is a very significant generator, and for some roadways in the study area where ADM generates a very large proportion of the trips for a roadway link, there is a possibility that the critical peak may coincide with the ADM peak as a trip generator. Additional information is needed to identify the magnitude and timing of the ADM's peak trip generation. With the identification of the ADM's peak period for gross trip generation (on its own driveways), the existing conditions methodology must be augmented with the appropriate weekend roadway counts and conditions.

   Further, because the ADM is such a large generator located at the edge of urban development and the roadway network, a more pronounced directional distribution is expected on the non-highway roads. The existing conditions analysis should use directional count data for any local, collector or arterial roadways.

   LC: Total and directional volumes will be provided in the TIA as requested. However, the CDMP TIA will need to adhere to the CDMP adopted guidelines which does not consider weekend analyses. Saturday peak site hour trip generation will be provided. Note that ADM is located within a DULA and as such is exempt from DRI review. However, the Applicant has committed to generally follow the DRI study guidelines to fully address impacts as part of the CDMP TIA.

2. Background Traffic – Weekend Analysis
   The existing year 2015 roadway data will be factored and analyzed along with committed development for the Year 2020 short range analysis and the Year 2040 long range analysis. Based on the identification of the ADM's peak period for trip generation, short range 2020 and long range 2040 conditions must to be augmented with the appropriate weekend period analysis. Also consistent with the existing conditions recommendation, future conditions analysis should use directional count data for any local, collector or arterial roadways.

   LC: See response to comment 1 above.

3. Background Traffic – Planned and Committed Development
   There is a large land area abutting to the south of the ADM land use amendment proposal that may be poised for redevelopment that itself may be regionally significant. The status of these vacant lands, pending development orders associated with them, and any land use plan amendments associated with these lands should be identified, and appropriate adjustments made to the TIA.

   LC: Any approved developments within that area will be included as committed developments. The area poised for development immediately south of the site up to NW 170th Street is mostly controlled by the Graham Companies. The Applicant has met with

representatives of the Graham Companies and received their anticipated land use program for that area. Their development at buildout would consist of 1 million square feet of retail; a business Park of 3 million square feet, and an additional 2,000 multi-family residential units (apartments). Since this is a substantial amount of diverse development it is not anticipated to be built in one single phase unlike the American Dream Miami. As such, we will assume that for the short term analysis (2020) the Graham Companies will build 150,000 square feet of retail; 250,000 square feet of Business Park; and, 500 Apartments. The remainder will be included in the long term analysis for 2040. Since these developments also require a land use amendment, the developments will be loaded into background traffic. Land areas further south of NW 170th Street will be included based on what is currently coded in the 2040 LRTP.

4. Trip Generation – Trip Generation Study – Number of Samples

   At least three trip generation survey sites must be used to provide reliable trip generation forecast rates for AGM. It is suggested that in addition to trip generation survey data from Mall of Americas, survey data from West Edmonton Mall, and methodology information from American Dream (NJ) be incorporated into the AGM methodology for trip generation. When compared, various factors must be considered in addition to the mix of uses and their floor area. These include, but should not be limited to the size and population of the trade area, volume of tourism, employment, annual visitors, design throughput of attractions and other factors may offer guidance as to the development of trip generation rates for AGM. These should be the subject of a special review committee.

   LC: ADM is a very unique project without many similar sources to draw data from. Fortunately, MOA mirrors the size and mix of unique retail an entertainment uses and it was developed and managed by the same entity that proposes ADM. Because of this, it is the logical choice to collect data from and draw informed conclusions for ADM trip estimates. The trip rates proposed for ADM were derived from two independent counts programs at MOA by two different consultants at different times (June and August). The variability between the counts was small and the results were logical. A presentation provided at the methodology meeting gave several reasons why the external trip rates are conservative to include ADM being larger than MOA (rate reduction expected), counts taken W through F for the weekday rates (Friday higher than average weekday data), proportion of tourists at ADM expected to be higher (more hotel capture), ADM AVO expected to be higher (to mirror Florida theme parks). The Applicant stands by the statement that MOA data is the best available source for ADM.

   The trip generation data for American Dream in the Meadowlands, formerly known as "Xanadu" is not a good comparison to the proposed American Dream Miami for a number of reasons, the most significant are enumerated as follows:

   A. The American Dream project in the Meadowlands was approved in 2003 for the Mills Corporation, then to be known as Xanadu, as an integral part of the larger expanding Meadowlands Sports Complex Master Plan. It broke ground in 2004 as a family entertainment, retail, hotel, and office complex. After bankruptcy of two successive owners it was taken over by Triple Five in 2013. The original trips associated with this development were not developed or negotiated by Triple Five. The trip entitlements and approvals which were also a part of the larger Meadowlands Sports Complex EIS were retained and slightly modified to allow a small expansion for the entertainment component. Since they were sufficient to support project trips, Triple Five retained the

project's vested trips other than to allow some small acreage to be added for a water park resulting in an overall increase of 58 PM peak hour trips.

B. *A NJ Transit rail station was built adjacent to the American Dream Meadowlands in 2009 to serve the area and especially the NY Jets and Giants Stadium. It is unclear to what degree if any the Mills Corporation consultants were allowed to rely on this transit station in 2002-2003 since they were originally programmed for a 2006 opening date. With excellent connections to Northern New Jersey and Manhattan, these transit assumptions would have significant impacts on the trip estimates.*

C. *American Dream Meadowlands is currently programmed for opening in 2016. To rely on trip generation studies performed by other developers and other consultants starting back in 2002 for this development with numerous unknown assumptions is far less reliable than to use the 2015 traffic count studies of the same development model, owned by the same developer, and with the same land use mix as proposed in Miami. The Mills Corporation consultants could not have used public traffic study information from Mall of America (MOA) since they received their approvals in 2003 and the MOA conducted and submitted their expansion studies in 2005 and 2006. If the traffic studies initiated in 2002 and 2003 by Mills Corp. used the ITE Trip Generation Report it would have been the 6th or 7th edition whereas currently the 9th edition is in effect. All this makes the use of this old data very unreliable.*

An additional trip generation study of the West Edmonton Mall (WEM) as a second site is not considered necessary and would be anticipated to result in lower trip generation. The land use mix and transit access are comparable, but other traffic predictors are not. The WEM has a gross floor area of 5.3 million square feet as compared to 4.87 million square feet at Mall of America (MOA). The WEM is therefore 9% larger than MOA. Yet, the annual visitors at WEM are 23% lower than at MOA, 30.8 million versus 40 million respectively based on each site's website. This may in part be a result of a much larger Metropolitan Area population in the Minneapolis St. Paul area than for the Edmonton Metropolitan Area, nearly double by some census data (1.3 million vs 2.8 million). The population of the area including Miami and Fort Lauderdale is nearly 4 million. Based on these general characteristics, the MOA is a better trip generation model than what we would expect from WEM.

5. <u>Trip Generation – Independent Variables</u>

The methodology proposed is based on net floor area (leasable area) of the mall; therefore, trip generation rates are factored based on 3.5-million square feet. This is consistent with way typical shopping centers, such as those conforming to Land Use 820 of the Institute for Transportation Engineers (ITE) *Trip Generation Handbook*; however, for the purpose of this multi-attraction destination use it is not demonstrated to be adequate. The applicant states that the ADM project land use is not captured by the ITE land uses due to its scale and because of its unique mix of non-merchandising attractions with retail. Accordingly, the decision to exclude the entertainment and hotel uses from calculation of trip generation is unwarranted and unsubstantiated, even though the rate is based on the similar Mall of America. Compared to MOA, too many distinctions are possible between the MOA entertainment uses and the ADM entertainment uses and their independent potential as primary trip attractors in different markets. At 2,000 hotel rooms and 2.5-million square feet of entertainment including theater seats, sports attractions and theme attractions, the scope of these uses is too large to dismiss on assumption, especially as it is clear that the entertainment uses are indeed included to draw a higher than typical patronage to the retail.

Some of these uses are so unique to this region (such as but not limited to indoor skiing) that they must be analyzed for their potential as primary destinations and then consider the shared trip potential with retail and restaurant. The assumption made by the proposed TIA methodology is that the entertainment and hotel components interact with retail in a mixed use concept with 100% internal capture between components. This is not substantiated and unlikely. Most notably, in similar super regional mall/entertainment complexes (see Comment 5), the entertainment venues are not free; they are ticketed, and therefore not incidental to the merchandising space. Furthermore, data from the American Dream mall in East Rutherford (not yet opened) will yield some information regarding the discrete attraction of entertainment trips apart from retail trips. Bergen County, NJ where the AD mall is located, still has "blue laws" requiring the retail components to close on Sunday, while the mall may remain open for visitors to its entertainment and restaurant attractions. Understandably, as the AD is not open, survey data is not available; however, the applicant may share AD TIA methodology until actual data is available. <u>The entertainment and hotel uses must be identified as independent variables for calculating trip generation, and internal capture rates established for reductions.</u>

The retail component of the trip generation independent variable follows the form of the ITE Land Use 820, in which restaurant space is averaged with anchor tenants, retail mall tenants, and kiosk tenants. Promotional material for the ADM provide that among the usual eateries incidental to the merchandising space (food court type eateries), destination restaurants will also be a significant part of the tenant mix. Trip generation rates from similar super-regional centers like ADM will account for this; however the relationship is not certain to be transferable among markets and proportions of destination eateries. <u>Destination restaurant space should be distinguished from merchandising space, and assumptions or averaging it with merchandising space must receive further analysis.</u>

LC: It is acknowledged that gross leasable area was chosen as the independent variable to be consistent with ITE's treatment Shopping Center (ITE 820). In this way it is also easier to compare to other shopping centers.

We disagree that by using gross leasable (GLA) versus gross floor area (GFA) for the independent variable, the external trips attributed to the entertainment and hotel portions of the site are not accounted for or are 100% captured on site. First on accountability, because the two projects are similar in land use mix as provided in the Methodology Statement (ratio of GLA/GFA) deriving either rate for MOA and then applying it to ADM will provide the same external trip total for ADM within 4%. That is, the conversion from a GLA rate to a GFA rate for MOA and then applying the rate to ADM GFA versus ADM GLA cancels out the difference in independent variable use. Second on 100% capture, the rates proposed are external trip rates derived from external count data. Whatever capture happens at MOA (and is expected to happen at ADM) is built into the rate. It does not imply that internal capture is 100% for entertainment and hotel portions. Another benefit of using external trip rates is that it takes out all the speculation and guesswork for internal capture or the need for surveys for the CDMP TIA. The CDMP TIA requirement only concerns itself with external trip impacts.

To the point of this comment that MOA is not a good fit for estimating ADM trip generation, the Applicant stands by the statement that MOA data is the best available source for ADM,

and it's use is consistent with ITE recommendations, for as discussed at length in the comment response above.

6. Trip Generation – Peak of Generator
   As noted for Comments 1 and 2, a thorough analysis must include impacts during the peak period of the generator. While the weekday pm-peak period is the LOS standard for the County and State jurisdictions, it is well understood that shopping centers and entertainment uses peak on Saturday afternoons. Additional information is needed to identify the magnitude and timing of the ADM's peak trip generation on a peak period of week basis. The trip generation rate must include at minimum, the concurrency requirement for pm peak of the adjacent roadways (4pm-6pm), and the peak period of the generator (most likely Saturday afternoon), and seasonality (weekly) factors for the ADM as a trip generator based on peer properties.

   LC: See response to comment 1 above. Complete documentation of the count data and methodology will be provided with the CDMP TIA.

7. Trip Generation – Seasonal Trip Generation Factors
   Seasonal trip variation has not been addressed in the TIA methodology. Typically, Florida Department of Transportation (FDOT) tabular data for averages on the roadway network in Dade County would be used. These values reflect the weekly variation of all trip making averaged, and tend to suppress season peaks of regional destination shopping centers and entertainment uses that have greater variation and differently timed peaks among seasons. Additional information is needed to identify the magnitude and timing of the ADM's peak trip generation on a week-of-year basis. Weekly seasonality may be available through parking survey data that may already exist for the peer sites; continuous annual hose counts are not necessary. While the FDOT seasonal variation will be appropriate for evaluating background traffic, the gross trip generation across the ADM driveways must be based on seasonal factors from the peer surveys discussed in Comment 5.

   LC: The Applicant's trip generation presentation from the methodology meeting described that the MOA trip rates were "annualized" based on continuous data collected at the entry point of MOA. Seasonal data is available and will be provided with the CDMP TIA.

8. Net External Trip Generation - Pass-By
   Pass-by trip reduction to net roadway trips in the proposed TIA methodology is based on the ITE *Trip Generation Manual* data for Land Use #820, Shopping Center. While the methodology clearly states that the ITE data for shopping centers does not support this use, the ITE data has been relied upon for a pass-by trip reduction to net external trips calculation. There is no evidence to support that this data, excluded for the more basic task of trip generation, should then be used for a pass-by reduction. Further, considering the size of ADM, its very substantial entertainment and hotel components, its location at the intersection of two major highways, and that it is marketed as a major stand-alone destination, such a high pass-by reduction appears dubious. This is not a neighborhood supermarket or 4-corners shopping center. ITE Shopping Center (Land Use #820) data must not be used to estimate pass-by trips. A pass-by trip estimate should be based on survey data from peer land uses. In the absence of such survey data and in consideration of the intended destination characteristic of ADM, then the pass-by trip percentage should be considered zero.

LC: [Duplicated from response to Miami-Dade County Traffic Engineering 9/23/15, #12] Consistent with providing a trip generation forecast based on the best available data (ITE's recommendation), the fitted curve equation for Shopping Center was used to forecast pass-by trips using only GLA of the retail square footage portion of ADM. Due to the inverse relationship of GLA to pass-by percentage from the equation, the resulting 14% pass-by is much lower than the rate from a more traditional sized shopping center. This appears to be a realistic assumption based on the hundreds of thousands of commuters on the two adjacent freeways who will pass by the project at build-out. These trips may be work trips for a commuter making a quick shopping or dining stop during their regular commute. It may be a new carpool stop for an employees from a vehicle already in the background traffic. It could be for a delivery to the project from a vehicle on a pre-existing route. It could be from commuters on business travel or vacation who are curious about ADM and make an unplanned stop.

9. Trip Generation - Parking Inventory Comparisons
   Trip generation for the unique AGM use is to be developed through this process. While not directly comparable, parking capacity, both standard and overflow will provide an additional point of reference when comparing to other super-regional mall peer uses and to more traditional malls. Proposed parking capacity should be provided as part of the TIA.

   LC: Parking needs will be addressed subsequent to the CDMP TIA. Comparisons of parking supplies for different facilities must consider transit availability, use of transit, and vehicle occupancies unique to that particular use.

10. Trip Generation - Mode Split
    As this land is currently designated industrial use, vacant, west of I-75 and near the UDB, there is virtually no existing transit service nor is there any planned transit service. The closest bus service is over ¾-mile away at NW 87th Avenue and NW 186th Street. (Metrobus Routes 54; the 183rd Street Local – Route 183; and the Ludlam Limited – 267). Given the existing state of transit coverage to the site, the existing lack of bike or pedestrian facilities, and without a site plan to show any such improvements, then the mode split for the trips generated must be 100% private automobile. In converting the MOA trip generation for this site, the ADM TIA methodology correctly proposes to add in the MOA trips that use the Minneapolis / St. Paul region's LRT system, and divide by the MOA auto occupancy of 2.3. For the short-range forecasts at build-out and for the Year 2020, a transit mode split of 0% may be reasonable; however, tied in to the mitigation analysis, transit service and capacity planning should be integrated into the analysis for the long range 2040 analysis.

    LC: Acknowledged. By applying MOA trip rates from MOA to ADM (with the LRT credit) the assumption is that ADM will be served by a comparable percentage of transit and other rideshare components as MOA at build-out. However, since we cannot guarantee that the same transit services will materialize over time at ADM the trip generation analysis must be conservative as forecasted through 2040. The evolution of more transit services will reduce the impacts currently being anticipated.

11. Trip Generation - Non-Public Alternative Modes

In recent years, new transportation innovations are redefining urban mobility. Of importance to this urban edge site, car sharing, Uber and traditional taxi services can reduce driveway trips through increased use of transit or increased vehicle occupancy. The positive impact of increasing use of these alternatives through mitigation strategies that support their use should be explored along with appropriate reductions in net external trip generation.

LC: Acknowledged. As part of the CDMP TIA, an analysis is required to address any mitigation measures to include a wide range of options for mobility and safety needs.

12. Trip Distribution and Assignment
Distribution of forecast project trips generated by ADM will be determined with the run and recalibration of the Miami Urbanized Area Transportation Study (MUATS) transportation model. There are no comments at this time.

LC: The Applicant will likely recommend to the County that the SERPM 6 model with SERPM 7 data and subarea refinements by Florida Turnpike be used to determine project distribution for ADM. Model output will be subject to review and any adjustments for logic will be discussed with the County.

13. Mitigation Analysis
Mitigation analysis is included in the ADM TIA to address the need for transportation facility improvements that may be required to remedy project impacts that cause degradation of roadway level-of-service with in the study area. Mitigation measures are suggested to include a range of options to address safety and mobility needs for the Year 2020 and Year 2040 networks. While the subject area has no significant or planned transit capacity, it is noteworthy that the Mall of America has LRT service, the West Edmonton Mall has a planned station for extension of the Edmonton region's LRT, and the American Dream in New Jersey is developed with direct service for New Jersey Transit rail and bus service. For the peer developments, premium and high capacity transit play a major role in mitigating the impact of vehicular trips for those centers. It is recommended that mitigation consider a multimodal approach that includes the development of enhanced transit service for Year 2020, and more significant transit infrastructure for meeting the 2040 future year mobility and ADM access needs.

LC: See response to comment 11 above.

14. Electric Vehicle Infrastructure
Plug-in Electric Vehicle (PEV) use in the South Florida Region is expanding; however, the installation of recharging equipment at longer distance, long-duration destination locations is a necessary and important tool to promote their use. The use of PEV have well documented benefits in the reduction of non-point source emissions. The benefits of reducing air quality impacts is a tangible benefit that is tied to transportation. The recommendation is to incorporate in the methodology for gross trip generation, a partial mitigation tied to the provision of permanent PEV recharging infrastructure.

LC: See response to comment 11 above.

Florida Department of Transportation, District 6, District 4 - October 2, 2015

General Comments

1. The proposed analysis does not include the anticipated Graham property development located immediately south of ADM. Significant traffic volumes are expected to be generated from the Graham property in the future which will influence the magnitude and the traffic patterns on the area's Strategic Intermodal System (SIS) facilities and arterial roadway network. The inclusion of the Graham property development in the analysis is critical to accurately assess the transportation network's needs as a result of the proposed developments.

   LC: [Duplicated from response to SFRPC 10/2/15, comment #3]. Any approved developments within that area will be included as committed developments. The area poised for development immediately south of the site up to NW 170th Street is mostly controlled by the Graham Companies. The Applicant has met with representatives of the Graham Companies and received their anticipated land use program for that area. Their development at buildout would consist of 1 million square feet of retail; a business Park of 3 million square feet, and an additional 2,000 multi-family residential units (apartments). Since this is a substantial amount of diverse development it is not anticipated to be built in one single phase unlike the American Dream Miami. As such, we will assume that for the short term analysis (2020) the Graham Companies will build 150,000 square feet of retail; 250,000 square feet of Business park; and, 500 Apartments. The remainder will be included in the long term analysis for 2040. Since these developments also require a land use amendment, the developments will be loaded into background traffic. Land areas further south of NW 170th Street will be included based on what is currently coded in the 2040 LRTP.

2. The proposed roadway network includes interchange modifications and new ramp connections at 1-75 and Miami Gardens Drive and NW 170th Street, respectively. In addition, substantial transportation impacts may be realized at 1-75 and HEFT, 1-75 at NW 138th Street, 1-75 at Miramar Parkway, HEFT at Okeechobee Road, and HEFT at State Road (S.R.) 823/Red Road/NW 57th Avenue. Interchange improvements will require an Interchange Access Request (IAR), and must adhere to Florida Department of Transportation (FDOT) Procedure 525-030-160 concerning new or modified interchanges.

   LC: Acknowledged as a separate matter from the CDMP TIA. However, in part on consideration of this matter, the directional interchange at I-75 and NW 170th Street will no longer be included in the CDMP TIA for the short-term (2020) and long-term (2040) analyses.

3. The ADM project will require coordination with the FDOT and Federal Highway Administration (FHWA) concerning an IAR. A separate Methodology Letter of Understanding (MLOU) must be prepared specifically for any proposed new or modified interchange access. The amount of analysis and documentation required is related to the proposed action and type of IAR document, and will be determined subsequently by FDOT and FHWA.

   LC: Acknowledged as a separate matter from the CDMP TIA. The ADM team will continue to coordinate interchange proposal requirements during the CDMP review with FDOT, FHWA and Florida Turnpike Enterprise.

Section 2.0 Study Area

4. The proposed study area definition is consistent with the Miami-Dade County instructions for study area definition when preparing a Comprehensive Development Master Plan amendment (5% of adopted level of service (LOS) capacity), which is also consistent with the Transportation Concurrency Best Practices Guide. The latter document also suggests inclusion of any critically deficient roadways with project traffic equivalent to more than 1% of adopted LOS capacity, which is not noted in the proposed methodology. Please include this as an additional definition of the study area determination.

   LC: Per the requirement of the CDMP, the study area will extend to all roadways where external project trips from the project are forecast to be equivalent to or greater than 5% of the MSV for each facility. However, the CDMP TIA has committed to generally follow the DRI study guidelines to fully address impacts as part of the CDMP TIA.

Section 4.0 Existing Conditions

5. The last paragraph states that "All projects funded for construction in the next three years will be assumed in place for existing conditions." It is unclear if "project" in this context means only transportation projects or other development projects. The FDOT Transportation Site Impact Handbook notes that pursuant to Section 163.3180, F.S., "vested trips" (major committed developments, either having an approved Development Order or an approved concurrency management certificate) also must be included in background trips. Please clarify the meaning of "project" and specify if vested trips are proposed to be included in the existing conditions analysis.

   LC: The intent of showing "All projects funded for construction in the next 3 years" in the existing analysis was to account for additional system capacity under construction or soon to be under construction. However, Miami-Dade County has requested a preference to exclude these committed roadway projects in the existing condition analysis, therefore the CDMP TIA will exclude them in the existing analysis. For future year background conditions (Years 2020 and 2040), the CDMP TIA will include all planned cost feasible improvements consistent with the CDMP TIA instructions. For the Year 2020, committed (vested) trips provided in the Miami-Dade County's Concurrency Database will be used if greater than linear growth.

6. It is stated that 2015 volumes will be used to represent existing conditions. If 2015 volume data is unavailable, it is proposed to extrapolate the available data to estimate 2015 conditions using 1% or the historical growth rate, whichever is greater. Please provide the origins and justification for the 1% growth rate, and identify if the estimation of 2015 volumes applies to daily and peak hour volumes.

   LC: The 1% growth rate is proposed as a bare minimum if historical patterns are shown to less or negative. Daily and PM peak volumes will be treated similarity.

7. It is recommended that K and D factor values be proposed for each of the roadways evaluated for existing and future conditions. The values of these factors should be consistent with the Department's Project Traffic Forecasting Handbook.

   LC: FDOT volumes, K factors and D factors will source FDOT data as available.

Section 5.0 Background Traffic

8. The 2040 Long Range Transportation Plan (LRTP) Cost Feasible Plan includes four roadway extensions or new roadways in the study area. If background year volumes are derived from historical counts, volumes on these roadways cannot be determined. The third paragraph states that "...background traffic patterns from regional model runs may be reviewed to anticipate the impact of future cost-feasible infrastructure improvements on background traffic patterns." The roadway projects include:

   - NW 170th Street from HEFT to NW 97th Avenue -- new 6-lane roadway funded in Priority III
   - NW 107th Avenue from NW 170th Street to Broward County line -roadway extension funded in Priority IV
   - NW 186th Street from NW 97th Avenue to 1-75 -- new 4-lane roadway funded in Priority IV
   - Gratigny Parkway from S.R. 826 and 1-75 to HEFT -- roadway extension funded in Priority II

   Please revise the methodology to state that Southeast Regional Planning Model (SERPM) model runs of the no-build will be included to estimate background traffic on these roadways.

   LC: The Applicant will likely recommend that SERPM runs be used for the CDMP TIA consistent with the Methodology Statement. To estimate future volumes on roadways which do not exist today, or where a shift in traffic is expected in the future, model runs subject to review for logic will be utilized.

9. Please explicitly identify the interchange, access, and ramp configurations that the project assumes are representative of the future roadway network. For example, the access via NW 170th Street at 1-75 is shown in Figure 2, and an alternative interchange configuration is shown at 1-75 and Miami Gardens Drive. Improvements not noted in the LRTP Cost Feasible Plan will be considered commitments by the Applicant and must be constructed and operational prior to the opening of the project.

   LC: The traffic analysis for the CDMP assumes interchange configurations for I-75 and HEFT and Miami Gardens Drive as have been jointly developed by the ADM and FDOT consultants. The I-75 and NW 170th Street interchange was an assumption for the 2040 planning horizon to support plans by others to the south, however, on consideration of this matter in part, the directional interchange at I-75 and NW 170th Street will no longer be included in the CDMP TIA for the short-term (2020) and long-term (2040) analyses. The applicant understands that interchanges not in the LRTP will require new funding sources to be identified before any interchange access, modification or justification report process can be initiated.

10. It is recommended that a complete listing of the transportation improvements and network changes for 2020 and 2040 as compared to the existing conditions be included in the methodology document.

    LC: Specific improvements and network changes will also be identified in the CDMP TIA.

11. It is recommended that the Applicant use the SERPM transportation model developed for

the 1-75 project development and environment (PD&E) study (and subsequent re-evaluations) for the 2020 and 2040 background volumes, since substantial traffic pattern changes are anticipated as a result of the proposed 6.2 million square feet of development that will not be reflected in historical growth along area roadways. Historical growth, however, can be used as a reasonableness check for future year background volumes.

LC: The Applicant has reviewed all of the recent regional models and refinements available for the area for most realistic volume forecasts for 2040 as this comment proposes. We tend to agree with the Turnpike that their version of SERPM 6 w/ SERPM 7 socioeconomic data is one of the better options to use for the CDMP TIA and we will likely recommend its use to Miami-Dade County for this reason.

12. Please note that future year travel demand forecasts along SIS and State Highway System (SHS) facilities must be reviewed and approved by FDOT.

    LC: The FDOT will be one of the reviewing agencies for the CDMP TIA as coordinated by Miami-Dade County.

<u>Section 6.0 Trip Generation</u>

13. While it is agreed that utilizing the Institute of Transportation Engineers (ITE) trip rates for a shopping mall will underestimate internal capture and thus overestimate external trips, it is unclear whether traffic counts collected at the Mall of America (MOA) development are sufficiently representative of the proposed ADM development for two reasons:

    First, from a regional perspective, it is likely that the MOA serves as a primary attraction destination in the Bloomington area, which is likely to result in a high internal capture rate, whereas the ADM would be located in a region with multiple international destinations including Miami Beach, the Everglades National Park, and the Florida Keys. It is reasonable, then, to assume that while visitors to ADM may be likely to stay at the resort, it also is likely they will venture out to visit attractions other than or in addition to ADM.

    Second, it is not clear whether the non-retail attractions proposed for ADM are similar enough in nature, attraction power, and size to be comparable to MOA. The square footage alone of the entertainment portion of the ADM development is more than double that of MOA whereas the Gross Leasable Area (GLA) square footage of ADM is only 35% greater than MOA. While the proposed trip generation rates developed from MOA data implicitly include the entertainment attractions, the recommended trip generation rates are based on GLA square footage, which does not include the entertainment and hotel portions of the development.

    The regional context of the proposed development could play an important role in both trip generation and internal capture. Please review Aventura Mall and American Dream Meadowlands trip generation data. Whereas Aventura Mall is primarily composed of retail and restaurants, it also features several hotels and resorts within walking distance, and it should be used as a point of reference, even if not for direct comparison of trip generation rates. American Dream Meadowlands also could provide more relevant comparison due to its regional context near New York City.

Given the disproportionate share of square footage allocated to entertainment uses at ADM, relative to MOA, it is recommended the trip generation function of the GLA and entertainment portions be separated in the trip generation analysis. If available, trip generation data from amusement parks in Central Florida should be reviewed to determine whether the proposed rates for ADM sufficiently capture the entertainment attraction.

LC: [Portions duplicated from response to SFRPC 10/2/15, comment #4]. ADM is a very unique project without many similar sources to draw data from. Fortunately, MOA rivals the size and mix of unique retail and entertainment uses <u>and</u> it was developed and managed by the same entity that proposes ADM. Because of this, it is the logical choice to collect data from and draw informed conclusions for ADM trip estimates.

By comparison, Aventura mall is much smaller and has no entertainment or hotel uses which are intended for substantial onsite capture. By comparison, even if data was readily available, Florida theme parks don't normally include a free-entry shopping center under the same roof as their entertainment districts. After months of researching, the Applicant stands by the statement that MOA data is the best available source for ADM.

Also note that the rates proposed are external trip rates derived from external count data. Whatever capture happens at MOA (and is expected to happen at ADM) is built into the rate. It does not imply that internal capture is 100% for entertainment and hotel portions. Another benefit of using external trip rates is that it takes out all the speculation and guesswork for internal capture or the need for surveys for the CDMP TIA. The CDMP TIA requirement only concerns itself with external trip impacts.

The trip generation data for American Dream in the Meadowlands, formerly known as "Xanadu" is not a good comparison to the proposed American Dream Miami for a number of reasons, the most significant are enumerated as follows:

A. The American Dream project in the Meadowlands was approved in 2003 for the Mills Corporation, then to be known as Xanadu, as an integral part of the larger expanding Meadowlands Sports Complex Master Plan. It broke ground in 2004 as a Family Entertainment, retail, hotel, and office complex. After bankruptcy of two successive owners it was taken over by Triple Five in 2013. The original trips associated with this development were not developed or negotiated by Triple Five. The trip entitlements and approvals which were also a part of the larger Meadowlands Sports Complex EIS were retained and slightly modified to allow a small expansion for the entertainment component. While the peak hour trips are similar in magnitude, since they were sufficient to support project trips and Triple Five retained the project's vested trips other than to allow some small acreage to be added for a water park resulting in an overall increase of 58 PM peak hour trips.

B. A NJ Transit rail station was built adjacent to the American Dream Meadowlands in 2009 to serve the area and especially the NY Jets and Giants Stadium. It is unclear to what degree if any the Mills Corporation consultants were allowed to rely on this transit station in 2002-2003 since they were originally programmed for a 2006 opening date. With excellent connections to Northern New Jersey and Manhattan, these transit assumptions would have significant impacts on the trip estimates.

C. American Dream Meadowlands is currently programmed for opening in 2016. To rely on trip generation studies performed by other developers and other consultants starting back

in 2002 for this development with numerous unknown assumptions is far less reliable than to use the 2015 traffic count studies of the same development model, owned by the same developer, and with the same land use mix as proposed in Miami. The Mills Corporation consultants could not have used public traffic study information from Mall of America (MOA) since they received their approvals in 2003 and the MOA conducted and submitted their expansion studies in 2005 and 2006. If the traffic studies initiated in 2002 and 2003 by Mills Corp. consultants used the ITE Trip Generation Report it would have been the 6th or 7th edition whereas currently the 9th edition is in effect. All this makes the use of this old data very unreliable.

14. If MOA trip generation rates are utilized for ADM, please clarify the seasonal adjustment factor applied to the MOA observed data. An explanation of the factor and its relationship to the June and August counts should be provided. Clarification of consistency with the SERPM model, which is calibrated to average annual conditions, should also be included. Given that the development is likely to be highly sensitive to seasonal demand, adjustment of SERPM results may be warranted.

    LC: The Applicant's trip generation presentation from the methodology meeting described that the MOA trip rates were "annualized" based on continuous data collected at the entry point of MOA. Seasonal data is available and will be provided with the CDMP TIA.

15. The characterization of the ADM as a "self-contained shopping/entertainment experience" implies 100% internal capture. This characterization either should be supported by data or removed from the methodology text.

    LC: "Self-contained" was intended to imply that the project has all uses within a single structure with shared access and parking. Because the trip rates were developed from external count data, whatever capture happens at MOA (and is expected to happen at ADM) is built into the rate. It does not imply that internal capture is 100% for entertainment and hotel portions.

16. It is assumed that a large portion of the proposed pass-by trips are from 1-75 and HEFT. Given the type of trip using a limited access facility during the peak hour (i.e., home-to-work trip/work-to-home trip), it is unlikely that 14.8% (or 9,900 daily trips and 750 weekday PM peak hour trips) will exit from 1-75 or HEFT and access a destination shopping area/entertainment complex of the magnitude proposed.

    To validate the pass-by reduction for the project, it is recommended that the actual pass-by trip percentage at a comparable site, such as Mall of America and American Dream Meadowlands, be quantified. This approach also would be consistent with the proposed trip generation methodology where deviating from ITE trip generation rates was proposed because of the uniqueness of the land use and the site's size, which is greater than most of the example uses in the Trip Generation Manual. Please note that 1TE suggests pass-by reduction should represent no more than 10% of the volume of the adjacent street. Such a reasonableness check should be provided in the trip generation analysis.

    LC: [Duplicated from response to Miami-Dade County Traffic Engineering 9/23/15, #12] Consistent with providing a trip generation forecast based on the best available data (ITE's

recommendation), the fitted curve equation for Shopping Center was used to forecast pass-by trips using only GLA of the retail square footage portion of ADM. Due to the inverse relationship of GLA to pass-by percentage from the equation, the resulting 14% pass-by is much lower than the rate from a more traditional sized shopping center. This appears to be a realistic assumption based on the hundreds of thousands of commuters on the two adjacent freeways who will pass by the project at build-out. These trips may be work trips for a commuter making a quick shopping or dining stop during their regular commute. It may be a new carpool stop for an employees from a vehicle already in the background traffic. It could be for a delivery to the project from a vehicle on a pre-existing route. It could be from commuters on business travel or vacation who are curious about ADM and make an unplanned stop.

17. By definition from the ITE Trip Generation Handbook, 2nd Edition, pass-by trips "...do not involve a route diversion to enter the site driveway." Since the 1-75 and HEFT "pass-by" trips will need to alter their route to gain entry to the mall, it appears these trips are more appropriately labelled as Diverted Link trips. Diverted Link trips "...add traffic to streets adjacent to the site [and the interchanges], but may not add traffic to the area's major travel routes." It is recommended that this trip reduction be labelled as Diverted Link Trips, which will assist in identifying and tracking the project's impact to the interchanges, ramps, and SIS facilities.

    LC: Acknowledged. Diverted trip is a more specific description of these trips and analysis would be consistent with this intent.

18. Given the scale of this project, please provide an AM peak hour trip generation analysis for the project.

    LC: [Duplicated from response to Florida Turnpike 10/1/15, #1] The TIA will present an AM peak hour trip generation summary to show that project trip generation in the traditional AM peak period for adjacent traffic (7am – 9am) is only estimated to be roughly 20% of the project PM peak generation. As such, the PM peak hour analysis will control, making an AM peak analysis moot. However, the Applicant will address specific concerns in the AM peak if there is an established need.

19. Please provide a weekend trip generation analysis for the project, particularly since the retail and entertainment components of the project may attract more trips during a Saturday or Sunday.

    LC: [Duplicated from response to SFRPC 10/2/15, #1]. Total and directional volumes will be provided in the TIA as requested. However, the CDMP TIA will need to adhere to the CDMP adopted guidelines which does not consider weekend analyses. Note that ADM is located within a DULA and as such is exempt from DRI review. However, the Applicant has committed to generally follow the DRI study guidelines to fully address impacts as part of the CDMP TIA.

20. It is noted that only the retail square footage portion or **GLA** of Mall of America is used in determining the trip generation rate. This excludes the trip generating characteristics of the entertainment portion of MOA. The entertainment portion represents 2.7 million square feet of proposed development for ADM.

The use of Gross Floor Area (GFA) as the independent variable for the trip generation calculation which will include the entertainment component of the development (i.e., the total proposed development intensity of 6.2 million square feet) should be considered.

LC: Because MOA and ADM are similar in land use mix as provided in the Methodology Statement (ratio of GLA/GFA) deriving either rate for MOA and then applying it to ADM will provide the same external trip total for ADM within 4%. That is, the conversion from a GLA rate to a GFA rate for MOA and then applying the rate to ADM GFA versus ADM GLA cancels out the difference in independent variable use.

21. The use of comparable sites for the trip generations analysis only sampled Mall of America. In previous discussions with the Applicant, references were made to American Dream Meadowlands mall in New Jersey that included many of the unique retail and entertainment uses proposed for the ADM. It is recommended that the American Dream Meadowlands mall trip generation data be added for comparison purposes to broaden the sample size beyond one site in Minneapolis.

    LC: See response to #13 above.

<u>Section 7.0 Trip Distribution and Assignment</u>

22. It is implied in Section 7.0 that project demand will be included in the model run(s) to estimate directional distribution of trips to/from the ADM development. It is stated in the methodology that the directional distribution proportions from the build run(s) will be added to background network volumes obtained from the growth rate methodology described in Section 5.0 Background Traffic. It is unclear how new roadways in future year Cost Feasible networks will be handled. Please clarify the use of directional distribution in the background traffic for all affected roadway links, including new roadways in the Cost Feasible Plan.

    LC: Project distribution on 2020 and 2040 networks will be derived, and subject to review for logic, from the corresponding cost feasible network build-out run.

23. Please list and/or graphically depict the 2020 and 2040 roadway improvements from the Cost Feasible network that will be used in the project's analysis.

    LC: Specific improvements and network changes will also be identified in the CDMP TIA.

24. For SIS and interchange analyses, vehicular trips (rather than person-trips) must be assigned to the transportation network and represent the basis for any traffic analysis. Please revise the methodology accordingly.

    LC: External vehicular trips from the trip generation summary will be applied to the network in the CDMP TIA.

25. Please explicitly specify the number of Traffic Analysis Zones (TAZs) that will represent the project in the transportation model. This will assist in clarifying the proposed model structure and the potential effects upon the distribution and assignment of trips within the model.

LC: The TAZs will be identified in the CDMP TIA and model files will be available for review.

26. It is recommended that the use of the SERPM model from the 1-75 PD&E study (and subsequent re-evaluations) be explicitly noted for the development of trip distribution and assignment. This model is considered the best current representation of future traffic flow within the study area.

    LC: The Applicant has reviewed all of the recent regional models and refinements available for the area for most realistic volume forecasts for 2040 as this comment proposes. We tend to agree with the Turnpike that their version of SERPM 6 w/ SERPM 7 socioeconomic data is one of the better options to use for the CDMP TIA and we will likely recommend its use to Miami-Dade County for this reason.

<u>Section 8.0 Mitigation Analysis</u>

27. The mitigation analysis states that mitigation measures will include "a range of options" but does not specifically refer to multimodal strategies. It is recommended that potential express bus service on the 1-75 and S.R. 826 express lanes, a park-and-ride at or near this site, and multimodal facilities connecting the site to the residential area on the east side of 1-75 be considered.

    LC: Multi-modal is included in the intent of "a range of options".

28. Please modify the methodology to explicitly note that the AM peak hour, PM peak hour, and a weekend peak period will be evaluated for the short and long term analysis of roadway segments, intersections, and interchanges. Also, please include text stating that the peak direction and off-peak direction of flow on each roadway segment will be analyzed.

    LC: The CDMP TIA will be consistent with the requirements of the Miami-Dade County CDMP requirements. Additionally, the Applicant has committed to generally follow the DRI study guidelines to fully address impacts.

29. Please include in the proposed methodology the approach to analyze the current and proposed interchanges impacted by ADM. This should include a definition of significant impact to ramps and interchanges, similar to that briefly described in Section 2.0.

    LC: Roadways in the CDMP study area will be analyzed per the Methodology Statement. If there is a specific concern identified at an interchange it will be subject to the mitigation analysis portion of the CDMP TIA.

City of Hialeah – October 13, 2015

The City of Hialeah would like to have a detailed analysis of the impact of the proposed development on NW 97th Avenue and NW 107th Avenue south of the proposed project down to NW 138th Street. Said analysis should include the future traffic projections and projected LOS for the most intense scenario of the future land uses in the area, within the City of Hialeah.

LC: Per the requirement of the CDMP, the study area will extend to all roadways where external project trips from the project are forecast to be equivalent to or greater than 5% of the MSV for each facility. This requirement will most likely include NW 97th and NW 107th Avenues within the study area. For CDMP study purposes, the alignment of NW 97th and 107th Avenues will be assumed for traffic connectivity and to avoid conflict with Florida's Turnpike at NW 170th Street. The final alignment will be determined through discussions with the affected land owners, and jurisdictions.

Any approved developments within that area will be included as committed developments. The area poised for development immediately south of the site up to NW 170th Street is mostly controlled by the Graham Companies. The Applicant has met with representatives of the Graham Companies and received their anticipated land use program for that area. Their development at buildout would consist of 1 million square feet of retail; a business Park of 3 million square feet, and an additional 2,000 multi-family residential units (apartments). Since this is a substantial amount of diverse development it is not anticipated to be built in one single phase unlike the American Dream Miami. As such, we will assume that for the short term analysis (2020) the Graham Companies will build 150,000 square feet of retail; 250,000 square feet of Business Park; and, 500 Apartments. The remainder will be included in the long term analysis for 2040. Since these developments also require a land use amendment, the developments will be loaded into background traffic. Land areas further south of NW 170th Street will be included based on what is currently coded in the 2040 LRTP.

City of Hialeah Gardens – October 13, 2015

The city of Hialeah Gardens would like to know a potential traffic impact, specifically through NW 107 Av. and NW 138 St. as part of our jurisdictional lines.

LC: Per the requirement of the CDMP, the study area will extend to all roadways where external project trips from the project are forecast to be equivalent to or greater than 5% of the MSV for each facility. This requirement will most likely include portions of NW 138th Street and NW 107th Avenue within the study area. For CDMP study purposes, the alignment of NW 107th Avenue will be assumed for traffic connectivity and to avoid conflict with Florida's Turnpike at NW 170th Street. The final alignment will be determined through discussions with the affected land owners, and jurisdictions.

Town of Miami Lakes – October 13, 2015

1. It appears that the analysis will assume an interchange of I-75 at NW 170th Street. What will the analysis assume about this interchange, i.e. will it be westbound only or also eastbound?

   LC: The directional interchange at I-75 and NW 170th Street will no longer be included in the CDMP TIA for the short-term (2020) and long-term (2040) analyses.

2. Performing a "traffic" analysis, rather than a broad based mobility analysis that includes consideration of impacts and opportunities associated with all modes of travel, is a fundamental error that will result in exacerbating an already dire situation of lack of mobility options and strangling traffic congestion that currents exists in northwest Miami-Dade County.

   Indeed, it is this precise approach to evaluating the impacts of, and evaluation the infrastructure needs of, planned land uses that has created the mobility crisis that exists today, with frequent laments about the lack of viable transit options and ever-increasing times spent in traffic. This is because transportation planning is, to a large degree, a self-fulfilling prophecy: if infrastructure needs are determined based on the assumption that everyone will drive for all trips, then the resulting infrastructure will make driving the only viable option. This keeps driving demand high, ensuring congestion and thus the resulting "need" for still more auto infrastructure at the expense of all other modes of travel. There is no reason to believe that using this same approach once again will create a different result this time.

   On the other hand, if ever there was a project that had the potential to begin creating real change in Miami-Dade County's transportation system, it is American Dream Miami. As the Technical Memorandum notes, the project would be the "... largest self-contained shopping / entertainment experience in the country." A project of this size will have an unprecedented impact on its surrounding landscape, including the transportation system. What that change will look like, however, depends upon how its approvals are handled.

   Rather than following the same approaches that have failed in the past, Miami-Dade County should take advantage of the broad legislative and policymaking discretion afforded by a comprehensive plan amendment, and use this exceedingly rare opportunity to address the mobility needs - and not just the traffic needs - of the County's residents and businesses.

   LC: The CDMP TIA for ADM will need to adhere to the CDMP adopted guidelines. As part of the CDMP TIA, an analysis is required to address any mitigation measures to include a wide range of options for mobility and safety needs. This will include consideration of multi-modal options.

City of Miramar – October 13, 2015

1. Prior to preparing the transportation impact analysis, the traffic consultant should meet with City staff to review committed development projects and roads that will be evaluated within the City of Miramar.

   LC: Consultants for the Applicant plan to coordinate with agencies to collect data for the CDMP TIA. Additionally, it is our understanding that Miami-Dade County will provide continued opportunities for input from other agencies.

2. At a minimum, the analysis should evaluate traffic impacts to Miramar Parkway, Pembroke Road and Flamingo Road/NW 67th Avenue.

   LC: Per the requirement of the CDMP, the study area will extend to all roadways where external project trips from the project are forecast to be equivalent to or greater than 5% of the MSV for each facility. This requirement will most likely include portions of Miramar Parkway and others.

3. The analysis should include justifications for all trip reductions, including internalization, transit and pass-by trips.

   LC: A trip generation summary and explanation is provided in the Methodology Statement. In addition, a presentation provided at the methodology meeting addressed the specific reasoning and data behind the trip generation proposal, specifically, justification for the use of count data at the most comparable land use available (Mall of America in Bloomington, MN) to derive trip generation forecasts for ADM based on ITE's guidance. No reduction to the MOA rate is proposed for ADM, however, an adjustment up due to the light rail ridership at MOA was performed because no light rail is assumed for ADM. Additionally, the internal capture between the retail, entertainment and hotel portions of MOA (and for ADM) is built into the rate and no additional capture is assumed beyond that. Consistent with providing a trip generation forecast based on the best available data (ITE's recommendation), the fitted curve equation for Shopping Center was used to forecast pass-by trips using only GLA of the retail square footage portion of ADM. Due to the inverse relationship of GLA to pass-by percentage from the equation, the resulting 14% pass-by is much lower than the rate from a more traditional sized shopping center. This appears to be a realistic assumption based on the hundreds of thousands of commuters on the two adjacent freeways who will pass by the project at build-out.

4. Entertainment and hotel uses do not appear to be included in the trip generation summary (Table 3).

   LC: The trip rates per gross leasable area (GLA) were derived from external count data at MOA. Whatever capture happens at MOA (and is expected to happen at ADM) is built into these external trip rates. As shown in the Methodology Statement MOA and ADM are similar in land use mix (ratio of GLA/GFA) which makes applying the per GLA rate applicable to ADM. Note that using GLA as the independent variable is consistent with ITE's treatment of Shopping Center (ITE 820).

5. Please see our comments marked on Page 17 of the presentation provided at the September 21, 2015 meeting.

   LC: Please note on Slide 17 of the presentation exhibit that a row on the ADM breakout was hidden unintentionally. Number 3 in the ADM break-out list of entertainment uses is a 370 ksf Water Park. With this information included, the subtotal discretion is resolved. Specifically, with the additional 370 ksf from the water park use, the sum of the entertainment uses now equal the 1,500 ksf of entertainment uses subtotaled at the bottom of the ADM table.

Miami-Dade Expressway Authority (MDX) – October 13, 2015

Our request is to document any potential traffic impact on our highways and projects in the area due to the additional demand generated by the new development. This includes NW 138th street and the SR 924/Gratigny West extension design project (MDX 92404). We asked for a one on one meeting with the consultants to discuss their approach to the project's transportation needs and traffic impacts.

LC: Per the requirement of the CDMP, the study area will extend to all roadways where external project trips from the project are forecast to be equivalent to or greater than 5% of the MSV for each facility. This requirement will most likely include these MDX projects within the study area. The Applicant has reached out to staff at MDX and indicated they would set a meeting shortly.

APPENDIX I-A4:
ADM Methodology Status Update Presentation_10232015

AMERICAN DREAM MIAMI TRANSPORTATION METHODOLOGY STATUS UPDATE

10/23/15

INTRODUCTION

CDMP TIA Methodology History

- **Sept 8** – Methodology Statement submitted to MDC (dated Sept 3, 2015)
- **Sept 17** - Methodology Meeting, TG Presentation
- **Sept 23 through Oct 13** - Agency comments received
- **Oct 16** - Response to Comments to MDC
- **Today** - Goal to discuss and finalize methodology

Agencies Providing Comments

4

- Miami-Dade County Traffic Engineering Div.
- Broward County Planning & Development Management Div.
- Florida's Turnpike Enterprise
- South Florida RPC
- FDOT Districts 6 and 4
- City of Hialeah
- City of Hialeah Gardens
- Town of Miami Lakes
- City of Miramar
- Miami-Dade Expressway Authority (MDX)

OVERVIEW OF KEY COMMENTS AND APPLICANT RESPONSES

CDMP TIA Scope

- Miami-Dade's Comprehensive Development Master Plan (CDMP) process is a periodic review of development capacity, including the availability of adequate travel network to serve future development.
- Proposed changes to the County's Land Use Plan (LUP) map must submit a CDMP application to show additional impacts.
- TIA to include:
  - Trip Generation (current LUP designation vs. requested designation)
  - Trip Distribution and Assignment
  - 5% significance study area
  - Existing, Short-term and Long-term LOS analyses on Cost Feasible roadway segments (Background vs. Current LUP Designation vs. Requested Designation)
  - Address the need for and mitigation of new facilities to provide a "safe and efficient" transportation network

Trip Generation Approach I

7

Comment:

- Additional/Alternative sites for trip rate development

Response:

- American Dream Miami (ADM) is unique
- MOA is the only site with size, mix and tourism comparison
- Several studies suggested for reference but none represent a better comparative than MOA

➡ MOA represents the most relevant site to reference. It's use is consistent with ITE's guidance.

Trip Generation Approach II

8

Comment:

- Use Total GFA SF instead of GLA SF

Response:

- Ratio of GLA to Total GFA SF is very similar for MOA and ADM
- Applying either rate will output same external trips (within 4%)

➡ TG per GLA SF remains applicable

Trip Generation Approach III

Comment:

- Use individual ITE rates for each land use type

Response:

- Presentation on Sept 17 provided details on limitations of ITE Manual's rates relative to ADM project
- ITE recommends traffic count study based on similar site
- Two separate count programs conducted at MOA

➡ TG rates are based on best available data (MOA)

➡ MOA count data to be provided with CDMP TIA

Trip Generation Approach IV

Comment:

- Separate TG rate needed for hotel/entertainment land use

Response:

- TG rates from MOA are “external” trip rates. For a similar mix of uses at MOA, the ADM hotel/entertainment uses are “built into” these rates.
- Internal capture is not implied to be 100% for these LUs

➡ One combined site rate is best approach

➡ Hotel/entertainment trips are accounted for

➡ Studying external trips eliminates the need to assume internal capture behavior

AM Trip Generation

Comment:

- AM peak hour trip generation requested; especially for school zones

Response:

- ADM has low TG for AM peak hour of adjacent roadways (1/5 of PM rate)
- Mall hours do not coincide w/ roadway AM peak hour
- Generally, no need for AM peak hour link analysis

➡ TG tables will include AM peak hour summary

➡ AM peak hour link analysis for roads w/ school zones

Weekend Trip Generation

Comment:

- Weekend TG may be critical for some nearby roadway

Response:

- The CDMP TIA will need to adhere to CDMP guidelines
- These guidelines do not consider weekend analyses

➡ TG tables will include Saturday peak site hour results

➡ Weekend impacts will be investigated by collecting Saturday counts at key facilities for the DRI-level analysis required subsequent the CDMP.

Pass-By/Diverted Trips

Comments:

- How is pass-by trips applied? Why is it not 0%?
- Should be referred to as “diverted trips”

Response:

- 100,000’s of commuters avail for “pass-by” trips on fwys
- Trips will detour from planned route due to Mall’s many opportunities for “pass-by” (dinning, shopping, etc.)
- Some future employees/deliveries/shoppers already on these routes today

➡ Lower 14% pass-by rate reflects ADM’s large size
➡ Reduction based only on ADM GLA retail
➡ Trips will be treated as “diverted trips” in the analysis

Travel Demand Model

Comments:

- Consider Turnpike's model w/ refinements for area
- Consider other models

Response:

- Applicant has reviewed all available models for area
- Considering using SERPM 6 model plus SERPM 7 SE data

➡ Recommend SERPM 6/7 combo for use

➡ Travel demand forecasts will be reviewed for logic

Background Traffic/Network I

Comment:

- CF projects must be incl. for future roadway networks
- Vested trips must be incl. in BG trips

Response:

- 2020 and 2040 networks will incl. all CF improvements consistent w/ CDMP TIA instructions
- 2020 and 2040 analyses will incl. vested trips and/or growth rate on a segment-by-segment basis
  - ➡ Committed improvements accounted for
  - ➡ Committed/vested trips accounted for

Background Traffic/Network II

Comment:

- The status of vacant land south of site needs to be reviewed

Response:

- Applicant has met with Graham Companies (owner)
- Has received anticipated land use for their development
- Will incl. Graham land use in ADM background analysis

➡ Assumptions presented for phasing Graham land uses

➡ Note: Graham will require separate LU amendment

Study Area & Significant Impact

Comment:

- Requests for ensuring encompassing study area

Response:

- Per CDMP, 5% will be used to identify threshold
- CDMP TIA also committed to generally follow DRI guidelines

➡ 5% threshold for defining study area

➡ Based on TG, will cover a considerable study area

Mitigation

18

Comment:

- Mitigation should include multimodal and safety

Response:

- Analysis uses conservative approach for transit
- Multimodal is included in the intent of “range of options” for mitigation

➡ Mitigation will address multimodal and safety

➡ Analysis is deemed conservative

ADDITIONAL CONSIDERATIONS

Beyond CDMP Req’ts…

- Total and directional PM peak hour analysis.
- Trip generation summary for AM, Saturday, and Saturday peak hour in addition to Weekday and PM peak
- TG Adjustment to account for MOA LRT adjustment
- Provide the MOA counts reports from KH and WPS
- Use of the SERPM 6 model w/ SERPM 7 model data as recommended by Turnpike
- Study area to extend beyond Miami-Dade to accommodate 5% significance
- A portion of Graham in the 2020 model background, total Graham in 2040 model background

Traffic Studies to Come

- **CDMP TIA** for Future Land Use Amendment
- Separate **County Traffic Analysis** similar to a DRI Question 21 Transportation Analysis, incl. intersections and interchanges along significantly impacted roadways
- **Interchange analyses,** incl. but not limited to:
  - I-75 PD&E Reevaluation
  - Interchange Access Requests (IAR)
  - Turnpike Interchange Justification Reports (TIJRs)

DISCUSSION

APPENDIX I-A5:
CDMP TIA Methodology Comment Set Response to Miami-Dade County Transportation and Public Works_10262015

AMERICAN DREAM MIAMI
MIAMI-DADE CDMP TIA METHODOLOGY
COMMENT SET & RESPONSES
Muhammad Khan October 26, 2015

Dear Mr. Kahn;

Thank you for your email comments following the last methodology conference on Monday October 23, 2015. We delved much deeper into the trip generation studies and rationale for our approach at our prior methodology conference on September 21, 2015, which I believe you did not attend. We had a robust discussion on many of the concerns you raised which would have been helpful to you. That is perhaps why Dr. Shen was generally on board with our approach during the conference call on October 21, and we did not hear any comments when Jack Osterholt asked if there were any additional questions regarding the trip generation at the meeting on October 23.

Nonetheless, we want to address any concerns you may have going forward as we have done below. Please understand that respectfully we must move forward with our analysis based on the general consensus of the reviewing agencies to date in order to meet our November 30 submission deadline. Any corrections or valid revisions will have to be considered during the review process. We look forward to working with you and other reviewing agencies throughout the CDMP and subsequent traffic studies and interchange proposals related to the American Dream Miami.

1) As commented before, we have concerns regarding 14% pass by trips. Was there any pass-by trip data collected for MOA site to support it. It is recommended that this rate should be reduced.

A specific pass-by study was not conducted at MOA for either their own expansion study or our American Dream Miami project. It should be noted that the pass-by rate was derived from ITE's Trip Generation for retail centers (ITE 820) and only calculated based on the retail GLA. There is no reason to assume it should be different here than for any other retail shopping center. In the past, DRI's for shopping centers located in Florida and along freeways have also applied the ITE pass-by rates and once off the freeway mainline treated them as "link-diverted" trips, thus having the same impact on the interchanges and access roads as a new trip. We really don't see any supported rationale to treat this center differently.

2) The size of about 1.5 million-SF of entertainment uses in ADM appears significantly higher than MOA. Therefore, it is expected to create its own separate trip generation apart from retail. Please revise trip generation accordingly.

The Applicant has considered all alternative sites that reviewers to date has presented for use and concluded that MOA is the closest model to ADM that exists to best forecast ADM trip generation based on the size, mix, trip type and design. The primary trip purpose at MOA remains overwhelmingly "shopping". Based on the Cambridge Systematics 2012 study it was 68% shopping, and another mixed 7% of shopping and other purposes (total 75%). Therefore the primary driver of the trip generation is the retail component and the same will be true of ADM to be operated under same owner.

One difference anticipated between the MOA and ADM ancillary entertainment trips, however, is vehicle occupancy. Florida entertainment facilities and theme parks have much higher vehicle occupancy rates than reported at MOA. The range is from 2.3 at MOA and is reported near 4.0 at theme parks in Central Florida. Therefore, if we increased a small portion of the trips for entertainment as you suggest, and then use internal capture matrices and apply the higher occupancy rates for Florida to all entertainment trips, the trip total is less. We opted to keep the rate conservative and avoid multiple adjustments up and down that may be questionable. Also, please keep in mind many of the entertainment uses measure large, but have significant unusable areas such as a 100,000 sf submarine lake, and a 65,000 sf outdoor fishing lake. We did not adjust MOA rates for use at ADM for these reasons.

3) Vehicle occupancy rates are not mentioned. If they are available they can be used to support trip generation by applying to estimated persons/customers of ADM project.

Please see the response to comment (2). At MOA it ranges from 2.1 for resident trips (within 150 miles) and 3.6 for Non-Resident trips (beyond 150 miles) with a weighted average of 2.3 persons per vehicle. These rates are already reflected in the trip counts taken at MOA. Note again that the average vehicle occupancy for theme entertainment centers in Florida is higher which if applied would lower our trip generation.

4) Provisions should be kept in planning and design phases for right-of-ways and space to accommodate any future rail or transit service with dedicated travel way.

As you suggest we are planning to incorporate a transit center within the parking system such as at MOA along with having an FDOT Park-and-Ride lot just off the exit ramps from I-75/HEFT. At this stage we are seeking land use and will be able to more accurately respond when developing the site plan. The developers have historically placed great value on transit access and services.

5) Based on review of slide 18, if the vehicles were tube counted for MOA, then no transit or non-motorized reductions should be made.

That is correct. The bus transit and other shared vehicle modes are inherent in the trip rates. The LRT adjustment was "added" to the trip rates to account for a lack of light rail transit within our planning horizon and based on the current 2040 LRTP.

6) No discussion is provided regarding the parking demand.

Parking will be addressed at the site plan review. Please keep in mind that most parking will be provided in structures as is the case at MOA.

7) We are working in coordination with our RER department for the stations' traffic data and will provide you soon.

We look forward to reviewing County's existing an historical count data and vested trips, by direction, for use in the CDMP TIA.

APPENDIX I-A6:
CDMP TIA Methodology Comment Set Response to FDOT Districts Four and Six_10302015

AMERICAN DREAM MIAMI
MIAMI-DADE CDMP TIA METHODOLOGY
COMMENT SET & RESPONSES
FDOT D4/D6 October 30, 2015

Dear Mrs. Colmenares;

Thank you for your additional comments following the last methodology conference on Monday October 23, 2015. We want to address any concerns you may have going forward as we have done below in red font. Please understand that respectfully we must move forward with our analysis based on the general consensus of the reviewing agencies to date in order to meet our November 30 submission deadline. Any corrections or valid revisions will have to be considered during the review process. We look forward to working with you and other reviewing agencies throughout the CDMP and subsequent traffic studies and interchange proposals related to the American Dream Miami.

General Comments

1. The proposed analysis does not include the anticipated Graham property development located immediately south of ADM. Significant traffic volumes are expected to be generated from the Graham property in the future which will influence the magnitude and the traffic patterns on the area's Strategic Intermodal System (SIS) facilities and arterial roadway network. The inclusion of the Graham property development in the analysis is critical to accurately assess the transportation network's needs as a result of the proposed developments.

   ADM RESPONSE (10/16/15): Any approved developments within that area will be included as committed developments. The area poised for development immediately south of the site up to NW 170th Street is mostly controlled by the Graham Companies. The Applicant has met with representatives of the Graham Companies and received their anticipated land use program for that area. Their development at buildout would consist of 1 million square feet of retail; a business Park of 3 million square feet, and an additional 2,000 multi-family residential units (apartments). Since this is a substantial amount of diverse development it is not anticipated to be built in one single phase unlike the American Dream Miami. As such, we will assume that for the short term analysis (2020) the Graham Companies will build 150,000 square feet of retail; 250,000 square feet of Business park; and, 500 Apartments. The remainder will be included in the long term analysis for 2040. Since these developments also require a land use amendment, the developments will be loaded into background traffic. Land areas further south of NW 170th Street will be included based on what is currently coded in the 2040 LRTP.

   FDOT REPLY (10/27/15): Please provide additional documentation and confirmation for the specific development intensity on the Graham property for the short-term (2020) and long term (2040) analysis. While it is understood that it is unlikely the Graham property will be developed in one phase by 2020 to the buildout intensities initially proposed, it is unclear how ADM determined that 150,000 square feet of retail; 250,000 square feet of Business Park; and 500 Apartments is a reasonable development intensity estimate for 2020, as well as their estimated 2040 development intensity.

ADM RESPONSE (10/29/15): The Graham property development was provided to ADM at our request by the Graham Company's consultant. This anticipated development will also require a land use amendment. ADM has again met with representatives from the Graham Companies (10/28) and to date the land use program was agreed to be the best planning estimate for 2020, and buildout sometime between 2021 and 2040. The Graham Companies may adjust these values as they proceed with their own CDMP application which may require some adjustments at that time.

2. The proposed roadway network includes interchange modifications and new ramp connections at 1-75 and Miami Gardens Drive and NW 170th Street, respectively. In addition, substantial transportation impacts may be realized at 1-75 and HEFT, 1-75 at NW 138th Street, 1-75 at Miramar Parkway, HEFT at Okeechobee Road, and HEFT at State Road (S.R.) 823/Red Road/NW 57th Avenue. Interchange improvements will require an Interchange Access Request (IAR), and must adhere to Florida Department of Transportation (FDOT) Procedure 525-030-160 concerning new or modified interchanges.

   ADM RESPONSE (10/16/15): Acknowledged as a separate matter from the CDMP TIA. However, in part on consideration of this matter, the directional interchange at I-75 and NW 170th Street will no longer be included in the CDMP TIA for the short-term (2020) and long-term (2040) analyses.

   FDOT REPLY (10/27/15): Response accepted.

3. The ADM project will require coordination with the FDOT and Federal Highway Administration (FHWA) concerning an IAR. A separate Methodology Letter of Understanding (MLOU) must be prepared specifically for any proposed new or modified interchange access. The amount of analysis and documentation required is related to the proposed action and type of IAR document, and will be determined subsequently by FDOT and FHWA.

   ADM RESPONSE (10/16/15): Acknowledged as a separate matter from the CDMP TIA. The ADM team will continue to coordinate interchange proposal requirements during the CDMP review with FDOT, FHWA and Florida Turnpike Enterprise.

   FDOT REPLY (10/27/15): Response accepted.

<u>Section 2.0 Study Area</u>

4. The proposed study area definition is consistent with the Miami-Dade County instructions for study area definition when preparing a Comprehensive Development Master Plan amendment (5% of adopted level of service (LOS) capacity), which is also consistent with the Transportation Concurrency Best Practices Guide. The latter document also suggests inclusion of any critically deficient roadways with project traffic equivalent to more than 1% of adopted LOS capacity, which is not noted in the proposed methodology. Please include this as an additional definition of the study area determination.

ADM RESPONSE (10/16/15): Per the requirement of the CDMP, the study area will extend to all roadways where external project trips from the project are forecast to be equivalent to or greater than 5% of the MSV for each facility. However, the CDMP TIA has committed to generally follow the DRI study guidelines to fully address impacts as part of the CDMP TIA.

FDOT REPLY (10/27/15): Response accepted.

Section 4.0 Existing Conditions

5. The last paragraph states that "All projects funded for construction in the next three years will be assumed in place for existing conditions." It is unclear if "project" in this context means only transportation projects or other development projects. The FDOT Transportation Site Impact Handbook notes that pursuant to Section 163.3180, F.S., "vested trips" (major committed developments, either having an approved Development Order or an approved concurrency management certificate) also must be included in background trips. Please clarify the meaning of "project" and specify if vested trips are proposed to be included in the existing conditions analysis.

   ADM RESPONSE (10/16/15): The intent of showing "All projects funded for construction in the next 3 years" in the existing analysis was to account for additional system capacity under construction or soon to be under construction. However, Miami-Dade County has requested a preference to exclude these committed roadway projects in the existing condition analysis, therefore the CDMP TIA will exclude them in the existing analysis. For future year background conditions (Years 2020 and 2040), the CDMP TIA will include all planned cost feasible improvements consistent with the CDMP TIA instructions. For the Year 2020, committed (vested) trips provided in the Miami-Dade County's Concurrency Database will be used if greater than linear growth.

   FDOT REPLY (10/27/15): Response accepted.

6. It is stated that 2015 volumes will be used to represent existing conditions. If 2015 volume data is unavailable, it is proposed to extrapolate the available data to estimate 2015 conditions using 1% or the historical growth rate, whichever is greater. Please provide the origins and justification for the 1% growth rate, and identify if the estimation of 2015 volumes applies to daily and peak hour volumes.

   ADM RESPONSE (10/16/15): The 1% growth rate is proposed as a bare minimum if historical patterns are shown to less or negative. Daily and PM peak volumes will be treated similarity.

   FDOT REPLY (10/27/15): Response accepted.

7. It is recommended that K and D factor values be proposed for each of the roadways evaluated for existing and future conditions. The values of these factors should be consistent with the Department's Project Traffic Forecasting Handbook.

ADM RESPONSE (10/16/15): FDOT volumes, K factors and D factors will source FDOT data as available.

FDOT REPLY (10/27/15): Response accepted.

Section 5.0 Background Traffic

8. The 2040 Long Range Transportation Plan (LRTP) Cost Feasible Plan includes four roadway extensions or new roadways in the study area. If background year volumes are derived from historical counts, volumes on these roadways cannot be determined. The third paragraph states that "...background traffic patterns from regional model runs may be reviewed to anticipate the impact of future cost-feasible infrastructure improvements on background traffic patterns." The roadway projects include:

   - NW 170th Street from HEFT to NW 97th Avenue -- new 6-lane roadway funded in Priority III
   - NW 107th Avenue from NW 170th Street to Broward County line -roadway extension funded in Priority IV
   - NW 186th Street from NW 97th Avenue to 1-75 -- new 4-lane roadway funded in Priority IV
   - Gratigny Parkway from S.R. 826 and 1-75 to HEFT -- roadway extension funded in Priority II

   Please revise the methodology to state that Southeast Regional Planning Model (SERPM) model runs of the no-build will be included to estimate background traffic on these roadways.

   ADM RESPONSE (10/16/15): The Applicant will likely recommend that SERPM runs be used for the CDMP TIA consistent with the Methodology Statement. To estimate future volumes on roadways which do not exist today, or where a shift in traffic is expected in the future, model runs subject to review for logic will be utilized.

   FDOT REPLY (10/27/15): Response accepted.

9. Please explicitly identify the interchange, access, and ramp configurations that the project assumes are representative of the future roadway network. For example, the access via NW 170th Street at 1-75 is shown in Figure 2, and an alternative interchange configuration is shown at 1-75 and Miami Gardens Drive. Improvements not noted in the LRTP Cost Feasible Plan will be considered commitments by the Applicant and must be constructed and operational prior to the opening of the project.

   ADM RESPONSE (10/16/15): The traffic analysis for the CDMP assumes interchange configurations for I-75 and HEFT and Miami Gardens Drive as have been jointly developed by the ADM and FDOT consultants. The I-75 and NW 170th Street interchange was an assumption for the 2040 planning horizon to support plans by others to the south, however, on consideration of this matter in part, the directional interchange at I-75 and NW 170th Street will no longer be included in the CDMP TIA for the short-term (2020) and long-term (2040) analyses. The applicant understands that interchanges not in the LRTP will require new

funding sources to be identified before any interchange access, modification or justification report process can be initiated.

FDOT REPLY (10/27/15): Response accepted.

10. It is recommended that a complete listing of the transportation improvements and network changes for 2020 and 2040 as compared to the existing conditions be included in the methodology document.

    ADM RESPONSE (10/16/15): Specific improvements and network changes will also be identified in the CDMP TIA.

    FDOT REPLY (10/27/15): Response accepted.

11. It is recommended that the Applicant use the SERPM transportation model developed for the 1-75 project development and environment (PD&E) study (and subsequent re-evaluations) for the 2020 and 2040 background volumes, since substantial traffic pattern changes are anticipated as a result of the proposed 6.2 million square feet of development that will not be reflected in historical growth along area roadways. Historical growth, however, can be used as a reasonableness check for future year background volumes.

    ADM RESPONSE (10/16/15): The Applicant has reviewed all of the recent regional models and refinements available for the area for most realistic volume forecasts for 2040 as this comment proposes. We tend to agree with the Turnpike that their version of SERPM 6 w/ SERPM 7 socioeconomic data is one of the better options to use for the CDMP TIA and we will likely recommend its use to Miami-Dade County for this reason.

    FDOT REPLY (10/27/15): The recommended use of the Turnpike model, I-75 PD&E study model, or the adopted SERPM 7 model must be reviewed, documented, and approved by the review agencies as part of the transportation analysis. A reasonableness check of the model volumes along roadway segments, such as I-75 and other regionally significant roads, must be performed as part of this documentation and approval process. It is suggested that an agreement concerning which model will be used for the traffic analysis occur at the onset of the traffic analysis study.

    ADM RESPONSE (10/29/15): For the CDMP TIA for MDC land use map amendment consideration, we contend we are using the best travel demand modeling tool available for ADM. This assessment is based on months of review of 2040 outputs in the study area from every other SERPM version 6 and 7 model available for use against growth of existing counts. As we proceed through the CDMP analysis we will continue to evaluate the model's use and output against other forecast methods. The model we are using is the same model FDOT provided for joint interchange/access feasibility exercises earlier this year. It is the SERPM 6.5/Managed Lanes PD&E model, plus Turnpike network edits for their planned future projects, plus the approved SERPM 7 socioeconomic data integrated in. This version of the model produced much more logical future volumes on major area roadways in 2040. The

Applicant will make the CDMP TIA and model files available to MDC for review of appropriate use of the model for forecasting distribution of project trips and, as necessary, background volumes or diverted traffic patterns due to new facilities. It is anticipated that the County will ask FDOT and other agencies to review at that time.

12. Please note that future year travel demand forecasts along SIS and State Highway System (SHS) facilities must be reviewed and approved by FDOT.

    ADM RESPONSE (10/16/15): The FDOT will be one of the reviewing agencies for the CDMP TIA as coordinated by Miami-Dade County.

    FDOT REPLY (10/27/15): Response accepted.

<u>Section 6.0 Trip Generation</u>

13. While it is agreed that utilizing the Institute of Transportation Engineers (ITE) trip rates for a shopping mall will underestimate internal capture and thus overestimate external trips, it is unclear whether traffic counts collected at the Mall of America (MOA) development are sufficiently representative of the proposed ADM development for two reasons:

    First, from a regional perspective, it is likely that the MOA serves as a primary attraction destination in the Bloomington area, which is likely to result in a high internal capture rate, whereas the ADM would be located in a region with multiple international destinations including Miami Beach, the Everglades National Park, and the Florida Keys. It is reasonable, then, to assume that while visitors to ADM may be likely to stay at the resort, it also is likely they will venture out to visit attractions other than or in addition to ADM.

    Second, it is not clear whether the non-retail attractions proposed for ADM are similar enough in nature, attraction power, and size to be comparable to MOA. The square footage alone of the entertainment portion of the ADM development is more than double that of MOA whereas the Gross Leasable Area (GLA) square footage of ADM is only 35% greater than MOA. While the proposed trip generation rates developed from MOA data implicitly include the entertainment attractions, the recommended trip generation rates are based on GLA square footage, which does not include the entertainment and hotel portions of the development.

    The regional context of the proposed development could play an important role in both trip generation and internal capture. Please review Aventura Mall and American Dream Meadowlands trip generation data. Whereas Aventura Mall is primarily composed of retail and restaurants, it also features several hotels and resorts within walking distance, and it should be used as a point of reference, even if not for direct comparison of trip generation rates. American Dream Meadowlands also could provide more relevant comparison due to its regional context near New York City.

    Given the disproportionate share of square footage allocated to entertainment uses at ADM, relative to MOA, it is recommended the trip generation function of the GLA and entertainment portions be separated in the trip generation analysis. If available, trip generation data from amusement parks in Central Florida should be reviewed to determine whether the proposed rates for ADM sufficiently capture the entertainment attraction.

ADM RESPONSE (10/16/15): ADM is a very unique project without many similar sources to draw data from. Fortunately, MOA rivals the size and mix of unique retail and entertainment uses <u>and</u> it was developed and managed by the same entity that proposes ADM. Because of this, it is the logical choice to collect data from and draw informed conclusions for ADM trip estimates.

By comparison, Aventura mall is much smaller and has no entertainment or hotel uses which are intended for substantial onsite capture. By comparison, even if data was readily available, Florida theme parks don't normally include a free-entry shopping center under the same roof as their entertainment districts. After months of researching, the Applicant stands by the statement that MOA data is the best available source for ADM.

Also note that the rates proposed are external trip rates derived from external count data. Whatever capture happens at MOA (and is expected to happen at ADM) is built into the rate. It does not imply that internal capture is 100% for entertainment and hotel portions. Another benefit of using external trip rates is that it takes out all the speculation and guesswork for internal capture or the need for surveys for the CDMP TIA. The CDMP TIA requirement only concerns itself with external trip impacts.

The trip generation data for American Dream in the Meadowlands, formerly known as "Xanadu" is not a good comparison to the proposed American Dream Miami for a number of reasons, the most significant are enumerated as follows:

A. The American Dream project in the Meadowlands was approved in 2003 for the Mills Corporation, then to be known as Xanadu, as an integral part of the larger expanding Meadowlands Sports Complex Master Plan. It broke ground in 2004 as a Family Entertainment, retail, hotel, and office complex. After bankruptcy of two successive owners it was taken over by Triple Five in 2013. The original trips associated with this development were not developed or negotiated by Triple Five. The trip entitlements and approvals which were also a part of the larger Meadowlands Sports Complex EIS were retained and slightly modified to allow a small expansion for the entertainment component. While the peak hour trips are similar in magnitude, since they were sufficient to support project trips and Triple Five retained the project's vested trips other than to allow some small acreage to be added for a water park resulting in an overall increase of 58 PM peak hour trips.

B. A NJ Transit rail station was built adjacent to the American Dream Meadowlands in 2009 to serve the area and especially the NY Jets and Giants Stadium. It is unclear to what degree if any the Mills Corporation consultants were allowed to rely on this transit station in 2002-2003 since they were originally programmed for a 2006 opening date. With excellent connections to Northern New Jersey and Manhattan, these transit assumptions would have significant impacts on the trip estimates.

C. American Dream Meadowlands is currently programmed for opening in 2016. To rely on trip generation studies performed by other developers and other consultants starting back in 2002 for this development with numerous unknown assumptions is far less reliable than to use the 2015 traffic count studies of the same development model, owned by the same developer, and with the same land use mix as proposed in Miami. The Mills Corporation consultants could not have used public traffic study information from Mall of America (MOA) since they received their approvals in 2003 and the MOA conducted and submitted

their expansion studies in 2005 and 2006. If the traffic studies initiated in 2002 and 2003 by Mills Corp. consultants used the ITE Trip Generation Report it would have been the 6th or 7th edition whereas currently the 9th edition is in effect. All this makes the use of this old data very unreliable.

FDOT REPLY (10/27/15): Response accepted. Please note that if American Dream Meadowlands is operational prior to the approval of ADM, trip generating data may be requested from American Dream Meadowlands to provide a second comparable trip generation site.

14. If MOA trip generation rates are utilized for ADM, please clarify the seasonal adjustment factor applied to the MOA observed data. An explanation of the factor and its relationship to the June and August counts should be provided. Clarification of consistency with the SERPM model, which is calibrated to average annual conditions, should also be included. Given that the development is likely to be highly sensitive to seasonal demand, adjustment of SERPM results may be warranted.

    ADM RESPONSE (10/16/15): The Applicant's trip generation presentation from the methodology meeting described that the MOA trip rates were "annualized" based on continuous data collected at the entry point of MOA. Seasonal data is available and will be provided with the CDMP TIA.

    FDOT REPLY (10/27/15): Response accepted.

15. The characterization of the ADM as a "self-contained shopping/entertainment experience" implies 100% internal capture. This characterization either should be supported by data or removed from the methodology text.

    ADM RESPONSE (10/16/15): "Self-contained" was intended to imply that the project has all uses within a single structure with shared access and parking. Because the trip rates were developed from external count data, whatever capture happens at MOA (and is expected to happen at ADM) is built into the rate. It does not imply that internal capture is 100% for entertainment and hotel portions.

    FDOT REPLY (10/27/15): Response accepted.

16. It is assumed that a large portion of the proposed pass-by trips are from 1-75 and HEFT. Given the type of trip using a limited access facility during the peak hour (i.e., home-to-work trip/work-to-home trip), it is unlikely that 14.8% (or 9,900 daily trips and 750 weekday PM peak hour trips) will exit from 1-75 or HEFT and access a destination shopping area/entertainment complex of the magnitude proposed.

    To validate the pass-by reduction for the project, it is recommended that the actual pass-by trip percentage at a comparable site, such as Mall of America and American Dream Meadowlands, be quantified. This approach also would be consistent with the proposed trip

generation methodology where deviating from ITE trip generation rates was proposed because of the uniqueness of the land use and the site's size, which is greater than most of the example uses in the Trip Generation Manual. Please note that 1TE suggests pass-by reduction should represent no more than 10% of the volume of the adjacent street. Such a reasonableness check should be provided in the trip generation analysis.

ADM RESPONSE (10/16/15): Consistent with providing a trip generation forecast based on the best available data (ITE's recommendation), the fitted curve equation for Shopping Center was used to forecast pass-by trips using only GLA of the retail square footage portion of ADM. Due to the inverse relationship of GLA to pass-by percentage from the equation, the resulting 14% pass-by is much lower than the rate from a more traditional sized shopping center. This appears to be a realistic assumption based on the hundreds of thousands of commuters on the two adjacent freeways who will pass by the project at build-out. These trips may be work trips for a commuter making a quick shopping or dining stop during their regular commute. It may be a new carpool stop for an employees from a vehicle already in the background traffic. It could be for a delivery to the project from a vehicle on a pre-existing route. It could be from commuters on business travel or vacation who are curious about ADM and make an unplanned stop.

FDOT REPLY (10/27/15): Given that the Methodology states the ITE Trip Generation manual was not considered an appropriate tool for evaluating the trip generation of ADM, its use to justify pass-by reductions is inconsistent. As a result, it is recommended that the actual pass-by trip percentage at a comparable site, such as Mall of America, be used to quantify the assumptions presented in the proposed methodology. Otherwise, the pass-by reduction should be eliminated. Also, please amend the methodology to include a reasonableness check of the pass-by reduction to ensure it represents no more than 10% of the volume of the adjacent street.

ADM RESPONSE (10/29/15): It should be noted that the pass-by rate was derived from the best available data from ITE for retail centers (ITE 820) and only calculated based on the retail GLA at ADM. Of the 100 studies that make up the ITE pass-by equation for ITE 820, three (3) of the data points exceed 1,000,000 square feet of GLA and showed pass-by of 34%, 17%, and 25%. By comparison, a conservative 14% is proposed for ADM.

There is no reason to assume ADM shopping trips (of which is the overwhelming primary trip purpose at MOA per the Cambridge Systematics 2012 reports which shows 75%) should be different for ADM than for other retail shopping centers. In the past, DRI's for shopping centers located in Florida and along freeways have also applied the ITE pass-by rates and once off the freeway mainline treated them as "link-diverted" trips, thus having the same impact on the interchanges and access roads as a new trip. We really don't see any supported rationale to treat this center differently.

Per FDOT's request, the pass-by will be checked for reasonability and capped at 10% of adjacent background traffic.

17. By definition from the ITE Trip Generation Handbook, 2nd Edition, pass-by trips "...do not involve a route diversion to enter the site driveway." Since the 1-75 and HEFT "pass-by"

trips will need to alter their route to gain entry to the mall, it appears these trips are more appropriately labelled as Diverted Link trips. Diverted Link trips "...add traffic to streets adjacent to the site [and the interchanges], but may not add traffic to the area's major travel routes." It is recommended that this trip reduction be labelled as Diverted Link Trips, which will assist in identifying and tracking the project's impact to the interchanges, ramps, and SIS facilities.

ADM RESPONSE (10/16/15): Acknowledged. Diverted trip is a more specific description of these trips and analysis would be consistent with this intent.

FDOT REPLY (10/27/15): Response accepted.

18. Given the scale of this project, please provide an AM peak hour trip generation analysis for the project.

ADM RESPONSE (10/16/15): The TIA will present an AM peak hour trip generation summary to show that project trip generation in the traditional AM peak period for adjacent traffic (7am – 9am) is only estimated to be roughly 20% of the project PM peak generation. As such, the PM peak hour analysis will control, making an AM peak analysis moot. However, the Applicant will address specific concerns in the AM peak if there is an established need.

FDOT REPLY (10/27/15): While the PM peak hour period trip generation is likely greater than the AM peak period, the scale and magnitude of ADM will still result in a substantial traffic volume generated in the morning. Understanding this project's impact upon SIS facilities, interchanges, and state roadways during the morning peak period is essential to identify movements, approaches, and roadway segments that may require improvements to maintain acceptable levels of service.

ADM RESPONSE (10/29/15): By analyzing the PM peak in the CDMP TIA, we are confident we are evaluating worst case conditions on study area roadway segments. Not only will AM trip generation be one-fifth of the PM peak generation, the AM peak hour for background traffic occurs well before the facility will be open for business in reduced background conditions. We will expand this explanation in the CDMP TIA.

19. Please provide a weekend trip generation analysis for the project, particularly since the retail and entertainment components of the project may attract more trips during a Saturday or Sunday.

ADM RESPONSE (10/16/15): Total and directional volumes will be provided in the TIA as requested. However, the CDMP TIA will need to adhere to the CDMP adopted guidelines which does not consider weekend analyses. Note that ADM is located within a DULA and as such is exempt from DRI review. However, the Applicant has committed to generally follow the DRI study guidelines to fully address impacts as part of the CDMP TIA.

FDOT REPLY (10/27/15): The magnitude of ADM and its composition of retail and entertainment uses indicates substantial traffic generation during weekend periods.

Quantifying this weekend traffic generation must be explicitly included in the Methodology, as well as peak period weekend traffic analyses.

ADM RESPONSE (10/29/15): Weekend analysis is beyond the scope of the CDMP process. Furthermore, the regional models are not calibrated to weekend conditions when traffic patterns shift dramatically from the traditional work week. Agencies do not collect weekend count data or track vested trips for the weekend. As such, there are no requirements in MDC's CDMP TIA instructions to consider weekend conditions. The CDMP TIA will adhere to the County's requirements as well as provide an analysis that will generally follow the DRI format as described in the Methodology Statement and subsequent comment responses.

20. It is noted that only the retail square footage portion or **GLA** of Mall of America is used in determining the trip generation rate. This excludes the trip generating characteristics of the entertainment portion of MOA. The entertainment portion represents 2.7 million square feet of proposed development for ADM.

    The use of Gross Floor Area (GFA) as the independent variable for the trip generation calculation which will include the entertainment component of the development (i.e., the total proposed development intensity of 6.2 million square feet) should be considered.

    ADM RESPONSE (10/16/15): Because MOA and ADM are similar in land use mix as provided in the Methodology Statement (ratio of GLA/GFA) deriving either rate for MOA and then applying it to ADM will provide the same external trip total for ADM within 4%. That is, the conversion from a GLA rate to a GFA rate for MOA and then applying the rate to ADM GFA versus ADM GLA cancels out the difference in independent variable use.

    FDOT REPLY (10/27/15): It is recommended that Gross Floor Area (GFA) be used as the independent variable for the trip generation analysis to ensure that the total proposed development intensity of 6.2 million square feet is included in the analysis.

    ADM RESPONSE (10/29/15): Either method (using GLA or GFA as an independent variable) accounts for all traffic from every use for the entire site. The rates were derived from MOA with respect to 100% of the external traffic that impact the roadway network and then effectively factored up to the size of ADM. Any difference in amount of primary trips for retail versus entertainment trips are built into the rates. Any internal capture is built into the rates. This approach avoids the need to guess at the gross rates and internal capture. This approach is also conservative as the increase in size of ADM will likely increase the internal capture rate and decrease the external trip total captured to MOA.

    Using GLA as the independent variable is consistent with the way ITE categorizes Shopping Center (ITE 820). This make it easy to compare between ADM, the 400+ studies ITE publishes for ITE 820, and other industry publications. Eleven (11) agencies have seen the rates using GLA since early September. Changing them now would be confusing and also unnecessary to the trip generation output for ADM. As described previously, using GFA results in approximately the same external trips for ADM because the mix of GLA/GFA is so similar at MOA and ADM. The CDMP TIA will show the trip generation with GLA as the independent variable as discussed and agreed to with MDC traffic engineering department.

21. The use of comparable sites for the trip generations analysis only sampled Mall of America. In previous discussions with the Applicant, references were made to American Dream Meadowlands mall in New Jersey that included many of the unique retail and entertainment uses proposed for the ADM. It is recommended that the American Dream Meadowlands mall trip generation data be added for comparison purposes to broaden the sample size beyond one site in Minneapolis.

    ADM RESPONSE (10/16/15): See response to #13 above.

    FDOT REPLY (10/27/15): Response accepted. Please note that if American Dream Meadowlands is operational prior to the approval of ADM, trip generating data may be requested from American Dream Meadowlands to provide a second comparable trip generation site.

<u>Section 7.0 Trip Distribution and Assignment</u>

22. It is implied in Section 7.0 that project demand will be included in the model run(s) to estimate directional distribution of trips to/from the ADM development. It is stated in the methodology that the directional distribution proportions from the build run(s) will be added to background network volumes obtained from the growth rate methodology described in Section 5.0 Background Traffic. It is unclear how new roadways in future year Cost Feasible networks will be handled. Please clarify the use of directional distribution in the background traffic for all affected roadway links, including new roadways in the Cost Feasible Plan.

    ADM RESPONSE (10/16/15): Project distribution on 2020 and 2040 networks will be derived, and subject to review for logic, from the corresponding cost feasible network build-out run.

    FDOT REPLY (10/27/15): It is still unclear how new roadways that do not have historical data to generate background growth rate estimates will be analyzed for future conditions. Please clarify the methodology to include details concerning the proposed approach to estimate background traffic for new roadways.

    ADM RESPONSE (10/29/15): Where historical data doesn't exist and application of a standard growth rate may not be appropriate, the method and use of the model to determine background volumes or traffic pattern shifts will be documented and justified in the CDMP TIA. It is anticipated that the County will ask FDOT and other agencies to review at that time. Model files will be made available.

23. Please list and/or graphically depict the 2020 and 2040 roadway improvements from the Cost Feasible network that will be used in the project's analysis.

    ADM RESPONSE (10/16/15): Specific improvements and network changes will also be identified in the CDMP TIA.

    FDOT REPLY (10/27/15): Response accepted.

24. For SIS and interchange analyses, vehicular trips (rather than person-trips) must be assigned to the transportation network and represent the basis for any traffic analysis. Please revise the methodology accordingly.

    ADM RESPONSE (10/16/15): External vehicular trips from the trip generation summary will be applied to the network in the CDMP TIA.

    FDOT REPLY (10/27/15): Response accepted.

25. Please explicitly specify the number of Traffic Analysis Zones (TAZs) that will represent the project in the transportation model. This will assist in clarifying the proposed model structure and the potential effects upon the distribution and assignment of trips within the model.

    ADM RESPONSE (10/16/15): The TAZs will be identified in the CDMP TIA and model files will be available for review.

    FDOT REPLY (10/27/15): Response accepted.

26. It is recommended that the use of the SERPM model from the 1-75 PD&E study (and subsequent re-evaluations) be explicitly noted for the development of trip distribution and assignment. This model is considered the best current representation of future traffic flow within the study area.

    ADM RESPONSE (10/16/15): The Applicant has reviewed all of the recent regional models and refinements available for the area for most realistic volume forecasts for 2040 as this comment proposes. We tend to agree with the Turnpike that their version of SERPM 6 w/ SERPM 7 socioeconomic data is one of the better options to use for the CDMP TIA and we will likely recommend its use to Miami-Dade County for this reason.

    FDOT REPLY (10/27/15): The recommended use of the Turnpike model, I-75 PD&E study model, or the adopted SERPM 7 model must be reviewed, documented, and approved by the review agencies as part of the transportation analysis. A reasonableness check of the model volumes along roadway segments, such as I-75 and other regionally significant roads, must be performed as part of this documentation and approval process. It is suggested that an agreement concerning which model will be used for the traffic analysis occur at the onset of the traffic analysis study.

    ADM RESPONSE (10/29/15): Please see response to #11.

<u>Section 8.0 Mitigation Analysis</u>

27. The mitigation analysis states that mitigation measures will include "a range of options" but does not specifically refer to multimodal strategies. It is recommended that potential express bus service on the 1-75 and S.R. 826 express lanes, a park-and-ride at or near this site, and

multimodal facilities connecting the site to the residential area on the east side of 1-75 be considered.

ADM RESPONSE (10/16/15): Multi-modal is included in the intent of "a range of options".

FDOT REPLY (10/27/15): Please revise the last sentence in Section 9.0 to include the following bold text to explicitly note that multi-modal and transit options are included.

"Consideration of any mitigation measures will also include a range of options, ***including multi-modal and transit options****, to address any safety and mobility needs for the Short-term (Year 2020) and Long-term (Year 2040) time frames."*

ADM RESPONSE (10/29/15): The CDMP TIA will also include a range of options, ***including multi-modal and transit options****, to address any safety and mobility needs for the Short-term (Year 2020) and Long-term (Year 2040) time frames.*

28. Please modify the methodology to explicitly note that the AM peak hour, PM peak hour, and a weekend peak period will be evaluated for the short and long term analysis of roadway segments, intersections, and interchanges. Also, please include text stating that the peak direction and off-peak direction of flow on each roadway segment will be analyzed.

    ADM RESPONSE (10/16/15): The CDMP TIA will be consistent with the requirements of the Miami-Dade County CDMP requirements. Additionally, the Applicant has committed to generally follow the DRI study guidelines to fully address impacts.

    FDOT REPLY (10/27/15): The magnitude of ADM and its composition of retail and entertainment uses indicates substantial traffic generation during AM, PM, and weekend periods. Evaluating each of these periods must be explicitly included in the Methodology to understand this project's impact upon SIS facilities, interchanges and state roadways. Such analyses is essential to identify movements, approaches, and roadway segments that may require improvements to maintain acceptable levels of service.

    ADM RESPONSE (10/29/15): Please see responses to #18 and #19.

29. Please include in the proposed methodology the approach to analyze the current and proposed interchanges impacted by ADM. This should include a definition of significant impact to ramps and interchanges, similar to that briefly described in Section 2.0.

    ADM RESPONSE (10/16/15): Roadways in the CDMP study area will be analyzed per the Methodology Statement. If there is a specific concern identified at an interchange it will be subject to the mitigation analysis portion of the CDMP TIA.

    FDOT REPLY (10/27/15): In the absence of explicit definitions in the methodology, currently accepted traffic volume thresholds and level of service standards, as noted in state and federal

guidelines, will define significant impact to ramps and interchanges. Any disagreement by ADM concerning significant impact to SIS facilities will be resolved by FDOT.

ADM RESPONSE (10/29/15): Acknowledged.

Additional Comment

Can the proposed build out (2020) of the project be explained in greater detail? Also, is the timeline realistic given the current constraints and reviews that will need to occur prior to final approval?

ADM RESPONSE (10/29/15): - The Applicant is proposing full build-out of the 6.2 million square feet facility by 2020 in a single phase. ADM is currently assessing the timelines and concurrent studies and applications. ADM will be discussing this with FDOT and the Turnpike in the next few weeks.

APPENDIX I-A7:
3rd CDMP TIA Methodology Comment Set from Miami-Dade County Transportation and Public Works_11172015

Additional County staff responses in blue below provided 11/17/15. On a follow-up conference call with Dr. Shen, the Applicant's consultants explained they would continue to work with staff on these concerns as the CDMP progressed, but had to proceed with the TIA to make the December 15, 2015 timeline for submitting in the upcoming CDMP cycle. Therefore, responses to these comments will be prepared after the CDMP TIA is submitted.

AMERICAN DREAM MIAMI
MIAMI-DADE CDMP TIA METHODOLOGY
COMMENT SET & RESPONSES
Muhammad Khan October 26, 2015

Dear Mr. Kahn;

Thank you for your email comments following the last methodology conference on Monday October 23, 2015. We delved much deeper into the trip generation studies and rationale for our approach at our prior methodology conference on September 21, 2015, which I believe you did not attend. We had a robust discussion on many of the concerns you raised which would have been helpful to you. That is perhaps why Dr. Shen was generally on board with our approach during the conference call on October 21, and we did not hear any comments when Jack Osterholt asked if there were any additional questions regarding the trip generation at the meeting on October 23.

Nonetheless, we want to address any concerns you may have going forward as we have done below. Please understand that respectfully we must move forward with our analysis based on the general consensus of the reviewing agencies to date in order to meet our November 30 submission deadline. Any corrections or valid revisions will have to be considered during the review process. We look forward to working with you and other reviewing agencies throughout the CDMP and subsequent traffic studies and interchange proposals related to the American Dream Miami.

1) As commented before, we have concerns regarding 14% pass by trips. Was there any pass-by trip data collected for MOA site to support it. It is recommended that this rate should be reduced.

A specific pass-by study was not conducted at MOA for either their own expansion study or our American Dream Miami project. It should be noted that the pass-by rate was derived from ITE's Trip Generation for retail centers (ITE 820) and only calculated based on the retail GLA. There is no reason to assume it should be different here than for any other retail shopping center. In the past, DRI's for shopping centers located in Florida and along freeways have also applied the ITE pass-by rates and once off the freeway mainline treated them as "link-diverted" trips, thus having the same impact on the interchanges and access roads as a new trip. We really don't see any supported rationale to treat this center differently.

The response is acknowledged. However, as it was discussed in a previous conference call over the phone, most of the pass-by trips are anticipated from FDOT roadways, therefore, approval should be obtained from FDOT prior to using this percentage. Furthermore, for any pass-by

trips along the County roadway system, it may be reviewed and commented during CDMP TIA review phase.

2) The size of about 1.5 million-SF of entertainment uses in ADM appears significantly higher than MOA. Therefore, it is expected to create its own separate trip generation apart from retail. Please revise trip generation accordingly.

The Applicant has considered all alternative sites that reviewers to date has presented for use and concluded that MOA is the closest model to ADM that exists to best forecast ADM trip generation based on the size, mix, trip type and design. The primary trip purpose at MOA remains overwhelmingly "shopping". Based on the Cambridge Systematics 2012 study it was 68% shopping, and another mixed 7% of shopping and other purposes (total 75%). Therefore the primary driver of the trip generation is the retail component and the same will be true of ADM to be operated under same owner.
One difference anticipated between the MOA and ADM ancillary entertainment trips, however, is vehicle occupancy. Florida entertainment facilities and theme parks have much higher vehicle occupancy rates than reported at MOA. The range is from 2.3 at MOA and is reported near 4.0 at theme parks in Central Florida. Therefore, if we increased a small portion of the trips for entertainment as you suggest, and then use internal capture matrices and apply the higher occupancy rates for Florida to all entertainment trips, the trip total is less. We opted to keep the rate conservative and avoid multiple adjustments up and down that may be questionable. Also, please keep in mind many of the entertainment uses measure large, but have significant unusable areas such as a 100,000 sf submarine lake, and a 65,000 sf outdoor fishing lake. We did not adjust MOA rates for use at ADM for these reasons.

The response is not accepted. The sizes of different uses in MOA and ADM are proportionally different. Such as, the entertainment and hotel uses are significantly high in ADM as compared to retail size of the mix. Therefore, we recommend that trip generation be revised for CDMP TIA.

3) Vehicle occupancy rates are not mentioned. If they are available they can be used to support trip generation by applying to estimated persons/customers of ADM project.

Please see the response to comment (2). At MOA it ranges from 2.1 for resident trips (within 150 miles) and 3.6 for Non-Resident trips (beyond 150 miles) with a weighted average of 2.3 persons per vehicle. These rates are already reflected in the trip counts taken at MOA. Note again that the average vehicle occupancy for theme entertainment centers in Florida is higher which if applied would lower our trip generation.

The response is accepted.

4) Provisions should be kept in planning and design phases for right-of-ways and space to accommodate any future rail or transit service with dedicated travel way.

As you suggest we are planning to incorporate a transit center within the parking system such as at MOA along with having an FDOT Park-and-Ride lot just off the exit ramps from I-75/HEFT. At this stage we are seeking land use and will be able to more accurately respond when developing the site plan. The developers have historically placed great value on transit access and services.

The response is accepted.

5) Based on review of slide 18, if the vehicles were tube counted for MOA, then no transit or non-motorized reductions should be made.

That is correct. The bus transit and other shared vehicle modes are inherent in the trip rates. The LRT adjustment was "added" to the trip rates to account for a lack of light rail transit within our planning horizon and based on the current 2040 LRTP.

The response is accepted.

6) No discussion is provided regarding the parking demand.

Parking will be addressed at the site plan review. Please keep in mind that most parking will be provided in structures as is the case at MOA.

The response is accepted.

7) We are working in coordination with our RER department for the stations' traffic data and will provide you soon.

We look forward to reviewing County's existing an historical count data and vested trips, by direction, for use in the CDMP TIA.

The 2014 data and some detailed are already provided. We are further coordinating with the County's RER department for analysis and information.

APPENDIX I-A8:
CDMP TIA Methodology Technical Memorandum (TM) Addendum_11242015

American Dream Miami
MIAMI-DADE COUNTY, FLORIDA

TECHNICAL MEMORANDUM
Methodology for Transportation Impact Analysis (TIA) for Comprehensive Development Master Plan (CDMP) Amendment

ADDENDUM

Prepared by:
Leftwich Consulting, Inc.
12151 Science Drive, Suite 101
Orlando, Florida 32826

November 24, 2015

1.0 PURPOSE FOR ADDENDUM

Subsequent to the Methodology Meetings of September 3, 2015 and October 23, 2015 the American Dream Miami Applicant (International Atlantic, LLC) responded to comments from the reviewing agencies and other participating jurisdictions. During this process, the Graham Companies, owners of the adjoining properties to the south, made it known that they were going to submit a CDMP for the approximate 300 acres concurrently with the American Dream Miami. This presented a number of challenges related to coordination of traffic study methodology and consistency of SERPM model data and analysis of common study area roads.

After discussing the traffic studies required for the two contiguous but separate CDMP applications with representatives from International Atlantic LLC, the Graham Companies, and Miami Dade County, it was agreed that while these are two independent CDMP applications it would be best to address the traffic impacts in a single traffic study. This study will now include both developments while separating the output data to identify discreet impacts of each development on each roadway facility being studied.

All technical aspects of the study methodology previously presented and reviewed will generally remain the same. **Figure 1** shows the proposed location of American Dream Miami and the Graham Companies Project.

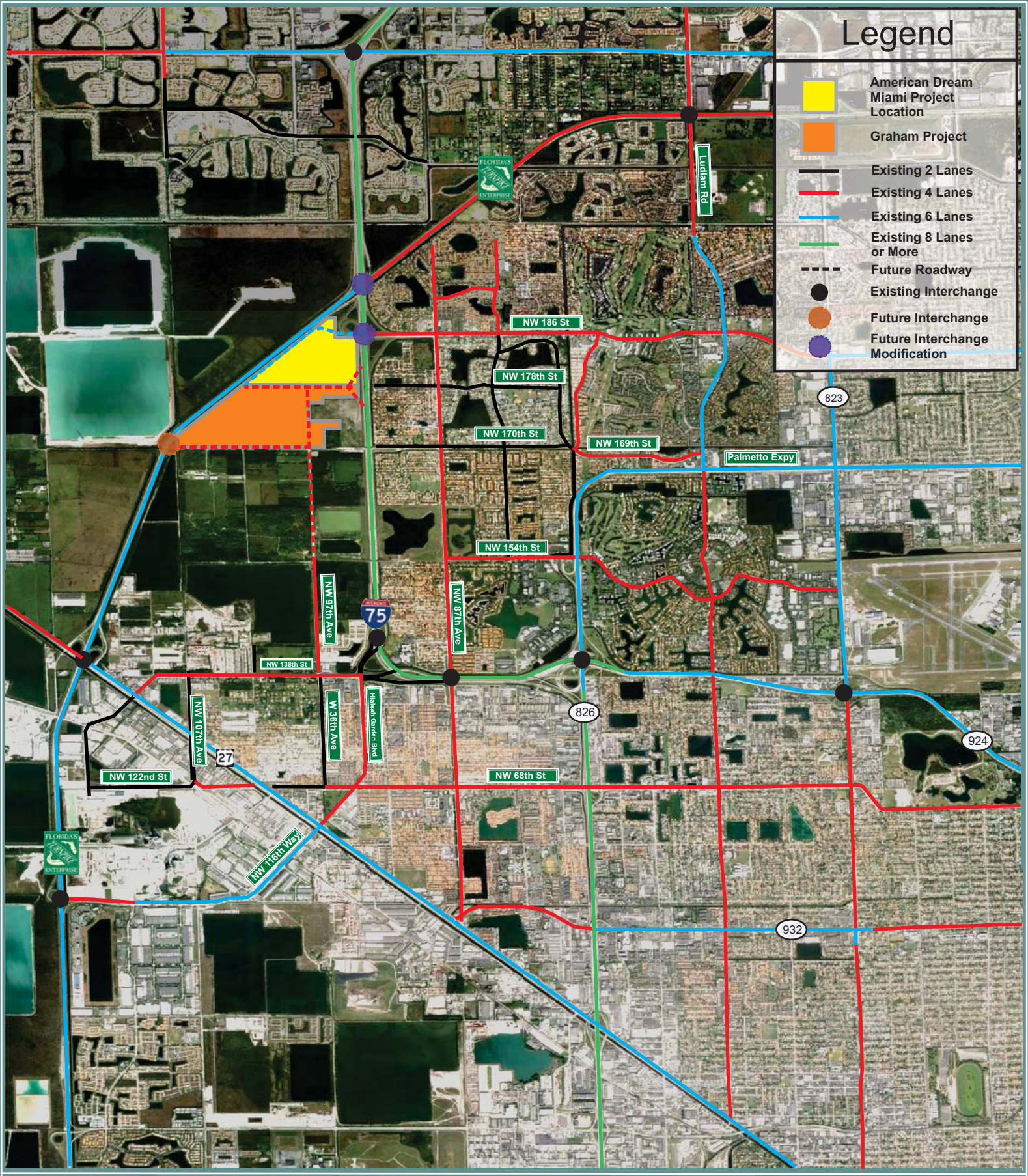
2.0 STUDY AREA

The study area for the TIA will be defined in terms of degree of project traffic impacts on the surrounding roadway networks. Specifically, the TIA analysis will extend to all State and County roadways where external trips are forecast to be equivalent to or greater than five percent (5%) of the maximum service volume (MSV) at the adopted level of service (LOS) standard for each facility. Local collectors roadways proximate to the Project will also be included.

The study area for the TIA will be defined by first determining the study areas for each project (Graham Project and American Dream Miami) separately. Then, the two study areas will be overlaid and the maximum outer boundary of the two study areas will form the final study area.

3.0 SITE ACCESS

American Dream Miami and the Graham Project intends to seek access to an extension of Miami Gardens Drive, Interstate 75 and Florida's Turnpike via a future interchange at NW 170th Street. **Figure 2** includes a preliminary access plan for the two Projects which may be subject to change in the TIA as project access needs are further analyzed.

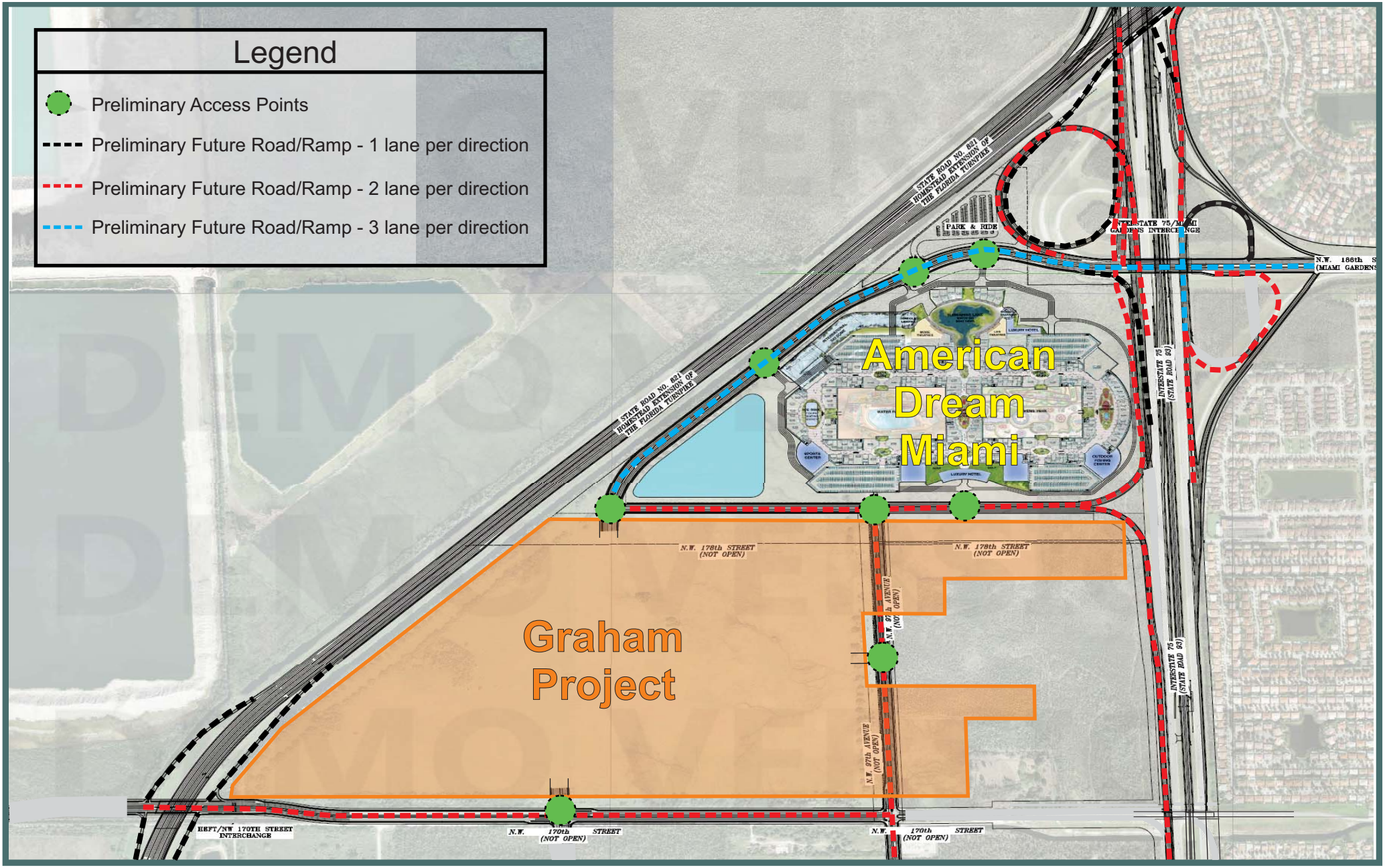


Project Location Map

American Dream Miami / Graham Project

NTS

Figure: 1



Preliminary Access Plan

American Dream Miami / Graham Project

NTS

Figure:

2

4.0 TRIP GENERATION FOR GRAHAM PROJECT

Trip generation associated with the Graham Project for the analysis years 2020 and 2040 has been forecast per Institute of Transportation's (ITE) methodology as outlined in the Trip Generation Manual, 9th Edition. In Year 2020, the project estimates a partial build-out of uses to include 150 ksf of commercial use, 250 ksf of business park use, and 500 multi-family dwelling units. In Year 2040, full build-out of the Graham Project will include 1,000 ksf of commercial use, 3,000 ksf of business park use, and 2,000 multi-family dwelling units.

For each year, the internal trip capture rate was calculated for the site by utilizing the Multi-Use Development Internal Capture Matrix methodology outlined in the Trip Generation Handbook. The resulting capture rate was applied to total project trips generated by land uses. The quantity of captured trips was then deducted from total trip quantities to derive the net external trips generated by the site. Next, and for each year, a pass-by trip reduction was applied to the amount of net external project trips generated by the retail uses. This percent reduction was derived from the ITE fitted curve equation for ITE Land Use 820 (Shopping Center) per ITE's Trip Generation Handbook. The quantity of pass-by trips was then deducted from net external trip quantities to derive the new external trips generated by the site. **Table 1** presents the Daily and PM peak hour trip generation summary for the Graham Project for Years 2020 and 2040.

Table 1: Trip Generation Summary for Graham Project

					Trip Rates		Trip Forecast	
	Land Use	**ITE Code**	**Size**	**Units**	**Daily**	**PM Peak**	**Daily**	**PM Peak**
Graham Project (2020)	Commercial	820	150	KSF	58.93	5.24	8,840	786
	Business Park	770	250	KSF	13.48	1.35	3,370	338
	Multi-Family Apartment	220	500	DU	6.31	0.59	3,155	295
	Total Generated Trips						**15,365**	**1,419**
	PM Internal Capture =	15.1%	of net external trips				2,317	214
	Net External Trips						**13,048**	**1,205**
	Passerby Trips =	35.0%	of ext'l comm'l trips				2,588	239
	New External Trips						**10,460**	**966**
					Trip Rates		**Trip Forecast**	
	Land Use	**ITE Code**	**Size**	**Units**	**Daily**	**PM Peak**	**Daily**	**PM Peak**
Graham Project (2040)	Commercial	820	1,000	KSF	30.33	2.80	30,330	2,800
	Business Park	770	3,000	KSF	10.86	1.05	32,580	3,150
	Multi-Family Apartment	220	2,000	DU	6.12	0.56	12,240	1,120
	Total Generated Trips						**75,150**	**7,070**
	PM Internal Capture =	10.8%	of net external trips				8,121	764
	Net External Trips						**67,029**	**6,306**
	Passerby Trips =	20.0%	of ext'l comm'l trips				5,172	487
	New External Trips						**61,857**	**5,819**

5.0 CDMP TIA ANALYSIS

The combined CDMP TIA analysis will be performed as outlined in the submitted Methodology Statement (dated September 3, 2015) and subsequent comment responses drafted to address agency review comments. Trips for American Dream Miami and the Graham Project will be tracked separately in the analysis, but will be combined to determine full impact of both projects together.

APPENDIX I-A9:
Additional Sources for 021916 PPT

American Dream Miami
Additional Source Material for 2/19/2016 Trip Generation Discussion

A. Trip Generation Presentation 2/19/2016
B. Mall of America Vehicle Occupancy Source
C. Supplemental Pass-by Data from Large-Scale Florida Retail Attractions
    1. Galleria Mall Pass-by Survey
    2. Florida Mall Substantial Deviation DRI Application

A. Trip Generation Presentation 2/19/2016

AMERICAN DREAM MIAMI TRIP GENERATION

Continued Discussion

02/19/16

Latest Agency Comments

1. MOA data is a valuable source of data for ADM, with caveats:
   a. Check Seasonal/Regional Variations
   b. Use GFA vs. Retail GLA as independent variable
   c. Adjust for Higher % Entertainment at ADM
   d. Adjust for Higher % Hotel at ADM

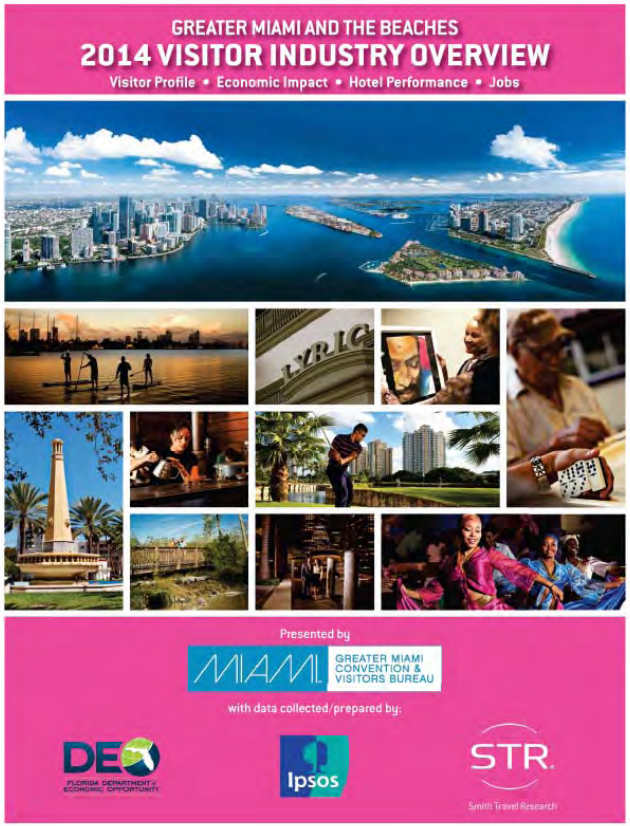
2. LRT Adjustment

3. Pass-by/Diverted Trips Concerns
   a. ITE 820 Pass-by/Diverted not applicable to ADM
   b. Pass-by/Diverted fitted curve removed in latest ITE Handbook
   c. Only apply Pass-by/Diverted to retail portion
   d. Use 10% background traffic volumes cap

1a. Seasonal Characteristics

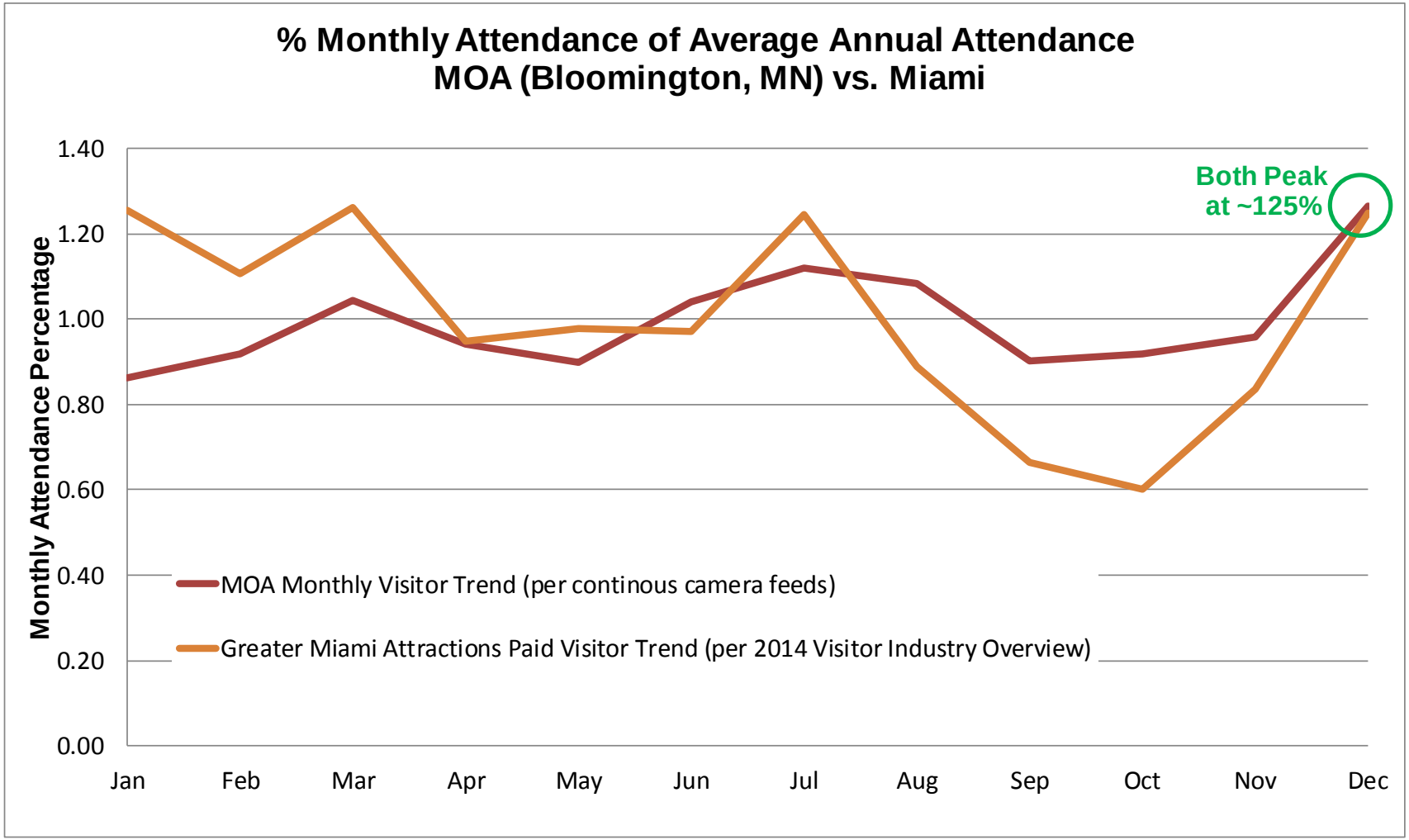
3

- Consistent with ITE methodology, MOA external counts were seasonally adjusted to determine average trip rates
- Agencies reviewing ADM CMDP TIA asked if the seasonal variations at MOA are applicable to Miami
- Applicant's consultant researched available attendance levels at Greater Miami attractions to compare seasonal variations in Greater Miami vs. MOA. Specifically, the "**Greater Miami 2014 Visitors Industry Overview**" was reviewed as presented by the Greater Miami Convention & Visitors Bureau
- As shown in the following graph, monthly variance shows a similar trend with Miami displaying slightly more volatility. However, both locations peak at around 125% during December
- No further adjustments proposed



1a. Seasonal Characteristics

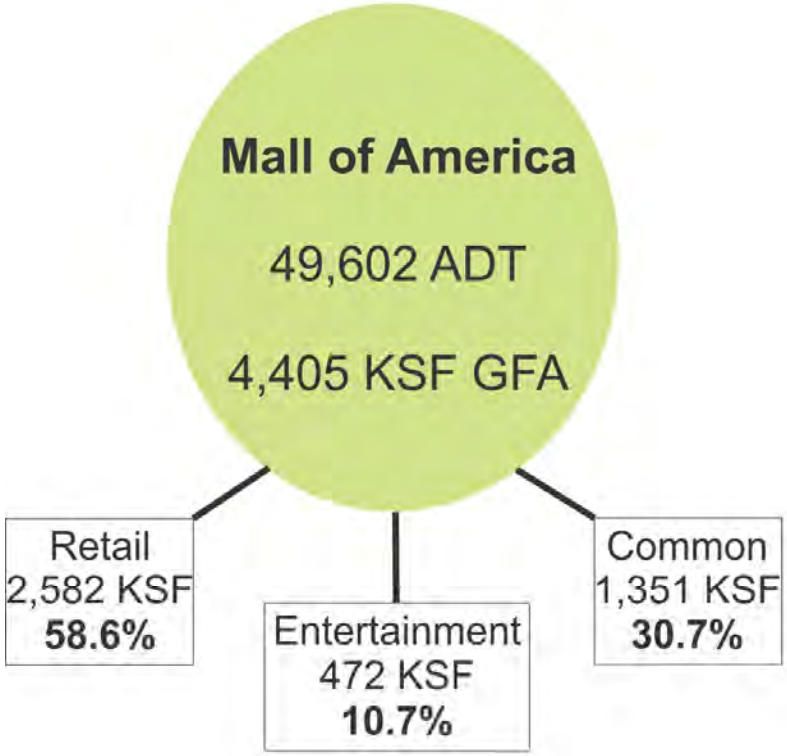
4

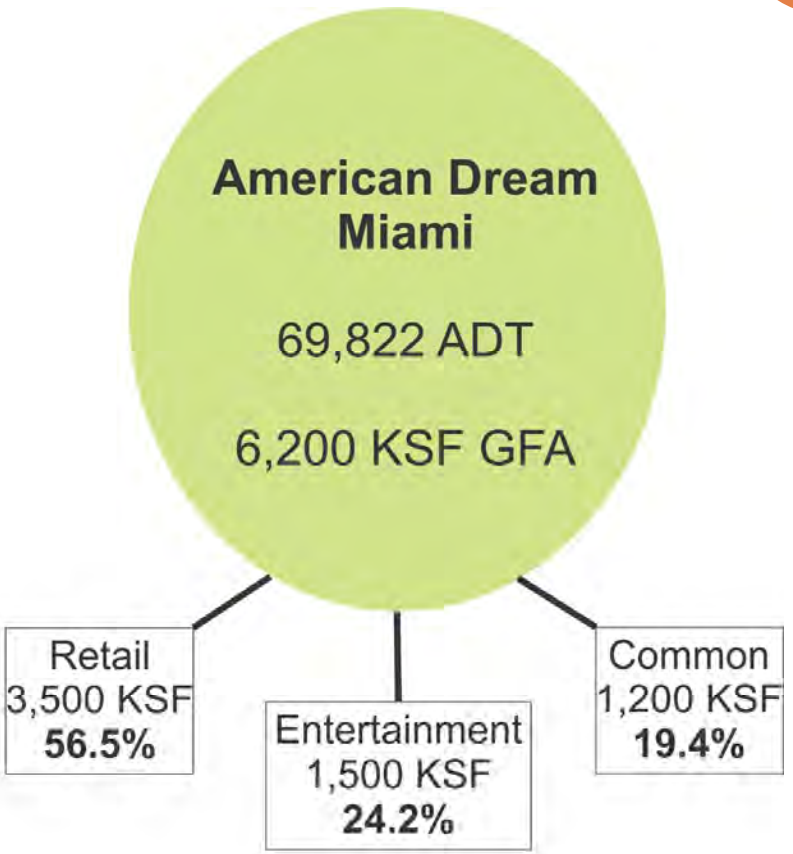


1b. GFA instead of GLA

- Applicant proposed in the CDMP TIA to use the external trip rate at MOA based on GLA of retail for ADM (to show consistency to ITE's treatment of ITE 820)
- Reviewing agencies concerned with the approach due to the larger % of entertainment at ADM…requested the rate be derived from GFA instead
- Applicant is willing to accommodate this adjustment
- MOA Daily Rate (GLA) = 19.22 (49,604 ADT / 2,581 KSF)
- MOA Daily Rate (GFA) = 11.26 (49,604 ADT / 4,405 KSF)

1b. GFA instead of GLA





$$\frac{49{,}604 \text{ Daily Trips}}{4{,}405 \text{ KSF GFA}} = 11.26 \frac{\text{ADT}}{\text{GFA}}$$

$$11.26 \frac{\text{Trips}}{\text{GFA}} \cdot 6{,}200 = \mathbf{69{,}822\ ADT}$$

1c. Entertainment Adjustment

- Applicant proposed in the CDMP TIA to apply the MOA trip rate to ADM land use without adjustments based on similarities of the sites
- Reviewing agencies concerned with the approach due to the larger % of entertainment at ADM
- As presented in previous meetings, data for entertainment from ITE with potential for application to ADM entertainment is very limited
- There were suggestions to draw conclusions from Florida Theme Park data

1c. Entertainment Adjustment

- Major theme parks in both Florida and California were analyzed for typical weekday attendance per KSF
- AECOM and Themed Entertainment Association (TEA) compiled data including annual attendance from the top theme parks around the world within the "**2014 Theme Index**"
- Square footage was obtained from park acreage presented in each park's individual fact sheets
- Annual attendance was divided into equal weekly proportions, then using ITE's Amusement Park (Code 480) trip generation rate for weekday vs. weekend, a weekday percentage of **10.38%** was applied to achieve average weekday attendance

1c. Entertainment Adjustment

- An auto occupancy of 3.0 to 4.0 persons/veh was used to derive an Entertainment ADT per KSF rate for each park
- A fitted curve was developed to project for the 1,500 KSF of Entertainment at ADM (this conservatively excludes any commons square footage), using two methods:
  - Reported: Using reported park acreage for the AECOM report
  - Compact: Using park acreage which excludes green spaces and water bodies

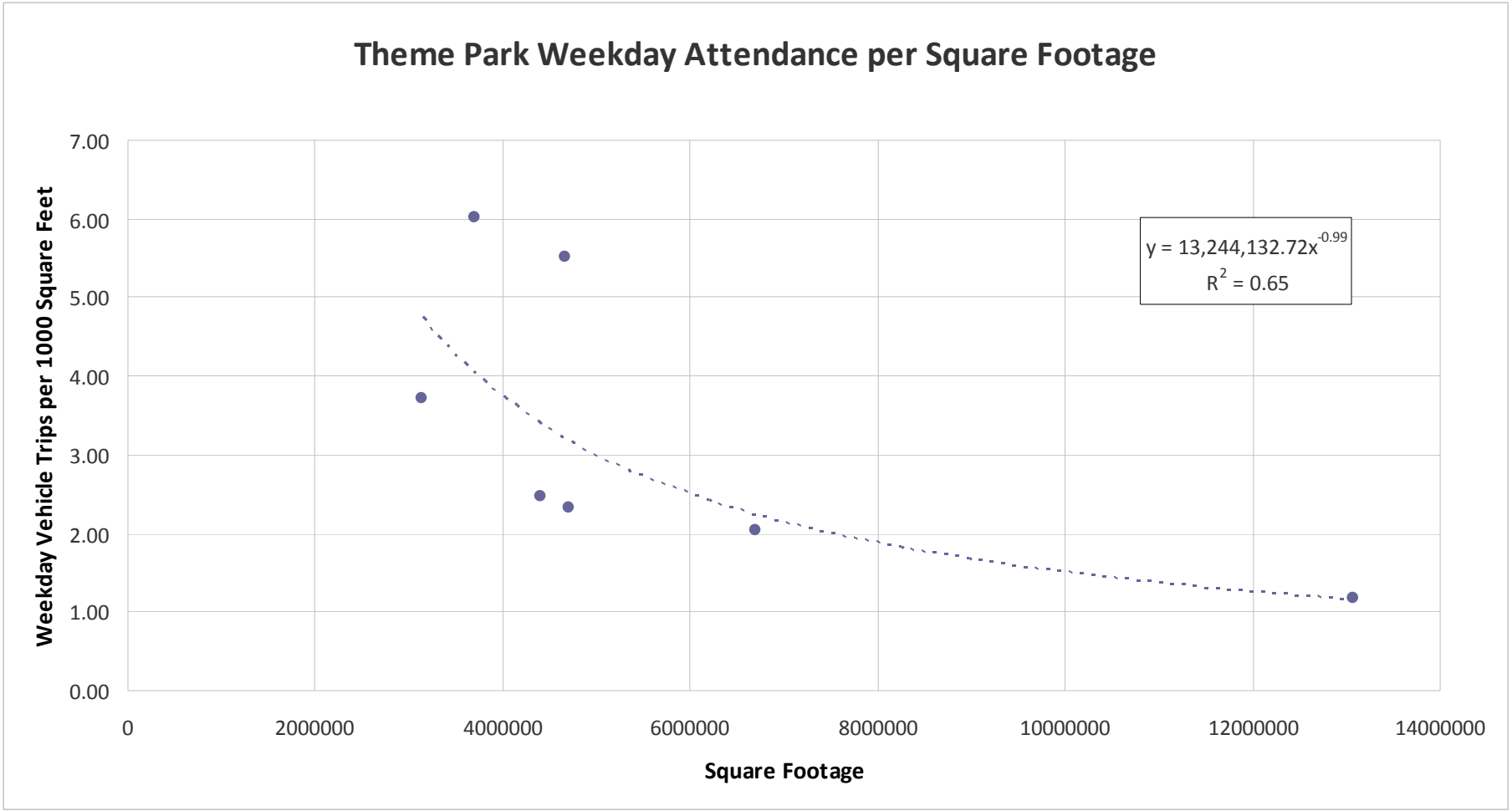
1c. Entertainment Adjustment

Using **reported acreage:**

Theme Park	Annual Attendance	Annual Vehicle Trips	Weekday Attendance based on Entertainment Trip Rate	Acreage	Square Footage	Weekday Vehicle Trips per 1000 square feet
Walt Disney World Magic Kingdom	19,332,000	12,888,000	25,721	107	4,660,920	5.52
Disneyland	16,769,000	11,179,333	22,311	85	3,702,600	6.03
EPCOT	11,454,000	7,636,000	15,239	300	13,068,000	1.17
Disney's Hollywood Studios	10,312,000	6,874,667	13,720	154	6,708,240	2.05
Disney's California Adventure	8,769,000	5,846,000	11,667	72	3,136,320	3.72
Universal Studios	8,263,000	5,508,667	10,994	108	4,704,480	2.34
Islands of Adventure	8,141,000	5,427,333	10,831	101	4,399,560	2.46

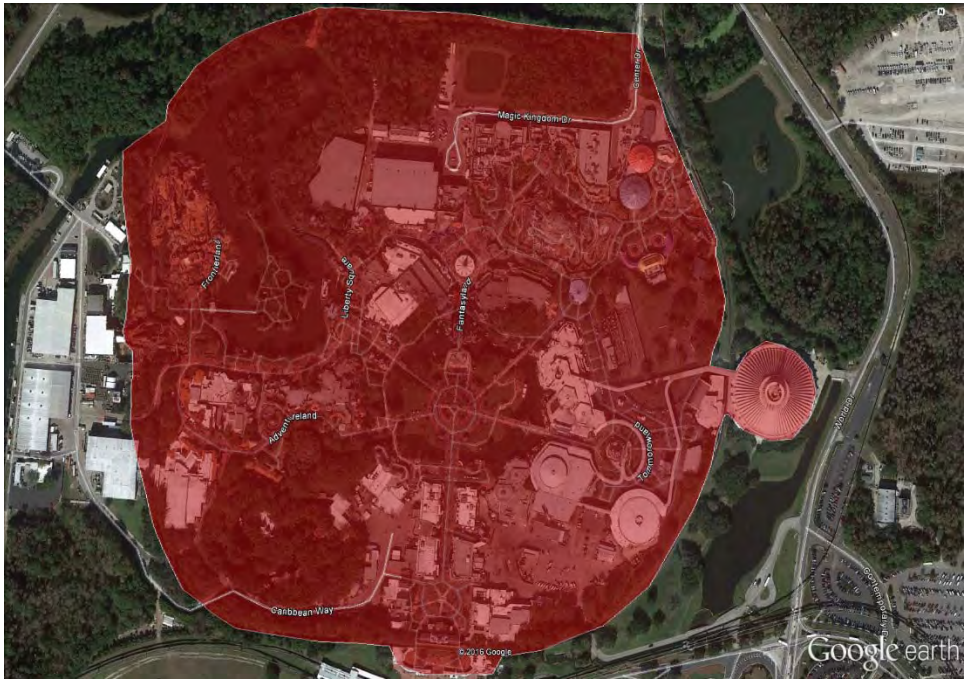
1c. Entertainment Adjustment

Using **reported acreage**, ADM Entertainment = **10.18 ADT/KSF**

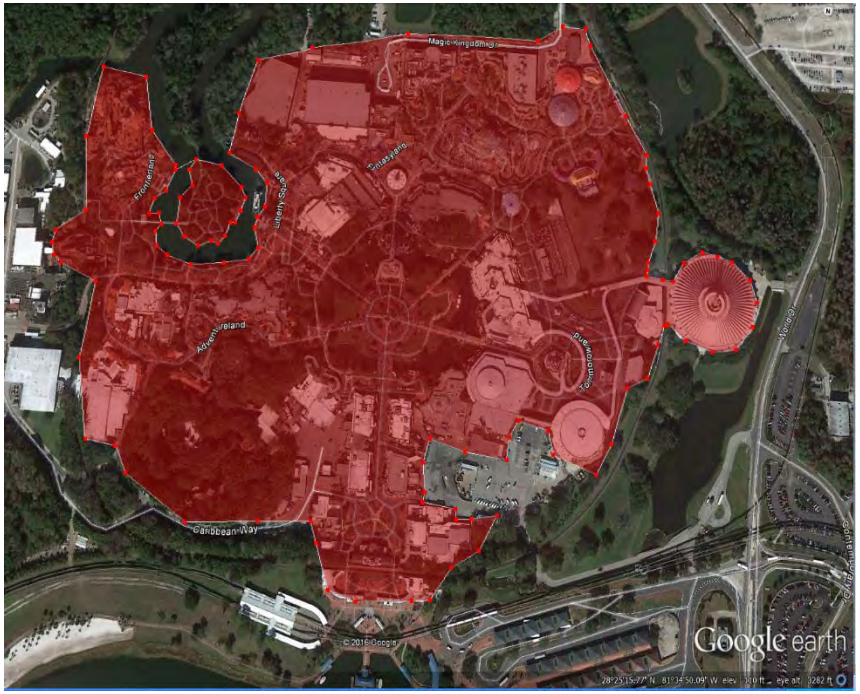


1c. Entertainment Adjustment

Walt Disney World Magic Kingdom Initial vs. Modified Measurements:



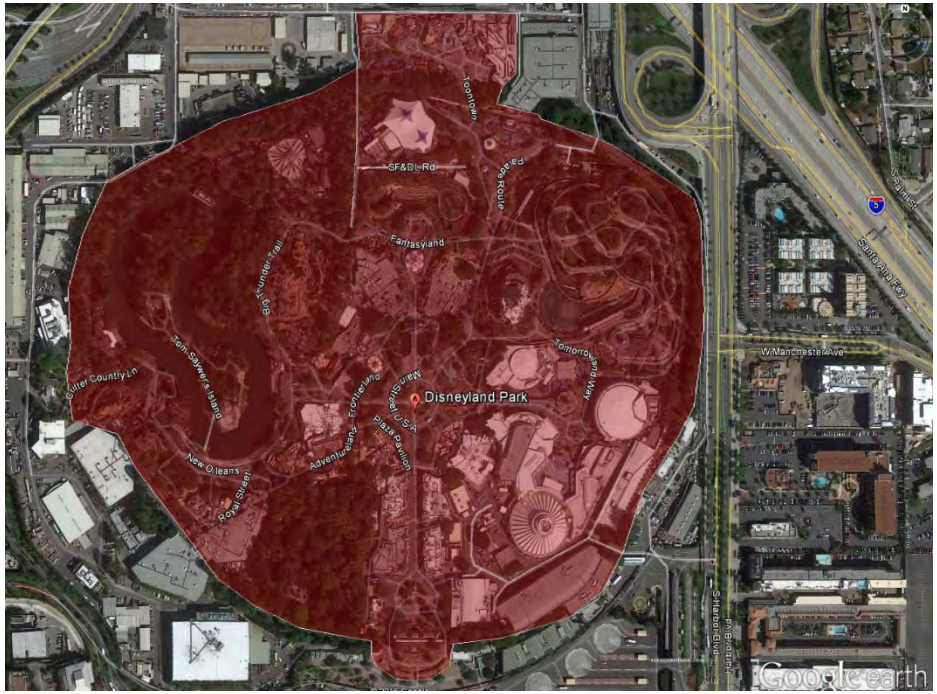
Initial Acreage: 115 acres



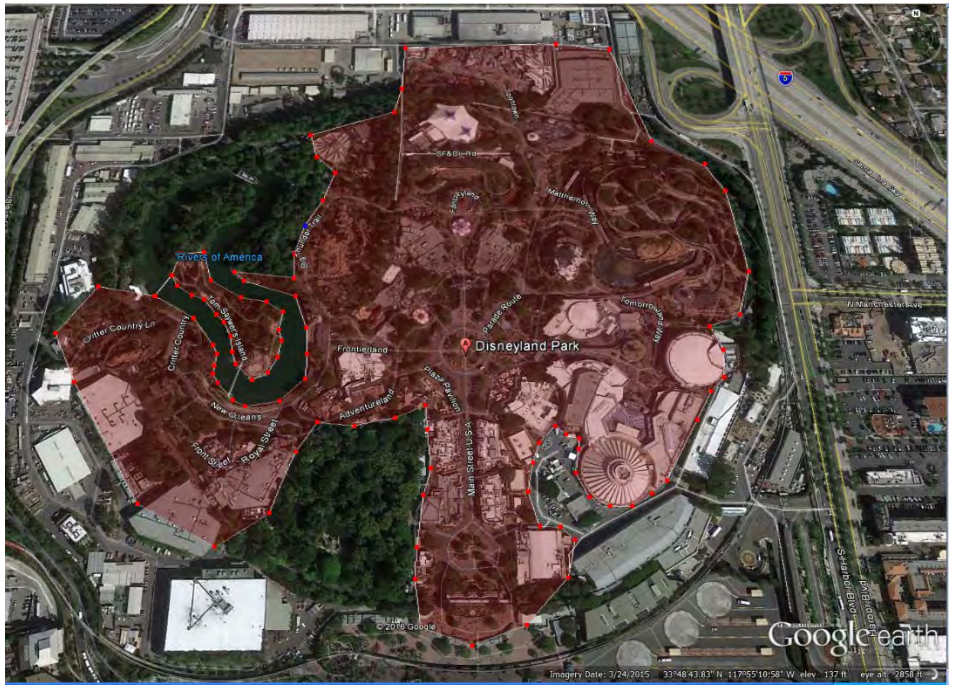
Modified Acreage: 81.9 acres

1c. Entertainment Adjustment

Disneyland Initial vs. Modified Measurements:



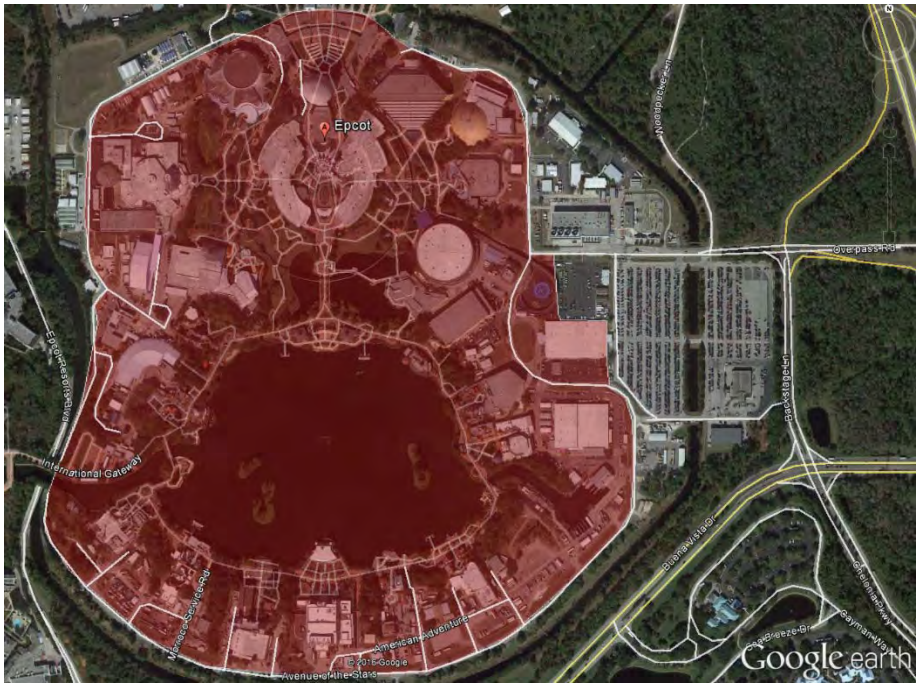
Initial Acreage: 81 acres



Modified Acreage: 59.3 acres

1c. Entertainment Adjustment

EPCOT at Walt Disney Initial vs. Modified Measurements:



Initial Acreage: 211 acres

Modified Acreage: 175 acres

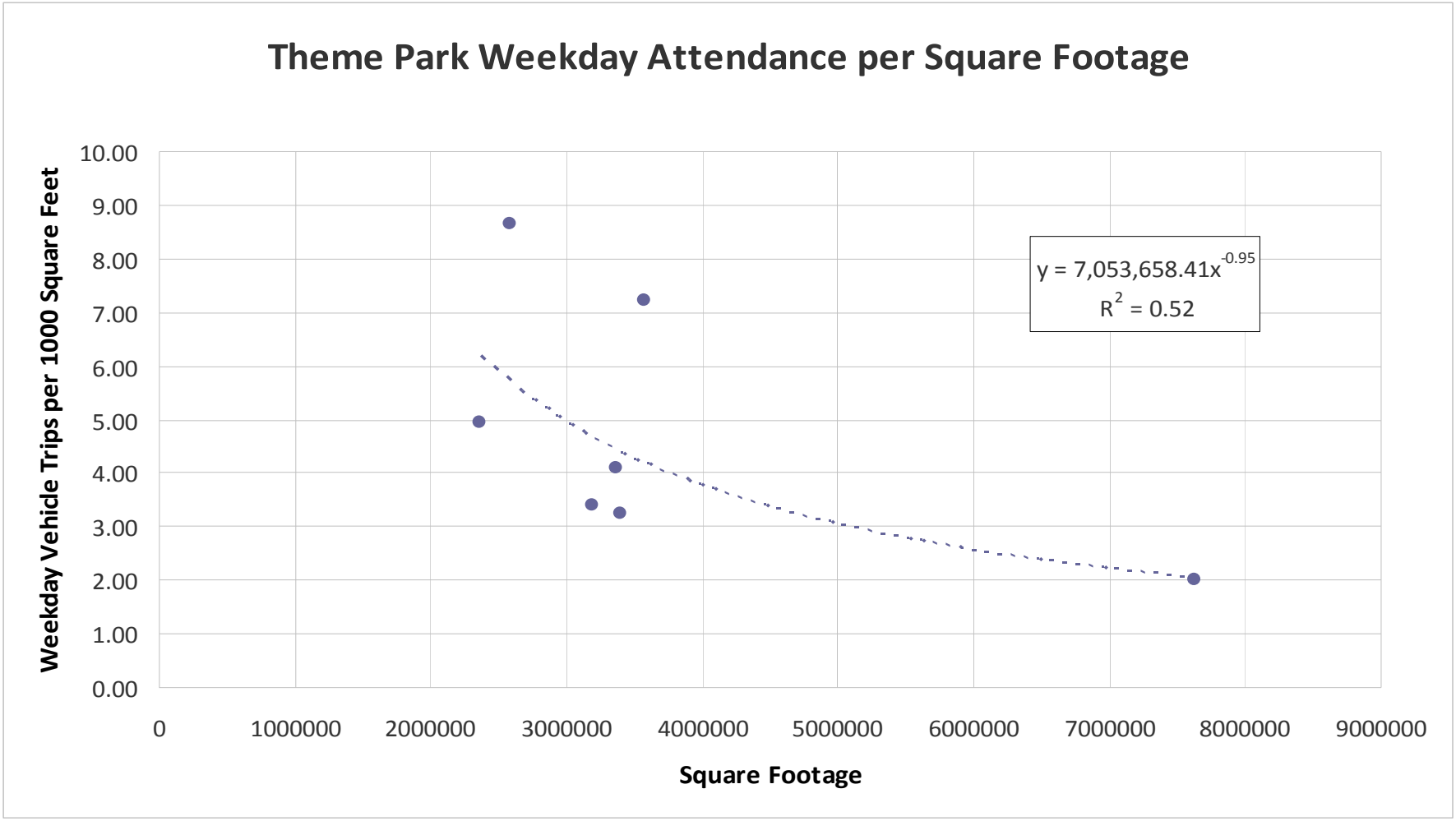
1c. Entertainment Adjustment

Using **compact acreage:**

Theme Park	Annual Attendance	Annual Vehicle Trips	Weekday Attendance based on Entertainment Trip Rate	Acreage	Square Footage	Weekday Vehicle Trips per 1000 square feet
Walt Disney World Magic Kingdom	19,332,000	12,888,000	25,721	81.9	3,567,564	7.21
Disneyland	16,769,000	11,179,333	22,311	59.3	2,583,108	8.64
EPCOT	11,454,000	7,636,000	15,239	175	7,623,000	2.00
Disney's Hollywood Studios	10,312,000	6,874,667	13,720	77.2	3,362,832	4.08
Disney's California Adventure	8,769,000	5,846,000	11,667	54.4	2,369,664	4.92
Universal Studios	8,263,000	5,508,667	10,994	78	3,397,680	3.24
Islands of Adventure	8,141,000	5,427,333	10,831	73.2	3,188,592	3.40

1c. Entertainment Adjustment

Using **compact acreage**, ADM Entertainment = **9.57 ADT/KSF**



1c. Entertainment Adjustment

- Conclusions of the Theme Park Analysis:
  - The more compact the park is, the higher the trip rate (Note: Disneyland and Disney World Magic Kingdom have the highest rates)
  - Fitted curve analysis conservatively projects an entertainment rate for the entertainment portion of ADM to be between **9.57** and **10.18 Daily Vehicle Trips / KSF**
  - The trip rate associated with entertainment portion of the ADM will be less than the trip rate associated with retail portion.
- Therefore, the **higher percentage of entertainment at ADM will drive the overall mixed trip rate observed at MOA downward**. This is logical because of the area required for the theme park infrastructure drives density downward.
- The Applicant proposes to continue using the MOA rates despite the data suggesting the rate at ADM will be lower.

1c. Entertainment Adjustment

$11.26 \frac{ADT}{GFA}$

MOA Mixed use Rate

Mall of America

49,602 ADT

4,405 KSF GFA

Retail
2,582 KSF
58.6%

Entertainment
472 KSF
10.7%

Common
1,351 KSF
30.7%

$< 11.26 \frac{ADT}{GFA}$

Due to higher % of Entertainment

American Dream Miami

69,822 ADT

6,200 KSF GFA

Retail
3,500 KSF
56.5%

Entertainment
1,500 KSF
24.2%

Common
1,200 KSF
19.4%

It is conservative to use the GFA MOA Rate at ADM

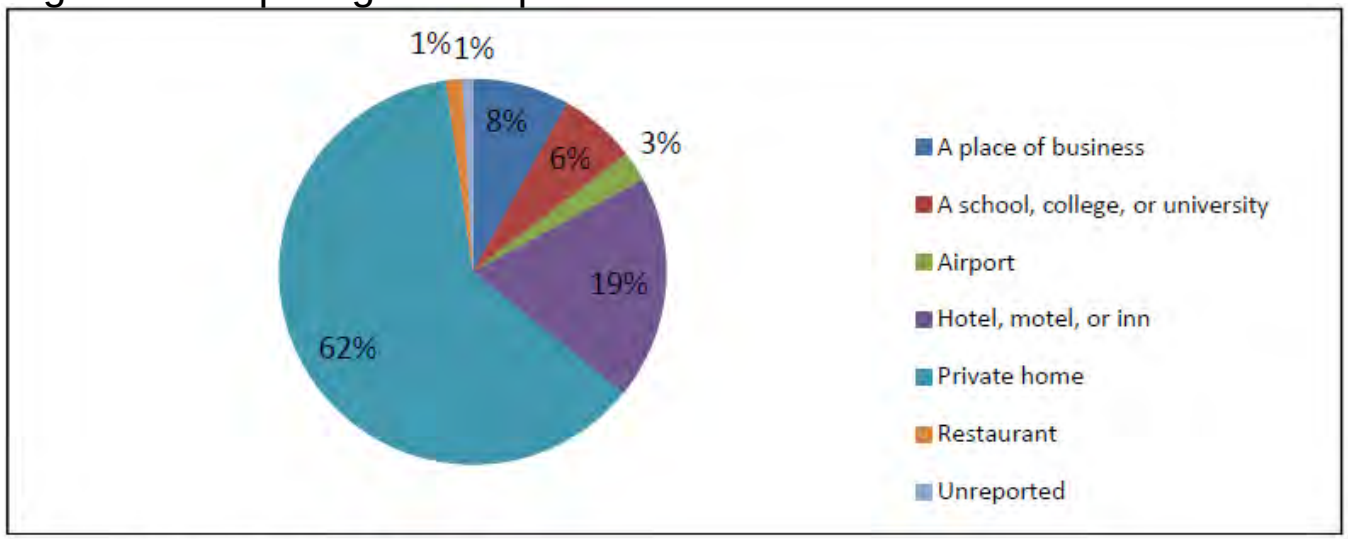
1d. Hotel Adjustment

- Applicant proposed in the CDMP TIA to apply the MOA trip rate to ADM land use without adjustments based on similarities of the sites
- Reviewing agencies concerned with the approach due to the larger % of hotel at ADM
- Applicant contends the hotel use is ancillary to the project and will likely drive the external trip rate down. MOA Phase 2 development plans are largely driven by the lack of hotel onsite to accommodate the demand
- Applicant's consultant researched available survey data at MOA to determine the amount of trips that are generated due to insufficient hotel rooms onsite.

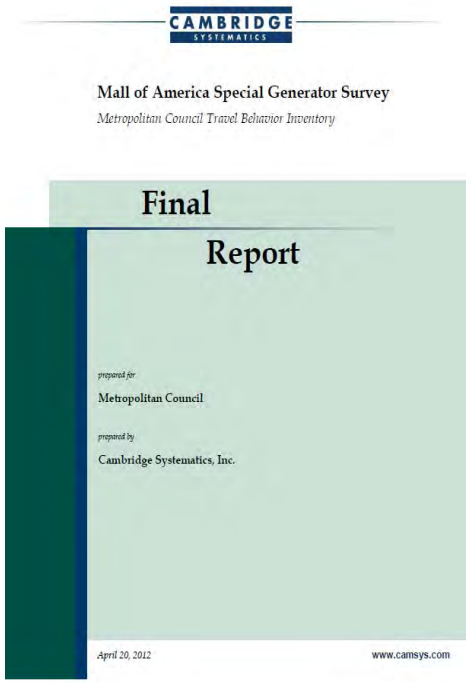
1d. Hotel Adjustment

- Surveys at MOA show 19.3% of trips had an offsite hotel trip end
- This equates to 9,573 daily trips at MOA from/to offsite hotel use (49,602 x 19.3%) due to lack of onsite rooms. The equivalent number of rooms needed to satisfy those offsite trips onsite is 1,172 hotel rooms using ITE's 8.17 daily trips per hotel room rate.

Figure 3.7 Trip Origin for trips to the Mall of America



Source: CS Team Analysis of Survey Data



1d. Hotel Adjustment

- ADM is proposing 2,000 rooms vs. 503 at MOA at the time of data collection. Factoring up MOA's 503 rooms by GFA ratio (6,200 KSF / 4,405 KSF) accounts for 708 rooms.
- The difference in rooms not accounted for at ADM after GFA proportioning is 1,292 rooms (2,000 - 708) of which 1,172 rooms are accounted for by reducing external traffic.
- A small remainder is left after deducting the equivalent off-site hotel trips at MOA that exist due to lack of supply (1,292 – 1,172). These are negligible considering the additional capture opportunities at the larger ADM.
- The Applicant proposes to continue using the MOA rates as they are the **best data available** for the ADM project.

2. LRT Adjustment

- Applicant proposes in the CDMP TIA to add trips back into the raw MOA trip rate due to the lack of LRT availability at ADM
- For the adjustment, 10.8% of net external trips were added to total generated trips and then factored to account for a higher AVO at ADM (4.0 persons/veh) vs. MOA (2.3 persons/veh) based on Florida theme park rates
- Applicant proposes to reduce the expected AVO at ADM to 3.0 persons/veh to be conservative and address agency comments

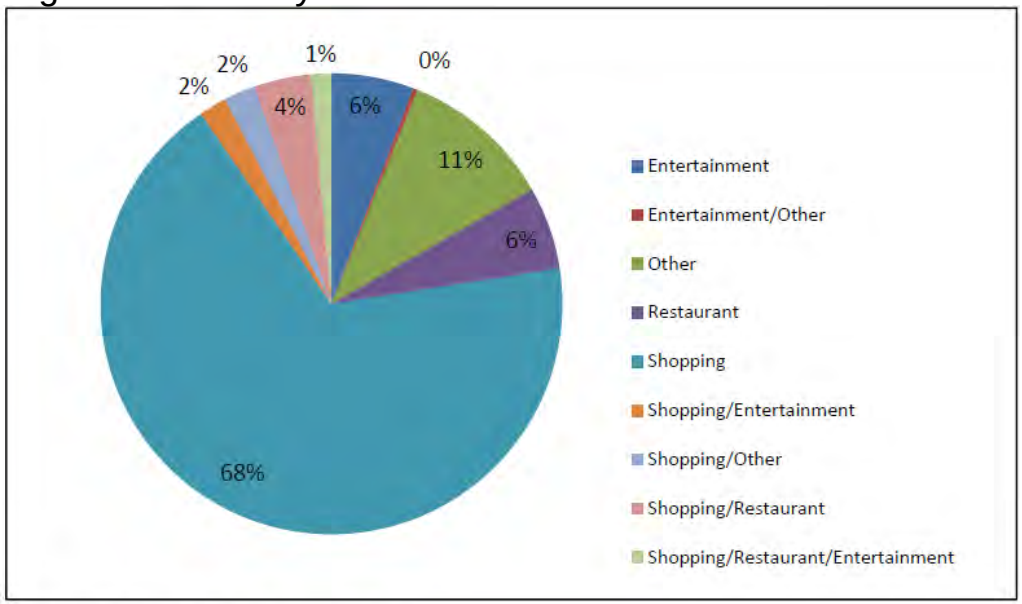
3. Pass-by/Diverted Rate

- Previously, ADM proposed using ITE's Pass-by/Diverted function for Shopping Center (ITE 820) to get a prediction for ADM Pass-by/Diverted of **14.0%**.
- The issue was revisited based on agency comments and only ITE Shopping Centers > 1 MSF GLA were considered. Additionally, the Applicant found data from two large retail projects in Florida.
- ITE > 1 MSF:
  - West Hartford , CT (1985)
  - Ross Twp, PA (1988)
  - Washington, DC (1980)
- Individual studies in Florida:
  - Florida Mall, FL (2000), DRI Subst. Dev
  - Galleria Mall, FL (1995), FDOT D4 TG Study

3. Pass-by/Diverted Rate

- Applying ITE methodology, a fitted curve was developed based on these five data points. Applied to ADM's size, Pass-by/Diverted rate of **9.7% or retail trips** was forecast.
- The revised Pass-by/Diverted rate was applied only to 81% of the ADM trips. From the Cambridge MOA survey only 19% of the visitors surveyed visited for entertainment (excluded from Pass-by/Diverted).

Figure 3.3 Primary Reason to Visit the Mall of America

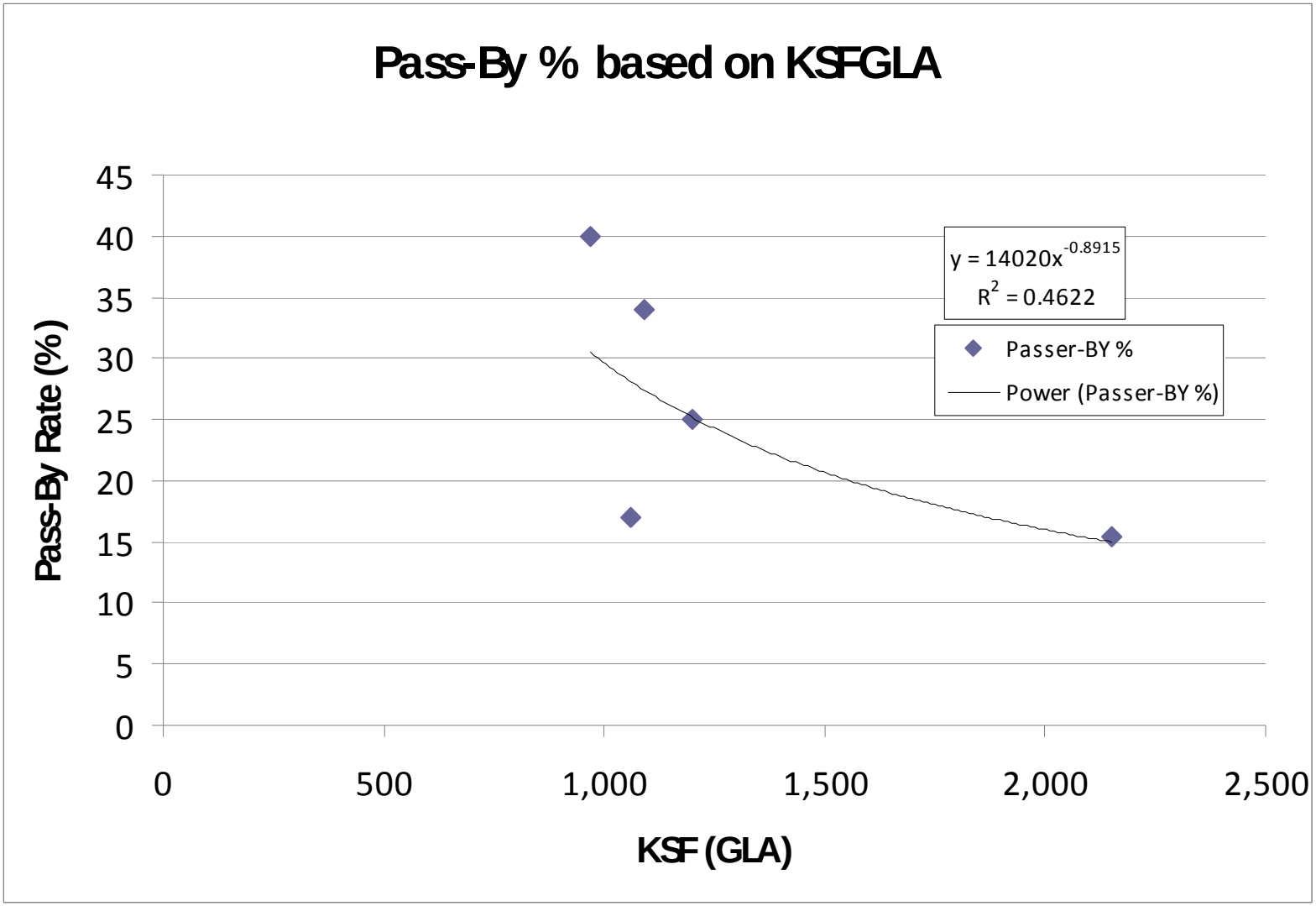


Source: CS Team Analysis of Survey Data

3. Pass-by/Diverted Rate

Data Source	KSF GLA	Passer-BY %
West Hartford, CT (1985), ITE 820 Table F.9	1,060	17
Ross Twp, PA (1988), ITE 820 Table F.9	1,090	34
Washington, DC (1980), ITE 820 Table F.9	1,200	25
Florida Mall, FL (2000), DRI Subst. Dev	2,150	15.4
Galleria Mall, FL (1995), FDOT D4 TG Study	970	40

3. Pass-by/Diverted Rate



Revised ADM Trip Gen Summary

CDMP Trip Generation Summary

Land Use	ITE Code	Size	Units	Trip Rates		Trips					
							PM Peak Hour				
				Daily	PM Peak	Daily	Total	In		Out	
Entertainment/Retail (GLA)	-	3,500	KSF	19.21	1.46	67,251	5,098	48%	2,447	52%	2,651
Total Generated Trips (pre-LRT adjustment)						**67,251**	**5,098**		**2,447**		**2,651**
PM Internal Capture =	0.0%					0	0		0		0
Net External Trips (pre-LRT adjustment)						**67,251**	**5,098**		**2,447**		**2,651**
LRT Adjustment =	10.8%	of net external trips				4,682	355		170		185
Net External Trips						**71,933**	**5,453**		**2,617**		**2,836**
Diverted Trips =	14.0%	of net external trips				10,071	763		343		420
New External Trips						**61,862**	**4,690**		**2,274**		**2,416**

Revised Trip Generation Summary

Land Use	ITE Code	Size	Units	Trip Rates		Trips					
							PM Peak Hour				
				Daily	PM Peak	Daily	Total	In		Out	
Entertainment/Retail (GFA)	-	6,200	KSF	11.26	0.85	69,822	5,293	48%	2,541	52%	2,752
Total Generated Trips (pre-LRT adjustment)						**69,822**	**5,293**		**2,541**		**2,752**
PM Internal Capture =	0.0%					0	0		0		0
Net External Trips (pre-LRT adjustment)						**69,822**	**5,293**		**2,541**		**2,752**
LRT Adjustment =	10.8%	of net external trips				6,481	491		236		255
Net External Trips						**76,303**	**5,784**		**2,777**		**3,007**
Diverted Trips =	9.7%	of net external trips				5,995	454		200		254
New External Trips						**70,308**	**5,330**		**2,577**		**2,753**

Alternative Solution (to verify)

- There were some suggestions from staff that the extra % of entertainment at ADM should be additive. While the data above supports otherwise, to address the concern an alternative solution was developed to see what the result may be using this approach.
- The additional GFA of entertainment at ADM was calculated to 835.93 KSF [1,500 – 471.8 x (6,200 / 4,405)]
- The Cambridge MOA survey rate for entertainment trips (19%) was applied to the MOA mixed rate to forecast the proportionate entertainment external trip rate
- All other adjustments were carried forward
- This method results in the same external trip forecast for ADM within 3%

Alternative Solution (to verify)

Alternative Trip Generation Summary

Land Use	ITE Code	Size	Units	Trip Rates		Trips					
							PM Peak Hour				
				Daily	PM Peak	Daily	Total	In		Out	
Entertainment/Retail (GFA)	-	6,200	KSF	11.26	0.85	69,822	5,293	48%	2,541	52%	2,752
Trips for Increased Entertainment	-	836	KSF	2.14	0.16	1,789	136	48%	65	52%	71
Total Generated Trips (pre-LRT adjustment)						**71,611**	**5,429**		**2,606**		**2,823**
PM Internal Capture =	0.0%					0	0		0		0
Net External Trips (pre-LRT adjustment)						**71,611**	**5,429**		**2,606**		**2,823**
LRT Adjustment =	10.8%	of net external trips				6,647	504		242		262
Net External Trips						**78,258**	**5,933**		**2,848**		**3,085**
Diverted Trips =	9.7%	of net external trips				6,149	466		200		266
New External Trips						**72,109**	**5,467**		**2,648**		**2,819**

Questions

B. Mall of America Vehicle Occupancy Source

MALL OF AMERICA

DRAFT FINAL
VISITOR & PARKING STUDY

APRIL 10, 2006
REVISED MAY 2, 2006

WESTWOOD PROFESSIONAL SERVICES, INC.
7699 Anagram Drive
Eden Prairie, MN 55344
952-937-5150

Table 2.1.5.1
Comparison of Key Visitor Factors

Category	2000 Analysis	2005 Analysis
Resident Shoppers	45%	68%
Non-Resident Shoppers	55%	32%
Vehicle Occupancy Residents	2.4	2.1
Vehicle Occupancy Nonresidents	3.5	3.6
Residents Arriving by Auto	95%	75%
Resident Arriving by Non-Auto	5%	25%
Non-Residents Arriving by Auto	85%	74%
Non-Resident Arriving by Non-Auto	15%	26%
Visitors per Car	2.90	2.30
Employee by Auto	95%	75%
Employee by Non-Auto	5%	25%
Shopper Duration Existing Mall	3.80	2.36
Shopper Duration Expanded Mall	5.50	3.41
Number of Employees	19,544	16,167
Existing Number of Visitors	41,400,000	38,000,000

AVO

C. Supplemental Pass-by Data from Large-Scale Florida Retail Attractions

1. Galleria Pass-by Survey (from D4 Trip Generation Study)

2. Florida Mall Substantial Deviation DRI Application
(use of Shopping Center pass-by equation)

C1. Galleria Pass-by Survey (from D4 Trip Generation Study)

– see Table 47 (p 122) for 40% pass-by survey

Districtwide Trip Generation Study

Task V:

Final Report

State Project No. 99004-1623
WPI No. 4590209

March 1995

Prepared in conjunction with:

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TASK V - FINAL REPORT

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I. INTRODUCTION

District IV of the Florida Department of Transportation (Department) initiated a trip generation study of multi-use developments in 1993. The purpose of the study was to develop a data base such that internal trip capture could be identified. In March, 1994, the Department continued this study effort. Walter H. Keller, Inc., was retained by the Department to prepare the second phase of the research effort. In addition to continuing to investigate the internalization of mixed-use developments, the second phase also included establishing "pass-by" capture.

The 1994 Trip Generation Study encompassed five major tasks. Each major task concluded with a technical report which presented the findings and results of the task efforts. The following technical reports were prepared in this Study:

Task 1.0 - Site Selection;
Task 2.0 - Site Characteristics;
Task 3.0 - Data Collection Summary; and,
Task 4.0 - Data Analysis.

This Task 5.0 Final Report summarizes the entire Districtwide Trip Generation Study effort. The Final Report also includes additional information on a computer based software program that can be utilized to estimate the total trip ends of multi-use developments, internal trips, pass-by trips and external vehicle trips. The report concludes with recommendations for further study.

Section II of the Final Report reviews the Site Selection Process including the procedure for initial identification of 144 candidate sites, the first screening process down to 37 sites and the second level screening process down to 13 sites. A brief discussion is then provided to describe the general features of each of the final 13 sites. The final screening process that evaluates and ranks each of the final 13 sites relative to specific criteria is then presented. This section concludes with the identification of the final three (3) selected sites.

The site characteristics of each selected site are presented in Section III of the Report. This section includes narrative information on the history, site description, land use characteristics, generalized site plan and site vicinity information. This section attempts to also provide a "flavor" of each site in addition to the site characteristics.

The description and tabular summaries of the data collection phase of the study are provided in Section IV along with the data collection methodology, procedures and results. The locations of traffic counts, auto occupancy counts, pedestrian - land use counts and questionnaire interviews are also noted. Lastly, Section IV presents the results of the traffic count efforts, and the data collection summaries for auto occupancy and pedestrian - land use counts.

Section V presents the data analysis portion of the Districtwide Trip Generation Study. The analysis results for each study site are presented in a similar manner to facilitate site comparisons. The first portion of this section presents information on the trip generation characteristics of each site. Information on the external traffic count results is then presented and the hourly traffic loading by major land uses are illustrated. For comparisons sake, trip generation estimates are then developed using the *Institute of Transportation Engineer's* (ITE) techniques.

The questionnaire results are also reported in Section V. This portion of the Report describes the percentage response at each location, and provides detailed information on internalization and pass-by trips. This section concludes with information on the statistical relevance of the questionnaire sampling.

Site comparisons and an analysis summary are reviewed in Section VI of this Report. This Section provides information to compare land use and site characteristics, traffic characteristics, trip generation characteristics and comparisons with the prior study.

Section VII describes a computer software program developed to synthesize the estimation of external, internal and pass-by trip characteristics of Multi-Use Developments. The methodology was developed based on the results of the current and prior Department studies.

The final Section of the Report provides major findings, and recommendations for further study.

II. SITE SELECTION PROCESS

Initial Site Selection

A comprehensive process was developed to prepare a listing of candidate sites for the trip generation study. The study area includes the five District IV counties of Broward, Palm Beach, Martin, Indian River and Saint Lucie. The identification process included identifying all Developments of Regional Impact (DRI), vested or non-DRI projects, major non-DRI projects and unique areawide locations that appeared to meet multi-use criteria within the District.

The South Florida Regional Planning Council and the Treasure Coast Regional Planning Council provided DRI listings. A total of 121 DRI's were identified in the 5 county District IV area. The Florida Department of Community Affairs was also contacted and a listing was obtained that identified vested (pre-DRI) and non-DRI projects in the 5 county area. Seventeen vested and two non-DRI projects were identified by the DCA listing.

Maps were obtained for each county and reviewed to identify areawide multi-use possibilities. Generally, these areas were multi-use areas with potential for isolation. Seventeen multi-use areas were identified in the initial site listing.

A listing was prepared that identified 144 potential multi-use sites in the 5 county area. This listing can be found in the Task 1.0 Site Selection Technical Report. Based on the land use characteristics and or knowledge of a particular site, 37 sites were chosen for second level screening and review.

Second Level Grading Protocol

The second level evaluation process was very extensive. Criteria was developed to identify optimum multi-use sites. The criteria includes distance to a competing market, diversity and intensity of uses on site, proximity and intensity of residential/ hotel uses, spatial separation of uses, and availability and proximity of transit. A point system was assigned for each criterion with minimum and maximum values based on consistency with established criteria. The maximum number of points by criterion is provided in Table 1 on the following page. Detailed information on the second level screening process can be found in the Task 1.0 Site Selection Technical Report.

Table 1: Second Level Screening Criteria

Criterion	Points
Competing Markets	10
Diversity and Intensity of Uses on Site	30
Proximity and Intensity of Residential/ Hotel Uses	25
Spatial Separation of Uses	25
Availability and Proximity of transit	10
Total:	100

Source: Walter H. Keller, Inc.

Competing Markets

Proximity to competing markets is expected to influence the capture of "pass-by" trips. The greater the distance between competing uses, the greater is the likelihood of capturing passer-by trips. The grading system established for evaluating the impact of competing markets provides up to ten (10) points.

Diversity and Intensity of Uses

The diversity and intensity of uses is a factor which will effect the number of pass-by trips captured and internalization. In general, at least three primary types of uses must be present on site to qualify for a mixed use development. These uses may vary depending on the type of mixed use development and may include uses such as commercial, residential/ hotel, office, industrial, marina slips, institutional and parks. The procedure for evaluating the diversity and intensity of uses gave a maximum of thirty (30) points when three or more of the site's land uses were approximately equal (i.e., within 15% of the mean) in trips. This value decreases to zero if none of the uses were approximately equal.

Proximity and Intensity of Residential/ Hotel Uses

The proximity and intensity of residential units and/ or hotel rooms will influence internalization and pedestrian trips. Generally, the greater the intensity and proximity of residential units or hotel rooms to other uses on site, the greater amount of internalization and pedestrian trips. It is also expected that multi-family dwellings or hotels will generate higher internalization and pedestrian trips than

single family uses with increasing distances decreasing the likelihood of pedestrian activity. The maximum points would be assigned if on-site residential or hotel units exceed 400 units.

Spatial Separation of Uses

The spatial relationship of uses on site is expected to play a significant role on the internal capture of trips in a mixed use development. The closer the uses are, one to another on site, the greater is the likelihood that pedestrians will patronize more than one use. However, it is assumed that beyond a certain point, pedestrians will choose to ride as opposed to walk between and among uses.

Availability and Proximity of Transit

Transit use can reduce vehicle trips on the roadway network. However, transit use is related to, among other things, the number of routes serving a site, frequency of service, and the distance from the transit stop to the respective uses. The availability and proximity of transit provided a maximum of ten (10) points when more than one bus route was available within 400 feet of the site with a frequency of at least 1 hour headways.

Results of the Second Level Evaluation

The second level evaluation procedure identified 13 sites for final evaluation. A detailed tabulation of the evaluation procedure including criteria rankings can be found in the Task 1.0 Site Selection Technical Report (see Table 8).

General Site Description - Final Candidate Sites

Design Center of the Americas (#2)[1]

This site is located in the City of Dania at the southeast corner of Griffin Road and Interstate 95. Design Center of the Americas (DCOTA) is a mixed use site that includes 500,000 square feet of designer showrooms, a 250 room Sheraton Hotel and a 60,000 square feet office building. The project was a DRI and the separation between uses are small with excellent pedestrian linkages. Approximately 35 acres are developed. The site is easy to isolate and does not have any "cut through" trips. Ultimate development will include an additional 500,000 square feet of designer showrooms and 120,000 square feet of offices. General site location can be found in Figure 1.

[1] #2 is a reference number carried over from Technical Report I and is not indicative of the site ranking.

Corporate Park at Cypress Creek (#4)

This DRI is approximately 78 acres in size and is located at the northeast corner of Powerline Road and Cypress Creek Road in the City of Fort Lauderdale. The site is a master planned business park that includes multi-story offices, industrial (service - office), a small commercial strip center with a day care, restaurants and commercial uses, three periphery restaurants (Bennigan's, Chili's and Burger King), banks and an Embassy Suite hotel. The site is almost totally developed. The site has a large number of driveways and no "cut-through" trips would be expected. Because of the large number of buildings and parking lots, survey efforts would be more complex. General site location can be found in Figure 1.

Mizner Park (#8)

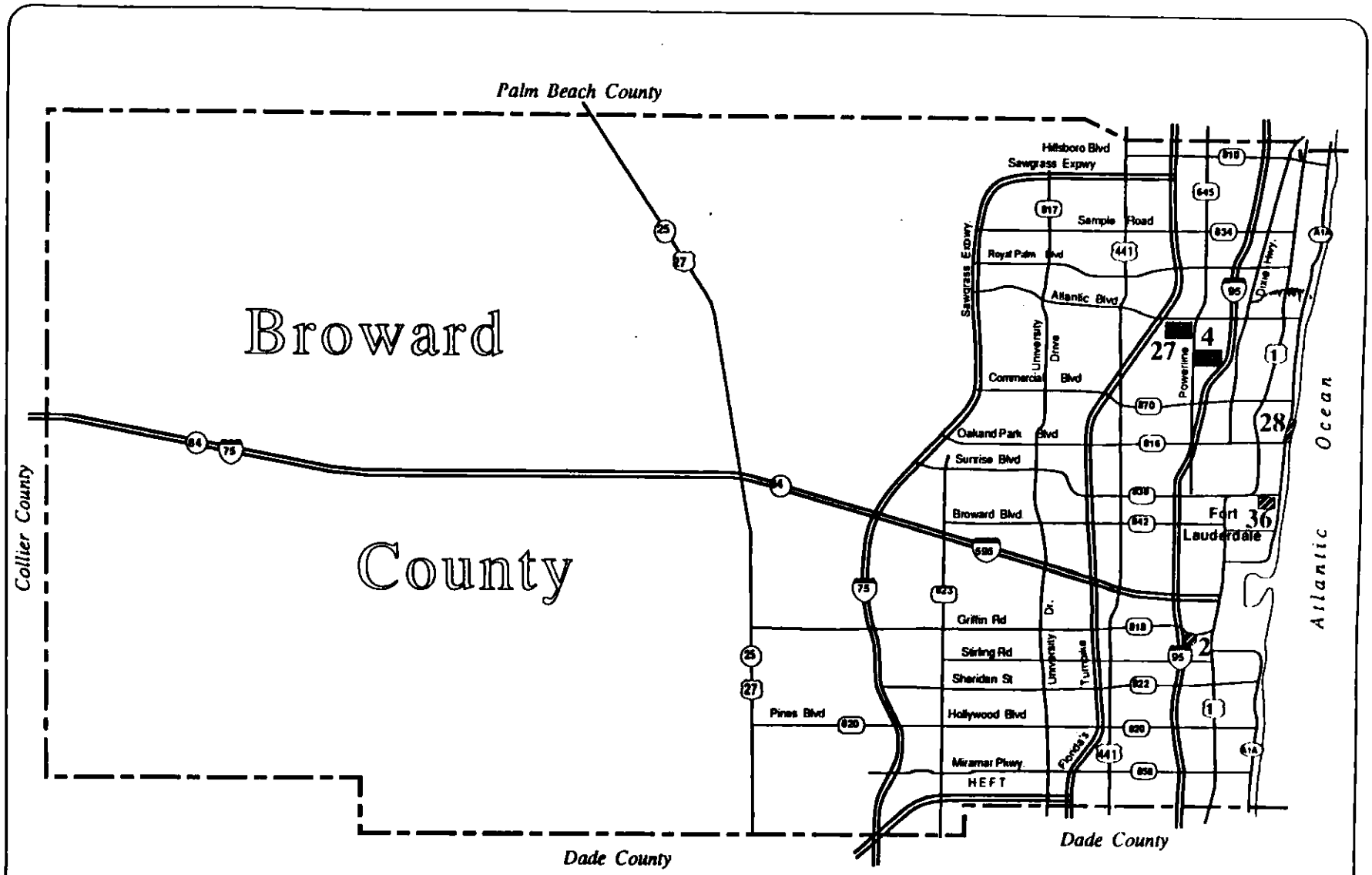
Mizner Park is 30 acre mixed use project located in the downtown redevelopment area of the City of Boca Raton north of Palmetto Park Road and east of Federal Highway (US 1). The project redeveloped a prior shopping mall into a commercial, office and residential complex with minimal separation between uses and excellent pedestrian linkages. An eight (8) screen theater and several trendy restaurants are located at this site. An additional 136 apartments and parking garages are being added to the site. General site location can be found in Figure 2.

Indian River Plantation (#13)

This resort oriented site is located on Hutchinson Island east of Stuart in Martin County. The project includes approximately 400 hotel rooms, 750 multi-family units, a marina, executive golf course, beach club, a bank, convenience store, gas station and several restaurants. An on-site tram is provided to link the various uses to each other for the approximately 190 acre development. Southeast McArthur Boulevard extends south of this development serving the southern portion of Hutchinson Island and Sailfish Point and "cut-through" trips would need to be identified. The site is however, easy to isolate and does not have any close competing land uses. General site location can be found in Figure 3.

Catalina Center - Savannah (#15)

This master planned parcel is located at the southwest corner of Gateway Boulevard (NW 22nd Avenue) and Congress Avenue in the City of Boynton Beach (see Figure 2). The site includes 466 apartments, a 170 unit Holiday Inn Hotel, and a 166,000 square feet commercial center with approximately 28,000 square feet of offices. A Target discount store with 120,000 square feet is also located on this site. Out parcel uses include a McDonald's restaurant, a Barns and Noble bookstore, a bank and an un-occupied restaurant. Catalina - Savannah is approximately 80 acres in size.



Districtwide Trip Generation Study

Broward County Candidate Sites

Figure 1

north
n.t.s.

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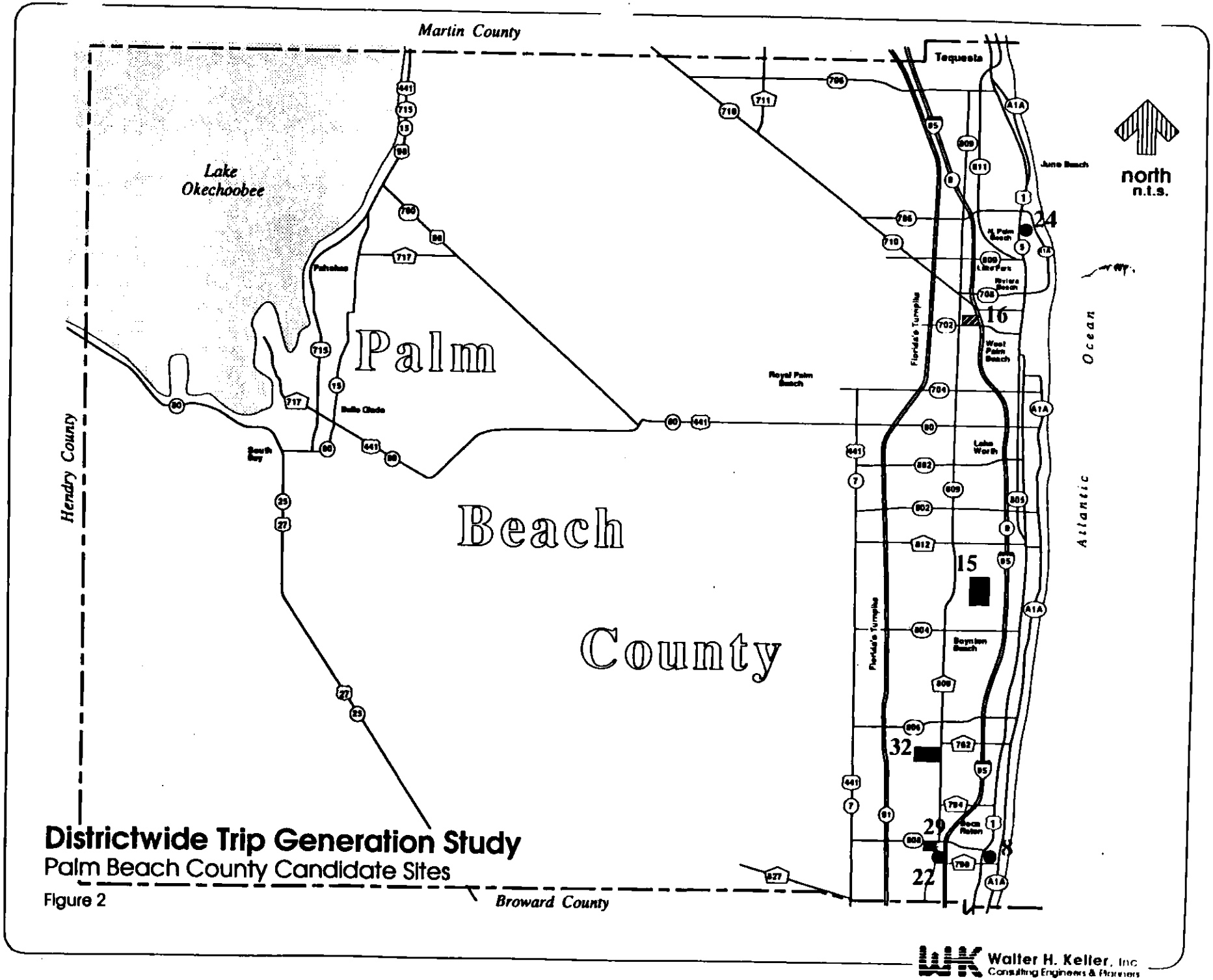

Districtwide Trip Generation Study

Palm Beach County Candidate Sites

Figure 2

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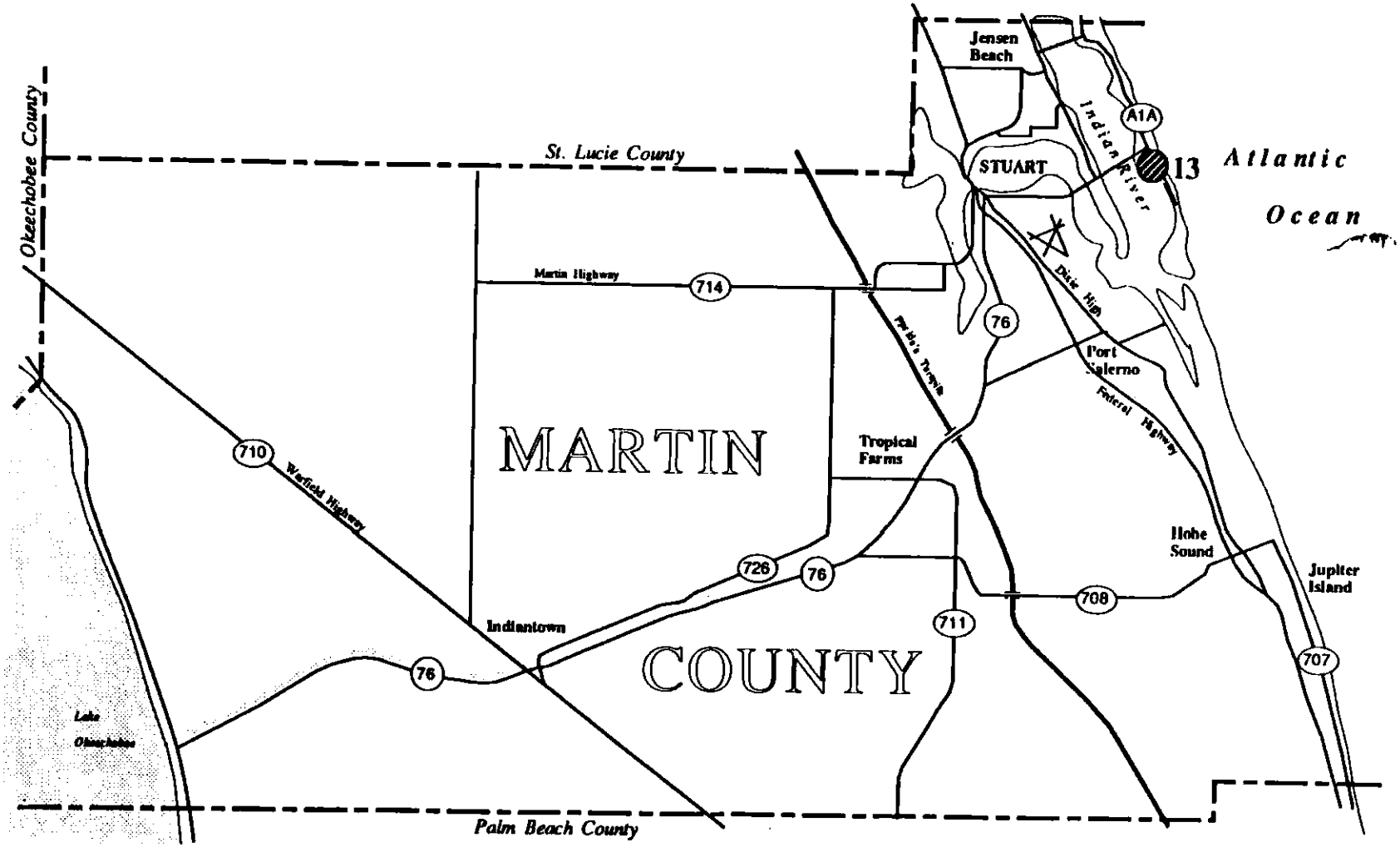


north
n.t.s.

Districtwide Trip Generation Study
Martin County Candidate Sites
Figure 3

Walter H. Keller, Inc
Consulting Engineers & Planners

Northpointe Corporate Park - 45th Street Business Park (#16)

This site encompasses two master planned projects: a 45 acre business park and an 80 acre corporate park which was a DRI. The site is located at the northwest corner of the intersection of 45th Street and Interstate 95 in the City of West Palm Beach. In addition to office and service - office uses, the combined site includes a 120 room Marriott Courtyards suite hotel, a commercial strip center, a regional FPL center, a Wendy's restaurant and a day care center. The sites have internal connections and share similar driveways. This site is approximately sixty percent developed and separation between uses can be significant. Pedestrian linkages between uses is also limited. General site location can be found in Figure 2.

Crocker Center (#22)

This site is located on the east side of Military Trail south of Glades Road in the City of Boca Raton (see Figure 2). The site includes a 256 room Marriott hotel, 212,000 square feet of office uses in two towers and 86,400 square feet of commercial and restaurant uses. The separation between uses is minimal with excellent pedestrian linkages. The site totals approximately 26 acres.

Old Port Cove (#24)

This development is located on the east side of Federal Highway (US 1) north of the Intracoastal Waterway in the Village of North Palm Beach. The site includes a mixture of multi-family units, a large marina and yacht club and a 95,000 square foot business commercial center. The site is easily isolated and totals approximately 70 acres. Pedestrian linkages between uses is satisfactory. General site location can be found in Figure 2.

Palm Aire (#27)

Palm Aire is a master planned development located west of Powerline Road and south of Atlantic Boulevard in the City of Pompano Beach (see Figure 1). The entire development includes approximately 9,000 housing units, several golf courses, a spa, several commercial centers and offices. A portion of the development located in the northeast area of approximately 105 acres was identified for this study. This area includes Loehmann's Plaza, the Marketplace at Palm Aire (a small strip center with offices), the Palm Aire Spa, offices and several multi-family uses. Because of the spread out nature of this site, spatial separation is higher and pedestrian linkages could be better. "Cut-through" trips would have to be accounted for on North Course Drive and SW 27th Avenue.

Galt Ocean Mile (#28)

This site (see Figure 1) is located east of SR A1A and north of Oakland Park Boulevard in the City of Fort Lauderdale. This site is about 75 acres and includes a variety of uses including eighteen (18) high-rise apartment

buildings, a 150 room hotel, a new 145,000 square feet shopping center with a Winn Dixie Marketplace Store and offices, commercial and office uses and restaurants. The spatial separation between the residential uses and the commercial - office uses is generally small with good pedestrian linkages. Galt Ocean Drive separates the residential from the commercial. No "cut-through" trips would be expected on this roadway.

Glades Plaza (#29)

Glades Plaza totals approximately 100 acres and includes a variety of commercial, office and hotel uses. The site is located south of Glades Road, east of Town Center and west of Military Trail in the City of Boca Raton. Two hotels are located in this area a Holiday Inn and a Sheraton. In addition to Glades Plaza and its commercial and restaurant uses, the area includes several multi-story office buildings including Grace Corporate Tower, Crocker Plaza, Twin Plaza, Town Center Plaza, One Lincoln Place and Mediplex medical offices. Other uses include banks and a Don Carter's Bowling Center. The spatial separation between uses can be high with limited pedestrian linkages due to intersecting streets. SW 19th Street and Sheraton Way cross the study area and "cut-through" trips would have to be accounted for. General site location can be found in Figure 2.

Delray Medical Center (#32)

This site is 175 acres and is located at the southwest corner of Linton Boulevard and Military Trail in the unincorporated area of Palm Beach County west of the City of Delray Beach. Included in this tract are two residential developments: Country Lakes (a townhouse community) and Belaire (a gated single family attached community). The site includes several hospitals and medical uses including Delray Community Hospital (211 beds), Fair Oaks Hospital, Pine Crest Rehabilitation Hospital, Hillhaven Convalescent Center, a Cancer Center and the Delray Eye Center. The site also includes the Palm Court Plaza (commercial uses and doctor's offices), a Wal-Mart and First Baptist Church of Delray Beach. Pedestrian linkage and connections between uses is restricted. General site location can be found in Figure 2.

Galleria (#36)

Galleria includes the area south of Sunrise Boulevard between the Intracoastal Waterway and the Middle River in the City of Fort Lauderdale and totals approximately 135 acres. A wide variety of uses exist including the Galleria Regional Shopping Center, the Galleria Professional offices, a 200 room Guest Quarters suite hotel, a four screen cinema, other commercial uses, professional and corporate offices, apartments and single family homes. While no "cut-through" trips are expected, the size and intensity of the area complicate the survey data collection efforts. General site location can be found in Figure 1.

Final Level Grading and Evaluation

Candidate sites selected in the final listing were evaluated in order to arrive at a priority list of the final thirteen (13) candidate sites. The criteria selected for evaluation were separated into three distinct categories: site layout; site development characteristics; and other. Table 2 provides the criteria for final site evaluation.

Site layout criteria included the ability to isolate the study site, the internal connection between land uses, the spatial separation of land uses and the probability of "cut through" trips. Each criteria was valued from 0 to a maximum of 10 points. If a particular site was best in each criteria, a maximum score of forty (40) points was awarded for site layout.

Site development characteristics included the intensity and diversity of land uses, the proximity and intensity of residential development, the pedestrian friendliness and whether the study site was "master planned". Each criteria was valued from 0 to a maximum of 10 points. If a particular site was best in each criteria, a maximum score of forty (40) points was awarded for site development characteristics.

Other criteria included the proximity of other competing land uses and the survey feasibility for collecting site data. Each criteria was valued from 0 to a maximum of 10 points. If a particular site was best in each criteria, a maximum score of twenty (20) points was awarded for site other criteria.

Table 2: Final Scoring Protocol

Criterion	Minimum (0 Points)	Maximum (10 Points)
Site Layout (0 - 40 Points)		
Easy to Isolate	Hard to Isolate	Easy to Isolate
Internal Connection Between Uses	Poor Connections	Good Connections
Spatial Separation Between Uses	Not Close Together	Close Together
Amount of "Cut Through" Trips	High Cut Through Trips	Low Cut Through Trips
Site Development Characteristics (0 - 40 Points)		
Intensity & Diversity of Uses	Skewed to One Use	Equal Intensity of Uses
Proximity & Intensity of Residential	Minor Residential	Significant Residential
Pedestrian Friendliness	Poor Pedestrian Linkage	Good Pedestrian Linkage
Master Planned Development	Not Master Planned	Master Planned
Other Characteristics (0 - 20 Points)		
Proximity to Competing Land Uses	Multiple Competing Uses	Lack of Competing Uses
Survey Feasibility	Complex Survey Effort	Less Complex Survey

Source: Walter H. Keller, Inc.

Evaluation and Scoring Procedure

Project team members held a review meeting to evaluate and score each of the final thirteen (13) sites. During the review meeting each site was reviewed using aerial photographs and the results of site inspections and prior site familiarity. The evaluation was also based in part of the results of the second level scoring of similar criteria of prior diversity and intensity of land uses, proximity and intensity of residential and spatial separation of uses. While a detailed and itemized scoring system was not utilized in the final level screening, an open discussion took place among project team members on the relative scoring for each criteria for each site. Table 3 details the results of the final evaluation.

Table 3 - Final Evaluation & Ranking

No.	Project Name	Size	Unit	Site Layout: Easy to Isolate	Site Layout: Connection Between Uses	Site Layout: Spatial Separation	Site Layout: Cut-Through Trips	Site Development Characteristics: Intensity & Diversity of Uses	Site Development Characteristics: Proximity & Intensity of Residential	Site Development Characteristics: Pedestrian Friendly	Site Development Characteristics: Master Planned	Other: Proximity to Other Uses	Other: Survey Feasibility	Total Pts	Rank
	Development Of Regional Impact														
2	Design Center Of The Americas (Dania)	44	Acres	10	10	10	10	10	8	10	10	7	10	95	1
	Hotel Room	250	Rooms												
	Commercial- Showroom	500,000	SF												
	Office	60,000	SF												
4	Corp Park @ Cypress Creek (Ft. Lauderdale)	24	Acres	5	8	6	10	8	8	6	10	3	3	67	8
	Hotel Room	300	Rooms												
	Industrial	35,255	SF												
	Commercial	30,000	SF												
	Office	442,142	SF												
8	Mizner Park (Boca Raton)(Portion of DRI)	30	Acres	10	10	10	9	9	9	10	10	7	8	92	2
	Dwelling Units	136	DU												
	Commercial	125,000	SF												
	Office	100,000	SF												
	Movie Theatre	8	Screens												
13	Indian River Plantation (Martin Co.)	190	Acres	9	6	4	6	5	10	10	10	10	6	76	5
	Dwelling Units	947	DU												
	Hotel Room	200	Rooms												
	Commercial	5,380	SF												
	Office	7,658	SF												
15	Catalina Center- Savannah (Boynton Beach)	80	Acres	7	7	6	10	8	9	6	8	3	8	72	6
	Apartments	466	DU												
	Hotel (includes 18 rental apartments)	170	Rooms												
	Retail Shopping Center	290,000	SF												
	Office	28,550	SF												
16	Northpoint Corporate Park	134	Acres	10	6	4	10	10	1	3	8	5	5	62	10
	Hotel Room	120	Rooms												
	Industrial	125,000	SF												
	Commercial	35,000	SF												
	Office	472,000	SF												
	Vested Non DRI's														
22	Crocker Center	26	Acres	10	10	10	10	10	8	10	10	4	10	92	2
	Hotel Room	256	Rooms												
	Commercial	86,400	SF												
	Office	217,247	SF												

Table 3 - Final Evaluation & Ranking (continued)

			Site Layout				Site Development Charateristics				Other			
No. Project Name	Size	Unit	Easy to Isolate	Connection Between Uses	Spatial Separation	Cut - Through Trips	Intensity & Diversity of Uses	Proximity & Intensity of Residential	Pedestrian Friendly	Master Planned	Proximity to Other Uses	Survey Feasibility	Total Pts	Rank
24 Old Port Cove Marina (Palm Beach Co.)	70	Acres	10	10	7	10	7	10	9	10	3	8	84	4
Dwelling Units	1,066	DU												
Office-Commercial	100,000	SF												
Marina	200	Berths												
27 Palm Aire (Pompano Beach)	105	Acres	3	4	6	6	10	8	5	10	3	4	59	11
Dwelling Units	3,529	DU												
Industrial	42,596	SF												
Commercial	189,000	SF												
Office	282,720	SF												
28 Galt Ocean Mile (Ft. Lauderdale)	74	Acres	3	8	8	9	10	10	7	6	6	1	68	7
Dwelling Units	3,930	DU												
Hotel Room	723	Rooms												
Industrial	52,319	SF												
Commercial	259,000	SF												
Office	461,776	SF												
29 Glades Plaza (Boca Raton)	100	Acres	1	5	5	1	10	10	4	3	3	3	45	12
Hotel Room	1,139	Rooms												
Industrial	2,315	SF												
Commercial	213,500	SF												
Office	670,016	SF												
32 Delray Medical Center (Delray Beach)	175	Acres	4	2	2	10	10	4	3	2	4	4	45	12
Dwelling Units	705	DU												
Industrial	926	SF												
Commercial	4,000	SF												
Hospital	211	Beds												
Office	455,088	SF												
36 Galleria	135	Acres	4	8	8	10	10	10	8	2	3	3	66	9
Dwelling Units	709	DU												
Hotel Room	201	Rooms												
Industrial	49,078	SF												
Commercial	514,500	SF												
Office	202,464	SF												

Source: Walter H. Keller, Inc.
ITE Trip Generation Manual - 5th Edtn.

Recommended Multi-Use Study Sites

Three multi-use sites received final scores of 92 - 95 points out of a maximum of 100 points. These sites were all somewhat similar in that spatial separation between uses was minimal with excellent pedestrian linkages. Additionally, these site were more equal in intensity of the individual uses and were generally easier to isolate. The three highest rated sites were:

#2	Design Center of the Americas	Dania	95 Points
#8	Mizner Park	Boca Raton	92 Points
#22	Crocker Center	Boca Raton	92 Points

The next highest rated sites varied from 72 to 84 points. These sites generally had greater separation of uses, were less pedestrian friendly and were somewhat more skewed to one primary use. The next three highest rated sites were:

#24	Old Port Cove	North Palm Beach	84 Points
#13	Indian River Plantation	Martin County	76 Points
#15	Catalina Center - Savannah	Boynton Beach	72 Points

The Department of Transportation selected Mizner Park and Crocker Center for study. The Design Center of the America's was not selected due to the uniqueness of the site. The Galleria Area (site #8) located in the City of Fort Lauderdale was chosen as the final study site.

III. SITE CHARACTERISTICS

Crocker Center

History and Description

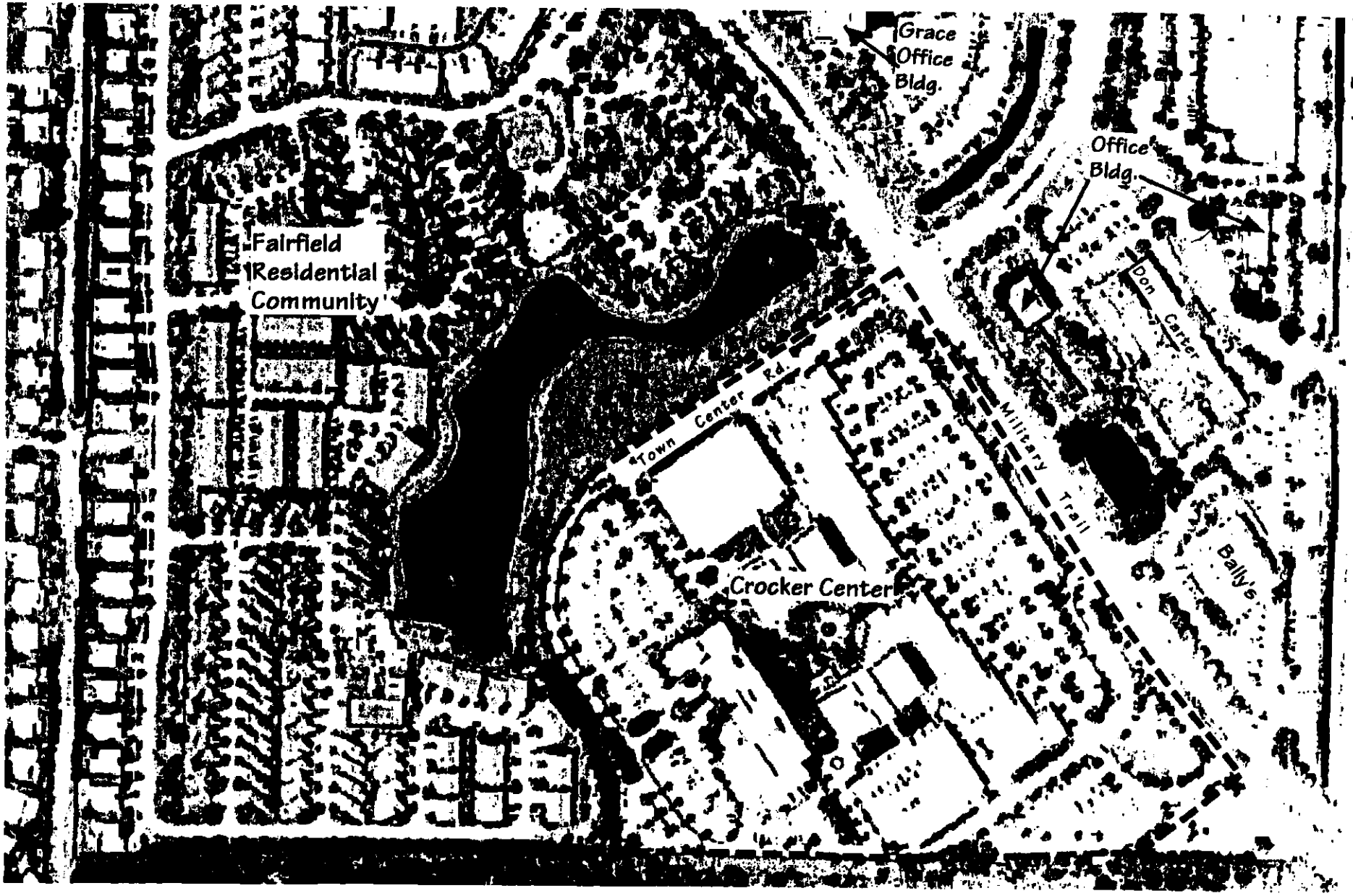
Crocker Center-[1] a 28.6 acre site, is located just outside the municipal boundaries of Boca Raton, Florida southwest of the I-95/Glades Road interchange, as shown on Figure 4. It is accessible only from Military Trail, directly opposite from the eastern access to Town Center, a thriving regional mall, and from Glades Plaza, a complex of retail businesses, recreational centers, hotels, and office buildings, which is well established and fully occupied.

Crocker Center was built as a unified, multi-use development, creating an upscale environment conducive to leisurely shopping and dining, attracting professional tenants to its office towers, and providing the most luxurious hotel in the four square mile I-95/Glades Road area with attendant catering facilities. The retail shops opened in 1986, the Marriott Hotel and south office tower in 1987, and the north office tower opened in 1988. All uses are connected by deeply shaded walkways. The site layout is shown in Figure 5.

An elaborately landscaped fountain and courtyard area is flanked by seven restaurants, half of which would be considered very expensive, as noted in the *Boca Raton Magazine*. Most of the restaurants provide al fresco dining, which integrates them into the pedestrian flow of the center. The shops face into the main parking area in two wings; they are predominantly upscale boutiques. At the north end of the retail row is a McDonald's fast food restaurant which does a brisk business; the south end is anchored by a moderately priced restaurant which attracts a sizable lunch crowd.

The Marriott Hotel has 256 rooms and, according to hotel management, attracts much of its trade from business trips related to nearby corporate headquarters. Its main entrance is from Town Center Drive which swings behind the complex. It also has a well defined entrance to the courtyard area, making that travel path very attractive. On the dates when the site was surveyed, the occupancy rate was 66 % although its annualized occupancy is 80%. The hotel has an upscale dining room and lounge occupying 3,000 square feet and various sized meeting rooms totaling 10,000 square feet. The Marriott provides all services and facilities usually associated with a first class facility.

1 - Crocker Center was re-named in November 1994 to Boca Center.



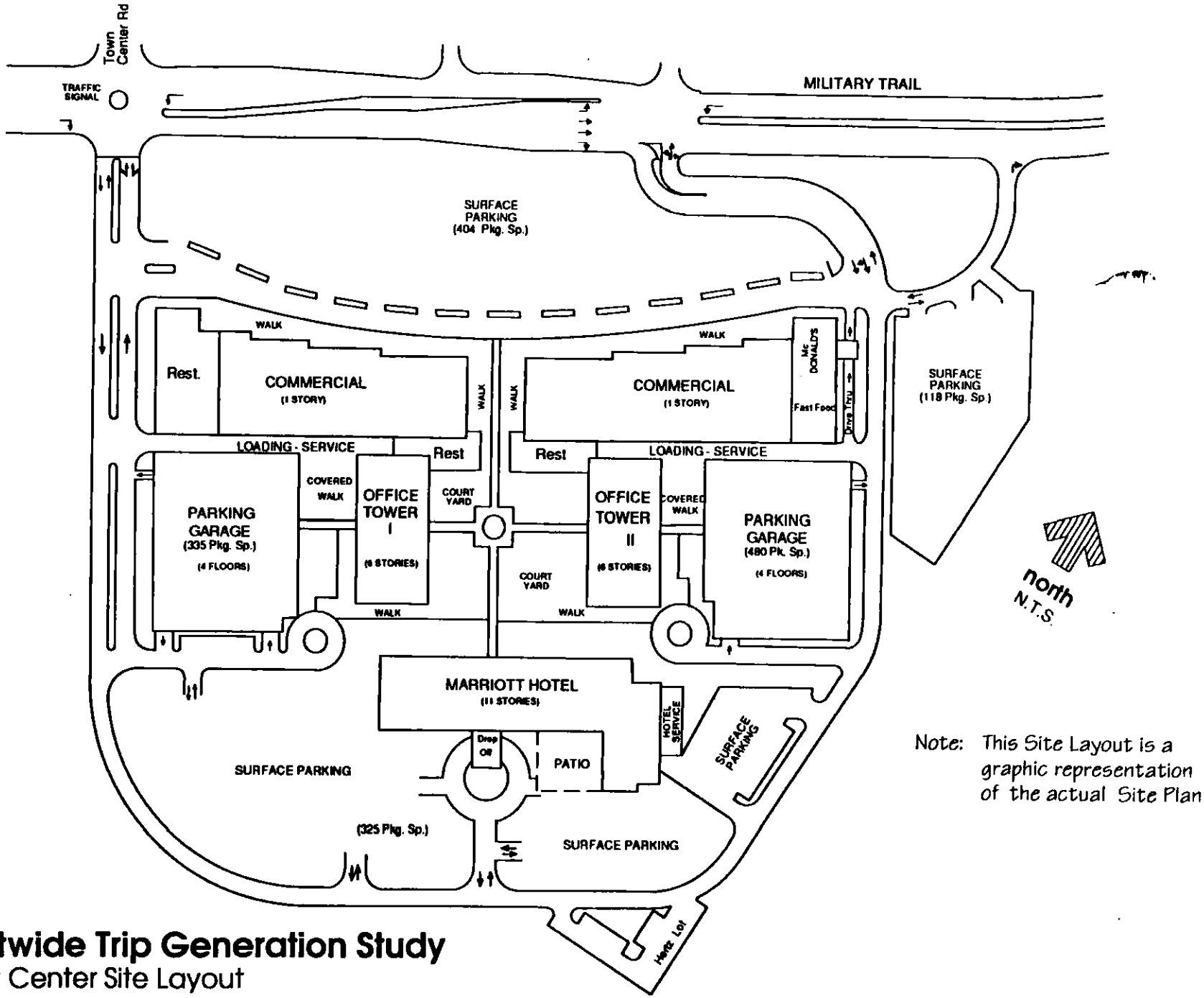
Districtwide Trip Generation Study

Crocker Center and Surrounding Development

Figure 4

north

Walter H. Keller, Inc.



Note: This Site Layout is a graphic representation of the actual Site Plan

Districtwide Trip Generation Study

Crocker Center Site Layout

Figure 5

Walter H. Keller, Inc
Consulting Engineers & Planners

Two, six story office towers are depicted in Figure 5. The south office building, Tower I, is developed at 120,000 square feet while the north office building, Tower II, is developed at 97,000 square feet. Both Towers are set back from the retail and restaurant facades, but have excellent pedestrian links. The office buildings have luxurious lobbies staffed by a front desk attendant. Due to the layout of the center, only those persons going to the offices would be likely to use the parking garages. The outdoor parking areas serve the retail and restaurant trade, and the hotel has valet service as well as its own parking areas. An inventory of land uses at Crocker Center is provided in Table 4.

Table 4 - Crocker Center Land Use Inventory

Land Use	Square Feet	% Occupied	ITE Code
Office Uses	208,883	94	
Law	19,019		710
Securities	89,150		710
Medical	2,434		710
Other	85,696		710
Vacant	12,584		
Commercial	87,157	90	
Retail (Specialty)	33,495		814
Restaurant (Quality)	30,201		831
Restaurant (Sit Down)	9,250		833
Fast Food (McDonald's)	5,611		834
Vacant	8,600		
Hotel		66	
Rooms	256		310
Mtg. Rooms	10,000		
Restaurant/ Lounge	3,000		

Source: Walter H. Keller, Inc.
Marda L. Zimring, Inc.
ITE Trip Generation, 5th Edition

Parking spaces are not assigned by use within Crocker Center. All parking is free and available for all Center users. One exception is that on a case by case basis, many office tenants have been assigned parking spaces within the garages. Overall parking conforms to Code requirements of one space per 200 square feet of gross leaseable floor area for shopping centers and office buildings. The management office did not have a reliable count on the number of employees at Crocker Center.

Site Vicinity Information

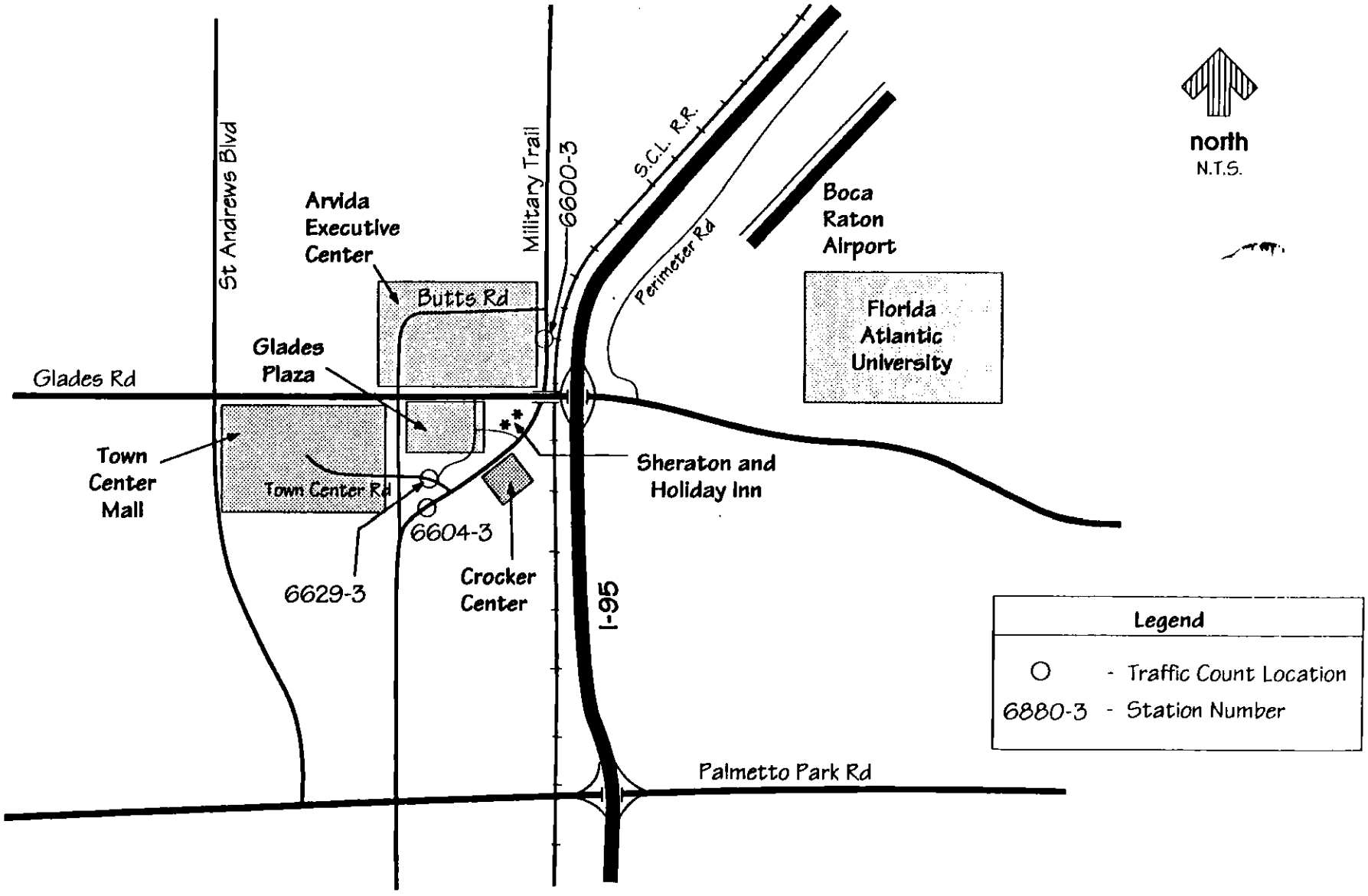
As discussed, Crocker Center is located in the midst of a large area of competing retail, office, restaurant and hotel uses. The Center is several miles from downtown Boca Raton, but is at the core of the intensely developed area surrounding Town Center. It has carved its own niche at the high end of the market, and is well positioned to capture trips from the adjacent development. Crocker Center is isolated to the extent that only those from office buildings directly across Military Trail would be likely to walk into the center. Due to the spread of the development in the area, trips from any other locations would necessarily be vehicular.

Annual Average Daily Traffic (AADT) and level of service for the surrounding roadways were analyzed to identify external traffic conditions adjacent to Crocker Center. The AADT counts were obtained from the Palm Beach County Metropolitan Planning Organization (MPO) and represent an average of first and third quarter counts. Three MPO stations are depicted in Figure 6. Peak Hour volumes were also computed by calculating the K-100 factor from the Study data collection effort pursuant to Florida Department of Transportation procedures and multiplying it by the AADT. AADT, peak hour and level of service are reported in Table 5. As noted in Table 5, the area around Crocker has levels of service D and F on Military Trail and C+ on Town Center Road.

Table 5 - Adjacent Traffic Volumes and Characteristics

Station #	Roadway	Location	93-94 AADT	LOS D	LOS	PM Pk Vol	LOS D	LOS
6629-3	Town Center Rd	W of Military Tr	11,863	29,400	C+	1,341	2,670	C+
6604-3	Military Tr	S of Town Ctr Rd	33,220	29,400	F	3,754	2,670	F
6600-3		S of Butts Road	26,008	29,400	D	2,939	2,670	E

Source: Walter H. Keller, Inc.
Florida Department of Transportation, District IV



Districtwide Trip Generation Study

Crocker Center Count Station Locations

Figure 6

Walter H. Keller, Inc.
Consulting Engineers & Planners

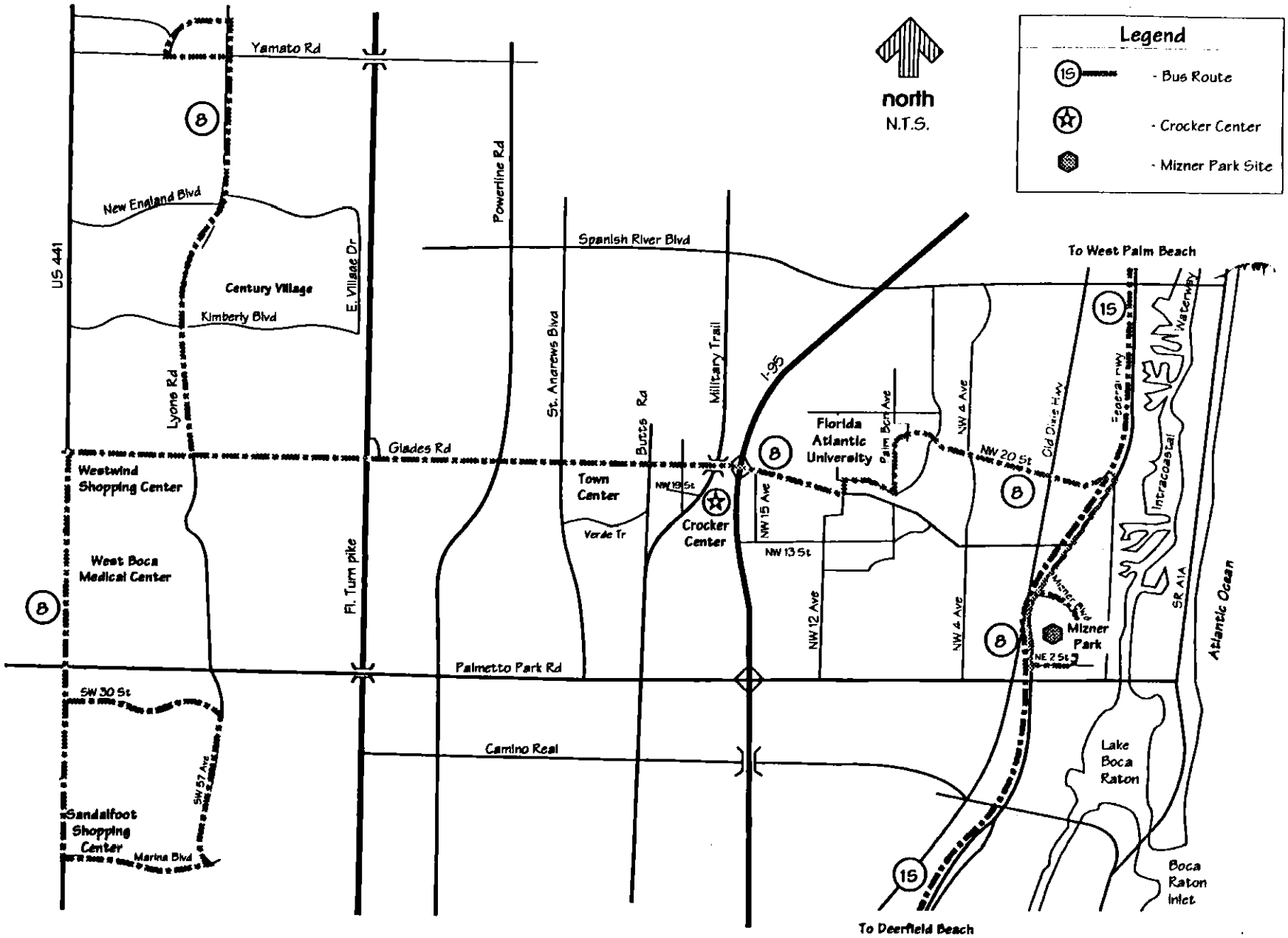
Crocker Center is not directly served by the local CoTran bus system, however, the "Cross Town Boca Raton" route (#8) stops at Glades Plaza and Town Center, west of Crocker Center. Route 8 runs west along Glades Road from Mizner Park on the east to the residential communities and commercial areas along State Road 7 to the west with intervening stops at Florida Atlantic University, Town Center, and Century Village, a large retirement community. Buses depart to the west and arrive from the west on an hourly schedule each day of the week during business hours except for Sundays. Route 8 is schematically depicted on Figure 7.

Crocker Center is geographically isolated from surrounding uses. All access is provided off of Military Trail. Its main entrance point is a signalized, heavily landscaped, median-divided roadway, Town Center Circle. This entry forms the east leg of a four-legged intersection. Proceeding directly east from the intersection, traffic is directed to the Marriott Hotel and both parking garages. Traffic intended for the commercial uses takes a left hand turn a hundred feet from the entrance at a north - south drive that accesses the large open parking area depicted in Figure 5. This roadway also provides a convenient means of access to the shopping promenade and allows site users access to the signalized intersection on Military Trail.

A secondary entrance to the site, which is not signalized, is approximately 680 feet further north on Military Trail where turning movements in all directions are permitted. This entrance would be most convenient for parking in the north parking garage as it would eliminate the drive around the Marriott parking areas or across the promenade roadway.

A third, minor entrance is located approximately 440 feet further north on Military Trail. This access provides right turns into and out of Crocker Center and is a convenient entrance to the McDonald's restaurant and drive-through window. The geometry at each access is depicted in Figure 5.

A total of 1,662 spaces are provided on site (see Figure 5). There is a parking lot for 404 cars across from the shops, with valet parking provided at the entrance to the courtyard for dinner-hour patrons. The northern surface lot has 118 spaces and the hotel has a surface parking lot with 325 spaces with valet parking service. The two parking garages have a total of 815 spaces (480 and 335) and are connected directly by covered walkways to the office towers, although anyone may use them. Except for valet parking, all parking is free.



Districtwide Trip Generation Study

Crocker Center Regional Bus Routes

Figure 7

Walter H. Keller, Inc.
Consulting Engineers & Planners

Mizner Park

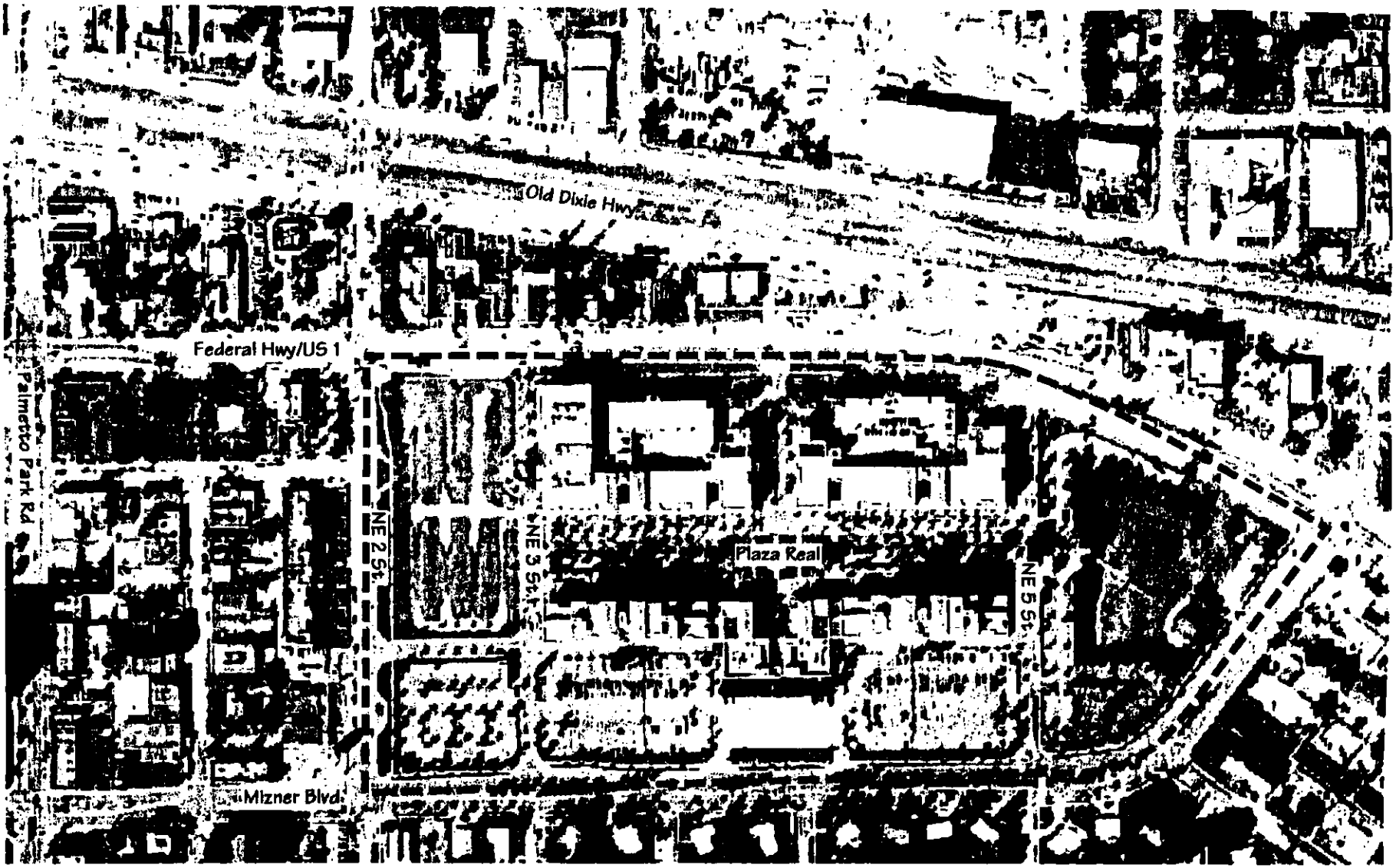
History and Description

Mizner Park was developed as a partnership venture by the City of Boca Raton Community Redevelopment Agency and a private developer to redevelop 30 acres of blighted property in the central business district. The project is privately owned. The site is located one block north of Palmetto Park Road, the downtown east-west arterial connecting I-95, Federal Highway, and terminating at Ocean Boulevard (S.R..-A1A) at the City's public beach. It is bordered on the west by Federal Highway which was recently reconstructed to a four-lane divided roadway with infrastructure and streetscaping improvements. An aerial of Mizner Park is depicted in Figure 8.

Retail and office building uses typical of downtown development are found immediately to the north, south and west of Mizner Park. To the south is Royal Palm Plaza, a Mizner style outdoor retail shopping center with covered walkways connecting shops with fountain and courtyard areas and a regionally renowned theater. To the west is the Boca Raton municipal complex which includes City Hall, the police station, community center, library, and tennis center. Adjacent to Mizner Park on the east is an old neighborhood of single family homes, most upwards of $250,000, and beyond those, expensive high rise condominiums lining Ocean Boulevard. All are within walking distance of Mizner Park.

Mizner Park opened in 1990 with 136 rental apartments, 85,000 square feet of retail space, two 250 car garages, a 1,900 seat movie theater with eight screens, 95,000 square feet of office space, and 30,000 square feet of restaurant space. Two 500 space garages on the east side of the property were completed in the Spring of 1994. An apartment tower, under construction on the east side of the project between the garages, will provide an additional 136 units when completed; however, it will not be occupied until the Fall of 1994, after the completion of the data collection. A generalized site layout is provided in Figure 9.

Mizner Park is a unique development which acts as a magnet to the surrounding community and to the region for social/ recreational purposes. It is important to note that the site is more heavily utilized in the evening than during the day. This is due to several factors: there are seven restaurants, eight movie screens in an elaborate movie house, and stores which stay open until at least 9:00 P.M., with most open until 11:00 P.M., and some open past midnight.



Districtwide Trip Generation Study

Mizner Park and Surrounding Development

Figure 8

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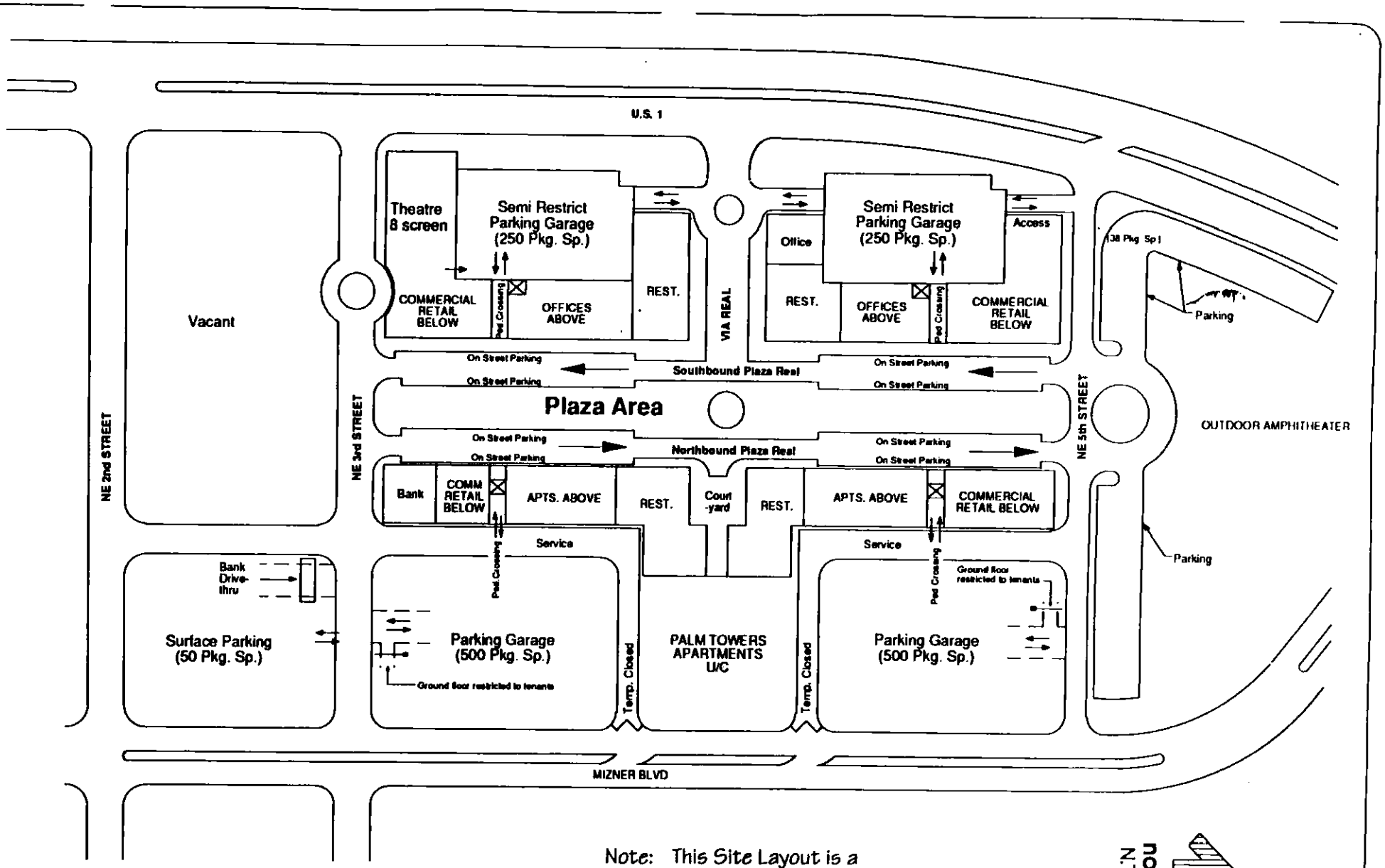

Note: This Site Layout is a graphic representation of the actual Site Plan

Districtwide Trip Generation Study

Mizner Park Site Layout

Figure 9

Walter H. Keller, Inc
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The site is often a destination in itself, providing a pleasant, pedestrian oriented environment with fountains, gazebos, manicured lawns, and covered walkways conducive to browsing.

The amphitheater on the north end and the plaza are regularly used for free events open to the public. By all accounts, this is a highly successful project based on rentals and occupancy factors, the quality of tenants, and its ability to draw a clientele which keeps them in business. An inventory of land uses at Mizner Park is depicted in Table 6.

Table 6 - Mizner Park Land Use Inventory

Land Use		Square Feet	% Occupied	# Employees	ITE Code
Office Uses		88,279	100	405	
Law		11,403		34	710
Securities		28,193		216	710
Medical		10,724		40	710
Other		37,959		115	710
Vacant		0			
Commercial		162,743	93	509	
Retail		86,632		253	814
Banking		3,653		8	911/912
Restaurant		29,697		188	831
Movie Theater (8 screens)		31,000		60	
Vacant		11,761			
Residential	Size	136 apts.	100		
1 bdrm	995 sq.ft.	48			223
2 bdrm/1 bath	1,145 sq.ft.	16			223
2 bdrm/2 bath	1,200 sq.ft.	56			223
3 bdrm/2 bath	1,695 sq.ft.	16			223

Source: Walter H. Keller, Inc. ITE Trip Generation, 5th Edition
Marda L. Zimring, Inc.

Mizner Park is centered on a broad, beautifully landscaped plaza/boulevard, named Plaza Real, running north-south through the site. The north end is a large open space providing grounds for the amphitheater. The south end has not yet been developed and remains an open grassy area. At the street level, both sides of Plaza Real are lined with retail shops; the restaurants, with one exception, are clustered around the central fountain area. The movie theater is located in the southwest corner. Offices are located above the retail uses on the west; rental apartments are located above the retail uses on the east.

Parking garages with 1,500 spaces which connect to the offices, apartments, shops and the plaza by covered walkways are located in each quadrant of the site. A 50 space parking lot which is integrated with the drive-through bank operation is located in the southwest corner of the site and a 38 space lot is located at the north end of the site. All self-parking is free. Valet parking convenient to the restaurants near the central fountain is available throughout the day.

Parking spaces are generally not assigned by use within Mizner Park. Two exceptions are those areas controlled by card-activated gates for the exclusive use of the apartment tenants and a number of spaces in the west garage which are restricted for office employees during office hours, before 5:00 P.M.. The retail shops conduct their heaviest business in the evening hours and that is also the peak period for the theaters.

Site Vicinity Information

As noted, Mizner Park is at the heart of Boca Raton's Downtown Redevelopment District, fronting on Federal Highway, the area's major north-south arterial, and two blocks north of Palmetto Park Road. Mizner Park is located in close proximity to the most densely developed residential areas of the City and to the municipal complex. Its downtown location, mixed uses and parking supply make the site well suited to capture pass-by trips. Mizner Park and its relationship to the surrounding developed areas are depicted in Figure 8 (see page 26).

Access to Mizner Park is provided from Federal Highway via three east/ west roadways: N.E. 3rd Street, Via Real, and N.E. 5th Street; from N.E. 2nd Street by a driveway which connects to N.E. 3rd Street and from Mizner Boulevard. Each of the three east/ west roadways have restricted right-in and right-out turning movements provided at the intersection with Federal Highway and, in addition, a southbound left turn lane is provided at N.E. 5th Street. None of the intersections is signalized.

The southernmost access point is located at N.E. 3rd Street. N.E. 3rd Street is conveniently located for access to the theaters. Traffic is slowed by a rotary 100 feet onto the site. Vehicles can proceed east to Plaza Real or further east to the southeast parking garage. N.E. 3rd Street cuts across the entire site and terminates at Mizner Boulevard. Through traffic on N.E. 3rd Street is discouraged owing to the right-in and right-out turning movement restrictions at Federal Highway and Mizner Boulevard.

The middle entry point of access from northbound Federal Highway is Via Real, a two lane roadway. Traffic entering at this point is slowed and distributed by a rotary located fewer than 50 feet onto the site. The rotary provides access to the garages. Traffic can also continue east along Via Real and then south on Plaza Real.

The northernmost point of access from northbound Federal Highway is at N.E. 5th Street. N.E. 5th Street cuts across the entire site and could be used by through traffic, however, as is the case with N.E. 3rd Street, the geometrics are not conducive to this movement.

The driveway which serves Mizner Park from N.E. 2nd Street is the only one which permits all turning movements. It provides access to the drive-in bank facility and it aligns with the service drive to the north. This driveway also provides access to the parking garage located in the southeast quadrant of the project and to the rear of the businesses located along the east side of Mizner Park.

Access from Mizner Boulevard, a median divided roadway bordering the east side of the site, is possible at N.E. 5th Street and N.E. 3rd Street, but only in right-in, right-out turning movements. There are no traffic signals. These access points provide convenient entry to the northeast and southeast parking garages.

Internal circulation at Mizner Park is provided by Plaza Real. Plaza Real is a broad boulevard with two, two-lane, one-way streets and a heavily landscaped center plaza which features pedestrian attractions such as sitting areas and landscaped views. On-street parallel parking is provided on Plaza Real adjacent to the covered walkways which front the retail outlets. Owing to its design and pedestrian amenities, Plaza Real is an attraction to Mizner Park visitors.

Due to the fact that access is distributed among six entry-ways, the location of the parking garages at four corners of the site, two rotaries and one main internal roadway, Plaza Real, internal circulation on the site flows slowly, but evenly. There were no observed bottlenecks. Valet parking and taxi loading are provided at the semicircle on the east side of Plaza Real in front of the restaurants. The parking garage located in the northeast quadrant of the site is used for valet parking. These activities do not adversely impact on-site traffic circulation; however, valet drivers exit the northeast parking garage and use Mizner Boulevard to re-enter the site at the southeast entrance.

Annual Average Daily Traffic (AADT), peak hour counts and level of service for the surrounding roadways were analyzed to identify external traffic conditions adjacent to Mizner Park. The AADT counts were obtained from the Palm Beach County Metropolitan Planning Organization and represent an average of first and third quarter counts. Four MPO stations are depicted in Figure 10, *Count Station Locations*. Peak Hour volumes were established by multiplying the K-100 factor (from the data collection effort) by the AADT. AADT, peak hour and level of service are reported in Table 7. Traffic volumes exceed LOS D on U.S.-1 as noted in Table 7.

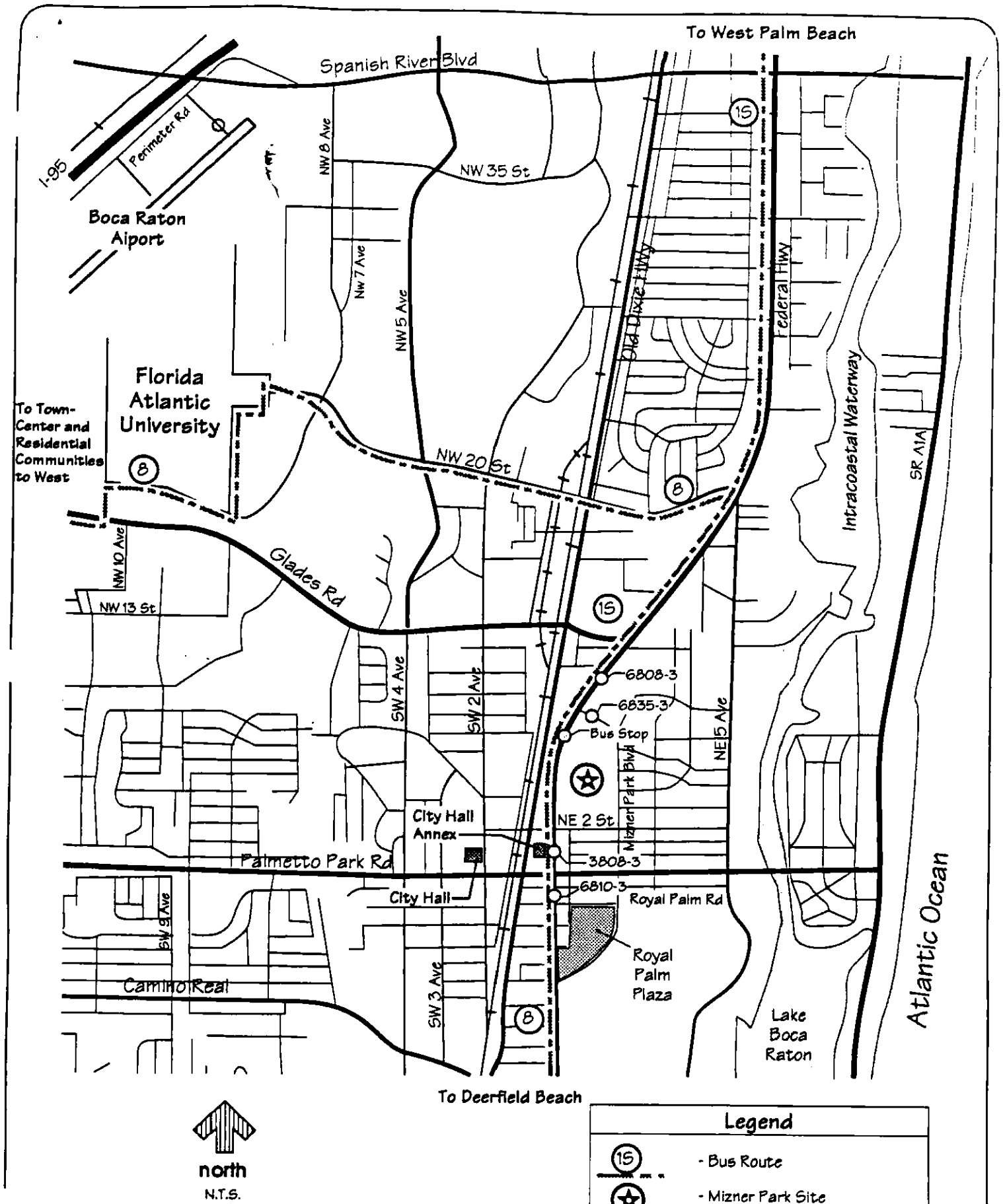
Table 7 - Adjacent Traffic Volumes and Characteristics

Station #	Roadway	Location	93-94 AADT	LOS D	LOS	PM Pk Vol	LOS D	LOS
6808-3	US 1	S of Glades Rd	30,370	29,400	E	3,067	2,670	F
3808-3		N of Palmetto Park	21,847	29,400	D	2,207	2,670	D
6810-3		S of Palmetto Park	21,250	29,400	D	2,146	2,670	D
6835-3	Mizner Blvd. (NE 6 St)	E of Federal Hwy	5,080	29,400	A	513	2,670	A

Source: Walter H. Keller, Inc.
Florida Department of Transportation, District IV

Mizner Park is served directly by the CoTran bus system. Routes 8 and 1S connect Mizner Park with the areas to the west and north. Route 8, the "Cross Town Boca Raton" route (see description on page 23). Buses run on an hourly schedule each day of the week during business hours except for Sundays. Route 1S runs along Federal Highway from downtown West Palm Beach to the intersection of Hillsboro Boulevard and Federal Highway in Deerfield Beach. Buses run every two hours, each day of the week during business hours except for Sundays. Routes 8 and 1S are shown on Figure 7 (see page 24).

Employment incomes vary from a low of under $20,000 per year for restaurant and retail employees to a high in excess of $100,000 per year for office professionals. Rental rates for the apartments at Mizner Park range from $840 to $3,000 per month. A conservative rule of thumb is that housing should equal 30% of gross annual income. Based on this rule, the Mizner Park apartments are affordable to persons earning an income greater than $34,000 per year.



Districtwide Trip Generation Study

Mizner Park Count Station Locations

Figure 10

Walter H. Keller, Inc.
Consulting Engineers & Planners

Galleria Area

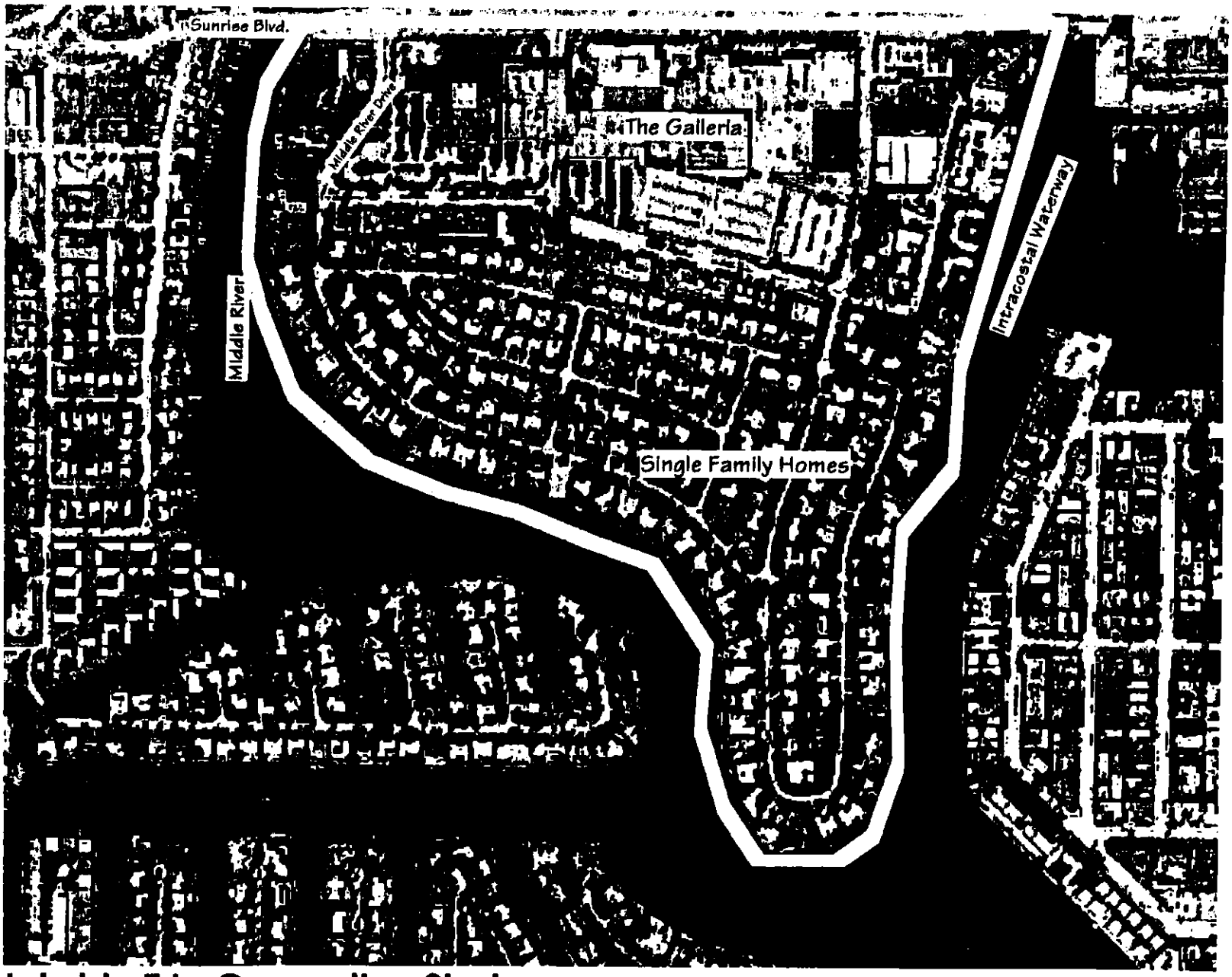
History and Description

The Galleria site is comprised of 165 acres surrounding and including the Galleria Mall, south of Sunrise Boulevard in east Fort Lauderdale. The site is surrounded on the other sides by the Intracoastal Waterway and the Middle River, isolating it geographically. Although the site was not developed as a single project, for the purposes of this study, its many complementary uses make it a viable subject. Figure 11 depicts the Galleria Area and surrounding development. Owing to the complexity of the site, a second more detailed aerial of the commercial portion of the site is provided in Figure 12. Figure 13 depicts the generalized site layout of the commercial area.

Commercial uses line the north side of Sunrise Boulevard, a six lane, divided east-west arterial connecting to Federal Highway and I-95 west of the site. To the east, the Sunrise Boulevard bridge spans the Intracoastal Waterway leading to beach front condominiums, hotels, and tourist destinations. The Intracoastal Waterway and Middle River separate the site from nearby residential development to the south and west.

The Galleria Cinemas, located on the west side of 26th Avenue, is a four screen theater in a 29,000 square foot space. A McDonald's fast food restaurant, which does a very slow daytime business, and vacant office space occupy the same building. The Guest Quarters, located on the Intracoastal and Sunrise Boulevard, is a 229 room suite hotel which had occupancy rates of 72% and 73% on the days the site was surveyed. The parking garage south of the theater belongs to the hotel, however, it is also used by the cinema. The hotel offers valet parking at all times and charges for parking.

There are eleven small buildings along the east side of 26th Avenue and N.E. 9th Street containing approximately 21,000 square feet of medical offices, 13,100 square feet of other office space, and 6,400 square feet of vacant office space. The five story Galleria Professional building on Middle River Drive was built in 1954. It contains 70,000 square feet of office space, approximately 15% of which are medical offices; a cafe is located on the ground floor of the building. A vacant two story office building sits at the southwest corner of Middle River Drive and Sunrise Boulevard. All buildings provide free on-site parking.

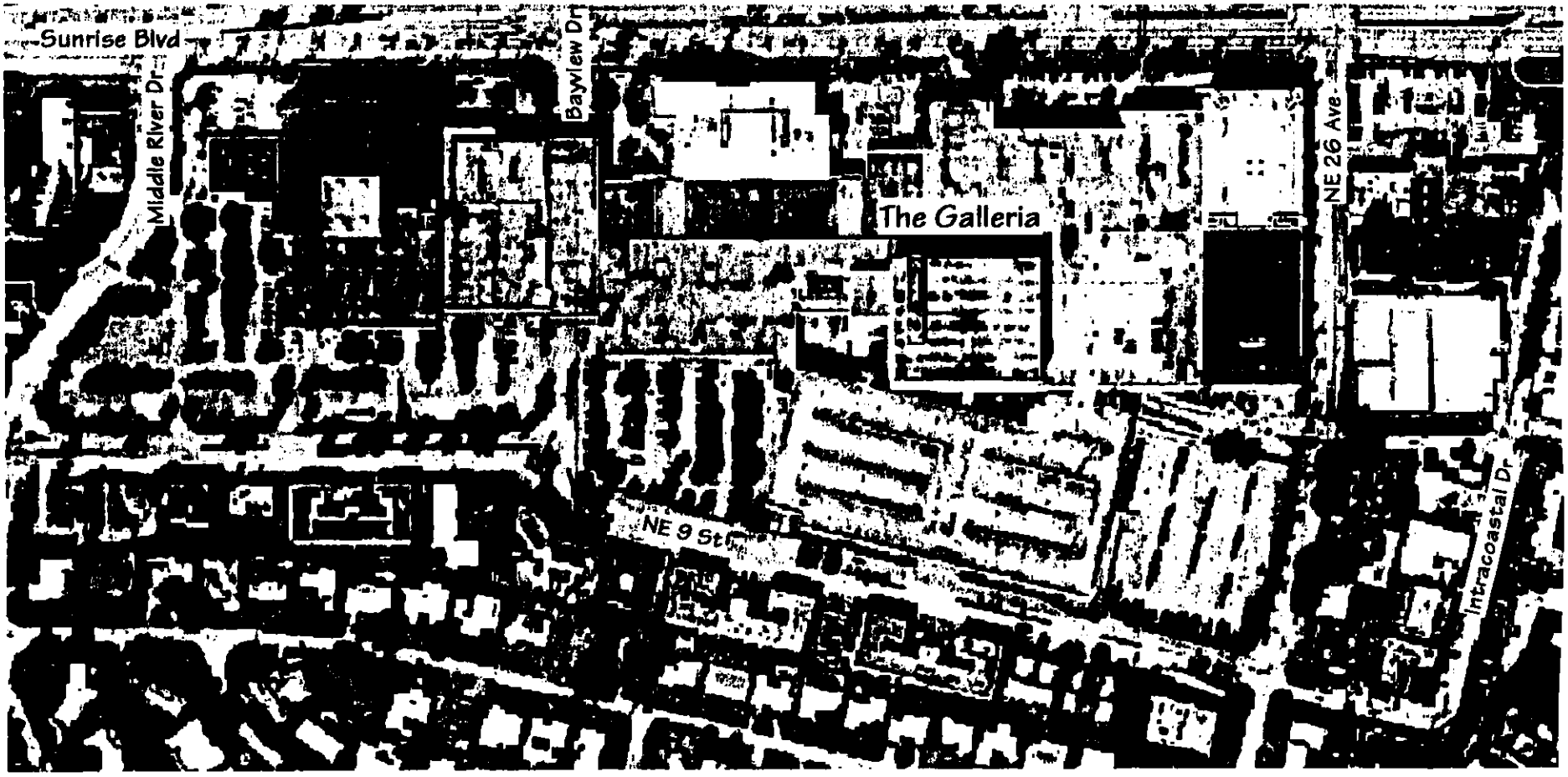


Districtwide Trip Generation Study

Galleria and Surrounding Development

Figure 11

Walter H. Keller, Inc.



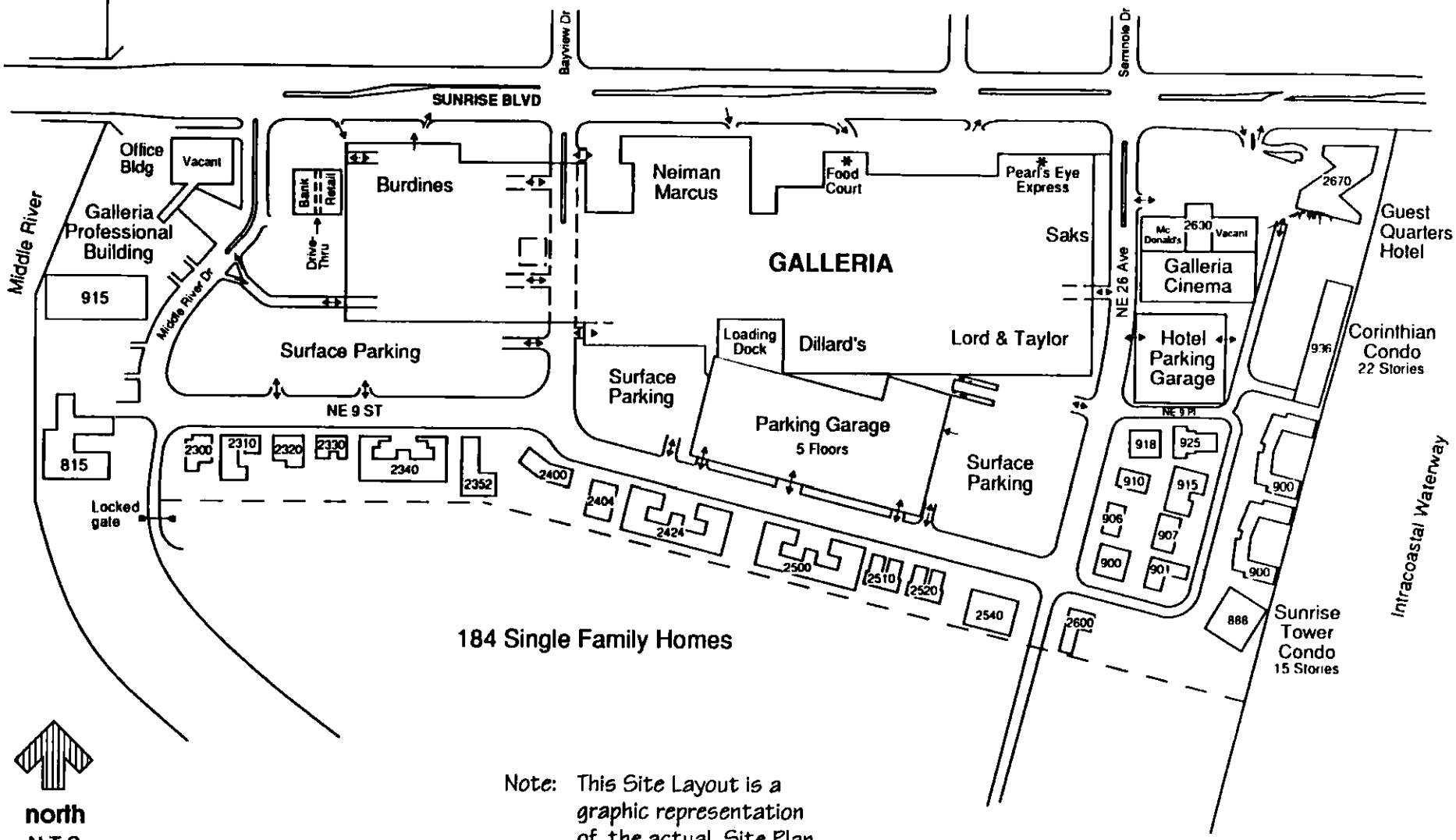
north

Districtwide Trip Generation Study

Galleria Area Detail

Figure 12

Walter H. Keller, Inc.



north
N.T.S.

Note: This Site Layout is a graphic representation of the actual Site Plan

Legend

2540 - Street Address

Districtwide Trip Generation Study

Galleria Site Layout

Figure 13

Walter H. Keller, Inc
Consulting Engineers & Planners

The gated enclave of 184 single family homes is located in the southern portion of the site. These homes were developed in the 1960's. The only open entrance is from N.E. 26th Avenue just south of N.E. 9th Street. Two condominium towers face the Intracoastal on the east side of the site. The Corinthian, on the north, is a 152 unit 22 story building; the Sunrise Tower, to the south, is a 100 unit 15 story building. There are six two-story apartment buildings east of N. E. 26th Avenue with a total of 76 units. On the south side of N.E. 9th Avenue there are nine multi-family buildings containing a total of 210 units. Galleria Area land uses are summarized in Table 8. Office and Residential Land Use Inventory, Table 9, further defines the large number of office and residential land uses in the Galleria area, outside of the Galleria Mall proper.

Table 8 - Galleria Area Land Use Inventory

Land Use	Square Feet	% Occupied	ITE Code
Office Uses	120,940	72	
Law	3,850		710
Medical	21,490		720
General	52,500		
Other	9,250		710
Vacant	33,850		710
Commercial	50,400	86	
Movie Theater (4 screens)	29,000		444
Fast Food (McDonald's)	5,600		834
Bank w/Drive Thru	3,400		912
Retail	5,400		814
Vacant	7,000		814
Residential (du's)	722		
Single Family	184		210
Condominium	252		232
Apartment	286		223
Hotel			
Rooms	229	72	310
The Galleria	1,115,575	90	820
Medical Offices	7,330		
Securities Offices	5,719		
Other Offices	3,707		
Retail	974,378		
Vacant Retail	108,000		
Banking	6,756		
Fast Food	9,685		

Source: Walter H. Keller, Inc. ITE Trip Generation, 5th Edition
Marda L. Zimring, Inc.

Parking is not assigned by use within the Galleria Area; it is available for all users. The only exception is the parking within the Guest Quarters garage which is secured for 60 vehicles. Additionally, employment figures were not available other than for the Galleria Mall, which employs 2,000.

Table 9 - Office and Residential Land Use Inventory

Offices Uses				Residential Uses		
Address	Use	Square Feet	Stories	Address	Dwelling Units	Stories
Medical Offices		21,490		Apartments/ Condominiums	530	
918	medical office	3,250	1			
906	medical office	2,600	1	925	16	2
2540	medical office	7,000	1	915	12	2
2600	medical office	2,040	2	907	10	2
2330	medical office	2,400	1	901	6	2
2300	medical office	4,200	1	900	16	2
				900	16	2
Law Offices		3,850		815	54	3
				2310	10	2
2404	law office	3,850	1	2340	30	3
				2352	12	2
Other Offices		61,750		2400	24	6
				2424	36	3
915	general office	52,500	5	2500	36	3
900	media production	8,450	2	936	152	22
2310	personal service	800	1	888	100	15
Vacant Offices		33,850		Townhouses	8	
910		2,450	1	2510	4	2
2320		3,900	2	2520	4	2
2300		10,000	1&2			
915		17,500	5	Single-Family	184	1&2
				Total:	**722**	
	Total:	**120,940**				
				Hotel		
				2670		
				Total:	**229**	14

Source: Walter H. Keller, Inc.
Marda L. Zimring, Inc.

Site Vicinity Information

The uses within the site are not conducive to pedestrian trips due to a lack of sheltered, interconnected pedestrian ways and integration of the entire site as a planned entity. The distances, however, are certainly walkable, and the non-residential uses are attractive to the residents in that they provide everyday necessities for services and goods.

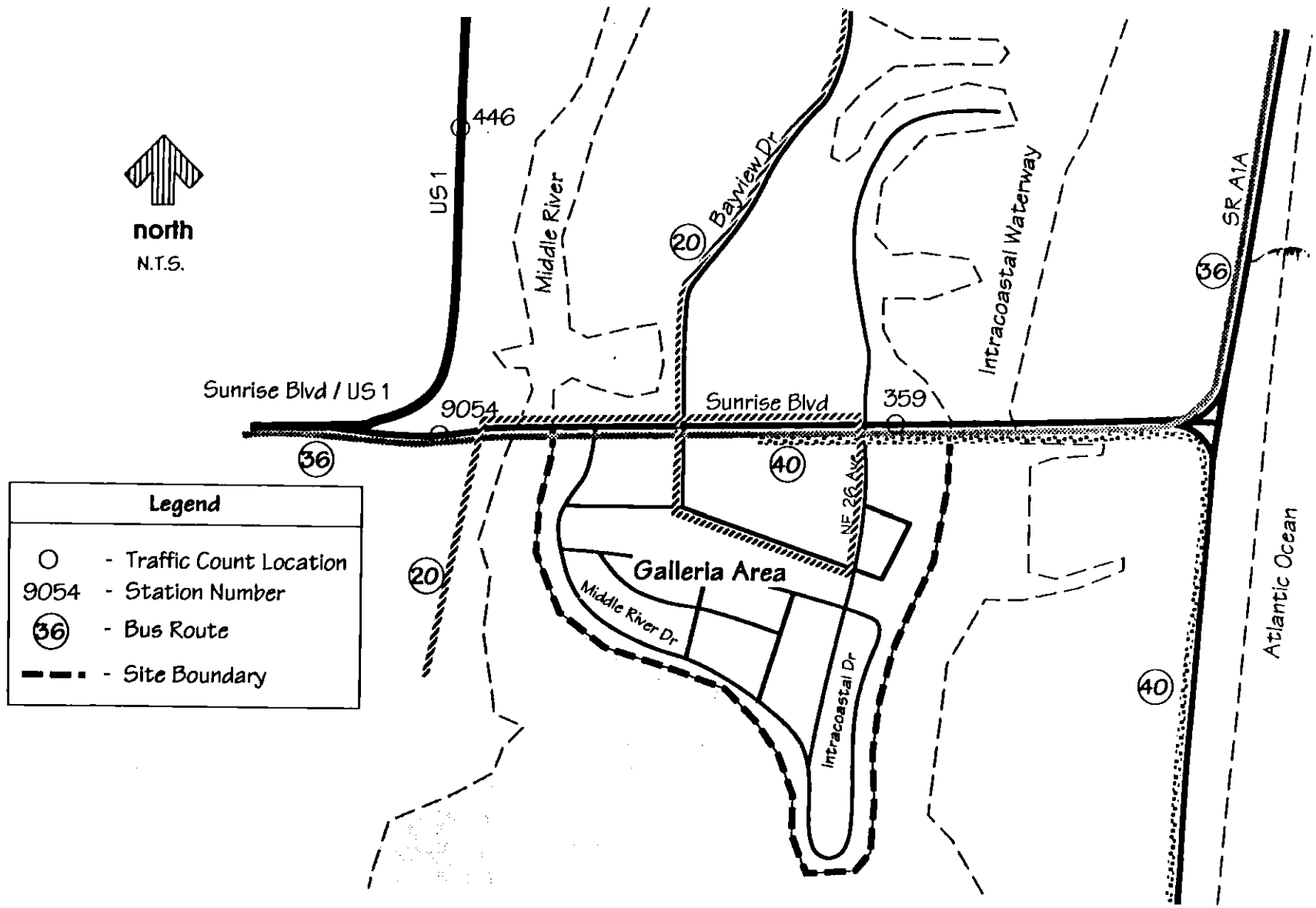
Annual Average Daily Traffic (AADT) and level of service for the surrounding roadways were analyzed to identify adjacent traffic characteristics. The AADT counts were obtained from the Broward County Metropolitan Planning Organization in 1993. A total of three stations were identified. Traffic counts for Sunrise Boulevard were conducted for three quarters of 1993 while one count was made for US 1. Both Sunrise Boulevard and U.S.-1 in the vicinity of the Galleria are six-lane divided urban arterials. Count stations are depicted in Figure 14. Peak Hour volumes were developed by using the calculated K-100 factor (from Consultant ADT counts) and multiplying it by the AADT. AADT, peak hour and level of service are reported in Table 10. As noted in Table 10, roadways in the vicinity of the Galleria are severely congested with LOS F on both Sunrise Boulevard and US 1.

Table 10 - Galleria Area Adjacent Traffic Volumes and Characteristics

Station #	Roadway	Location	1993 AADT	LOS D	LOS	Pk Hr Vol	LOS D	LOS
9054	Sunrise Blvd	E of US 1	41,507	38,700	E	3,943	3,410	E
359		E of Bayview Dr	24,889	38,700	C	2,364	3,410	C
446	US 1	N of NE 13 St	52,210	51,200	F	4,960	4,660	F

Source: Walter H. Keller, Inc.
Florida Department of Transportation, District IV

The Galleria Area is served directly by the BCT bus system. Routes 20, 36 and 40 connect the Galleria Area with the areas to the west and north and to the downtown Fort Lauderdale central terminal. Indirect transfer service is available to all areas of Broward County. Route 20 runs from the Broward County Terminal northward with stops at several commercial areas including the Galleria Mall, the Coral Ridge Mall, and the Pompano Square. Additionally, Route 20 serves two major hospitals, Holy Cross Hospital at U.S.-1 and Commercial Boulevard and the North Broward Medical Center located at Sample Road and I-95.



Districtwide Trip Generation Study

Galleria Count Station Locations

Figure 14

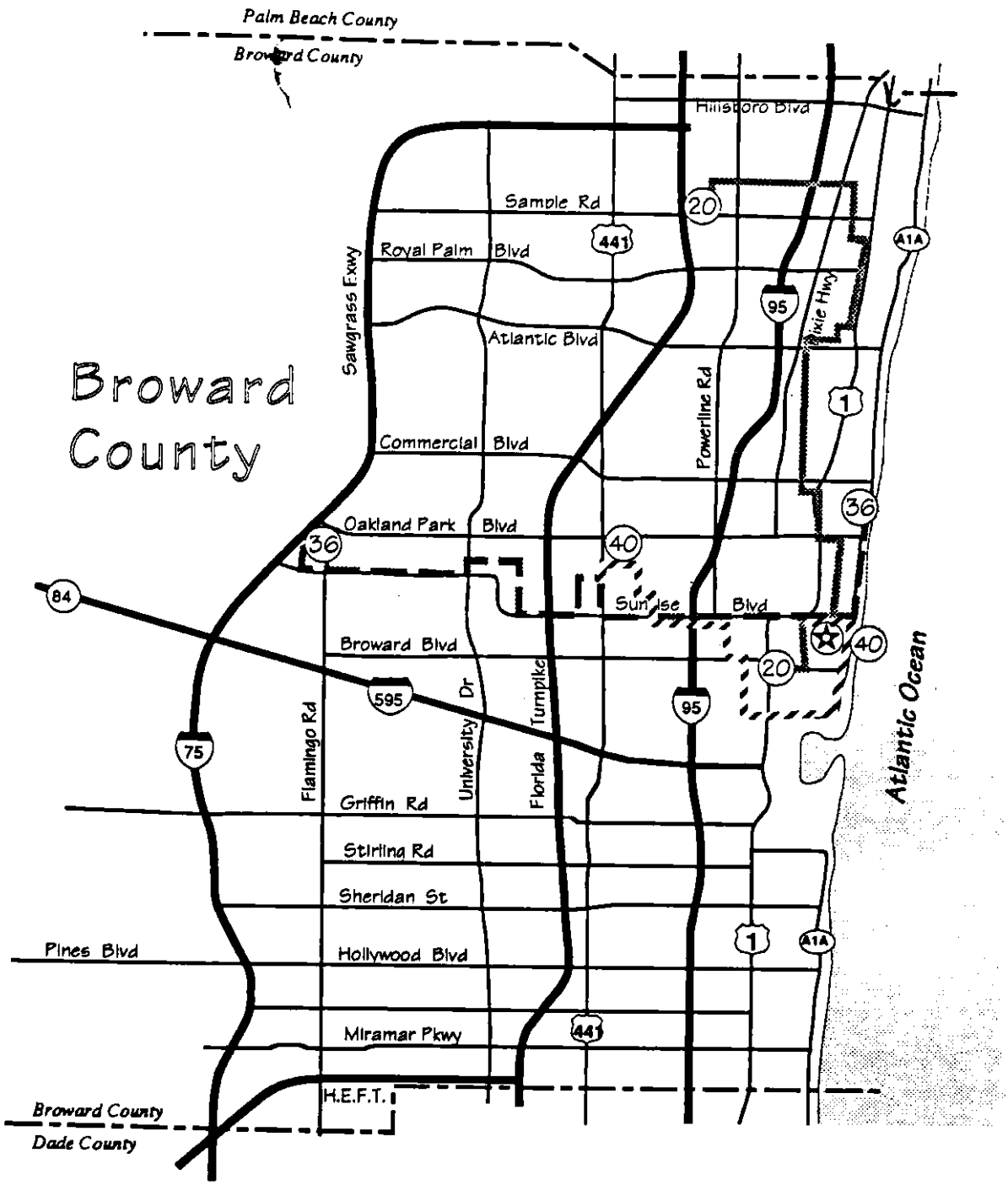
Walter H. Keller, Inc
Consulting Engineers & Planners

These major destinations range in distance from the Galleria mall from approximately 3 miles to the Coral Ridge Mall to approximately 12 miles to the North Broward Medical Center. Route 20 serves the Galleria on approximately a one hour headway in each direction six days a week during business hours, not including Sunday.

Route 36 runs along Sunrise Boulevard west to Sawgrass Mills, a regional discount mall, with intervening stops at the Lauderhill Mall, Lauderhill City Hall and Motorola, a major manufacturing center. It also stops east of the Galleria at Birch State Park and then runs north along S.R.-A1A to Galt Ocean Mile, a high density, residential area. Route 36 serves the Galleria on an approximately one-half hour headway in each direction six days a week during business hours. Service is provided on Sundays on an hourly basis. Route 36 has among the highest ridership rates for all bus routes in the County. Route 36 traverses a route of approximately 13 miles from east to west.

Route 40 serves the Galleria Mall from the south and central parts of the County. Service on Route 40 begins at the Galleria Mall, on the east, and at the Lauderhill Mall, on the west. The route runs approximately parallel to Sunrise Boulevard between U.S.-441 and Andrews Avenue where it turns south and runs to the Broward Central Terminal and thence to Broward General Hospital. Following the stop at the Broward General Hospital, the bus route runs along the 17th Street Causeway to S.R.-A1A and then north on S.R. A1A to Sunrise Boulevard where it turns west to the Galleria Mall where it terminates. Primary stops along Route 40 include the Downtown Bus Terminal, Broward General Hospital, the Southport Shopping Center, Ocean World, Pier 66 Hotel and Birch State Park, in addition to the Galleria and Lauderhill Malls. Route 40 buses serve the Galleria Area on an approximately one-half hour headway in each direction six days a week during business hours. Route 40 traverses a semi-circular route from the Lauderhill Mall Shopping Center to the Galleria. If measured along Sunrise Boulevard the distance would be approximately 6 miles; however, when measured along the actual route the distance would equal approximately 12 miles. Service is provided on Sundays on an hourly basis. Bus Routes which serve the Galleria are depicted on Figure 15.

Access to the Galleria Area is provided from a series of public streets and private driveways. The public streets are Middle River Drive, Bayview Drive, and Seminole Drive/ N.E. 26th Avenue and in each instance the intersection of these streets with Sunrise Boulevard is signalized without restriction. These streets provide direct access to the Mall and the adjacent commercial, office and residential land uses.



north
N.T.S.

Legend

- Galleria Site
- 40 - Bus Route #40
- 36 - Bus Route #36
- 20 - Bus Route #20

Districtwide Trip Generation Study
Galleria Regional Bus Routes

Figure 15

Walter H. Keller, Inc.
Consulting Engineers & Planners

Middle River Drive is located between the Galleria Mall and the office and residential land uses which border the Middle River to the west. Middle River Drive forms a T-intersection with Sunrise Boulevard and provides direct access to the parking lots which serve the non-residential and residential land uses adjacent to the west and to the Mall surface lots and parking garage to the east. Middle River Drive intersects with N.E. 9th Street south of the Mall. N.E. 9th Street is an internal circulation roadway which connects with Bayview Drive, NE 26th Avenue and Intracoastal Drive.

Bayview Drive is the primary access to the Galleria Mall. Bayview Drive continues north of Sunrise Boulevard and it is an important collector roadway serving the residential area to the north of the Galleria Area. Bayview Drive provides direct access to the Mall parking garages and surface lots before it terminates at N.E. 9th Street.

N.E. 26th Avenue(Seminole Drive) is located between the Galleria Mall and the commercial and residential land uses which border the Intracoastal Waterway to the east. N.E. 26th Avenue provides direct access to the McDonald's fast food restaurant, cinema and the Guest Quarters Hotel to the east and to the Mall parking garages and surface lots to the west. As it continues to the south, N.E. 26th Avenue provides access to the land uses adjacent to the Intracoastal Waterway and the single-family residential area to the south of the Mall.

In addition to the access points discussed above, there are six driveways which access the Galleria Area land uses directly from Sunrise Boulevard. Five of these driveways provide direct access to the Galleria Mall surface lots and parking garages and the sixth driveway serves the Guest Quarters Hotel area. The driveway which serves the Guest Quarters Hotel continues to the south to access the Hotel's parking garage and the residential areas located along the Intracoastal Waterway. A restricted westbound left turn lane is provided at the intersection of the hotel driveway and Sunrise Boulevard.

The primary internal circulation route is a U-shaped road formed by Middle River Drive, N.E. 9th Street and N.E. 26th Avenue. Access to all uses other than the Galleria Mall and the area adjacent to Sunrise Boulevard is made from this roadway. Although the single family subdivision has access only from N.E. 26th Avenue, the circulation within the subdivision works well with no dead ends. Intrusion of commercial traffic in the residential area is restricted owing to the geographic isolation of the community created by the Middle River and the Intracoastal Waterway.

There is adequate access to all land uses in the Galleria Area, with no obvious problem areas. It is the unplanned evolution of the site combined with the 21 points of access to the Galleria Mall which create a less than "user-friendly" internal circulation system. Internal circulation is particularly hostile to pedestrian traffic. There are no sidewalks except along Sunrise Boulevard and a limited amount of tree canopy to afford shade for pedestrians.

The on-site employment opportunities provide jobs with salaries that range from minimum wage within the Galleria Mall, to the highest paid professionals at the medical offices which predominate and the other professional offices. The single family homes cost range from $200,000 on an interior lot to more than $500,000 on the water. The condominiums along the Intracoastal are sold in the range of $60,000 to $150,000 in the Sunrise Tower and $100,000 to $200,000 in the Corinthian. The apartments rent from as little as $400 per month up to $600 per month and are affordable to a household with an income of less than $15,000, using 30% of income for housing as a generally accepted standard of affordability.

The Galleria garages and surface lots provide 5,000 spaces of indoor and outdoor parking. There is indoor parking connected to each anchor store which makes it possible to minimize walking distances. The garage areas are well marked by color coding, however, once in the garage system it is difficult to circulate from one area to another. The Galleria Professional Building provides parking spaces consistent with the City of Fort Lauderdale's Code which requires one space per 250 square feet of floor area for office building. The Guest Quarters has a parking garage with 260 spaces, 60 of which are secured for use by the hotel with the remaining 200 spaces free for use by cinema patrons. The surface lot north of the cinemas provides another forty spaces. The condominiums have indoor garages with adequate parking for owners and visitors. The apartment buildings have outdoor assigned parking spaces which appear to be adequate, as do the small office buildings. There was parking available at all locations during the data collection days. Parking is not permitted on the public streets. All parking is free except for the daily charge for the Hotel parking and valet parking.

Major Site Characteristic Findings

Both Crocker Center and Mizner Park are recently completed and developed under unified control, subject to a master plan. The Galleria Area was developed in stages with no overall plan or single developer. This development took place over three decades.

All three multi-use sites cater to an upper end market with the Galleria having a broader appeal and a broader based residential component. All sites have high occupancy rates, are considered to be thriving and are located in highly developed areas. Mizner Park and the Galleria Area are located in the eastern portion of the urban area which experience notable tourist activity. Crocker Center is located on the western portion of the urban area and does not experience the same tourist impacts as Mizner Park and Galleria. All three sites will reflect an off-peak season data collection effect. They are all affected to some degree by South Florida tourist and snowbird populations.

These three sites are deemed to be representative of functionally well-integrated, multi-use projects with complementary, well distributed land uses.

IV. DATA COLLECTION

Data Collection Methodology

The data collection effort for the Trip Generation Study involved collecting information in order to establish the vehicle trip generation of each site, internal trips, pass-by trips, peaking characteristics and person trips. In order to obtain this information, the following data was collected at each site:

- Machine Traffic Counts to Identify the Passing Traffic Stream
- Machine Traffic Counts to ascertain entering and exiting vehicles
- Manual Auto Occupancy Counts
- Manual Pedestrian Counts by Land Uses
- Personal Interviews of Travel Characteristics & User Demographics

Several visits were made to each site to identify: general operating conditions, ingress/egress points, appropriate locations for traffic counts, appropriate locations for pedestrian and auto occupancy counts and potential interview sites. Site layout maps were prepared based on information obtained from aerial photographs, site visits and discussions with site management personnel.

Discussions were held with the Department to review the proposed data collection process and collection locations. The data collection period generally included two (2) days of manual counts and questionnaire interviews with three (3) days of machine traffic counts. Primary data collection periods for auto occupancy and pedestrian counts were oriented to the 11:30 AM - 1:30 PM mid-day and 4:30 - 6:30 PM peak hours. Questionnaire interviews were scheduled between 10:00 AM - 2:00 PM and 3:00 PM - 7:00 PM time frames. Discussions with management personnel suggested Wednesday and Thursday preferences for manual data collection efforts.

Sampling and Questionnaire Design

The sampling design was structured to obtain both internal and external generated traffic characteristics at each site. The sample frame consists of all persons visiting each site on each of the sample days. The sample days coincided with machine and manual traffic counts as well as with the pedestrian - land use counts. Based on the desired level of accuracy and confidence (15% and 90%, respectively), the general make up of the sites,

and the number of key binary questions, it was decided that two to three sample days were needed.

Questionnaires were designed to capture the required information on internal and external trip characteristics and also to provide demographic profiles of the trip makers. The questionnaire was developed consistent with the suggested interview questions for multi-use developments as provided in the Institute of Transportation Engineers Trip Generation Report - 5th Edition. The questionnaire included questions on: origin and purpose of trips, mode of transportation to the site, last stop, length of trip, expected time of departure, destination, distance and mode of transportation to the next destination, additional stops within the site, age, occupation, household size and income, number of vehicles in household, type of residential housing and home zip code.

Personnel Training and Data Collection Management

Training sessions were held with survey personnel prior to the first interview survey and data collection period and again prior to the initiating efforts at the last survey site (Galleria Area), due to the complexities of the site layout. Several supervisors were available to coordinate and monitor operations with counting and interview personnel during the data collection efforts at each site. Individual forms were prepared to facilitate counting efforts and improve quality control. Data collection survey forms such as the auto occupancy and pedestrian - land use counts were prepared for each site, specific land uses and time frames. All data collection forms were issued in similar colors. Crocker Center data collection forms were pale yellow, Mizner Park forms were green and Galleria Area forms were pink.

The following sections provide an overview and summary of the data collection effort for this study. For additional information, the Task III Report should be consulted.

Crocker Center

Data Collection Overview

Crocker Center data collection efforts were scheduled for the first week of August, 1994. Figure 16 depicts a generalized site layout indicating land uses, access and circulation routes, parking areas and surrounding roadways. Figure 16 also identifies the locations for machine traffic counts, auto occupancy counts, pedestrian - land use counts and general survey (interviewer) locations.

Traffic count machines were set on Monday August 1, 1994 and manual data collection efforts were programmed for Wednesday August 3rd and Thursday August 4th.

Data Collection Efforts and Influences - 1st Day - August 3, 1994

Weather Conditions:

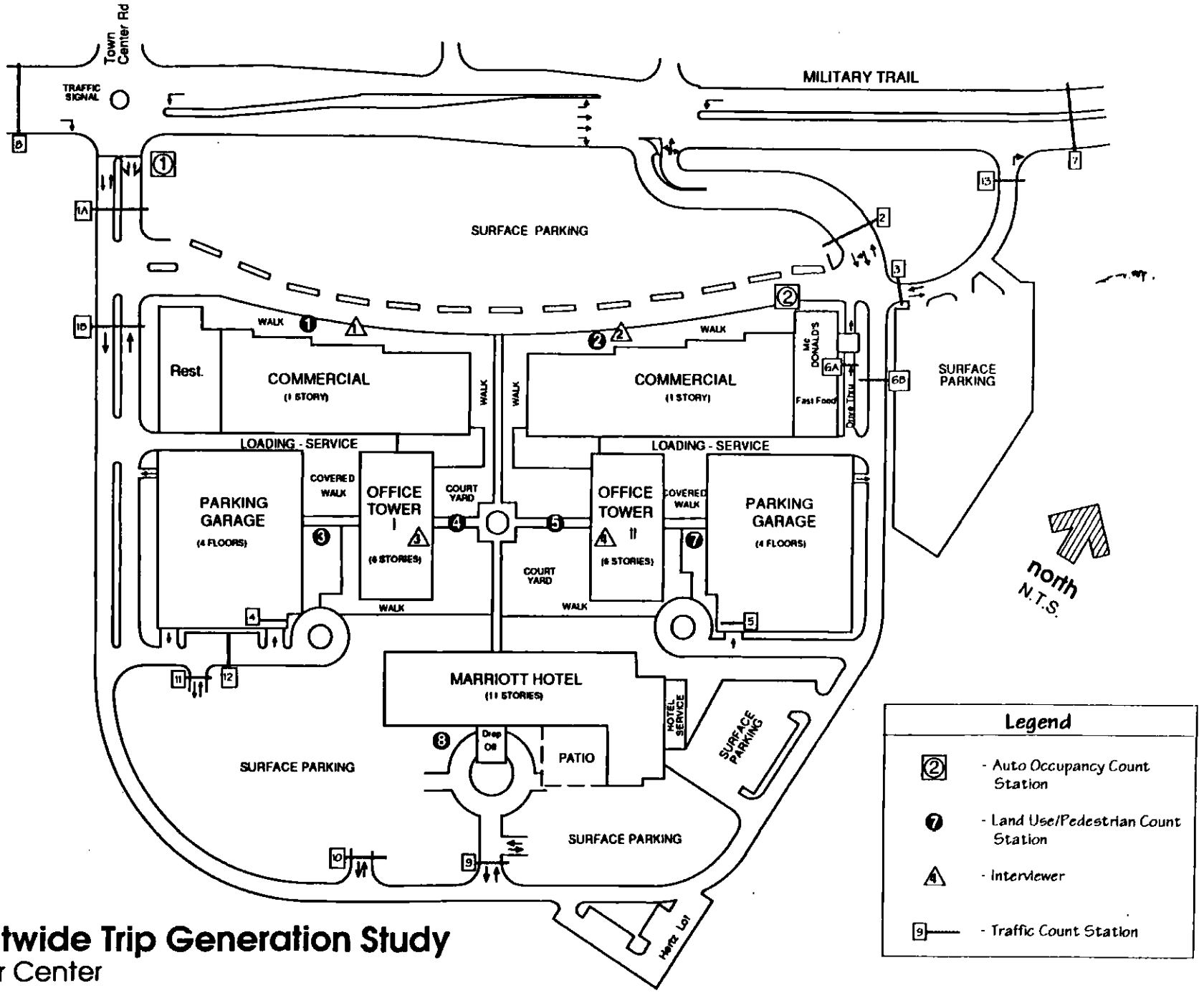
Rain chance was projected to be 50%. Light rain was occurring in the morning prior to the start of the Interview period at 10:00 AM. By 10:00 AM, the rain was essentially stopped. Very light rain, almost drizzle occurred during the 10:00 AM -1:15 PM time frame. At about 1:15 PM the rain became very heavy. During the afternoon hours, rain continued at a light to medium pace. This continued until the survey ended at 7:00 PM.

Machine Traffic Counts:

Traffic count machines were set in place on Monday afternoon at the locations noted in Figure 16. Site observations indicated some counting problems which necessitated minor adjustments in the hose locations to improve count results. Fifteen (15) minute manual counts were conducted at each traffic count machine location to establish an axle adjustment factor.

Auto Occupancy Counts

Two people conducted auto occupancy counts at locations 1 and 2. These people also noted any walkers, bikers or transit trips. Except for occasional difficulties due to window tints, no difficulties were encountered in this data collection effort.



Districtwide Trip Generation Study

Crocker Center

Figure 16

Walter H. Keller, Inc.
Consulting Engineers & Planners

Pedestrian - Land Use Count Conditions

Personnel were placed at several locations with responsibilities of counting pedestrian movements from parking lots to land uses and internally. One person was placed at both the north (#2) and south (#1) commercial areas, two in the courtyard area (#4 & #5) and one each at each office parking garage (#3 & #7) and the hotel entrance (#9). No difficulties were noted in the first day data collection effort.

Questionnaire Interviews

Seven people were assigned to perform interviews through-out the data collection period. Additionally, pedestrian counters were utilized to do surveys between 10:00 - 11:15 AM and 3:00 - 4:15 PM. During the first day, some interviewers encountered problems getting interviewees to answer the income question and/or the specific location . Most surveyors allowed the interviewees to provide zip codes only. General participation and performance during the survey appeared satisfactory.

Data Collection Efforts and Influences - 2nd Day - August 4, 1994

Weather Conditions:

Rain chance during the day was again estimated at 50% however, only sparse and very light rain occurred during the day.

Machine Traffic Counts:

Traffic count machines remained in place on Thursday. Additional manual counts were made during the day to verify machine operation.

Auto Occupancy Counts

No difficulties were encountered in this data collection effort during the Thursday effort.

Pedestrian Count Conditions

Observations at the Hotel noted employees parking in the southern lot and entering the Hotel unobserved. Additionally, a north exit was noted at McDonald's adjacent to

the drive-through that was not being counted. The majority of the people missed in the pedestrian count used the north parking lot, which was being monitored during the second day.

Questionnaire Interviews

Interviewers were instructed to get proper zone locations and not to be passive with regards to the income question. While some improvement was noted, most surveyors again allowed the interviewees to provide zip codes only. General participation and performance during the Thursday survey appeared satisfactory however, less participation was received since some of the parties were surveyed the previous day.

Additional Data Collection Efforts and Influences

Machine Traffic Counts:

In order to improve traffic count results, traffic count machines were relocated in the vicinity of the Hotel and north entrance on Thursday evening. Two additional count locations were established at the Hotel at the east (#10) and west entrances/exits (#11) to the south parking lot. This necessitated relocating the machine at the south parking garage (#4) to count the west entrance (#11) and the drive to the parking garage (#12). An additional machine was also located on the northern most roadway to count vehicles between the ring road at location 3 and the exit at Military Trail (#13). These machines were picked up on Sunday, August 7, 1994.

Data Collection Results

The results of the data collection effort are provided in the pages that follow. In instances where data has been edited or adjusted from the raw results, notations are provided. Questionnaire survey results are provided in Section V (see page 95) of this report.

Traffic Count Summary - Table 11

A summary of traffic-count results depicting daily, AM and PM peak hour totals by location, direction and day is provided in Table 11. This information has been adjusted to reflect the manual axle counts. Information relative to the axle count adjustment factors can be found in the Task 3.0 Data Collection Technical Report. The individual daily traffic count sheets for each location can be found in the Appendix to this report.

Table 11 - Crocker Center - Traffic Count Summary

Location	Date	AM Pk		PM Pk		Daily	
		In	Out	In	Out	In	Out
1A	Tues 8/2/94	282	91	270	262	2,436	2,665
	Wed 8/3/94	219	189	343	303	2,533	2,891
	Thurs 8/4/94	276	111	314	320	2,576	2,788
	Fri 8/5/94	283	111	319	334	2,813	3,143
		In	Out	In	Out	In	Out
1B	Tues 8/2/94	273	59	57	243	1,386	1,365
	Wed 8/3/94	271	66	67	155	1,343	1,043
	Thurs 8/4/94	254	85	62	233	1,315	1,402
	Fri 8/5/94	267	84	90	177	1,362	1,536
		In	Out	In	Out	In	Out
2	Tues 8/2/94	195	72	250	143	2,043	1,049
	Wed 8/3/94	217	61	256	231	1,978	1,203
	Thurs 8/4/94	194	57	213	160	1,959	1,147
	Fri 8/5/94	203	64	265	158	2,035	1,168
		In	Out	In	Out	In	Out
3	Tues 8/2/94	7	87	17	174	95	1,258
	Wed 8/3/94	7	98	12	170	86	1,309
	Thurs 8/4/94	9	94	12	168	96	1,262
	Fri 8/5/94	7	82	12	153	90	1,263
		In		In		In	
4	Tues 8/2/94	180		239		812	
	Wed 8/3/94	179		85		637	
		In		In		In	
5	Fri 8/5/94	158		40		540	
		Thru		Thru		Thru	
6A	Tues 8/2/94	77		99		704	
	Wed 8/3/94	64		107		727	
	Thurs 8/4/94	75		80		677	
	Fri 8/5/94	90		94		707	
		In	Out	In	Out	In	Out
6B	Tues 8/2/94	202	35	142	102	1,404	648
	Wed 8/3/94	193	35	155	75	1,412	581
	Thurs 8/4/94	218	32	95	89	1,365	580
	Fri 8/5/94	206	24	134	62	1,449	596
		NB	SB	NB	SB	NB	SB
7	Tues 8/2/94	1,620	708	886	1,460	12,976	12,889
	Wed 8/3/94	1,619	707	877	1,442	13,270	12,908
	Thurs 8/4/94	1,687	815	923	1,482	13,153	13,050
	Fri 8/5/94	1,479	765	828	1,444	12,845	12,940

Table 11 - Crocker Center - Traffic Count Summary

Location	Date	AM Pk		PM Pk		Daily	
		NB	SB	NB	SB	NB	SB
8	Tues 8/2/94	2,097	601	989	1,863	15,642	15,501
	Wed 8/3/94	2,124	582	1,022	1,871	16,151	17,561
		In	Out	In	Out	In	Out
9	Tues 8/2/94	44	20	21	26	431	267
	Fri 8/5/94	50	49	79	41	857	536
		In & Out		In & Out		In & Out	
10	Fri 8/5/94	82		92		939	
		In	Out	In	Out	In	Out
13	Fri 8/5/94	8	67	4	186	145	1,256

Source : Walter H. Keller, Inc.

Vehicle Occupancy Survey - Table 12

Auto occupancy count sheets are provided for each location (see Figure 16 for location) by 15 minute period, direction and day. As noted, walk-ins, taxi and transit person-trips are also noted. Table 12 provides the auto occupancy results.

Pedestrian - Land Use Counts - Tables 13 and 14

The results of the pedestrian - land use counts are provided in Tables 13 and 14 (see pages 57 through 58). These tables are summarized in 15-minute periods by land use, location, direction for the mid-day and PM peak periods. The tables also include percentage summaries of half-hour loading by land use type.

Table 12 - Crocker Center
Vehicle Occupancy Survey

Date 8/3/94				
Location	**Time**	**Inbound**	**Outbound**	**Total**
1A	Mid Day	1.32	1.27	1.30
	PM	1.48	1.19	1.30
McDonald's	Mid Day	1.34	1.36	1.35
	PM	1.34	1.26	1.29
Date 8/4/94				
Location	**Time**	**Inbound**	**Outbound**	**Total**
1A	Mid Day	1.41	1.30	1.36
	PM	1.38	1.26	1.30
McDonald's	Mid Day	1.41	1.37	1.41
	PM	1.47	1.36	1.31

Source: Walter H. Keller, Inc.

Table 13 - Crocker Center - Pedestrian Trips

Pedestrian Trips

8/3/94 11:30AM - 1:30PM

Time	In: Rest.	Fast Food	Retail South	Retail North	Office South	Office North	Hotel	Other*	Total	Out: Rest.	Fast Food	Retail South	Retail North	Office South	Office North	Hotel	Other*	Total
11:30-11:45	14	18	12	9	9	5	7	30	104	2	11	13	11	17	4	4	3	65
11:45-12:00	19	21	9	9	5	6	6	40	115	0	9	11	11	39	5	8	9	92
12:00-12:15	37	15	13	19	14	14	12	43	167	1	13	6	8	35	12	15	11	101
12:15-12:30	32	25	19	8	16	5	10	44	159	5	16	5	8	18	39	6	10	107
12:30-12:45	15	15	16	5	14	9	10	41	125	12	13	6	5	14	15	2	25	92
12:45-1:00	16	16	20	13	44	7	1	40	157	14	20	5	22	9	6	11	28	115
1:00-1:15	6	15	9	10	23	9	2	14	88	26	11	17	8	22	11	3	27	125
1:15-1:30	12	6	9	5	21	19	4	8	84	17	8	6	9	14	5	6	22	87
Total	151	131	107	78	146	74	52	260	999	77	101	69	82	168	97	55	135	784
% of Total	15.1%	13.1%	10.7%	7.8%	14.6%	7.4%	5.2%	26.0%	100.0%	9.8%	12.9%	8.8%	10.5%	21.4%	12.4%	7.0%	17.2%	100.0%
	Eating Establishments 28.2%		Retail 18.5%		Offices 22.0%					Eating Establishments 22.7%		Retail 19.3%		Offices 33.8%				

% of Total Pedestrians Per Half Hour in Each Location

Time	In: Rest.	Fast Food	Retail South	Retail North	Office South	Office North	Hotel	Other*	Total	Out: Rest.	Fast Food	Retail South	Retail North	Office South	Office North	Hotel	Other*	Total
11:30-12:00	21.9%	29.8%	19.6%	23.1%	9.6%	14.9%	25.0%	26.9%	21.9%	2.6%	19.8%	34.8%	26.8%	33.3%	9.3%	21.8%	8.9%	20.0%
12:00-12:30	45.7%	30.5%	29.9%	34.6%	20.5%	25.7%	42.3%	33.5%	32.6%	7.8%	28.7%	15.9%	19.5%	31.5%	52.6%	38.2%	15.6%	26.5%
12:30-1:00	20.5%	23.7%	33.6%	23.1%	39.7%	21.6%	21.2%	31.2%	28.2%	33.8%	32.7%	15.9%	32.9%	13.7%	21.6%	23.6%	39.3%	26.4%
1:00-1:30	11.9%	16.0%	16.8%	19.2%	30.1%	37.8%	11.5%	8.5%	17.2%	55.8%	18.8%	33.3%	20.7%	21.4%	16.5%	16.4%	36.3%	27.0%

8/3/94 4:30PM - 6:30PM

Time	In: Rest.	Fast Food	Retail South	Retail North	Office South	Office North	Hotel	Other*	Total	Out: Rest.	Fast Food	Retail South	Retail North	Office South	Office North	Hotel	Other*	Total
4:30-4:45	11	7	4	6	3	9	7	5	52	0	1	11	9	35	14	4	2	76
4:45-5:00	11	2	0	10	4	6	13	12	58	2	12	2	10	62	10	5	1	104
5:00-5:15	10	4	2	1	4	4	15	9	49	3	3	13	5	45	57	15	5	146
5:15-5:30	17	3	2	6	3	2	16	5	54	0	3	8	10	32	16	5	6	80
5:30-5:45	12	8	6	4	3	0	19	7	59	4	4	5	5	24	40	6	10	98
5:45-6:00	17	7	2	4	3	4	10	25	72	5	12	6	7	8	34	11	10	93
6:00-6:15	28	7	1	3	0	5	2	25	71	17	5	7	7	8	20	3	12	79
6:15-6:30	15	9	0	0	1	2	17	20	64	15	5	3	3	15	4	12	8	65
Total	121	47	17	34	21	32	99	108	479	46	45	55	56	229	195	61	54	741
% of Total	25.3%	9.8%	3.5%	7.1%	4.4%	6.7%	20.7%	22.5%	100.0%	6.2%	6.1%	7.4%	7.6%	30.9%	26.3%	8.2%	7.3%	100.0%
	Eating Establishments 35.1%		Retail 10.6%		Offices 11.1%					Eating Establishments 12.3%		Retail 15.0%		Offices 57.2%				

% of Total Pedestrians Per Half Hour in Each Location

Time	In: Rest.	Fast Food	Retail South	Retail North	Office South	Office North	Hotel	Other*	Total	Out: Rest.	Fast Food	Retail South	Retail North	Office South	Office North	Hotel	Other*	Total
4:30-5:00	18.2%	19.1%	23.5%	47.1%	33.3%	46.9%	20.2%	15.7%	23.0%	4.3%	28.9%	23.6%	33.9%	42.4%	12.3%	14.8%	5.6%	24.3%
5:00-5:30	22.3%	14.9%	23.5%	20.6%	33.3%	18.8%	31.3%	13.0%	21.5%	6.5%	13.3%	38.2%	26.8%	33.6%	37.4%	32.8%	20.4%	30.5%
5:30-6:00	24.0%	31.9%	47.1%	23.5%	28.6%	12.5%	29.3%	29.6%	27.3%	19.6%	35.6%	20.0%	21.4%	14.0%	37.9%	27.9%	37.0%	25.8%
6:00-6:30	35.5%	34.0%	5.9%	8.8%	4.8%	21.9%	19.2%	41.7%	28.2%	69.6%	22.2%	18.2%	17.9%	10.0%	12.3%	24.6%	37.0%	19.4%

* Other: Person trips entering or exiting central restaurant-office area where only the western parking lot destination/origin could be observed.

Source: Walter H. Keller, Inc.

Table 14
Crocker Center - Pedestrian Trips

8/4/94 11:30AM - 1:30PM

	In									Out								
Time	Rest.	Fast Food	Retail South	Retail North	Office South	Office North	Hotel	Other*	Total	Rest.	Fast Food	Retail South	Retail North	Office South	Office North	Hotel	Other*	Total
11:30-11:45	5	17	1	3	6	6	7	2	47	0	7	2	11	11	13	3	0	47
11:45-12:00	5	46	2	7	6	2	15	1	84	0	12	1	13	15	15	8	2	66
12:00-12:15	13	21	0	8	9	11	8	0	70	2	27	1	7	16	14	10	2	79
12:15-12:30	7	23	2	10	7	6	19	17	91	4	29	0	5	20	21	14	9	102
12:30-12:45	12	15	1	3	7	13	13	14	78	4	43	4	3	12	7	14	12	99
12:45-1:00	1	7	5	10	18	6	5	16	68	3	35	2	9	20	5	7	5	86
1:00-1:15	10	10	0	2	13	8	8	2	53	2	7	2	4	16	8	1	19	59
1:15-1:30	6	5	0	6	10	10	8	13	58	19	24	11	7	9	3	12	11	96
Total	59	144	11	49	76	62	83	65	549	34	184	23	59	119	86	69	60	634
% of Total	10.7%	26.2%	2.0%	8.9%	13.8%	11.3%	15.1%	11.8%	100.0%	5.4%	29.0%	3.6%	9.3%	18.8%	13.6%	10.9%	9.5%	100.0%
	Eating Establishments 37.0%		Retail 10.9%		Offices 25.1%					Eating Establishments 34.4%		Retail 12.9%		Offices 32.3%				

% of Total Pedestrians Per Half Hour in Each Location

Time	Rest.	Fast Food	Retail South	Retail North	Office South	Office North	Hotel	Other*	Total	Rest.	Fast Food	Retail South	Retail North	Office South	Office North	Hotel	Other*	Total
11:30-12:00	16.9%	43.8%	27.3%	20.4%	15.8%	12.9%	26.5%	4.6%	23.9%	0.0%	10.3%	13.0%	40.7%	21.8%	32.6%	15.9%	3.3%	17.8%
12:00-12:30	33.9%	30.6%	18.2%	36.7%	21.1%	27.4%	32.5%	26.2%	29.3%	17.6%	30.4%	4.3%	20.3%	30.3%	40.7%	34.8%	18.3%	28.5%
12:30-1:00	22.0%	15.3%	54.5%	26.5%	32.9%	30.6%	21.7%	46.2%	26.6%	20.6%	42.4%	26.1%	20.3%	26.9%	14.0%	30.4%	28.3%	29.2%
1:00-1:30	27.1%	10.4%	0.0%	16.3%	30.3%	29.0%	19.3%	23.1%	20.2%	61.8%	16.8%	56.5%	18.6%	21.0%	12.8%	18.8%	50.0%	24.4%

8/4/94 4:30PM - 6:30PM

	In									Out								
Time	Rest.	Fast Food	Retail South	Retail North	Office South	Office North	Hotel	Other*	Total	Rest.	Fast Food	Retail South	Retail North	Office South	Office North	Hotel	Other*	Total
4:30-4:45	10	4	4	13	9	3	6	6	55	3	1	5	19	33	8	11	9	89
4:45-5:00	10	7	9	2	4	2	5	18	57	6	4	7	11	21	14	4	7	74
5:00-5:15	10	4	12	4	9	2	22	10	73	10	1	17	5	80	29	12	10	164
5:15-5:30	20	7	12	6	8	1	14	1	69	0	10	12	2	38	12	6	8	88
5:30-5:45	25	11	11	7	8	3	13	4	82	10	5	9	7	19	36	6	4	96
5:45-6:00	13	8	9	8	5	3	28	20	94	8	23	10	14	21	18	8	10	112
6:00-6:15	21	6	7	5	8	1	13	25	86	15	17	10	4	23	12	22	19	122
6:15-6:30	35	3	1	0	1	0	20	35	95	10	1	0	2	7	10	4	5	39
Total	144	50	65	45	52	15	121	119	611	62	62	70	64	242	139	73	72	784
% of Total	23.6%	8.2%	10.6%	7.4%	8.5%	2.5%	19.8%	19.5%	100.0%	7.9%	7.9%	8.9%	8.2%	30.9%	17.7%	9.3%	9.2%	100.0%
	Eating Establishments 31.8%		Retail 18.0%		Offices 11.0%					Eating Establishments 15.8%		Retail 17.1%		Offices 48.6%				

% of Total Pedestrians Per Half Hour in Each Location

Time	Rest.	Fast Food	Retail South	Retail North	Office South	Office North	Hotel	Other*	Total	Rest.	Fast Food	Retail South	Retail North	Office South	Office North	Hotel	Other*	Total
4:30-5:00	13.9%	22.0%	20.0%	33.3%	25.0%	33.3%	9.1%	20.2%	18.3%	14.5%	8.1%	17.1%	46.9%	22.3%	15.8%	20.5%	22.2%	20.8%
5:00-5:30	20.8%	22.0%	36.9%	22.2%	32.7%	20.0%	29.8%	9.2%	23.2%	16.1%	17.7%	41.4%	10.9%	48.8%	29.5%	24.7%	25.0%	32.1%
5:30-6:00	26.4%	38.0%	30.8%	33.3%	25.0%	40.0%	33.9%	20.2%	28.8%	29.0%	45.2%	27.1%	32.8%	16.5%	38.8%	19.2%	19.4%	26.5%
6:00-6:30	38.9%	18.0%	12.3%	11.1%	17.3%	6.7%	27.3%	50.4%	29.6%	40.3%	29.0%	14.3%	9.4%	12.4%	15.8%	35.6%	33.3%	20.5%

* Other: Person trips entering or exiting central restaurant-office area where only the western parking lot destination/origin could be observed.

Source: Walter H. Keller, Inc.

Mizner Park

Data Collection Overview

Mizner Park data collection efforts were scheduled for the second week of August, 1994. Figure 17 depicts a generalized site layout indicating land uses, access and circulation routes, parking areas and surrounding roadways. Figure 17 also identifies the locations for machine traffic counts, auto occupancy counts, pedestrian - land use counts and general survey (interviewer) locations.

Traffic count machines were set on Monday August 8, 1994 and manual data collection efforts were conducted on Wednesday August 10th and Thursday August 11th.

Data Collection Efforts and Influences - 1st Day - August 10, 1994

Weather Conditions:

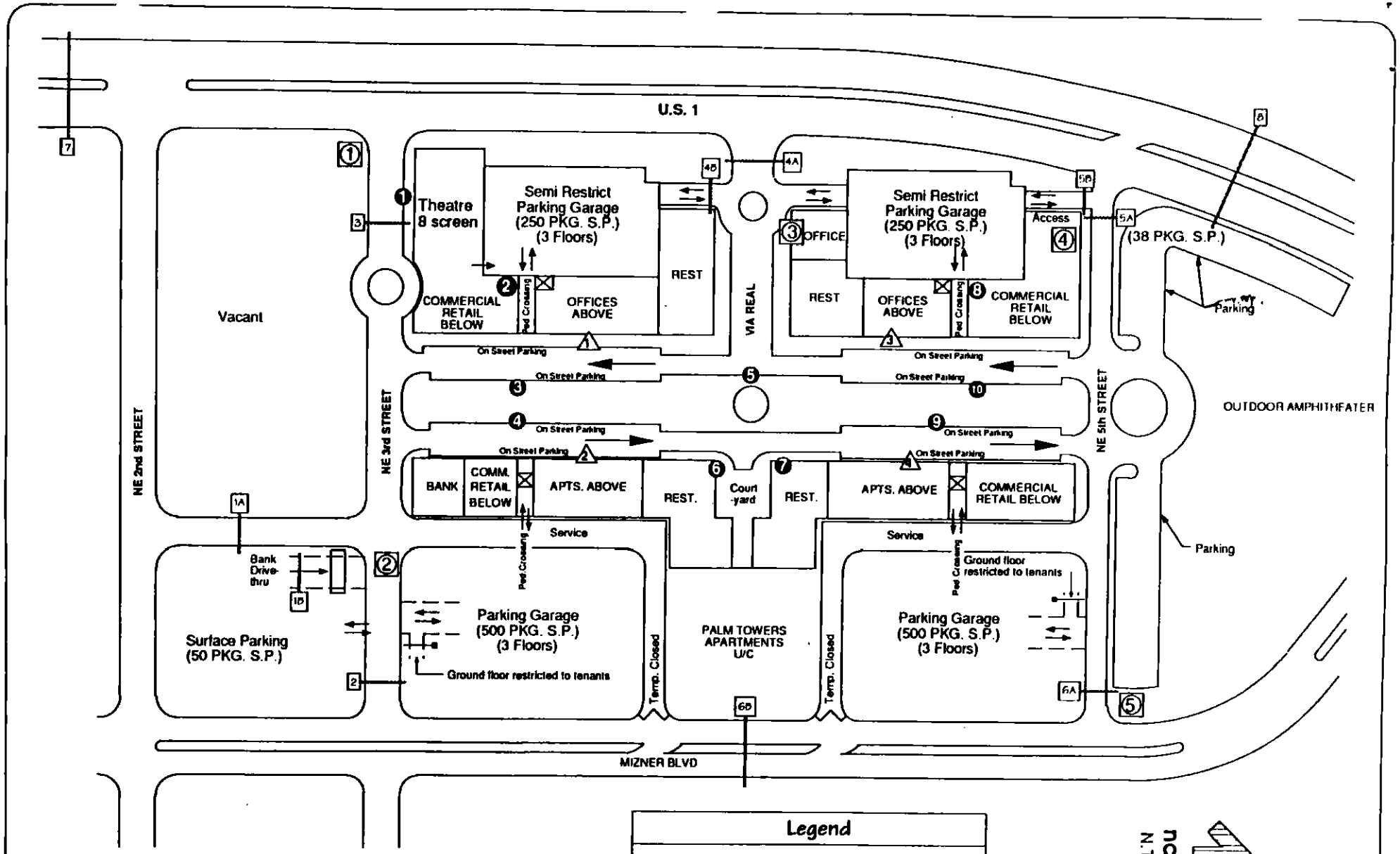
Rain chance was projected to be 40%. Light rain was occurring in the morning prior to the start of the Interview period at 10:00 AM. By 10:00 AM, the rain stopped. At about 3:00 PM the rain became very heavy. During the afternoon hours, rain continued at a medium pace. This continued until the survey ended at 7:00 PM.

Machine Traffic Counts:

Traffic count machines were set in place on Monday afternoon at the locations noted in Figure 17. Site observations indicated some counting problems which necessitated minor adjustments in the hose locations to improve count results. Fifteen (15) minute manual counts were conducted at each traffic count machine location to establish an axle adjustment factors. The adjustment factors for each count location can be found in the Task 3.0 Data Collection Technical Report.

Auto Occupancy Counts

Five people were stationed around the site to perform auto occupancy counts. These counts were taken at locations 1 - 5 (see Figure 17).



Legend

- Auto Occupancy Count Station
- Land Use/Pedestrian Count Station
- Interviewer
- Traffic Count Station
- Elevator to offices/apartments

Districtwide Trip Generation Study

Mizner Park

Figure 17

Walter H. Keller, Inc.
Consulting Engineers & Planners

Pedestrian - Land Use Count Conditions

Personnel were placed at locations based upon site visits and review of site drawings with the responsibility of counting pedestrian movements from parking lots to land uses. Some difficulties were encountered in the first day morning data collection effort and adjustments were made in the afternoon session to improve results. With the changes in locations and personnel, the afternoon data collection effort was significantly improved with no observed difficulties.

Questionnaire Interviews

Four people were assigned to perform interviews through-out the data collection period (locations #'s 1 - 4). Pedestrian counters also conducted interviews from 10:00 - 11:15 AM and 3:00 - 4:15 PM. During the first day, some interviewers encountered problems getting interviewees to answer the income question and/or the specific location by individual zone number for the trip origin. Most surveyors allowed the interviewees to provide zip codes only. General participation and performance during the survey appeared satisfactory.

Data Collection Efforts and Influences - 2nd Day - August 11, 1994

Weather Conditions:

Rain chance during the day was estimated at 50% and rain occurred during the morning data collection effort. While the sky was threatening in the afternoon, no rain occurred.

Traffic Count Conditions:

Traffic count machines remained in place on Thursday. Additional manual counts were made to establish adjustment factors at each location.

Auto Occupancy Counts

No difficulties were encountered in this data collection effort during the Thursday effort. The counter located at #5 noted valet personnel exiting the northeast parking garage and making a eastbound right at Mizner Boulevard. These vehicles would re-enter Mizner Park at the southeast entrance (#2). Manual counts were made by the counter at location #5 to quantify this condition.

Pedestrian Count Conditions

No problems were encountered during the Thursday pedestrian count data collection effort.

Questionnaire Interviews

Interviewers were again instructed to get specific locations of trip origins and not to be passive related to the income question. General participation and performance during the Thursday survey appeared satisfactory, however, less participation was received since some of the parties were surveyed the prior day.

Data Collection Results

The results of the data collection effort are provided in the pages that follow. In some instances, data has been adjusted and edited. In instances where data has been edited or adjusted from the raw results, notations have been provided.

Traffic Count Summary - Table 15

A summary of traffic count results depicting daily, AM peak hour and PM peak hour totals by location, direction and day is provided in Table 15.

Vehicle Occupancy Survey - Table 16

Pedestrian - Land Use Counts - Tables 17 and 18

Table 15 - Mizner Park All Entrances Counts

Location	Date	Daily		8 - 9		11 - 12		1 - 2		5 - 6		Adj Factor		Daily		8 - 9		11 - 12		1 - 2		5 - 6	
		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
1A	Tues 8/9/94	1,319	1,088	33	28	101	50	95	68	86	82	100.00%	92.85%	1,319	1,010	33	26	101	46	95	63	86	76
	Wed 8/10/94	1,313	1,078	39	21	94	63	119	79	96	93	100.00%	92.85%	1,313	1,001	39	19	94	58	119	73	96	86
	Thrus 8/11/94	1,331	1,144	33	26	107	62	110	77	83	92	100.00%	92.85%	1,331	1,062	33	24	107	58	110	71	83	85
2A	Tues 8/9/94	800	572	20	9	33	27	51	47	55	27	92.85%	103.15%	743	590	19	9	31	28	47	48	51	28
	Wed 8/10/94	748	465	16	13	37	24	57	54	42	14	92.85%	103.15%	695	480	15	13	34	25	53	56	39	14
	Thrus 8/11/94	796	561	22	6	34	25	61	62	41	29	92.85%	103.15%	739	579	20	6	32	26	57	64	38	30
3	Tues 8/9/94	1,978	1,120	31	18	78	56	160	70	107	88	89.15%	83.35%	1,763	934	28	15	70	47	143	58	95	73
	Wed 8/10/94	1,948	2,991	35	27	31	48	111	22	123	76	89.15%	83.35%	1,737	2,493	31	23	28	40	99	18	110	63
	Thrus 8/11/94	2,209	1,094	15	15	107	60	109	76	164	80	89.15%	83.35%	1,969	912	13	13	95	50	97	63	146	67
4A	Tues 8/9/94	1,008	1,108	129	66	58	44	63	75	85	108	61.90%	18.80%	624	208	80	12	36	8	39	14	53	20
	Wed 8/10/94	972	1,220	120	83	51	54	56	80	67	79	61.90%	18.80%	602	229	74	16	32	10	35	15	41	15
	Thrus 8/11/94	1,016	1,272	116	83	73	65	70	91	59	94	61.90%	18.80%	629	239	72	16	45	12	43	17	37	18
5A	Tues 8/9/94	2,101	1,457	37	44	119	69	143	84	125	106	112.50%	57.95%	2,364	844	42	25	134	40	161	49	141	61
	Wed 8/10/94	1,897	1,359	38	46	104	87	166	99	111	89	112.50%	57.95%	2,134	788	43	27	117	50	187	57	125	52
	Thrus 8/11/94	1,905	1,544	38	41	81	72	25	126	221	138	112.50%	57.95%	2,143	895	43	24	91	42	28	73	249	80
5B	Tues 8/9/94	782	690	17	76	31	35	54	50	87	33	58.60%	50.00%	458	345	10	38	18	18	32	25	51	17
	Wed 8/10/94	541	608	17	83	38	36	31	44	61	34	58.60%	50.00%	317	304	10	42	22	18	18	22	36	17
	Thrus 8/11/94	684	665	11	70	47	1	77	11	60	75	58.60%	50.00%	401	333	6	35	28	1	45	6	35	38
6A	Tues 8/9/94	587	1,177	10	20	52	64	41	80	46	84	109.10%	68.20%	640	803	11	14	57	44	45	55	50	57
	Wed 8/10/94	519	932	13	29	27	41	50	97	43	58	109.10%	68.20%	566	636	14	20	29	28	55	66	47	40
	Thrus 8/11/94	598	1,160	23	29	47	36	66	107	31	68	109.10%	68.20%	652	791	25	20	51	25	72	73	34	46
Total	Tues 8/9/94	8,575	7,212	277	261	472	345	607	474	591	528			7,911	4,734	222	140	446	230	561	312	527	333
	Wed 8/10/94	7,938	8,653	278	302	382	353	590	475	543	443			7,363	5,930	226	159	356	230	565	308	494	287
	Thrus 8/11/94	8,539	7,440	258	270	496	321	518	550	659	576			7,865	4,810	213	137	449	212	452	367	621	364
Average	3 Days	8,351	7,768	271	278	450	340	572	500	598	516			7,713	5,158	220	145	417	224	526	329	547	328

Source : Walter H. Keller, Inc.

Table 16 - Mizner Park
Vehicle Occupancy Survey

Date 8/10/94				
Location	Time	Inbound	Outbound	Total
NW	Mid Day	1.60	1.51	1.55
	PM	1.51	1.44	1.47
NE	Mid Day	1.57	1.44	1.50
	PM	1.40	1.29	1.33
Date 8/11/94				
Location	Time	Inbound	Outbound	Total
NW	Mid Day	1.57	1.41	1.50
	PM	1.49	1.38	1.44
NE	Mid Day	1.53	1.34	1.44
	PM	1.56	1.33	1.46

Source: Walter H. Keller, Inc.

Table 17 - Mizner Park
Pedestrian Trips

8/10/94 11:30AM - 1:30PM

Time	In: Apt NE	Apt SE	Retail North	Retail South	Office NW	Office SW	Rest	Bank	Theater	Total	Out: Apt NE	Apt SE	Retail North	Retail South	Office NW	Office SW	Rest	Bank	Theater	Total
11:30-11:45	3	2	7	3	6	5	11	1	0	38	3	5	15	2	5	4	6	1	0	41
11:45-12:00	0	1	9	16	12	8	32	1	0	79	1	6	15	8	13	10	4	1	10	68
12:00-12:15	0	2	8	16	9	9	68	2	0	114	1	1	7	11	14	13	14	0	15	76
12:15-12:30	2	3	13	5	12	2	70	1	0	108	0	4	5	9	22	18	28	0	0	86
12:30-12:45	2	3	10	10	16	6	67	3	0	118	1	5	5	6	23	16	49	4	8	117
12:45-1:00	1	2	18	16	28	5	54	2	9	135	0	4	8	10	6	7	34	3	0	74
1:00-1:15	1	3	12	16	10	21	57	2	6	128	1	5	12	7	9	11	48	4	4	101
1:15-1:30	1	1	10	15	15	8	32	1	7	90	2	1	12	14	10	4	46	4	2	95
Total	10	17	87	97	108	66	391	13	22	811	9	31	79	67	104	83	229	17	39	658
% of Total	1.2%	2.1%	10.7%	12.0%	13.3%	8.1%	48.2%	1.6%	2.7%	100.0%	1.4%	4.7%	12.0%	10.2%	15.8%	12.6%	34.8%	2.6%	5.9%	100.0%
	Apt 3.3%		Retail 22.7%		Offices 21.5%						Apt 6.1%		Retail 22.2%		Offices 28.4%					

% of Total Pedestrians Per Half Hour in Each Location

Time	In: Apt NE	Apt SE	Retail North	Retail South	Office NW	Office SW	Rest	Bank	Theater	Total	Out: Apt NE	Apt SE	Retail North	Retail South	Office NW	Office SW	Rest	Bank	Theater	Total
11:30-12:00	30.0%	17.6%	18.4%	19.6%	16.7%	19.7%	11.0%	15.4%	0.0%	14.4%	44.4%	35.5%	38.0%	14.9%	17.3%	16.9%	4.4%	11.8%	25.6%	16.6%
12:00-12:30	20.0%	29.4%	24.1%	21.6%	19.4%	16.7%	35.3%	23.1%	0.0%	27.4%	11.1%	16.1%	15.2%	29.9%	34.6%	37.3%	18.3%	0.0%	38.5%	24.6%
12:30-1:00	30.0%	29.4%	32.2%	26.8%	40.7%	19.7%	30.9%	38.5%	40.9%	31.3%	11.1%	29.0%	16.5%	23.9%	29.8%	27.7%	36.2%	41.2%	20.5%	29.0%
1:00-1:30	20.0%	23.5%	25.3%	32.0%	23.1%	43.9%	22.8%	23.1%	59.1%	26.9%	33.3%	19.4%	30.4%	31.3%	18.3%	18.1%	41.0%	47.1%	15.4%	29.8%

8/10/94 4:30PM - 6:30PM

Time	In: Apt NE	Apt SE	Retail North	Retail South	Office NW	Office SW	Rest	Bank	Theater	Total	Out: Apt NE	Apt SE	Retail North	Retail South	Office NW	Office SW	Rest	Bank	Theater	Total
4:30-4:45	2	1	28	38	5	3	15	0	9	101	0	6	35	41	17	8	13	0	66	186
4:45-5:00	0	2	29	62	4	2	21	0	24	144	1	4	24	35	22	6	7	0	23	122
5:00-5:15	1	0	29	63	2	2	13	0	19	129	0	3	28	18	38	10	12	0	47	156
5:15-5:30	0	5	30	60	6	2	20	2	64	189	0	0	35	39	31	25	4	2	6	142
5:30-5:45	1	1	37	43	11	0	46	0	53	192	2	0	20	37	8	6	8	0	2	83
5:45-6:00	1	3	39	37	10	0	31	0	8	129	1	4	42	17	21	1	19	0	1	106
6:00-6:15	1	1	20	19	6	2	33	0	0	82	2	3	26	24	15	4	16	0	0	90
6:15-6:30	3	5	17	21	5	0	14	0	0	65	3	0	22	14	11	3	13	0	3	69
Total	9	18	229	343	49	11	193	2	177	1031	9	20	232	225	163	63	92	2	148	954
% of Total	0.9%	1.7%	22.2%	33.3%	4.8%	1.1%	18.7%	0.2%	17.2%	100.0%	0.9%	2.1%	24.3%	23.6%	17.1%	6.6%	9.6%	0.2%	15.5%	100.0%
	Apt 2.6%		Retail 55.5%		Offices 5.8%						Apt 3.0%		Retail 47.9%		Offices 23.7%					

% of Total Pedestrians Per Half Hour in Each Location

Time	In: Apt NE	Apt SE	Retail North	Retail South	Office NW	Office SW	Rest	Bank	Theater	Total	Out: Apt NE	Apt SE	Retail North	Retail South	Office NW	Office SW	Rest	Bank	Theater	Total
4:30-5:00	22.2%	16.7%	24.9%	29.2%	18.4%	45.5%	18.7%	0.0%	18.6%	23.8%	11.1%	58.0%	25.4%	33.8%	23.9%	22.2%	21.7%	0.0%	60.1%	32.3%
5:00-5:30	11.1%	27.8%	25.8%	35.9%	16.3%	36.4%	17.1%	100.0%	46.9%	30.8%	0.0%	15.0%	27.2%	25.3%	42.3%	55.8%	17.4%	100.0%	35.8%	31.2%
5:30-6:00	22.2%	22.2%	33.2%	23.3%	42.9%	0.0%	39.9%	0.0%	34.5%	31.1%	33.3%	20.0%	26.7%	24.0%	17.8%	11.1%	29.3%	0.0%	2.0%	19.8%
6:00-6:30	44.4%	33.3%	16.2%	11.7%	22.4%	18.2%	24.4%	0.0%	0.0%	14.3%	55.6%	15.0%	20.7%	16.9%	16.0%	11.1%	31.5%	0.0%	2.0%	16.7%

Source: Walter H. Keller, Inc.

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Table 18 - Mizner Park
Pedestrian Trips

6/11/94 11:30AM - 1:30PM

	In										Out									
Time	Apt NE	Apt SE	Retail North	Retail South	Office NW	Office SW	Rest	Bank	Theater	Total	Apt NE	Apt SE	Retail North	Retail South	Office NW	Office SW	Rest	Bank	Theater	Total
11:30-11:45	3	3	50	47	17	6	24	3	5	158	2	4	48	61	16	5	4	5	1	146
11:45-12:00	1	2	37	37	12	6	23	2	17	137	4	0	42	34	28	13	2	3	4	130
12:00-12:15	2	2	38	73	12	12	51	8	36	234	1	3	47	55	28	18	12	6	0	170
12:15-12:30	0	1	33	45	23	7	72	7	32	220	3	1	39	53	24	14	27	8	0	169
12:30-12:45	0	2	40	44	23	8	63	8	17	205	1	0	43	68	20	14	17	4	1	168
12:45-1:00	3	3	35	42	20	9	37	5	33	187	1	0	37	44	19	18	32	5	0	156
1:00-1:15	3	0	49	31	35	7	30	4	7	166	7	3	47	24	22	10	34	5	1	153
1:15-1:30	1	1	39	49	24	7	37	7	0	165	1	1	37	37	19	11	45	5	0	156
Total	13	14	321	368	166	62	337	44	147	1472	20	12	340	376	176	103	173	41	7	1248
% of Total	0.9%	1.0%	21.8%	25.0%	11.3%	4.2%	22.9%	3.0%	10.0%	100.0%	1.6%	1.0%	27.2%	30.1%	14.1%	8.3%	13.9%	3.3%	0.6%	100.0%
	Apt 1.8%		Retail 46.8%		Offices 15.5%						Apt 2.8%		Retail 57.4%		Offices 22.4%					

% of Total Pedestrians Per Half Hour in Each Location

Time	Apt NE	Apt SE	Retail North	Retail South	Office NW	Office SW	Rest	Bank	Theater	Total	Apt NE	Apt SE	Retail North	Retail South	Office NW	Office SW	Rest	Bank	Theater	Total
11:30-12:00	30.8%	35.7%	27.1%	22.8%	17.5%	19.4%	13.9%	11.4%	15.0%	20.0%	30.0%	33.3%	26.5%	25.3%	25.0%	17.5%	3.5%	19.5%	71.4%	22.1%
12:00-12:30	15.4%	21.4%	22.1%	32.1%	21.1%	30.8%	36.5%	34.1%	48.3%	30.8%	20.0%	33.3%	25.3%	28.7%	29.5%	31.1%	22.5%	34.1%	0.0%	27.2%
12:30-1:00	23.1%	35.7%	23.4%	23.4%	25.9%	27.4%	29.7%	29.5%	34.0%	26.6%	10.0%	0.0%	23.5%	29.8%	22.2%	31.1%	28.3%	22.0%	14.3%	26.0%
1:00-1:30	30.8%	7.1%	27.4%	21.7%	35.5%	22.6%	19.9%	25.0%	4.8%	22.5%	40.0%	33.3%	24.7%	16.2%	23.3%	20.4%	45.7%	24.4%	14.3%	24.8%

6/11/94 4:30PM - 6:30PM

	In										Out									
Time	Apt NE	Apt SE	Retail North	Retail South	Office NW	Office SW	Rest	Bank	Theater	Total	Apt NE	Apt SE	Retail North	Retail South	Office NW	Office SW	Rest	Bank	Theater	Total
4:30-4:45	0	2	30	39	14	4	12	3	17	121	2	0	19	26	14	13	11	4	23	112
4:45-5:00	1	0	23	64	8	4	10	2	20	132	2	0	21	41	18	5	0	3	0	90
5:00-5:15	1	0	19	53	6	1	29	3	27	141	3	5	23	59	26	31	5	3	19	174
5:15-5:30	1	0	23	75	9	3	23	1	13	148	1	0	32	67	16	15	16	1	6	156
5:30-5:45	1	7	15	39	9	1	34	2	31	139	1	3	16	39	13	10	20	2	11	115
5:45-6:00	5	1	26	54	5	0	38	3	29	161	0	0	29	63	9	6	20	3	5	135
6:00-6:15	0	6	21	52	5	0	57	0	20	161	0	1	12	38	10	6	19	0	3	89
6:15-6:30	1	1	15	41	4	5	47	0	22	136	0	3	17	47	5	0	11	0	2	85
Total	10	17	172	417	62	18	250	14	179	1139	9	12	169	380	111	86	104	16	69	956
% of Total	0.9%	1.5%	15.1%	36.6%	5.4%	1.6%	21.9%	1.2%	15.7%	100.0%	0.9%	1.3%	17.7%	39.7%	11.6%	9.0%	10.9%	1.7%	7.2%	100.0%
	Apt 2.4%		Retail 51.7%		Offices 7.0%						Apt 2.2%		Retail 57.4%		Offices 20.6%					

% of Total Pedestrians Per Half Hour in Each Location

Time	Apt NE	Apt SE	Retail North	Retail South	Office NW	Office SW	Rest	Bank	Theater	Total	Apt NE	Apt SE	Retail North	Retail South	Office NW	Office SW	Rest	Bank	Theater	Total
4:30-5:00	10.0%	11.8%	30.8%	24.7%	35.5%	44.4%	8.8%	35.7%	20.7%	22.2%	44.4%	0.0%	23.7%	17.6%	28.8%	20.9%	10.6%	43.8%	33.3%	21.1%
5:00-5:30	20.0%	0.0%	24.4%	30.7%	27.4%	22.2%	20.8%	28.6%	22.3%	25.4%	44.4%	41.7%	32.5%	33.2%	37.8%	53.5%	22.1%	25.0%	36.2%	34.5%
5:30-6:00	60.0%	47.1%	23.8%	22.3%	22.6%	5.6%	28.8%	35.7%	33.5%	28.3%	11.1%	25.0%	26.6%	26.8%	19.8%	18.6%	38.5%	31.3%	23.2%	26.2%
6:00-6:30	10.0%	41.2%	20.9%	22.3%	14.5%	27.8%	41.6%	0.0%	23.5%	26.1%	0.0%	33.3%	17.2%	22.4%	13.5%	7.0%	28.8%	0.0%	7.2%	18.2%

Source: Walter H. Keller, Inc.

Galleria Area

Data Collection Overview

The Galleria Area data collection efforts were scheduled for the fourth week of August, 1994. Figure 18 depicts the generalized site layout indicating land uses, access and circulation routes, parking areas and the locations for machine traffic counts, auto occupancy counts, pedestrian - land use counts and general survey (interviewer) locations.

Traffic count machines were set on Monday August 22, 1994 and manual data collection efforts were conducted on Tuesday August 23rd and Wednesday August 24th. The data collection was started on Tuesday to allow for an additional day of data collection (Thursday) if necessary. Sufficient surveys were completed on Wednesday, thereby, negating the need for an additional survey day.

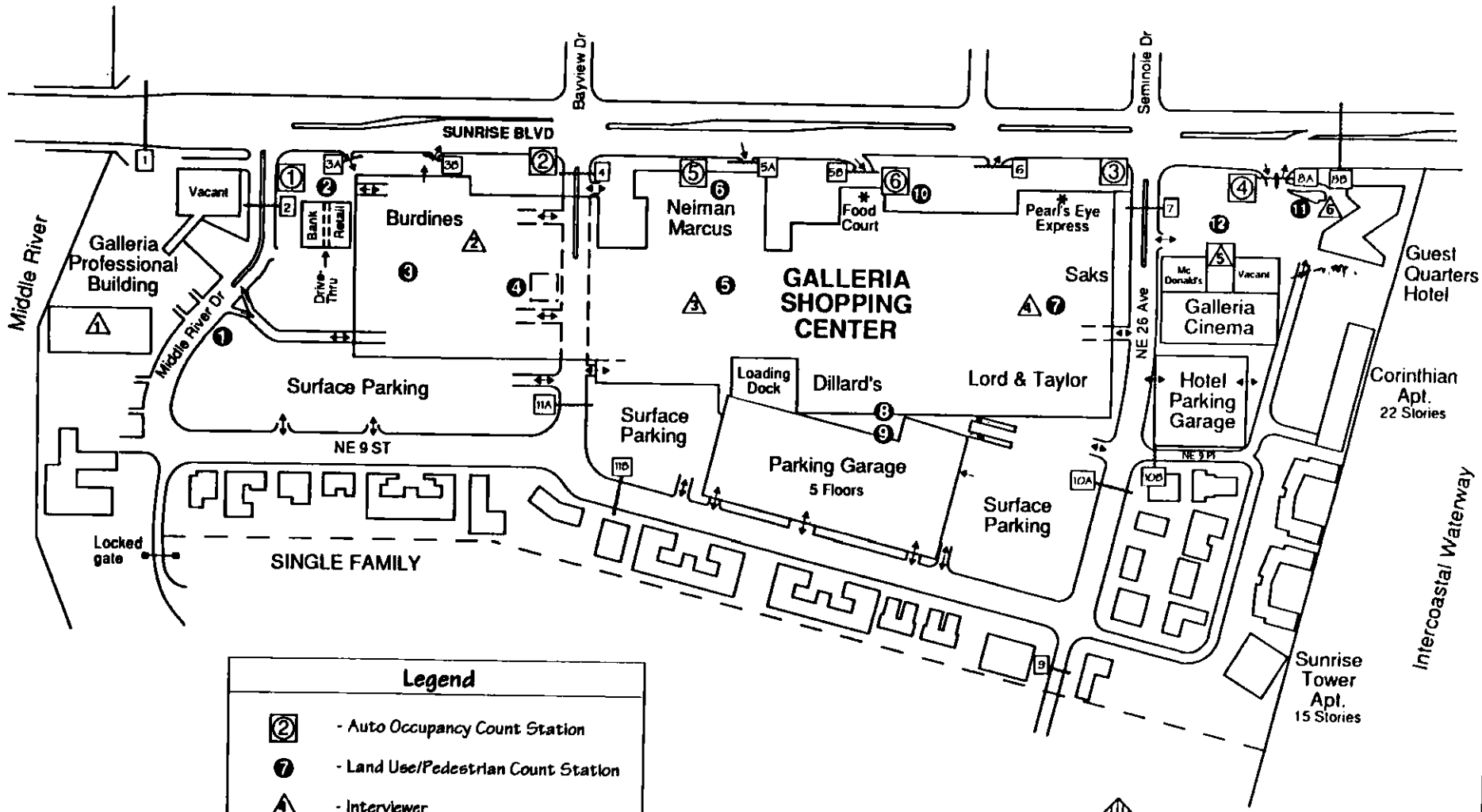
Data Collection Efforts and Influences - 1st Day - August 23, 1994

Weather Conditions:

Tuesday's rain chance was projected to be 40% with possible thunderstorms. While surrounding weather conditions appeared very threatening and severe weather was occurring in the western portions of the County in the afternoon, only light rain occurred during the first portion of the afternoon data collection period.

Machine Traffic Counts:

Traffic count machines were set in place on Monday afternoon. Directional entrances into the Galleria Mall along Sunrise Boulevard were spaced too far apart for one machine and therefore only entrances and joint entrance/exits were counted off Sunrise. Locations set on Monday included #'s 1, 2, 3A, 4, 5A, 5B, 7, 8A, 8B and 9 (see Figure 18). No major difficulties were encountered in placing traffic count machines. Manual counts were also conducted at each location to establish an adjustment factor for each location.



Districtwide Trip Generation Study

Galleria

Figure 18

Waller H. Keller, Inc
Consulting Engineers & Planners

Auto Occupancy Counts

The data collection effort began on Tuesday. Personnel were placed at Middle River Drive (#1), Bayview Drive (#2), at 29th Avenue (#3) and at the Sunrise Boulevard entrance to the Hotel (#4). Additionally, pedestrian counters were also used to obtain auto occupancy counts at the Nieman Marcus entrance (#5) and at the Food Court entrance (#6). No problems were encountered during this day's data collection effort.

Pedestrian Count Conditions

Considerable difficulties were encountered in identifying and counting entrances/exits at the Galleria Area due to the very high number of locations. After extensive review, only non-residential land uses adjacent to Sunrise Boulevard and the major Mall entrances were selected for counting since these locations were expected to be the highest generators. Discussions with the Galleria Shopping Center Management Company suggested the highest locations for entering the Mall. Based on these discussions and several site observations, initial pedestrian - land use count locations were determined.

The Galleria Professional Building had entrances from a northern and southern parking lot. An additional side entrance was located adjacent to Middle River Drive. One person (#1) was located across from the Middle River Drive entrance with responsibilities for counting vehicles in and out of the parking lots and walkers in and out of the side entrance. The Nations Bank, drive-through and Fedco Drugs is located at the northeast corner of Middle River Drive and was counted by one person (#2).

The Galleria Shopping Center has approximately 18 entrances/exits into the Department Stores and Mall shopping areas. With access at ground level parking, second level parking, third level parking and rooftop parking, pedestrians can enter and exit at a total of 26 locations. The following count locations were initially established: Burdines Escalator - 2nd level (#3), Orange Parking Mall entrance - inside (#4), Red Parking Escalator - ground level (#5), Nieman Marcus Elevator (#6), Plum garage - ground level (#7), Dillards -ground level (#8), Blue and Plum garages - 2nd level (#9) and Food Court main entrance (#10). At some mall locations, counters had responsibilities for counting multiple entrances.

Pedestrian counters were also placed at the McDonald's Restaurant (#12) and at the Guest Suites Hotel (#11). Pedestrian counts were also taken by the auto occupancy

counter at Bayview Drive for the Hollywood Federal and the Police Department Substation.

Questionnaire Interviews

Six (6) questionnaire interviewers were located in the Galleria Shopping Center (#'s 1-3), at the Galleria Professional Office Building (#4), McDonald's (#5) and the Guest Suites Hotel (#6). Pedestrian counters also collected questionnaire interviews between 10:00 - 11:15 AM and 3:00 - 4:15 PM. Origin zone survey response results were improved during the first day of survey when compared to earlier survey results.

Data Collection Efforts and Influences - 2nd Day - August 24, 1994

Weather Conditions:

Rain chance was projected to be 30%. Only very light rain occurred during a very small portion of the day.

Machine Traffic Counts:

Manual counts were again conducted to establish adjustment factors for each location. No traffic count machine problems were encountered during the day.

Auto Occupancy Counts

No problems were encountered during this day's data collection effort.

Pedestrian Count Conditions

During the second day's data collection effort, most locations were again counted similar to the first day's effort, except as noted. Two Galleria Shopping Center entrances were dropped due to low pedestrian counts during the first day's effort. During the second day minimum problems occurred in the pedestrian counts.

Questionnaire Interviews

Second day questionnaire interviews were performed in a similar manner to day one interviews. Two additional interviewers were located within the Mall area to insure adequate survey sample size. No problems were encountered during the second day's survey effort.

Additional Data Collection Efforts and Influences

Traffic count machines were left in place until Sunday August 28, 1994 when some machines were relocated to additional locations. Locations counted between Monday August 22nd through Saturday August 27th included locations #'s 1, 2, 4, 5A and 9. Locations counted between Monday August 29th through Tuesday August 30th included locations #'s 10A and 10B. Locations counted between Monday August 29th through Wednesday August 31st included locations #'s 3B, 6, 11A and 11B. Locations counted between Tuesday August 23rd through Wednesday August 31st included locations #'s 3A, 5B, 7, 8A and 8B. Manual traffic counts were again performed to establish adjustment factors for each location.

Data Collection Results

The results of the data collection effort are provided in the pages that follow. In some instances, data has been adjusted and edited. In instances where data has been edited or adjusted from the raw results, notations are provided.

Traffic Count Summary - Table 19

A summary of traffic count results depicting daily, AM peak hour and PM peak hour totals by location, direction and day is provided in Table 19.

Vehicle Occupancy Survey - Table 20

Pedestrian - Land Use Counts - Tables 21 and 22

Table 19 - Galleria Area - Traffic Count Summary

Location	Date	AM Pk		PM Pk		Daily	
		EB	WB	EB	WB	EB	WB
1	Tues 8/23/94	1,319	969	1,365	1,308	19,180	16,504
	Wed 8/24/94	1,355	1,202	1,509	1,551	20,285	19,602
	Thurs 8/25/94	1,210	1,272	1,520	1,614	20,132	21,073
	Fri 8/26/94	1,374	1,249	1,578	1,562	22,283	21,129
	Sat 8/27/94	1,432	1,179	1,690	1,484	21,461	21,225
		In	Out	In	Out	In	Out
2	Tues 8/23/94	226	198	254	295	2,755	2,842
	Wed 8/24/94	229	213	221	326	2,835	2,945
	Thurs 8/25/94	239	186	228	374	2,807	2,747
	Fri 8/26/94	259	244	333	354	2,872	3,031
	Sat 8/27/94	285	267	238	318	2,529	2,782
		In		In		In	
3A	Tues 8/23/94	64		86		658	
	Wed 8/24/94	75		105		742	
	Thurs 8/25/94	65		104		738	
	Fri 8/26/94	81		87		794	
	Sat 8/27/94	124		172		1,281	
	Sun 8/28/94	65		158		733	
	Mon 8/29/94	66		78		671	
	Tue 8/30/94	71		89		721	
	Wed 8/31/94	63		98		655	
			Out		Out		Out
3B	Mon 8/29/94		31		57		410
	Tue 8/30/94		38		43		357
	Wed 8/31/94		28		43		349
		In	Out	In	Out	In	Out
4	Tues 8/23/94	258	233	281	317	3,018	3,391
	Wed 8/24/94	236	182	270	325	2,986	3,382
	Thurs 8/25/94	293	178	354	300	3,064	3,663
	Fri 8/26/94	244	180	310	340	3,348	3,572
	Sat 8/27/94	342	213	346	499	3,757	4,272
		In	Out	In	Out	In	Out
5	Tues 8/23/94	73	3	80	12	481	57
	Wed 8/24/94	51	5	67	4	505	39
	Thurs 8/25/94	48	2	134	5	658	52
	Fri 8/26/94	53	0	79	11	521	47
		In		In		In	
5B	Tues 8/23/94	91		121		1,032	
	Wed 8/24/94	96		95		963	
	Thurs 8/25/94	82		116		953	
	Fri 8/26/94	76		88		933	
	Sat 8/27/94	80		116		1,034	
	Sun 8/28/94	46		74		451	
	Mon 8/29/94	43		69		541	
	Tue 8/30/94	56		48		504	
	Wed 8/31/94	39		59		496	
			Out		Out		Out
6	Mon 8/29/94		67		115		1,117
	Tue 8/30/94		73		126		1,032
	Wed 8/31/94		86		95		926

Table 19 - Galleria Area - Traffic Count Summary

Location	Date	AM Pk		PM Pk		Daily	
		In	Out	In	Out	In	Out
7	Tues 8/23/94	233	191	343	213	3,896	3,188
	Wed 8/24/94	244	176	320	156	3,940	2,096
	Thurs 8/25/94	239	182	344	172	3,727	2,350
	Fri 8/26/94	236	269	322	363	3,857	4,609
	Sat 8/27/94	322	358	637	638	5,699	6,559
	Sun 8/28/94	9	288	708	197	3,806	2,607
	Mon 8/29/94	247	101	378	178	4,464	2,106
	Tue 8/30/94	290	230	298	268	4,360	2,555
		In	Out	In	Out	In	Out
8A	Tues 8/23/94	65	21	73	16	829	283
	Wed 8/24/94	56	14	75	22	864	278
	Thurs 8/25/94	42	31	70	41	900	343
	Fri 8/26/94	72	25	126	37	1,042	324
	Sat 8/27/94	56	32	152	30	1,158	390
	Sun 8/28/94	41	22	111	33	902	399
	Mon 8/29/94	49	17	68	24	793	279
	Tue 8/30/94	43	15	70	14	745	255
	Wed 8/31/94	51	30	69	29	826	306
		EB	WB	EB	WB	EB	WB
8B	Tues 8/23/94	717	693	937	895	12,110	10,530
	Wed 8/24/94	734	633	892	773	12,488	10,860
	Thurs 8/25/94	607	702	876	753	11,954	11,072
	Fri 8/26/94	688	664	999	741	13,827	11,807
	Sat 8/27/94	683	697	913	801	13,151	12,608
	Sun 8/28/94	483	776	1,026	643	10,799	10,749
	Mon 8/29/94	637	613	868	723	11,117	10,762
	Tue 8/30/94	560	650	874	748	11,380	10,994
	Wed 8/31/94	580	680	747	774	11,468	10,913
		In	Out	In	Out	In	Out
9	Tues 8/23/94	69	72	77	84	896	957
	Wed 8/24/94	65	81	95	86	940	991
	Thurs 8/25/94	67	82	80	55	851	906
	Fri 8/26/94	64	85	90	69	884	951
	Sat 8/27/94	47	71	72	60	782	798
		In	Out	In	Out	In	Out
10A	Mon 8/29/94	50	71	58	94	354	981
	Tue 8/30/94	82	75	82	100	397	1,043
		In	Out	In	Out	In	Out
10B	Mon 8/29/94	14	74	16	69	190	782
	Tue 8/30/94	6	79	27	61	207	822
		In	Out	In	Out	In	Out
11A	Mon 8/29/94	186	75	199	134	1,870	1,402
	Tue 8/30/94	233	57	181	157	2,047	1,454
	Wed 8/24/94	251	77	164	160	1,820	1,517
11B	Mon 8/29/94	In	Out	In	Out	In	Out
	Tue 8/30/94	348	117	328	253	3,340	2,907
	Wed 8/24/94	354	155	209	178	2,544	2,148

Source : Walter H. Keller, Inc.

Table 20 - Galleria
Vehicle Occupancy Survey

Date 8/23/94				
Location	**Time**	**Inbound**	**Outbound**	**Total**
A1	Mid Day	1.39	1.34	1.37
	PM	1.30	1.32	1.31
A2	Mid Day	1.45	1.38	1.42
	PM	1.65	1.40	1.51
A3	Mid Day	1.49	1.39	1.43
	PM	1.46	1.33	1.38
Hotel	Mid Day	1.42	1.98	1.59
	PM	1.73	1.34	1.62
Neiman Marcus	Mid Day	1.43	1.26	1.40
	PM	1.69	1.83	1.71
Food Court	Mid Day	1.44	-	1.44
	PM	1.51	-	1.51
Date 8/24/94				
Location	**Time**	**Inbound**	**Outbound**	**Total**
A1	Mid Day	1.35	1.26	1.31
	PM	1.32	1.39	1.36
A2	Mid Day	1.44	1.38	1.41
	PM	1.43	1.39	1.41
A3	Mid Day	1.42	1.43	1.42
	PM	1.51	1.36	1.42
Hotel	Mid Day	1.63	1.78	1.67
	PM	1.60	1.78	1.65
Food Court	Mid Day	1.59	-	1.59
	PM	1.51	-	1.51

Source: Walter H. Keller, Inc.

Table 21
Galleria - Pedestrian Trips

8/23/94 11:30AM - 1:30PM

Time	In: Galleria Sh. Cent.	Office By Walk	Office By Car	Other Retail	Bank	Bank Drive-In	Fast Food	Theater	Hotel *	Police Hlywd Fed	Total	Out: Galleria Sh. Cent.	Office By Walk	Office By Car	Other Retail	Bank	Bank Drive-In	Fast Food	Theater	Hotel *	Police Hlywd Fed	Total
11:30-11:45	292	1	10	27	6	2	19	2	-	3	382	150	0	17	28	8	2	8	0	-	2	215
11:45-12:00	327	0	4	20	14	3	22	0	-	2	392	166	3	5	18	11	3	16	0	-	10	234
12:00-12:15	351	1	7	14	7	3	28	0	-	2	413	198	2	15	24	7	3	18	0	-	0	267
12:15-12:30	323	2	16	21	8	5	15	2	9	4	405	195	3	9	25	17	5	12	0	12	3	281
12:30-12:45	353	2	11	16	16	5	16	12	16	0	447	206	4	5	15	14	5	25	0	10	3	289
12:45-1:00	302	2	11	16	8	7	27	14	22	0	409	262	8	5	16	8	7	15	0	11	2	334
1:00-1:15	309	7	18	26	5	0	23	9	9	0	406	271	6	13	20	7	0	15	0	11	0	343
1:15-1:30	332	3	11	18	4	4	15	34	5	4	430	283	3	13	21	7	4	17	0	4	1	353
Total	2568	16	88	158	68	29	165	73	61	13	3263	1733	29	82	167	76	26	126	0	48	21	2318
% of Total	79.3%	0.6%	2.7%	4.8%	2.1%	0.9%	5.1%	2.2%	1.9%	0.4%	100.0%	74.8%	1.3%	3.5%	7.2%	3.4%	1.3%	5.5%	0.0%	2.1%	0.9%	100.0%
		Office 3.2%											Office 4.8%									

% of Total Pedestrians Per Half Hour in Each Location

Time	In: Galleria Sh. Cent.	Office By Walk	Office By Car	Other Retail	Bank	Bank Drive-In	Fast Food	Theater	Hotel *	Police Hlywd Fed	Total	Out: Galleria Sh. Cent.	Office By Walk	Office By Car	Other Retail	Bank	Bank Drive-In	Fast Food	Theater	Hotel *	Police Hlywd Fed	Total
11:30-12:00	23.9%	5.6%	15.9%	29.7%	20.4%	17.2%	24.8%	2.7%	0.0%	30.8%	23.1%	18.2%	10.3%	26.8%	27.5%	24.1%	17.2%	20.3%	-	0.0%	57.1%	19.4%
12:00-12:30	28.6%	18.7%	26.1%	22.2%	22.1%	27.6%	26.1%	2.7%	14.8%	30.8%	25.1%	22.7%	17.2%	29.3%	29.3%	38.4%	27.6%	23.4%	-	25.0%	14.3%	23.7%
12:30-1:00	25.3%	22.2%	25.0%	20.3%	35.3%	41.4%	26.1%	35.6%	62.3%	15.4%	26.2%	27.1%	41.4%	12.2%	18.6%	27.8%	41.4%	31.3%	-	43.8%	23.8%	26.9%
1:00-1:30	24.7%	55.6%	33.0%	27.8%	13.2%	13.8%	23.0%	58.9%	23.0%	23.1%	25.8%	32.0%	31.0%	31.7%	24.6%	17.7%	13.8%	25.0%	-	31.3%	4.8%	30.1%

*Note: Data collection for the hotel began at 12:15 PM and data was collected only at the front entrance to the hotel.

Source: Walter H. Keller, Inc.

8/23/94 4:30PM - 8:30PM

Time	In: Galleria Sh. Cent.	Office By Walk	Office By Car	Other Retail	Bank	Bank Drive-In	Fast Food	Theater	Hotel *	Police Hlywd Fed	Total	Out: Galleria Sh. Cent.	Office By Walk	Office By Car	Other Retail	Bank	Bank Drive-In	Fast Food	Theater	Hotel *	Police Hlywd Fed	Total
4:30-4:45	254	2	17	11	0	2	9	12	64	0	371	224	4	12	7	0	2	12	7	19	0	287
4:45-5:00	211	0	3	14	0	3	7	18	26	1	281	211	2	20	21	0	3	10	0	12	0	279
5:00-5:15	232	0	4	4	0	3	11	8	21	3	286	245	2	22	8	0	3	6	8	10	3	307
5:15-5:30	218	0	3	15	0	0	3	2	19	0	258	189	2	10	15	0	0	12	9	8	0	245
5:30-5:45	235	0	0	20	0	0	7	0	12	2	276	196	1	6	24	0	0	11	0	18	0	256
5:45-6:00	254	1	2	11	0	0	6	2	37	0	313	200	3	8	22	0	0	8	1	9	1	252
6:00-6:15	278	1	2	0	0	0	14	5	15	0	315	222	2	14	0	0	0	7	2	29	1	277
6:15-6:30	265	1	3	0	0	0	5	2	18	0	295	208	1	4	0	0	0	7	1	63	1	285
Total	1948	5	34	75	0	8	63	47	212	6	2395	1893	17	96	97	0	8	73	28	168	6	2186
% of Total	81.2%	0.2%	1.4%	3.1%	0.0%	0.3%	2.6%	2.0%	8.9%	0.3%	100.0%	77.5%	0.8%	4.4%	4.4%	0.0%	0.4%	3.3%	1.3%	7.7%	0.3%	100.0%
		Office 1.6%											Office 5.2%									

% of Total Pedestrians Per Half Hour in Each Location

Time	In: Galleria Sh. Cent.	Office By Walk	Office By Car	Other Retail	Bank	Bank Drive-In	Fast Food	Theater	Hotel *	Police Hlywd Fed	Total	Out: Galleria Sh. Cent.	Office By Walk	Office By Car	Other Retail	Bank	Bank Drive-In	Fast Food	Theater	Hotel *	Police Hlywd Fed	Total
4:30-5:00	23.9%	40.0%	58.8%	33.3%	-	62.5%	25.4%	50.0%	42.9%	16.7%	27.2%	28.7%	35.3%	33.3%	28.9%	-	62.5%	30.1%	25.0%	18.5%	0.0%	25.9%
5:00-5:30	23.0%	0.0%	20.6%	25.3%	-	37.5%	22.2%	21.3%	18.9%	50.0%	22.7%	25.6%	23.5%	33.3%	23.7%	-	37.5%	24.7%	60.7%	10.7%	50.0%	25.2%
5:30-6:00	25.1%	20.0%	5.9%	41.3%	-	0.0%	20.6%	4.3%	23.1%	33.3%	24.6%	23.4%	23.5%	14.6%	47.4%	-	0.0%	26.0%	3.6%	16.1%	16.7%	23.2%
6:00-6:30	27.9%	40.0%	14.7%	0.0%	-	0.0%	31.7%	14.9%	15.6%	0.0%	25.5%	25.4%	17.8%	18.8%	0.0%	-	0.0%	19.2%	10.7%	54.8%	33.3%	25.7%

*Note: Data was collected only at the front entrance to the hotel.

Data was not collected at the West Food Court entrance after 4:45 PM.

Source: Walter H. Keller, Inc.

Table 22
Galleria - Pedestrian Trips

8/24/94 11:30AM - 1:30PM

Time	In: Galleria Sh. Cent.	Office By Walk	Office By Car	Other Retail	Bank	Bank Drive-In	Fast Food	Theater	Hotel *	Police Hlywd Fed	Total
11:30-11:45	188	3	8	20	10	4	11	0	13	3	260
11:45-12:00	216	0	14	20	7	6	23	0	22	1	309
12:00-12:15	272	0	3	27	10	7	36	1	17	4	377
12:15-12:30	250	0	12	44	13	2	16	0	13	0	350
12:30-12:45	202	1	9	14	9	1	13	12	21	1	283
12:45-1:00	194	4	17	37	8	1	10	23	24	1	319
1:00-1:15	233	3	21	31	6	5	21	9	18	1	348
1:15-1:30	254	0	9	18	5	4	28	16	19	2	355
Total	1809	11	93	211	68	30	158	61	147	13	2601
% of Total	69.6%	0.4%	3.6%	8.1%	2.6%	1.2%	6.1%	2.3%	5.7%	0.5%	100.0%
		Office 4.0%									

Time	Out: Galleria Sh. Cent.	Office By Walk	Office By Car	Other Retail	Bank	Bank Drive-In	Fast Food	Theater	Hotel *	Police Hlywd Fec	Total
11:30-11:45	108	3	17	16	8	4	6	0	11	0	173
11:45-12:00	135	0	12	19	3	8	12	0	42	0	229
12:00-12:15	156	0	6	28	11	7	22	0	27	0	259
12:15-12:30	161	0	10	38	15	2	16	0	16	3	261
12:30-12:45	150	3	12	26	8	1	23	0	21	2	246
12:45-1:00	228	3	10	33	9	1	14	0	22	0	320
1:00-1:15	180	4	10	36	9	5	19	0	15	1	279
1:15-1:30	194	5	8	23	5	4	17	0	18	5	279
Total	1314	18	85	219	68	30	129	0	172	11	2046
% of Total	64.2%	0.9%	4.2%	10.7%	3.3%	1.5%	6.3%	0.0%	8.4%	0.5%	100.0%
		Office 5.0%									

% of Total Pedestrians Per Half Hour in Each Location

Time	In: Galleria Sh. Cent.	Office By Walk	Office By Car	Other Retail	Bank	Bank Drive-In	Fast Food	Theater	Hotel *	Police Hlywd Fed	Total
11:30-12:00	22.3%	27.3%	23.7%	19.0%	25.0%	33.3%	21.5%	0.0%	23.8%	30.8%	21.9%
12:00-12:30	28.9%	0.0%	16.1%	33.6%	33.8%	30.0%	32.9%	1.6%	20.4%	30.8%	28.0%
12:30-1:00	21.9%	45.5%	28.0%	24.2%	25.0%	6.7%	14.6%	57.4%	30.6%	15.4%	23.1%
1:00-1:30	26.9%	27.3%	32.3%	23.2%	16.2%	30.0%	31.0%	41.0%	25.2%	23.1%	27.0%

% of Total Pedestrians Per Half Hour in Each Location

Time	Out: Galleria Sh. Cent.	Office By Walk	Office By Car	Other Retail	Bank	Bank Drive-In	Fast Food	Theater	Hotel *	Police Hlywd Fec	Total
11:30-12:00	18.5%	16.7%	34.1%	16.0%	16.2%	33.3%	14.0%	-	30.8%	0.0%	19.6%
12:00-12:30	24.3%	0.0%	16.8%	30.1%	38.2%	30.0%	29.5%	-	25.0%	27.3%	25.4%
12:30-1:00	28.8%	33.3%	25.9%	26.9%	25.0%	6.7%	28.7%	-	25.0%	18.2%	27.7%
1:00-1:30	28.5%	50.0%	21.2%	26.9%	20.6%	30.0%	27.9%	-	19.2%	54.5%	27.3%

* Note: Data was not collected at the Neiman Marcus, West Food Court, and Orange Parking entrances for 8/24/94.

Source: Walter H. Keller, Inc.

8/24/94 4:30PM - 6:30PM

Time	In: Galleria Sh. Cent.	Office By Walk	Office By Car	Other Retail	Bank	Bank Drive-In	Fast Food	Theater	Hotel *	Police Hlywd Fed	Total
4:30-4:45	182	0	22	-	-	-	12	13	7	0	236
4:45-5:00	161	1	36	-	-	-	11	20	27	0	256
5:00-5:15	190	0	39	-	-	-	15	4	22	0	270
5:15-5:30	151	1	6	-	-	-	9	9	17	0	193
5:30-5:45	181	0	4	-	-	-	9	0	9	0	203
5:45-6:00	192	0	6	-	-	-	7	0	11	2	218
6:00-6:15	198	0	2	-	-	-	5	0	14	0	219
6:15-6:30	145	0	3	-	-	-	7	0	4	0	159
Total	1400	2	118	0	0	0	75	46	111	2	1754
% of Total	79.8%	0.1%	6.7%	0.0%	0.0%	0.0%	4.3%	2.6%	6.3%	0.1%	100.0%
		Office 6.8%									

Time	Out: Galleria Sh. Cent.	Office By Walk	Office By Car	Other Retail	Bank	Bank Drive-In	Fast Food	Theater	Hotel *	Police Hlywd Fec	Total
4:30-4:45	254	2	20	-	-	-	11	12	23	1	323
4:45-5:00	222	2	35	-	-	-	13	3	27	0	302
5:00-5:15	208	3	36	-	-	-	16	14	12	0	289
5:15-5:30	214	1	6	-	-	-	10	2	16	1	250
5:30-5:45	210	1	14	-	-	-	12	0	22	2	261
5:45-6:00	223	0	16	-	-	-	12	0	6	0	259
6:00-6:15	252	0	8	-	-	-	7	0	28	0	295
6:15-6:30	169	0	9	-	-	-	7	6	7	1	199
Total	1752	9	146	0	0	0	88	37	141	5	2178
% of Total	80.4%	0.4%	6.7%	0.0%	0.0%	0.0%	4.0%	1.7%	6.5%	0.2%	100.0%
		Office 7.1%									

% of Total Pedestrians Per Half Hour in Each Location

Time	In: Galleria Sh. Cent.	Office By Walk	Office By Car	Other Retail	Bank	Bank Drive-In	Fast Food	Theater	Hotel *	Police Hlywd Fed	Total
4:30-5:00	24.5%	50.0%	49.2%	-	-	-	30.7%	71.7%	30.6%	0.0%	28.1%
5:00-5:30	24.4%	50.0%	38.1%	-	-	-	32.0%	28.3%	35.1%	0.0%	26.4%
5:30-6:00	26.6%	0.0%	8.5%	-	-	-	21.3%	0.0%	19.0%	100.0%	24.0%
6:00-6:30	24.5%	0.0%	4.2%	-	-	-	16.0%	0.0%	16.2%	0.0%	21.6%

% of Total Pedestrians Per Half Hour in Each Location

Time	Out: Galleria Sh. Cent.	Office By Walk	Office By Car	Other Retail	Bank	Bank Drive-In	Fast Food	Theater	Hotel *	Police Hlywd Fec	Total
4:30-5:00	27.2%	44.4%	37.7%	-	-	-	27.3%	40.5%	33.5%	20.0%	28.7%
5:00-5:30	24.1%	44.4%	28.8%	-	-	-	29.5%	43.2%	19.9%	20.0%	24.7%
5:30-6:00	24.7%	11.1%	21.9%	-	-	-	27.3%	0.0%	19.9%	40.0%	23.9%
6:00-6:30	24.0%	0.0%	11.6%	-	-	-	15.9%	16.2%	24.8%	20.0%	22.7%

* Note: Data was not collected at the Neiman Marcus, West Food Court, and Orange Parking entrances as well as Other Retail, the Bank, or Drive-In for 8/24/94 PM.

Source: Walter H. Keller, Inc.

V. DATA ANALYSIS

Trip Generation Results

Overview of Trip Generation Analysis

Each study site was totally isolated by machine traffic counts and did not have any roadways crossing the site with external to external trips. Each traffic count location was also manually counted to develop adjustment factors for accounting for slight differences due to vehicles not hitting the machine hose perpendicular at each location. Standard ITE trip generation procedures were then employed at different levels of stratification to project external trip ends. The ITE results were then compared with the adjusted machine count results.

Crocker Center Trip Generation - Machine Counts

The results of the driveway machine counts are provided in Table 23. These results have been modified to reflect the manual adjustment factors for each access location and are averaged. For consistency, set time periods were chosen to compare the traffic count results. These times included 8:00 AM - 9:00 AM for the AM peak hour, 12:00 PM - 1:00 PM for the Midday peak hour and 5:00 PM - 6:00 PM for the PM peak hour. In reality, the peak hour for each location may actually occur at a time slightly different and on different days.

Based on the results of Table 23, the AM peak hour was 7.2% of the 24 hour, the Midday peak hour was 12.0% of the 24 hour and the PM peak hour was 8.2% of the 24 hour traffic loading. The average daily external traffic associated with Crocker Center was 9,972 vehicle trips per day.

Table 23 - Crocker Center External Traffic From Machine Counts

Location †	Date	AM PK 8 - 9 In	AM PK 8 - 9 Out	Mid Day 12 - 1 In	Mid Day 12 - 1 Out	PM PK 5 - 6 In	PM PK 5 - 6 Out	Daily In	Daily Out
1A	Tues 8/2/94	282	91	273	251	151	352	2,436	2,665
	Wed 8/3/94	290	82	343	303	144	373	2,533	2,891
	Thurs 8/4/94	276	111	314	320	168	298	2,576	2,788
	Fri 8/5/94	289	102	333	296	210	319	2,813	3,143
2	Tues 8/2/94	190	74	250	143	120	62	2,043	1,049
	Wed 8/3/94	217	47	256	231	112	66	1,978	1,203
	Thurs 8/4/94	189	60	213	160	117	80	1,959	1,147
	Fri 8/5/94	196	69	270	152	95	77	2,035	1,168
3	Tues 8/2/94	9	80	17	151	4	128	95	1,258
	Wed 8/3/94	1	67	12	170	3	125	86	1,309
	Thurs 8/4/94	8	78	13	162	6	128	96	1,262
	Fri 8/5/94	4	53	7	151	4	113	90	1,263
13	Fri 8/5/94	7	64	3	159	10	122	145	1,256
Averages*	1A	283	95	310	291	154	341	2,515	2,781
	2	199	60	240	178	116	69	1,993	1,133
	3	6	75	14	161	4	127	92	1,276
	Total of Averages	487	230	564	630	275	537	4,601	5,191
	Percent Total	7.33%		12.19%		8.30%		9,791	
	Percent Day	68%	32%	47%	53%	34%	66%		

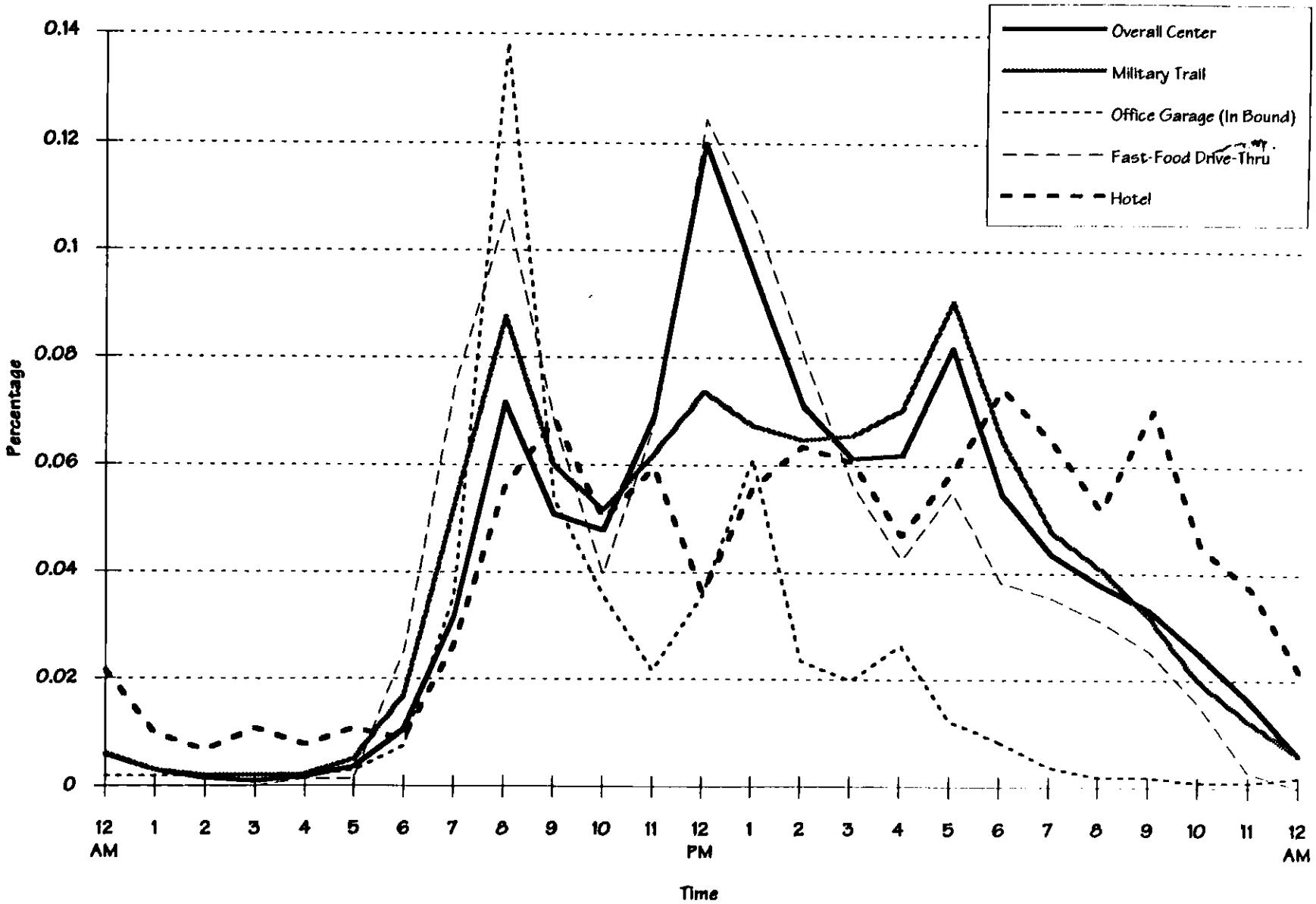
Source : Walter H. Keller, Inc.

*Averages based on Tues, Wed, Thurs

† - See Figure 16 for locations

For comparison purposes, the hourly external distribution of trips at the access points of Crocker Center have been graphed (see Figure 19) along with the distribution of trips of individual uses such as office, fast food drive-thru, the hotel, and the traffic distribution along the adjacent street, Military Trail. The distribution of office trips, however, is only reflective of the in-bound garage trips.

Figure 19: Crocker Center - % Loading by Use



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Crocker Center Trip Generation - Using ITE Procedures

Table 24 summarizes the number of external site trips which would be estimated using the ITE Trip Generation Procedures, and segregating the site land uses. For example, the two office buildings (i.e., Tower 1 and Tower II) contain 208,883 square feet of total floor area. Table 24 stratified the office space into the following uses: law, securities, medical, vacant and other. The total square footage of commercial oriented uses was segregated into the following uses: retail, restaurant, fast-food restaurant and vacant. The hotel use was grouped into hotel rooms, meeting rooms and restaurant/lounge. ITE rates for each sub category were then used to estimate the trip generation characteristics.

An aggregated projection of trips was also developed using ITE rates for aggregated uses (see Table 23). The aggregated uses are as follows: office, commercial and hotel. The aggregated analysis is based on occupied floor area only.

Mizner Park Trip Generation - Machine Counts

Mizner Park is located on the east side of Federal Highway (US1) and west of Mizner Park Boulevard. Mizner Park has six (6) access points (see Figure 9). Three (3) access points are located along Federal Highway and two (2) access points are along Mizner Park Boulevard. The last access point is along NE 2nd Street. Except for the northern access on Federal Highway and the access along NE 2nd Street, all access locations allow right in and right out movements only. The northern most Federal Highway access is served by a directional median opening which allows for southbound left, right in, and right out movements. The NE 2nd Street access point allows all movements. None of the access locations are signalized.

The results of the driveway counts are provided in Table 26. Note, adjustments have been made in Table 26 as necessary, based on manual turning movement counts. As noted in Table 26, the traditional AM peak hour was 2.8% of the daily generation, the mid day peak hour was 5.0% of the daily generation and the PM peak hour was 6.8% of the daily generation. The average daily external traffic associated with Mizner Park was 12,471 vehicle trips per day.

296p40

Table 24 - Crocker Center Disaggregate Trip Generation Estimate

ITE Code	Land Use	Size	Unit	Daily Trip	AM PK Hr In	AM PK Hr Out	PM Pk Hr In	PM Pk Hr Out
	Office Uses	208,883	SF					
710	Law	19,019	SF	400	47	6	9	45
710	Securities	89,150	SF	1,287	155	19	29	142
720	Medical	2,434	SF	46	20	6	3	6
710	Other	85,696	SF	1,249	151	19	28	138
	Vacant	12,584	SF					
	Total			2,981	373	50	69	331
	Commercial	87,157	SF					
814	Retail	33,495	SF	1,362	*103*	*112*	*94*	*71*
831	Restaurant	30,201	SF	2,420	26	2	162	69
831	Restaurant(Sit Down)	9,250	SF	1,900	73	73	81	69
834	Fast Food(McDonald's)	5,611	SF	3,547	159	153	107	98
	Vacant	8,600	SF					
	Total			9,229	361	339	444	308
	Hotel							
310	Rooms @ 66% occup	256	Rooms	1,448	61	41	68	58
	Mtg. Rooms	10,000	SF					
831	Restaurant/ Lounge	3,000	SF	318	3	0	16	7
	Total			1,766	64	41	84	65
	Total			**13,976**	**798**	**429**	**597**	**704**

Source: Walter H. Keller, Inc.
Marda L. Zimring, Inc.
ITE Trip Generation, 5th Edition

Table 25 - Crocker Center Aggregated Trip Generation Estimate

ITE Code	Land Use	Size	Unit	Daily Trip	AM PK Hr In	AM PK Hr Out	PM Pk Hr In	PM Pk Hr Out
710	Office Uses	196,299	SF	2,336	287	35	52	254
820	Commercial	78,557	SF	6,078	89	52	281	281
310	Hotel @ 66% Occupancy	256	Rooms	1,448	61	41	68	58
	Total			**9,862**	**437**	**128**	**402**	**593**

Source: Walter H. Keller, Inc.
Marda L. Zimring, Inc.
ITE Trip Generation, 5th Edition

Table 26 - Mizner Park Driveway Counts

Location	Date	AM PK 8 - 9 In	AM PK 8 - 9 Out	Mid Day 12 - 1 In	Mid Day 12 - 1 Out	PM PK 5 - 6 In	PM PK 5 - 6 Out	Daily In	Daily Out
1A	Tues 8/9/94	33	26	121	53	86	76	1,319	1,019
	Wed 8/10/94	39	19	142	73	96	86	1,313	1,010
	Thurs 8/11/94	33	24	149	73	83	85	1,331	1,067
2A	Tues 8/9/94	19	9	40	44	51	28	743	578
	Wed 8/10/94	15	13	40	28	39	14	698	468
	Thurs 8/11/94	20	6	37	43	38	30	740	565
3	Tues 8/9/94	28	15	150	62	95	73	1,765	927
	Wed 8/10/94	31	23	122	72	110	63	1,739	939
	Thurs 8/11/94	13	13	132	66	146	67	1,967	908
4A	Tues 8/9/94	80	12	42	14	53	20	583	339
	Wed 8/10/94	74	16	42	29	41	15	562	380
	Thurs 8/11/94	72	16	51	25	37	18	588	394
5A	Tues 8/9/94	42	25	148	68	141	61	2,364	851
	Wed 8/10/94	43	27	140	70	125	52	2,143	794
	Thurs 8/11/94	43	24	0	96	249	80	2,149	896
5B	Tues 8/9/94	10	38	38	24	51	17	467	362
	Wed 8/10/94	10	42	27	29	36	17	321	324
	Thurs 8/11/94	6	35	48	0	35	38	406	349
6A	Tues 8/9/94	11	14	47	42	50	57	641	804
	Wed 8/10/94	14	20	58	43	47	40	563	641
	Thurs 8/11/94	25	20	82	59	34	46	652	790
Averages	1A	35	23	137	66	88	83	1,321	1,032
	2A	18	10	39	38	43	24	727	537
	3	24	17	135	67	117	68	1,824	925
	4A	75	15	45	23	44	18	578	371
	5A	42	25	96	78	171	64	2,219	847
	5B	9	38	38	18	41	24	398	345
	6A	17	18	62	48	44	48	619	745
	Total of Averages	220	145	552	338	547	328	7,685	4,802
	Percent Total	2.93%		7.13%		7.01%		12,486	
	Percent Day	60%	40%	62%	38%	63%	37%		

Source : Walter H. Keller, Inc.

The hourly external distribution of trips at the access points of Mizner Park have been graphed (see Figure 17) along with distribution of trips at individual uses such as garages, bank drive-thru, and the traffic distribution along the adjacent streets of Federal Highway and Mizner Boulevard. The center loadings are heavily influenced by the site's retail - commercial oriented land uses resulting in traffic growth increasing during the day.

Mizner Trip Generation - Using ITE Procedures

Table 27 summarizes the number of external site trips which would be estimated using the ITE Trip Generation Procedures, and segregating the site land uses. Table 27 stratified the office space into the following uses: law, securities, medical, vacant and other. The total square footage of commercial oriented uses was segregated into the following uses: retail, restaurant, fast-food restaurant and vacant. The residential apartment use was separated by the number of unit types. ITE rates for each sub category were then used to estimate the trip generation characteristics.

An aggregated projection of trips was also developed using ITE rates for aggregated uses (see Table 28). The aggregated uses are as follows: office, commercial, movie theater and residential (apartment) uses. The aggregated analysis is based on occupied floor area and dwelling units only.

Galleria Area Trip Generation - Machine Counts

The Galleria Area includes the land area south of Sunrise Boulevard between the Intracoastal Waterway and the Middle River. The Galleria Area has nine (9) access points (see Figure 18). Three (3) access points are intersecting streets including: Middle River Drive, Bayview Drive and NE 26th Avenue. All of these access points have full median openings and are signalized. Five (5) additional driveways provide right turn in and right turn out access in and out of the Galleria Shopping Center. The final access has a directional median opening on Sunrise Boulevard just west of the Intracoastal Waterway bridge allowing westbound left-turn, right in, and right out movements. This access point provides access to the Guest Suites Hotel, the Galleria Cinema and McDonald's Restaurant.

The results of the driveway machine counts, including manual adjustments, are provided in Table 29. As noted in Table 29, the traditional AM peak hour was 4.2% of the daily

Figure 20: Mizner Park - % Loading by Use

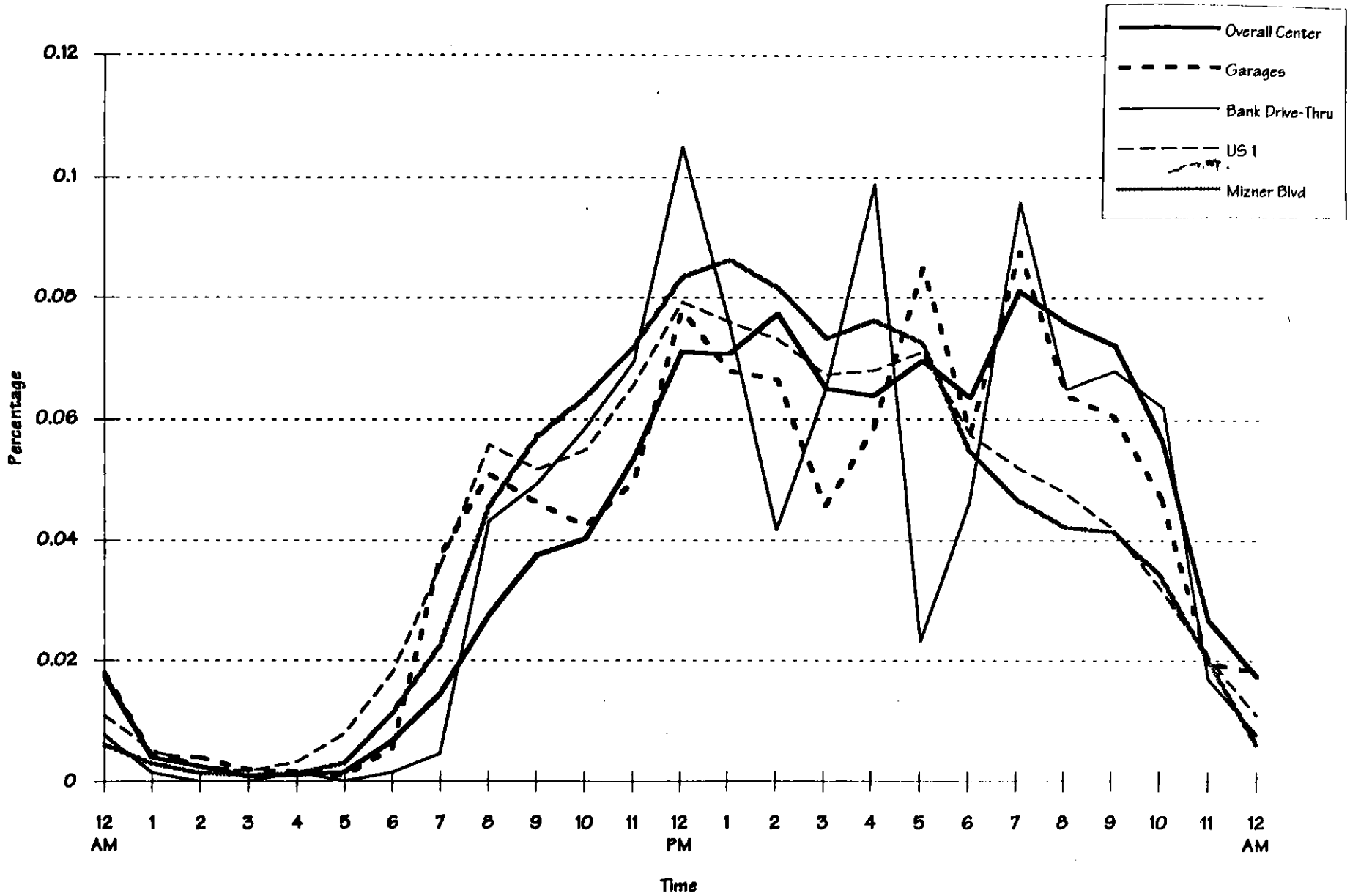

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Table 27 - Mizner Park Disaggregate Trip Generation Estimate

ITE Code	Land Use	Size	% Occup	Unit	Daily Trip	AM PK Hr In	AM PK Hr Out	PM Pk Hr In	PM Pk Hr Out
	Office Uses	88,279		SF					
710	Law	11,403	100%	SF	272	31	4	6	31
710	Securities	28,193	100%	SF	539	64	8	12	61
720	Medical	10,724	100%	SF	263	34	10	12	29
710	Other	37,959	100%	SF	675	80	10	15	76
	Total				1,748	209	32	47	196
	Commercial	162,743		SF					
814	Retail	86,632	100%	SF	3,523	*267*	*289*	*243*	*184*
911/912	Bank w/Drive Thru	3,653	100%	SF	1,001	19	15	77	83
831	Restaurant	29,697	100%	SF	2,384	26	2	159	68
444	Movie Theater*	31,000	100%	SF	1,227	38	38	105	47
	Vacant	11,761		SF					
	Total				8,136	349	343	584	382
	Residential	136		Apts					
223	1 bdrm	995/ 48	100%	Du's					
223	2 bdrm/1 bath	1,145/ 16	100%	Du's					
223	2 bdrm/2 bath	1,200/ 56	100%	Du's					
223	3 bdrm/2 bath	1,695/ 16	100%	Du's					
	Total				846	12	58	58	27
	Total				**10,730**	**570**	**433**	**689**	**605**

Source: Walter H. Keller, Inc.
Marda L. Zimring, Inc.
ITE Trip Generation, 5th Edition

* - with 8 screens

Table 28 - Mizner Park Aggregate Trip Generation Estimate

ITE Code	Land Use	Size	% Occup	Unit	Daily Trip	AM PK Hr In	AM PK Hr Out	PM Pk Hr In	PM Pk Hr Out
710	Office Uses	88,279	100%	SF	1,277	154	19	29	141
820	Commercial	131,743	91.07%	SF	8,396	120	71	391	391
444	Movie Theater	8	100%	Screens	1,227	38	38	105	47
223	Residential	136	100%	Apts	846	12	58	58	27
	Total				**11,746**	**325**	**186**	**583**	**606**

Source: Walter H. Keller, Inc.
Marda L. Zimring, Inc.
ITE Trip Generation, 5th Edition

generation, the Midday peak hour was 8.5% of the daily generation and the PM peak hour was 8.1% of the daily generation. The average daily external traffic associated with the Galleria Area was 22,971 vehicle trips per day.

The hourly external distribution of trips at the access points to the Galleria Area have been graphed (see Figure 20) along with the distribution of trips at individual uses such as the Galleria Shopping Center entrances, the Guest Suites Hotel/ McDonald's, the single family area, the main entry roadways, and the traffic distribution along Sunrise Boulevard. The center loadings are only reflective of a retail - commercial oriented site with the traffic growth increasing during the day. The Galleria area loadings are heavily influenced by the Galleria Mall's land uses resulting in traffic growth increasing during the day.

Galleria Area Trip Generation - Using ITE Procedures

Table 30 summarizes the number of external site trips which would be estimated using the ITE Trip Generation Procedures, and segregating the site land uses. Table 30 stratifies the office space into the following uses: law, securities, medical, vacant and other. The total square footage of commercial oriented uses was segregated into the following uses: retail, banking, restaurant, movie theater and vacant. The residential uses were grouped into single family, apartment, high-rise apartment and hotel rooms.. ITE rates for each sub category were then used to estimate the trip generation characteristics. Table 31 provides a trip generation estimate with partial disaggregation of land uses.

An aggregated projection of trips was also developed using ITE rates for aggregated uses (see Table 32). The aggregated uses are as follows: office, commercial and residential. The aggregated analysis is based on occupied floor area and occupied residential units only.

Significant differences existed between the machine traffic counts and the estimated ITE trip generation (22,819 vpd versus approximately 41,600 vpd with lowest estimate). Review of the machine counts and the floor area estimates did not reveal any obvious problem which would cause such a major difference. The largest generator in this area is the Galleria Shopping Mall which should account for approximately 78% of all trips according to the trip generation estimates. Using the pedestrian counts taken in the Midday and PM peak hour periods, however, the traffic counts were found to be reflective of true conditions and accurate.

Table 29 - Galleria Driveway Counts

Location	Date	AM PK 8 - 9		Mid Day 12 - 1		PM PK 5 - 6		Daily	
		In	Out	In	Out	In	Out	In	Out
2	Tues 8/23/94	245	79	272	228	154	268	2,755	2,842
	Wed 8/24/94	270	94	254	269	191	343	2,835	2,945
	Thurs 8/25/94	198	75	282	240	187	343	2,807	2,747
	Fri 8/26/94	244	87	333	354	194	350	2,872	3,031
	Sat 8/27/94	98	34	232	246	151	272	2,529	2,782
3A	Tues 8/23/94	9		82		73		658	
	Wed 8/24/94	0		105		69		742	
	Thurs 8/25/94	0		101		78		738	
	Fri 8/26/94	0		87		84		794	
	Sat 8/27/94	7		139		90		1,281	
	Sun 8/28/94	0		123		32		733	
	Mon 8/29/94	0		78		65		671	
	Tue 8/30/94	0		80		76		721	
	Wed 8/31/94	0		92		54		655	
3B	Mon 8/29/94		0		44		45		410
	Tue 8/30/94		0		28		43		357
	Wed 8/31/94		0		40		33		349
4	Tues 8/23/94	154	50	309	235	202	289	3,018	3,391
	Wed 8/24/94	148	45	292	242	232	326	2,986	3,382
	Thurs 8/25/94	149	52	354	300	216	327	3,064	3,663
	Fri 8/26/94	126	177	346	278	274	294	3,348	3,572
	Sat 8/27/94	135	32	447	288	243	499	3,757	4,272
5	Tues 8/23/94	0	0	72	9	34	6	481	57
	Wed 8/24/94	0	0	60	4	38	2	505	39
	Thurs 8/25/94	6	0	75	0	125	4	658	52
	Fri 8/26/94	0	0	50	5	47	3	521	47
	Sat 8/27/94	0	0	58	5	45	7	617	53
5B	Tues 8/23/94	75		121		64		1,032	
	Wed 8/24/94	49		79		76		963	
	Thurs 8/25/94	45		93		60		953	
	Fri 8/26/94	44		77		76		933	
	Sat 8/27/94	45		83		59		1,034	
	Sun 8/28/94	0		64		28		451	
	Mon 8/29/94	17		66		50		541	
	Tue 8/30/94	28		41		42		504	
	Wed 8/31/94	27		52		43		496	
6	Mon 8/29/94		33		108		82		1,117
	Tue 8/30/94		22		62		101		1,032
	Wed 8/31/94		28		53		81		926

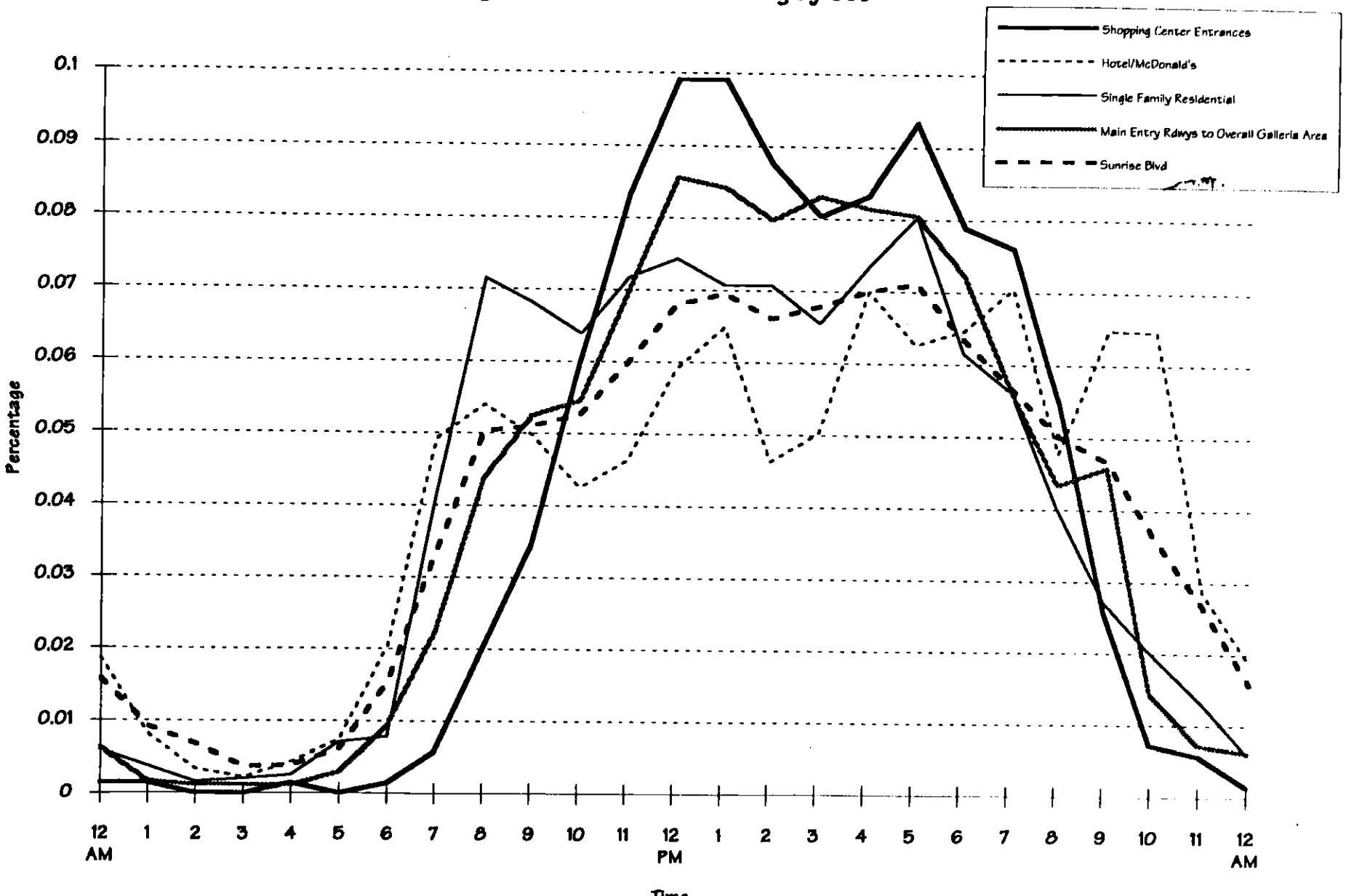
Table 29 - Galleria Driveway Counts (continued)

Location	Date	AM PK 8 - 9		Mid Day 12 - 1		PM PK 5 - 6		Daily	
		In	Out	In	Out	In	Out	In	Out
7	Tues 8/23/94	170	132	275	168	262	138	3,896	2,188
	Wed 8/24/94	184	123	272	168	307	142	3,940	2,096
	Thurs 8/25/94	168	126	258	188	289	146	3,727	2,350
	Fri 8/26/94	175	162	269	327	286	322	3,857	4,609
	Sat 8/27/94	176	166	369	448	396	448	5,699	6,559
	Sun 8/28/94	2	117	91	217	527	33	3,806	2,607
	Mon 8/29/94	235	100	338	128	320	167	4,464	2,106
	Tue 8/30/94	201	123	270	211	320	169	4,360	2,555
8A	Tues 8/23/94	39	20	54	26	45	16	829	283
	Wed 8/24/94	44	15	55	19	50	19	864	278
	Thurs 8/25/94	43	23	65	21	80	17	900	343
	Fri 8/26/94	63	22	52	13	57	33	1,042	324
	Sat 8/27/94	35	15	65	20	57	16	1,158	390
	Sun 8/28/94	27	16	44	24	42	26	902	399
	Mon 8/29/94	40	9	42	18	40	8	793	279
	Tue 8/30/94	36	13	44	13	48	16	745	255
	Wed 8/31/94	47	20	48	13	56	15	826	306
Averages*	2	238	83	269	246	177	318	2,799	2,845
	3A	2		92		70		703	
	3B		0		34		38		353
	4	150	49	318	259	217	314	3,023	3,479
	5	2	0	69	4	66	4	548	49
	5B	45		77		57		790	
	6		25		58		91		979
	7	181	126	269	184	295	149	3,981	2,297
	8A	42	18	53	18	56	17	833	293
	Total of Averages	659	301	1,148	803	937	930	12,676	10,295
	Percent Total	4.18%		8.49%		8.13%		22,971	
	Percent Day	69%	31%	59%	41%	50%	50%		

Source : Walter H. Keller, Inc.

*Averages based on Tues, Wed, Thurs

Figure 21: Galleria - % Loading by Use



Walter H. Keller, Inc.
Consulting Engineers and Planners

Table 30 - Galleria Area Disaggregate Trip Generation Estimate

ITE Code	Address	Land Use	Size	% Occup	Unit	Daily Trip	AM PK Hr In	AM PK Hr Out	PM PK Hr In	PM PK Hr Out
	Office Uses									
720	918	Medical office	3,250	100%	SF	64	22	6	4	9
720	908	Medical office	2,600	100%	SF	50	21	6	3	7
720	2540	Medical office	7,000	100%	SF	159	28	8	8	19
720	2600	Medical office	2,040	100%	SF	37	20	6	2	5
720	2330	Medical office	2,400	100%	SF	45	20	6	3	6
720	2300	Medical office	4,200	100%	SF	87	23	7	5	11
710	2404	Law Office	3,850	100%	SF	120	14	2	3	14
710	915	general office	52,500	100%	SF	862	103	13	20	96
710	900	media production	8,450	100%	SF	217	25	3	5	25
710	2310	personal service	800	100%	SF	36	4	0	1	4
	915	Vacant Offices(4 loc)	33,850		SF					
		Total				1,677	279	58	53	196
	Residential									
220	925	Apartment	16	50%	Du's	46	1	6	4	2
220	915	Apartment	12	50%	Du's	35	1	5	3	1
220	907	Apartment	10	50%	Du's	29	1	5	3	1
220	901	Apartment	6	50%	Du's	17	1	4	2	1
220	900	Apartment	16	35%	Du's	32	1	5	3	1
220	900	Apartment	16	35%	Du's	32	1	5	3	1
220	815	Apartment	54	65%	Du's	211	4	17	16	8
220	2310	Apartment	10	65%	Du's	38	1	5	3	2
220	2340	Apartment	30	65%	Du's	116	2	11	10	4
220	2352	Apartment	12	65%	Du's	45	1	6	4	2
220	2400	Apartment	24	65%	Du's	92	2	9	8	4
220	2424	Apartment	36	65%	Du's	140	3	12	11	5
220	2500	Apartment	36	65%	Du's	140	3	12	11	5
220	936	Apartment	152	35%	Du's	324	5	24	24	11
220	888	Apartment	100	35%	Du's	211	3	17	16	8
230	2510	Townhouses	4	75%	Du's	33	1	4	2	1
230	2520	Townhouses	4	75%	Du's	33	1	4	2	1
		Single Family	184	97.5%	Du's	1,768	35	99	119	64
		Total				3,341	66	252	246	124
	Commercial		50,400		SF					
444		Movie Theater (4 screens)	29,000	100%	SF	613	19	19	53	24
834		Fast Food (McDonald's)	5,600	100%	SF	3,540	159	152	106	98
912		Bank w/Drive Thru	3,400	100%	SF	962	18	14	71	77
820		Retail	5,400	100%	SF	620	18	11	34	34
		Vacant	7,000		SF					
		Total				5,734	214	196	264	233
	Hotel									
310		Rooms	229	72.5%	Rooms	1,402	60	40	67	57
	The Galleria		1,115,575		SF					
820		Retail	974,378	100%	SF	31,465	391	230	1,456	1,456
710		Medical Offices	7,330	100%	SF	168	28	8	8	19
710		Securities Offices	5,719	100%	SF	161	18	2	4	19
710		Other Offices	3,707	100%	SF	116	13	2	3	14
912		Banking	6,756	100%	SF	1,415	31	24	141	153
834		Fast Food	9,685	100%	SF	6,122	274	264	184	170
820		Vacant Retail	108,000		SF					
	Total					39,448	757	530	1,796	1,830
		Total				**51,603**	**1,375**	**1,077**	**2,425**	**2,440**

Source: Walter H. Keller, Inc. & Marda L. Zimring, Inc.
ITE Trip Generation, 5th Edition

Table 31 - Galleria Area Partial Disaggregate Trip Generation Estimate

ITE Code	Land Use	Size	% Occup	Unit	Daily Trip	AM PK Hr In	AM PK Hr Out	PM Pk Hr In	PM Pk Hr Out
710	Office Uses	120,940							
	General Offices	99,450	66.0%	SF	1,020	122	15	23	113
	Medical Offices	21,490	100%	SF	596	51	15	25	58
	Total				1,616	174	30	48	171
820	Commercial	1,161,975		SF					
	Movie Theater (4 screens)	29,000	100%	SF	613	19	19	53	24
	Fast Food	5,600	100%	SF	3,540	159	152	106	98
	Retail	12,400	43.5%	SF	620	18	11	34	34
	Bank w/Drive Thru	3,400	100%	SF	962	18	14	71	77
	Galleria Shopping Center	1,111,575	90.3%	SF	32,185	398	234	1,487	1,487
820	Total			SF	37,919	612	430	1,751	1,720
	Residential	722		Du's					
210	Single Family	184	97.5%	Du's	1,768	35	99	119	64
232	Apartment	286	59.6%	Du's	802	13	56	48	29
222	High-Rise Apartment	252	35.0%	Du's	401	7	20	20	13
	Total				2,972	55	175	187	106
	Hotel								
310	Rooms	229	73%	Rooms	1,402	60	40	67	57
	Total				**43,910**	**900**	**675**	**2,054**	**2,055**

Source: Walter H. Keller, Inc. & Marda L. Zimring, Inc.
ITE Trip Generation, 5th Edition

Table 32 - Galleria Area Aggregate Trip Generation Estimate

ITE Code	Land Use	Size	% Occup	Unit	Daily Trip	AM PK Hr In	AM PK Hr Out	PM Pk Hr In	PM Pk Hr Out
710	Office Uses	120,940	72.01%	SF	1,264	153	19	29	139
820	Commercial Uses	1,136,975	89.89%	SF	32,622	402	236	1,507	1,507
444	Movie Theater (4 screens)	29,000	100%	SF	613	19	19	53	24
210	Residential - Single Family	184	97.5%	Du's	1,768	35	99	119	64
232	Residential - Apartment	286	59.6%	Du's	802	13	56	48	29
222	Residential - High Rise Apartment	252	35.0%	Du's	401	7	20	20	13
310	Hotel - Occupied Rooms	229	72.5%	Rooms	1,402	60	40	67	57
	Total				**38,873**	**688**	**489**	**1,842**	**1,833**

Source: Walter H. Keller, Inc.
Marda L. Zimring, Inc.
ITE Trip Generation, 5th Edition

Table 33 summarizes the pedestrian counts at the Galleria Mall during the data collection period. These numbers were developed from the manual counts of Galleria Mall entrances. A trip generation estimate was then developed utilizing the auto occupancy information collected on site. The auto occupancy rate was divided into the pedestrian count to arrive at an estimate of external vehicles during the survey period. For the Galleria Mall, an estimated 5,378 vehicles were estimated for the time frame during which the pedestrian count data was collected.

Table 34 identifies the estimated hourly trip generation loading for a regional mall from the ITE Trip Generation Handbook - 5th Edition. This analysis (see Table 34) indicates that regional shopping centers in general have 33.7% of their 24 hour loading during the hours which the pedestrian count data was collected. Table 34 further identifies the estimated 24 hour trip generation and the adjustment results considering the day of the week and month (based on ITE). Based on ITE estimates, Galleria Mall should have 10,573 vehicle trips during the pedestrian count period per the square footage of the center. However, because the center pedestrian count estimate is 5,378, it was concluded that the center is producing approximately 51% of the trips that would normally be expected for a center of this size. As a result, it was further concluded that the traffic count data was accurate.

Discussions were held with the Galleria Mall Management Company to review the trip generation findings and to ascertain possible reasons for the lower trip generation rate. The Management Company indicated the Mall does produce less traffic than average due to the higher expenditure rate of the Mall's customers. Management personnel indicate the Mall generates a per customer expenditure almost three (3) times higher than the national average.

Table 33 - Galleria Shopping Mall - Pedestrian Counts

Time Period	Auto Occupancy In Bound	Auto Occupancy Out Bound
Average 2 days AM	1.42	1.36
Average 2 days PM	1.45	1.37

Time Period	Ped Counts (Person Trips) In Bound	Ped Counts (Person Trips) Out Bound
Avg of 2 Days 11:30-1:45	257	135
Avg of 2 Days 11:45-12:00	292	164
Avg of 2 Days 12:00-12:15	333	194
Avg of 2 Days 12:15-12:30	313	191
Avg of 2 Days 12:30-12:45	291	189
Avg of 2 Days 12:45-1:00	261	267
Avg of 2 Days 1:00-1:15	289	239
Avg of 2 Days 1:15-1:30	306	251
Avg of 2 Days 4:30-4:45	227	253
Avg of 2 Days 4:45-5:00	194	233
Avg of 2 Days 5:00-5:15	224	236
Avg of 2 Days 5:15-5:30	193	216
Avg of 2 Days 5:30-5:45	222	215
Avg of 2 Days 5:45-6:00	239	223
Avg of 2 Days 6:00-6:15	254	242
Avg of 2 Days 6:15-6:30	216	194

Time Period	Vehicle Trips In Bound	Vehicle Trips Out Bound	Vehicle Trips Total
Avg of 2 Days 11:30-1:45	181	99	280
Avg of 2 Days 11:45-12:00	205	120	325
Avg of 2 Days 12:00-12:15	234	142	377
Avg of 2 Days 12:15-12:30	220	140	360
Avg of 2 Days 12:30-12:45	204	138	343
Avg of 2 Days 12:45-1:00	184	196	379
Avg of 2 Days 1:00-1:15	203	175	379
Avg of 2 Days 1:15-1:30	215	184	399
Avg of 2 Days 4:30-4:45	156	184	341
Avg of 2 Days 4:45-5:00	134	170	303
Avg of 2 Days 5:00-5:15	154	172	326
Avg of 2 Days 5:15-5:30	133	157	290
Avg of 2 Days 5:30-5:45	153	156	309
Avg of 2 Days 5:45-6:00	164	162	327
Avg of 2 Days 6:00-6:15	175	176	351
Avg of 2 Days 6:15-6:30	149	141	290

Est Veh Trips/Ped Cnts = 5,378

Source: Walter H. Keller, Inc.

Table 34 - Galleria Shopping Mall - Pedestrian Traffic Estimate

ITE Reg Shopping Center Hrly Traffic Loadings			
Time	In	Out	Total
11 - 12 AM	8.6%	5.9%	
12 - 1PM	9.5%	7.9%	
1 - 2 PM	8.7%	8.2%	
4 -5 PM	8.2%	9.1%	
5 - 6 PM	8.3%	9.5%	
6 - 7 PM	7.8%	7.7%	
11:30 AM-1:30 PM & 4:30 PM-7:30 PM Total	34.5%	32.9%	33.7%

ITE Reg Shopping Center Daily Traffic Estimate	
24 Hour Ext Traffic Estimate =	32,275
Adj for Day & Month =	31,420
Estimated Traffic for Ped Count Time Frame =	10,573

Ped Count Est % of ITE Estimate	
Ped Count Veh Traffic Estimate (Tab 10) =	5,378
ITE Vehicle Est for Ped Count Time Frame =	10,573
Ped Count % of ITE Estimate =	50.87%

Source: Walter H. Keller, Inc.

Questionnaire Results

Overview of Questionnaire Analysis

A major component of the data collection effort for the Districtwide Trip Generation Study was collecting face to face questionnaire interviews with users and workers at the study sites. At each site, face to face interviews were collected over a two (2) day period during the Midday (10:00 AM - 2:00 PM) and PM peak hour (3:00 PM- 6:30 PM) time frames. The questionnaires were based on questions relative to major trip purpose, major destination, additional destinations, the origin and destination of the trip, mode and demographic profile. The questionnaire was based on the recommended procedures as outlined in the ITE Trip Generation Report - 5th Edition for mixed use sites. A total of 2,189 interviews were collected. The actual tabulation of the interviews can be found in Technical Report 3.0 along with the preliminary tabulations of the findings. This report provides final tabulation of the survey results for each study site based upon final review and editing.

In addition to providing information on trip purposes and destinations, the questionnaire results were also utilized to estimate the amount of internalization, pass-by characteristics, and diverted trips.

Crocker Center Questionnaire Results

A total of 650 interviews were completed during the two (2) day survey periods at Crocker Center. Table 35 provides a tabulation of the questionnaire results. In general, the majority of trip purposes were for work (42%), followed by eating (25%). The majority of trip destinations were office (39%), followed by restaurant (33%). The majority of origins came from the home (62%), with an off-site work location accounting for 18% of the trip origins. Three (3%) percent of all trips originated from the on-site Marriott Hotel.

The auto accounted for 97% of all trips, walking/biking accounted for 2% and no trips were by transit. Year round residents accounted for 91% of all respondents, tourists totaled 8%, and seasonal residents were 2% of the people surveyed.

Internalization

A screening procedure was utilized to identify the amount of internalization. In this procedure, the survey results were first grouped into users and workers at the center,

Table 35 - Crocker Center Questionnaire Results

Question 1: **What is your major purpose for coming to Crocker Center?**

Work	Shop	Eat	Personal Service	Conduct Business	Lodging	Live Here	Browse	Cinema	Other
41.7%	9.1%	24.8%	6.3%	10.3%	2.0%	0.2%	3.7%	0.0%	2.0%

Question 2: **What is your major destination here?**

Office	Retail	Restaurant	Bank/ S&L ATM	Medical/ Dental	Hotel/ Motel	SFH	MFH	Cinema	Other
39.4%	19.6%	32.8%	1.4%	2.3%	4.2%	0.0%	0.0%	0.0%	30.8%

Question 3: **Which other types of buildings or establishments have you visited or intend to visit here today?**

Office	Retail	Restaurant	Bank/ S&L ATM	Medical/ Dental	Hotel/ Motel	SFH	MFH	Cinema	Other	None
6.5%	17.2%	34.0%	0.9%	0.0%	0.6%	0.0%	0.0%	0.0%	0.5%	40.3%

no additional destinations	one additional destination	two additional destinations	three additional destinations	four or more additional destinations
40.3%	59.7%	14.8%	2.6%	0.9%

Question 4: **Where did you come from before arriving at Crocker Center today?**

Live/ Stay Crocker Center	Off-site Home	Off-site Work	Off-site Hotel/ Motel	Off-site Store/ Office	Other
2.7%	62.4%	17.8%	1.4%	3.8%	11.9%

Question 6: **Was this stop along your normal route or did you deviate from your normal route to come here?**

Normal Route	Deviation from Route
71.4%	28.6%

Table 35 - Crocker Center Questionnaire Results
(Continued)

Question 7: Where will you go immediately after leaving Crocker Center?

Home	Work	Hotel/ Motel	Retail Stores	Office	Other
57.8%	13.1%	2.3%	7.7%	4.2%	14.9%

Question 10: What mode of travel did you use to get here?

Automobile/ Van	Transit Bus	Motor Cycle Scooter	Taxi	Local Tram	Bicycle	Walk	Other
96.6%	0.3%	0.0%	1.1%	0.0%	0.5%	1.1%	0.3%

Question 11: What mode of travel will you use to leave here?

Automobile/ Van	Transit Bus	Motor Cycle Scooter	Taxi	Local Tram	Bicycle	Walk	Other
96.4%	0.6%	0.0%	1.1%	0.0%	0.5%	1.1%	0.3%

Question 12: If you arrived by automobile, which of these applies?

Driver	Passenger
91.4%	8.6%

Question 13: Which of these statements best describes you?

Live in SF 6 months +	Live in SF 3-5 months	Tourist
90.7%	1.5%	7.7%

Question 14: Age?

Under 24	25-44	45-54	55-64	65+
9.6%	50.0%	17.5%	13.8%	9.1%

Table 35 - Crocker Center Questionnaire Results
(Continued)

Question 15: Occupation?

Employed	Retired	Homemaker	Student	Unemployed
73.7%	12.4%	6.4%	5.3%	2.0%

Question 16: Household Income?

Under 25 K	25-50 K	50-75 K	75-100 K	100 K +
10.6%	28.3%	24.9%	12.5%	23.6%

Question 17: Size of Household?

One	Two	Three	Four	Five +
20.2%	38.1%	16.6%	18.9%	39.0%

Question 18: Number of vehicles in household?

None	One	Two	Three	Four	Five +
0.3%	27.8%	52.8%	10.8%	5.7%	2.5%

Question 19: Type of housing here?

Single Family	Duplex	Townhouse	Mobile Home	Hotel/ Motel	Apt/ Condo 1-3 Stories	Apt/ Condo > 3 Stories
58.0%	3.6%	11.4%	0.8%	14.8%	9.2%	2.2%

and then sorted by primary trip purpose. The surveys were then sorted into subgroups based on the number of internal visits which the individual made.

Three levels of stratification were used to describe the site's major uses. The first level is broken into the least number of uses: office, commercial, hotel, other and browse. The next level of stratification separates the commercial use into retail and restaurant. The final level of stratification separates the restaurant uses into sit-down and fast food.

Tables 36 - 38 identify the internalization results for Crocker Center. In general, users visiting the site make one internal trip for every secondary visit. Workers, on the other hand, generally return to their place of employment after visiting a secondary use; thereby making two internal trips. This is not always the case for a worker, however, since some secondary visits may be made after leaving one's place of employment for the day (or prior to arriving to work for the day). As such, it was assumed that the first secondary visit made by a worker will generate 1.5 internal trips, and every secondary visit made thereafter by a user, will generate 1.0 internal trip. All external primary visits (by their nature) generate 2.0 external trips (inbound and out bound). Figure 7 has been prepared to illustrate the trip end characteristics of external and internal trips.

Tables 36 - 38 reveal that of the 1,300 external person trips generated by the Crocker Center, 907 additional internal trips were produced. For users, 447 internal trips were produced and 758 primary trips. For workers, 460 internal trips were produced and 542 primary trips.

Pass-by Trips

An additional screening process was utilized to identify the amount of pass-by trips attracted to Crocker Center. The following criteria were used to determine pass-by trips:

- the major trip purpose was to shop, eat a meal, personal service to conduct business or to browse ;
- the major trip destination was to an office, retail, restaurant or financial type use ;
- the trip origin was off-site;
- the trip was made by an automobile/van ; and,
- the trip could not have the same origin and destination.

Table 36 - Crocker Center Internalization (1)
1st Stratification

Destination	Major Destination (5)	External Trips (2)	Destination +1	Internal Trips	Destination +2	Internal Trips	Destination +3	Internal Trips	Destination +4	Internal Trips	Total Internal Trips	% of Internal Trips	Live/ Stay Crocker
Users (3)													14
Office	84	168	20	20	2	2	2	2			24	5.4%	
Commercial	274	548	172	172	50	50	6	6			228	51.0%	
Hotel	19	38	2	2	2	2	1	1	5	5	10	2.2%	
Other	2	4	1	1							1	0.2%	
Browse			184	184							184	41.2%	
Sub-Total	379	758	379	379	54	54	9	9	5	5	447	100.0%	14
Workers (4)													
Office	196	392	28	42	4	4	2	2			48	10.4%	2
Commercial	67	134	161	242	32	32	5	5			279	60.6%	1
Hotel	8	16	2	3	7	7	2	2	1	1	13	2.8%	
Other			2	3							3	0.7%	
Browse			78	117							117	25.5%	
Sub-Total	271	542	271	407	43	43	9	9	1	1	460	100.0%	3
Total	650	1300	650	786	97	97	18	18	6	6	907		17

Source: Walter H. Keller, Inc.

(1) Based on questionnaire population.
(2) Primary purpose visits to the site generate two (2) external trips.
(3) Secondary visits made by users of the site are assumed to generate one (1) internal trip.
(4) Secondary visits made by workers at the site are assumed to generate 1.5 trips per visit for the first additional destination and then one (1) trip per destination for additional on-site destinations.
(5) The major destination is the primary trip purpose.

Table 37 - Crocker Center Internalization (1)
2nd Stratification

Destination	Major Destination (5)	External Trips 2)	Destination +1	Internal Trips	Destination +2	Internal Trips	Destination +3	Internal Trips	Destination +4	Internal Trips	Total Internal Trips	% of Internal trips	Live/ Stay Crocker
Users (3)													14
Office	84	168	20	20	2	2	2	2			24	5.4%	
Retail	88	176	88	88	8	8	6	6			102	22.8%	
Restaurant	186	372	84	84	42	42					126	28.2%	
Hotel	19	38	2	2	2	2	1	1	5	5	10	2.2%	
Other	2	4	1	1							1	0.2%	
Browse			184	184							184	41.2%	
Sub-Total	379	758	379	379	54	54	9	9	5	5	447	100.0%	14
Workers (4)													
Office	196	392	28	42	4	4	2	2			48	10.4%	2
Retail	40	80	24	36	9	9					45	9.8%	
Restaurant	27	54	137	206	23	23	5	5			234	50.8%	1
Hotel	8	16	2	3	7	7	2	2	1	1	13	2.8%	
Other			2	3							3	0.7%	
Browse			78	117							117	25.5%	
Sub-Total	271	542	271	407	43	43	9	9	1	1	460	100.0%	3
Total	650	1300	650	786	97	97	18	18	6	6	907		17

Source: Walter H. Keller, Inc.

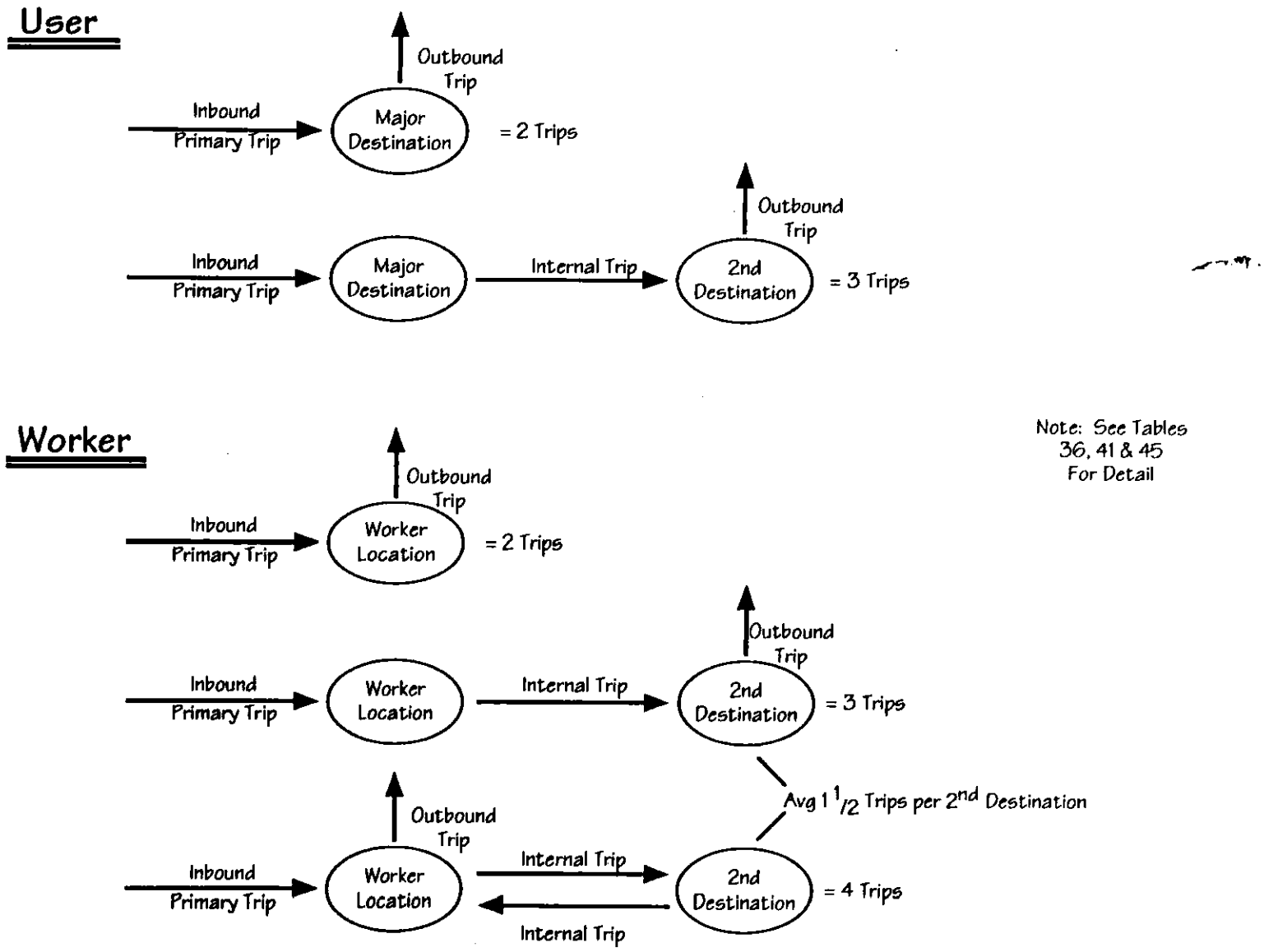
(1) Based on questionnaire population.
(2) Primary purpose visits to the site generate two (2) external trips.
(3) Secondary visits made by users of the site are assumed to generate one (1) internal trip.
(4) Secondary visits made by workers at the site are assumed to generate 1.5 trips per visit for the first additional destination and then one (1) trip per destination for additional on-site destinations.
(5) The major destination is the primary trip purpose.

Table 38 - Crocker Center Internalization (1)
3rd Stratification

Destination	Major Destination (5)	External Trips (2)	Destination +1	Internal Trips	Destination +2	Internal Trips	Destination +3	Internal Trips	Destination +4	Internal Trips	Total Internal Trips	% of Internal Trips	Live/ Stay Crocker
Users (3)													14
Office	84	168	20	20	2	2	2	2			24	5.4%	
Retail	88	176	88	88	8	8	6	6			102	22.8%	
Restaurant-Sit Down	101	202	58	58	27	27					85	19.0%	
Restaurant- Fast Food	85	170	26	26	15	15					41	9.2%	
Hotel	19	38	2	2	2	2	1	1	5	5	10	2.2%	
Other	2	4	1	1							1	0.2%	
Browse			184	184							184	41.2%	
Sub-Total	379	758	379	379	54	54	9	9	5	5	447	100.0%	14
Workers (4)													
Office	196	392	28	42	4	4	2	2			48	10.4%	2
Retail	40	80	24	36	9	9					45	9.8%	
Restaurant-Sit Down	27	54	125	188	23	23	5	5			216	46.9%	1
Restaurant- Fast Food			12	18							18	3.9%	
Hotel	8	16	2	3	7	7	2	2	1	1	13	2.8%	
Other			2	3							3	0.7%	
Browse			78	117							117	25.5%	
Sub-Total	271	542	271	407	43	43	9	9	1	1	460	100.0%	3
Total	650	1300	650	786	97	97	18	18	6	6	907		17

Source: Walter H. Keller, Inc.

(1) Based on questionnaire population.
(2) Primary purpose visits to the site generate two (2) external trips.
(3) Secondary visits made by users of the site are assumed to generate one (1) internal trip.
(4) Secondary visits made by workers at the site are assumed to generate 1.5 trips per visit for the first additional destination and then one (1) trip per destination for additional on-site destinations.
(5) The major destination is the primary trip purpose.



Districtwide Trip Generation Study

Figure 22 - Internalization Methodology

Walter H. Keller, Inc.
Consulting Engineers & Planners

Table 39, below, presents the result of the pass-by analysis. For Crocker Center, twenty-six (26%) percent of the respondents were estimated to be pass-by trips.

Table 39 - Crocker Pass-By (vehicle trips)

Crocker Center Pass-by Trips		
Land Use	**Number**	**%**
Retail	34	20.1%
Restaurant	81	47.9%
Personal Service	17	10.1%
Business	26	15.4%
Browse	11	6.5%
Total (Site Pass-by)	**169**	**100.0%**
Total (Site Respondent	**650**	**26.0%**

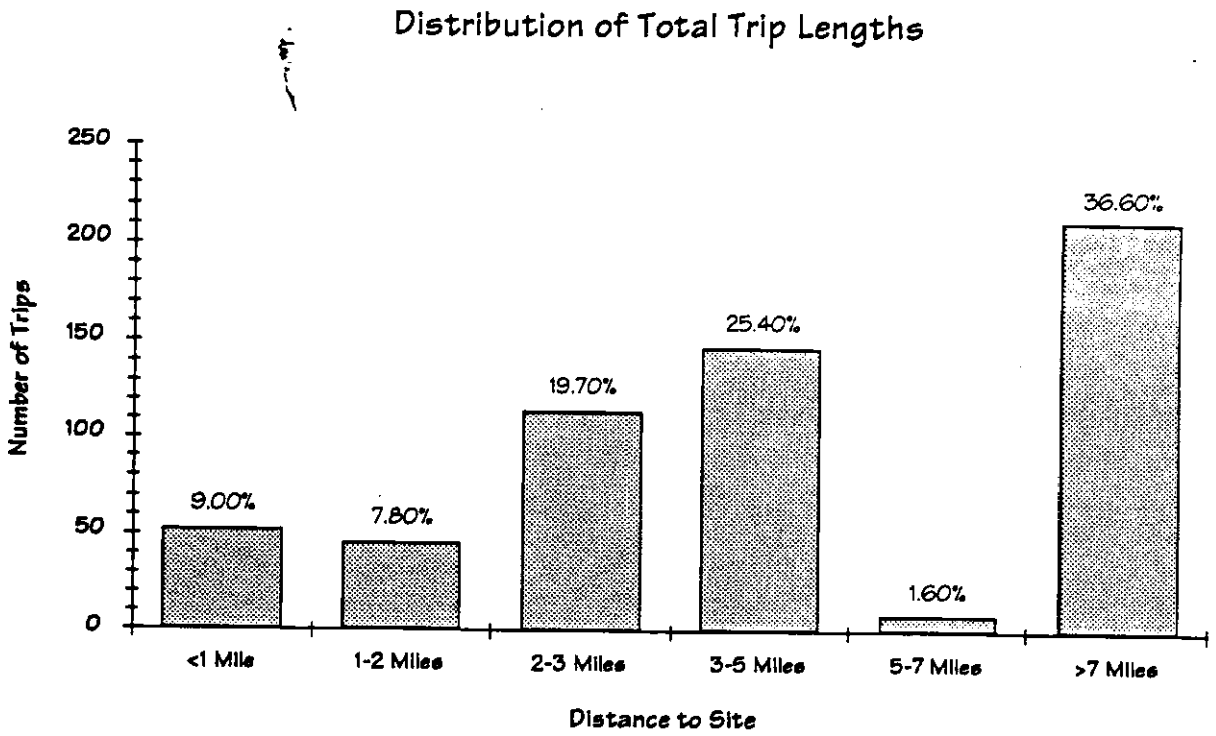
Source: Walter H. Keller, Inc.

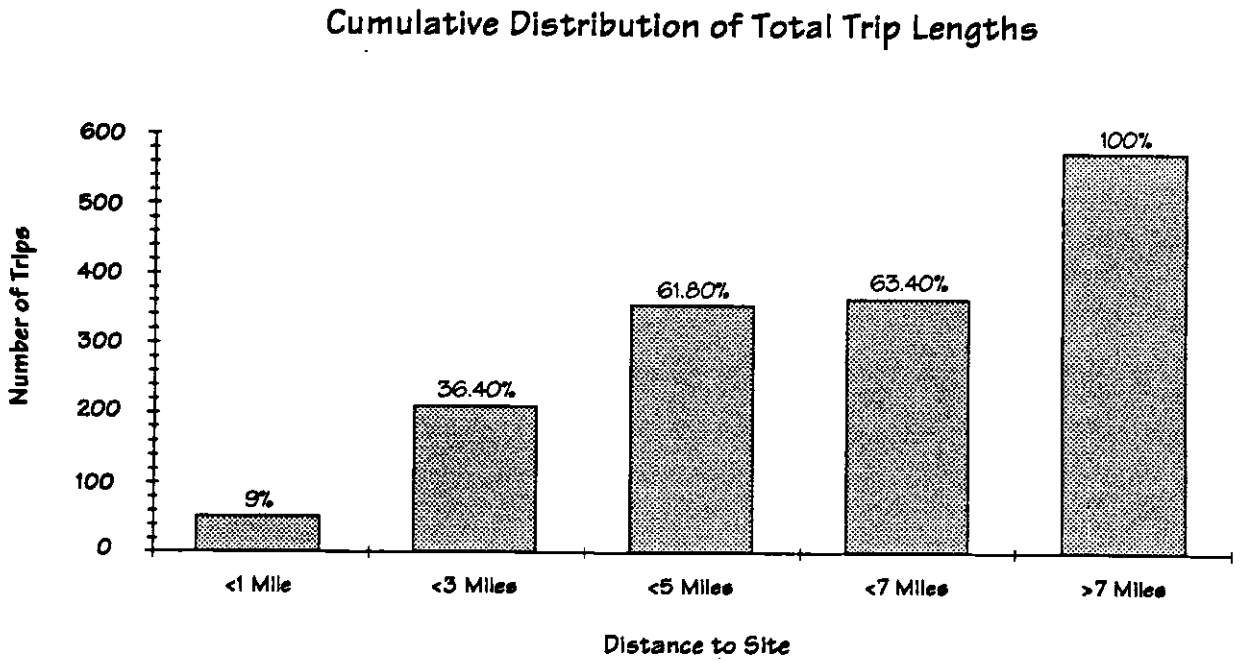
Trip Length

Each questionnaire respondent was asked to identify the trip origin and destination location. This information was processed to identify the distribution of trips from the site and the cumulative distribution of trips. Figures 23 - 24 provide a graphic representation of the trip distribution. Figure 23 provides a bar chart of the distribution of total trip lengths and the cumulative distribution. Figure 24 illustrates the trip distribution in radial miles around the site.

Mizner Park Questionnaire Results

A total of 720 interviews were completed during the two (2) day survey period at Mizner Park. Table 40 provides a tabulation of the questionnaire results. In general, the majority of trip purposes were for shopping (29%), followed by work (17%). The majority of trip destinations were retail (49%), followed by restaurant (22%). The majority of trip origins came from the home (61%), with off-site work location accounting for 12% of the trip origins. Three (3%) percent of all trips originated from the on-site apartments.





Districtwide Trip Generation Study

Figure 23 - Crocker Center Site

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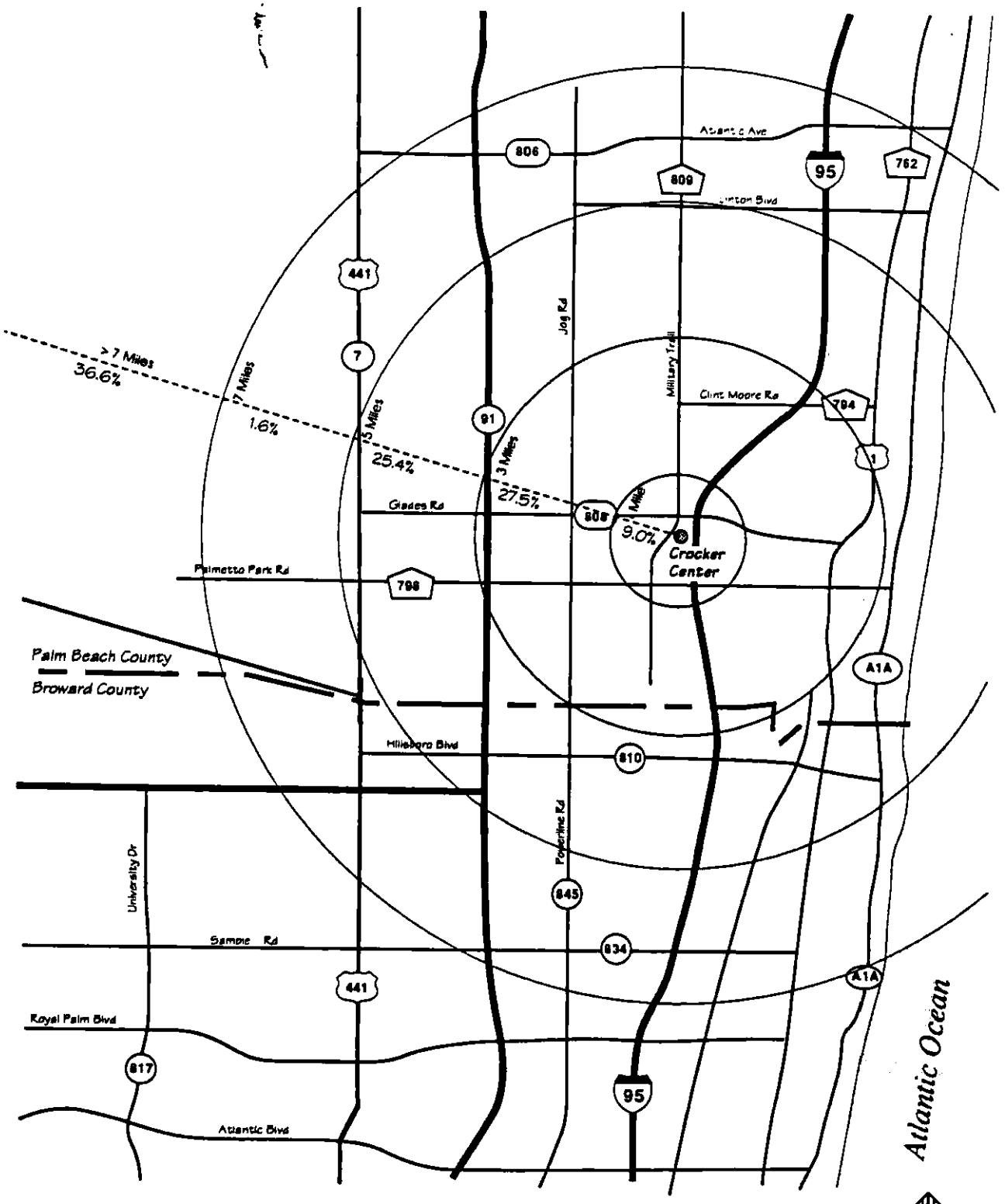


Districtwide Trip Genereration Study

Figure 24 - Crocker Center Site, Trip Length Distribution

north
N.T.S.

Walter H. Keller, Inc.
Consulting Engineers & Planners

Table 40 - Mizner Park Questionnaire Results

Question 1: What is your major purpose for coming to Mizner Park?

Work	Shop	Eat	Personal Service	Conduct Business	Lodging	Live Here	Browse	Cinema	Other
17.2%	28.5%	15.6%	6.5%	4.9%	0.0%	2.6%	14.4%	9.4%	0.6%

Question 2: What is your major destination here?

Office	Retail	Restaurant	Bank/ S&L ATM	Medical/ Dental	Hotel/ Motel	SFH	MFH	Cinema	Other	Browse
8.8%	49.2%	21.5%	2.8%	1.5%	0.0%	0.0%	1.7%	9.9%	2.2%	2.5%

Question 3: Which other types of buildings or establishments have you visited or intend to visit here today?

Office	Retail	Restaurant	Bank/ S&L ATM	Medical/ Dental	Hotel/ Motel	SFH	MFH	Cinema	Other	None
1.5%	38.9%	26.3%	2.5%	0.4%	0.0%	0.0%	0.3%	1.0%	1.7%	27.5%

no additional destinations	one additional destination	two additional destinations	three additional destinations	four or more additional destinations
27.5%	72.5%	20.6%	3.6%	0.7%

Question 4: Where did you come from before arriving at Mizner Park today?

Live/ Stay Mizner Park	Off-site Home	Off-site Work	Off-site Hotel/ Motel	Off-site Store/ Office	Other
3.2%	61.4%	12.2%	5.6%	7.9%	9.7%

Question 6: Was this stop along your normal route or did you deviate from your normal route to come here?

Normal Route	Deviation from Route
51.6%	48.4%

Table 40 - Mizner Park Questionnaire Results
(Continued)

Question 7: Where will you go immediately after leaving Mizner Park?

Home	Work	Hotel/ Motel	Retail Stores	Office	Other
57.4%	7.8%	5.3%	11.0%	2.5%	16.1%

Question 10: What mode of travel did you use to get here?

Automobile/ Van	Transit Bus	Motor Cycle Scooter	Taxi	Local Tram	Bicycle	Walk	Other
91.6%	2.1%	0.0%	0.3%	0.1%	2.0%	3.9%	0.0%

Question 11: What mode of travel will you use to leave here?

Automobile/ Van	Transit Bus	Motor Cycle Scooter	Taxi	Local Tram	Bicycle	Walk	Other
96.4%	0.6%	0.0%	1.1%	0.0%	0.5%	1.1%	0.3%

Question 12: If you arrived by automobile, which of these applies?

Driver	Passenger
85.0%	15.0%

Question 13: Which of these statements best describes you?

Live in SF 6 months +	Live in SF 3-5 months	Tourist
83.6%	3.9%	12.5%

Question 14: Age?

Under 24	25-44	45-54	55-64	65+
16.5%	40.8%	18.2%	11.7%	12.8%

Table 40 - Mizner Park Questionnaire Results
(Continued)

Question 15: Occupation?

Employed	Retired	Homemaker	Student	Unemployed
66.2%	17.0%	7.0%	8.1%	1.7%

Question 16: Household Income?

Under 25 K	25-50 K	50-75 K	75-100 K	100 K +
19.5%	25.7%	20.4%	12.3%	22.1%

Question 17: Size of Household?

One	Two	Three	Four	Five +
21.1%	38.5%	17.7%	16.0%	6.6%

Question 18: Number of vehicles in household?

None	One	Two	Three	Four	Five +
0.9%	27.7%	49.4%	16.2%	5.2%	0.6%

Question 19: Type of housing here?

Single Family	Duplex	Townhouse	Mobile Home	Hotel/ Motel	Apt/ Condo 1-3 Stories	Apt/ Condo > 3 Stories
52.8%	3.8%	11.0%	0.6%	12.9%	11.0%	8.0%

The auto accounted for 96% of all trips, walking/biking accounted for 2%, and 1% of all trips were by transit. Year round residents accounted for 84% of all respondents, tourists totaled 13%, and seasonal residents were 4% of the people surveyed.

Internalization

The same procedure which was used to determine the internalization for Crocker Center was followed for Mizner Park. However, only two stratifications were developed. These stratifications included the major land uses of office, commercial, multi-family residential, other and browse. The second stratification provides refined land uses within office and commercial uses. Tables 41 - 42 identify the Mizner Park internalization. This table also estimates the number of trips produced both internal and external.

Tables 41 - 42 reveal that of the 720 primary trips generated by the site, 1,440 external and 966 additional internal trips were produced. For users, 730 internal trips were produced and 596 primary trips. For workers, 236 internal trips were produced and 124 primary trips.

Pass-by Trips

Table 43 presents the result of the Mizner Park pass-by analysis. For Mizner Park, 29.2 percent of the respondents were estimated to be pass-by trips.

Table 41 - Mizner Park Internalization (1)
1st Stratification

Destination	Major Destination (5)	External Trips (2)	Destination +1	Internal Trips	Destination +2	Internal Trips	Destination +3	Internal Trips	Destination +4	Internal Trips	Total Internal Trips	% of Internal Trips	Live/ Stay Mizner
Users (3)													21
Office	23	46	7	7	1	1					8	1.1%	
Commercial	531	1062	412	412	113	113	16	16	3	3	544	74.5%	
MFH	10	20	2	2	1	1					3	0.4%	
Other	14	28	11	11							11	1.5%	
Browse	18	36	164	164							164	22.5%	
Sub-Total	596	1192	596	596	115	115	16	16	3	3	730	100.0%	21
Workers (4)													
Office	51	102	7	11					1	1	12	4.9%	1
Commercial	69	138	82	123	27	27	18	18	4	4	172	72.9%	1
MFH	2	4									0	0.0%	
Other	2	4	1	2							2	0.6%	
Browse			34	51							51	21.6%	
Sub-Total	124	248	124	186	27	27	18	18	5	5	236	100.0%	2
Total	720	1440	720	782	142	142	34	34	8	8	966		23

Source: Walter H. Keller, Inc.

(1) Based on questionnaire population.
(2) Primary purpose visits to the site generate two (2) external trips.
(3) Secondary visits made by users of the site are assumed to generate one (1) internal trip.
(4) Secondary visits made by workers at the site are assumed to generate 1.5 trips per visit for the first additional destination and then one (1) trip per destination for additional on-site destinations.
(5) The major destination is the primary trip purpose.

Table 42 - Mizner Park Internalization (1)
2nd Stratification

Destination	Major Destination (5)	External Trips (2)	Destination +1	Internal Trips	Destination +2	Internal Trips	Destination +3	Internal Trips	Destination +4	Internal Trips	Total Internal Trips	% of Internal Trips	Live/ Stay Mizner
Users (3)													21
Office-General	13	26	4	4							4	0.5%	
Office-Med/Dent	10	20	3	3	1	1					4	0.5%	
Retail	306	612	247	247	3	3					250	34.2%	
Restaurant-Sit Down	139	278	145	145	91	91	2	2			238	32.6%	
Bank w/ Drive Thru	17	34	13	13	3	3	4	4	2	2	22	3.0%	
Cinema-8 Screens	69	138	7	7	16	16	10	10	1	1	34	4.7%	
MFH	10	20	2	2	1	1					3	0.4%	
Other	14	28	11	11							11	1.5%	
Browse	18	36	164	164							164	22.5%	
Sub-Total	596	1192	596	596	115	115	16	16	3	3	730	100.0%	21
Workers (4)													
Office-General	50	100	7	11					1	1	12	4.9%	1
Office-Med/ Dent	1	2									0	0.0%	
Retail	48	96	33	50	2	2					52	21.8%	
Restaurant-Sit Down	16	32	44	66	21	21	10	10			97	41.1%	1
Bank w/ Drive Thru	3	6	5	8	1	1	4	4	2	2	15	6.1%	
Cinema-8 Screens	2	4			3	3	4	4	2	2	9	3.8%	
MFH	2	4									0	0.0%	
Other	2	4	1	2							2	0.6%	
Browse			34	51							51	21.6%	
Sub-Total	124	248	124	186	27	27	18	18	5	5	236	100.0%	2
Total	720	1440	720	782	142	142	34	34	8	8	966		23

Source: Walter H. Keller, Inc.

(1) Based on questionnaire population.
(2) Primary purpose visits to the site generate two (2) external trips.
(3) Secondary visits made by users of the site are assumed to generate one (1) internal trip.
(4) Secondary visits made by workers at the site are assumed to generate 1.5 trips per visit for the first additional destination and then one (1) trip per destination for additional on-site destinations.
(5) The major destination is the primary trip purpose.

Table 43 - Mizner Pass-By (vehicle trips)

Mizner Park Pass-by Trips		
Land Use	**Number**	**%**
Retail	98	46.7%
Restaurant	41	19.5%
Personal Service	20	9.5%
Business	14	6.7%
Browse	37	17.6%
Total (Site Pass-by)	**210**	**100.0%**
Total (Site Respondents)	**720**	**29.2%**

Source: Walter H. Keller, Inc.

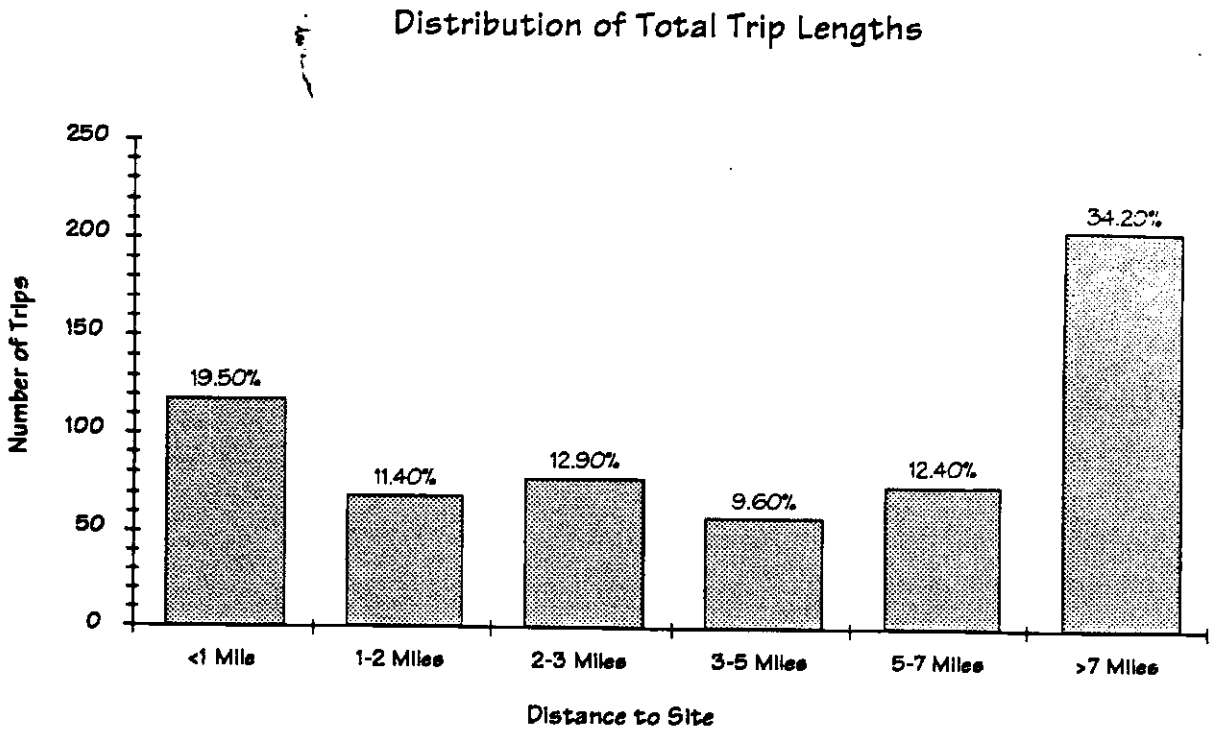
Trip Length

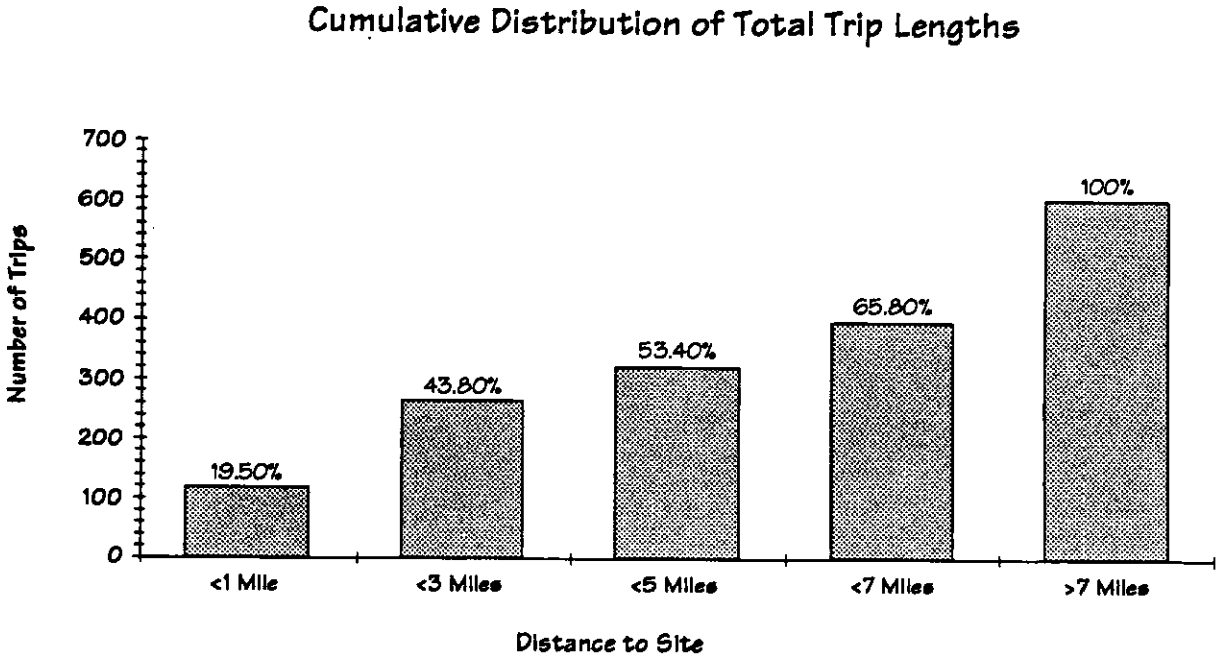
Figures 25 - 26 provide a graphic representation of the Mizner Park trip distribution. Figure 25 illustrates a bar chart of the distribution of total trip lengths and the cumulative distribution while Figure 26 depicts the trip distribution in radial miles around the site.

Galleria Area Questionnaire Results

A total of 819 interviews were completed for the Galleria Area during the two (2) day survey period. Table 44 provides a tabulation of the questionnaire results. In general, the majority of trip purposes were for shopping (47%), followed by work (22%). The majority of trip destinations were the Galleria Shopping Mall (67%), followed by offices (11%). The majority of trip origins came from the home (57%), with an off-site work location accounting for 11% of the trip origins. Seven (7%) percent of all trips originated from the on-site residential uses or the Guest Suites Hotel.

The auto accounted for 87% of all trips, walking/biking accounted for 6%, and 5% of all trips were by transit. Year round residents accounted for 77% of all respondents, tourists totaled 17%, and seasonal residents were 6% of the people surveyed.





Districtwide Trip Generation Study

Figure 25 - Mizner Park Site

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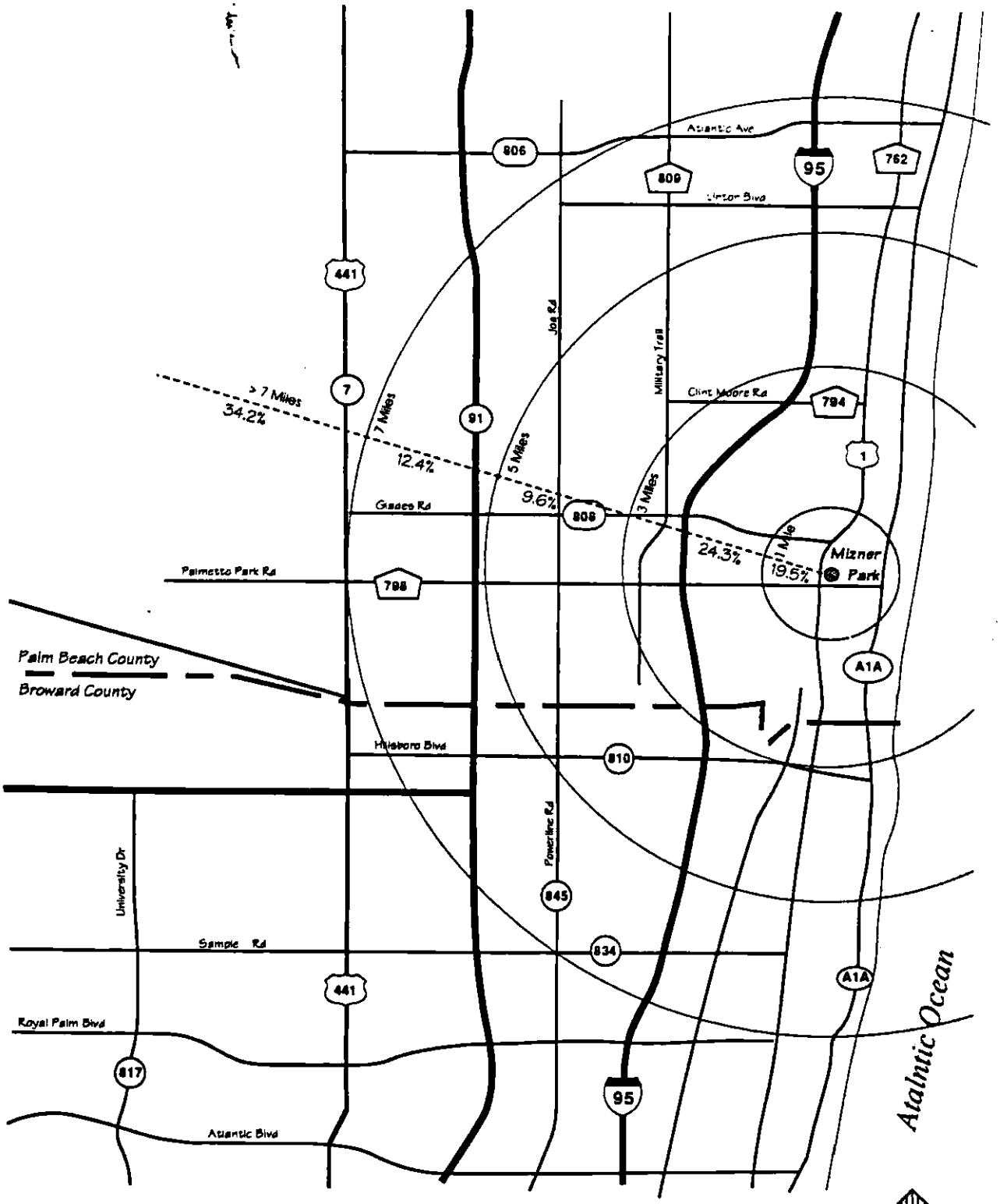


Districtwide Trip Genereration Study

Figure 26 - Mizner Park Site, Trip Length Distribution

north
N.T.S.

Walter H. Keller, Inc.
Consulting Engineers & Planners

Table 44 - Galleria Questionnaire Results

Question 1: What is your major purpose for coming to Galleria Area?

Work	Shop	Eat	Personal Service	Conduct Business	Lodging	Live Here	Browse	Cinema	Other
21.5%	47.0%	7.3%	3.8%	4.9%	1.6%	1.3%	9.6%	0.7%	2.2%

Question 2: What is your major destination in the Galleria Area?

Galleria Shopping Center	Office	Retail	Restaurant	Bank/ S&L ATM	Medical/ Dental	Hotel/ Motel	SFH	MFH	Cinema	Other
67.0%	10.7%	8.9%	5.3%	0.6%	2.8%	3.2%	0.2%	0.2%	0.7%	0.2%

Question 3: If visiting the Galleria Shopping Center, what is your major destination in the Center?

Office	Retail	Restaurant	Bank/ S&L ATM	Medical/ Dental	Hotel/ Motel	SFH	MFH	Cinema	Other	Not Visiting Mall
5.4%	67.3%	9.5%	0.4%	1.3%	1.8%	0.1%	0.0%	0.9%	0.9%	12.5%

Question 4: Which other types of buildings or establishments have you visited or intend to visit here today?

Office	Retail	Restaurant	Bank/ S&L ATM	Medical/ Dental	Hotel/ Motel	SFH	MFH	Cinema	Other Destination in Mall	None
4.8%	46.3%	18.6%	1.6%	0.9%	2.7%	0.1%	0.2%	1.6%	1.1%	22.2%

no additional destinations	one additional destination	two additional destinations	three additional destinations	four or more additional destinations
22.2%	69.4%	25.2%	9.5%	2.3%

Question 5: Where did you come from before arriving at Galleria Area today?

Live/ Stay Galleria Area	Off-site Home	Off-site Work	Off-site Hotel/ Motel	Off-site Store/ Office	Other
6.8%	57.4%	11.2%	8.9%	6.5%	9.2%

Table 44 - Galleria Questionnaire Results
(Continued)

Question 7: Was this stop along your normal route or did you deviate from your normal route to come here?

Normal Route	Deviation from Route
51.4%	48.6%

Question 8: Where will you go immediately after leaving Galleria Area?

Home	Work	Hotel/ Motel	Retail Stores	Office	Other
60.0%	8.5%	9.6%	5.0%	2.8%	14.0%

Question 11: What mode of travel did you use to get here?

Automobile/ Van	Transit Bus	Motor Cycle Scooter	Taxi	Local Tram	Bicycle	Walk	Other
86.7%	5.0%	0.1%	1.6%	0.1%	0.6%	5.8%	0.0%

Question 12: What mode of travel will you use to leave here?

Automobile/ Van	Transit Bus	Motor Cycle Scooter	Taxi	Local Tram	Bicycle	Walk	Other
87.3%	4.9%	0.1%	1.2%	0.1%	0.6%	5.5%	0.1%

Question 13: If you arrived by automobile, which of these applies?

Driver	Passenger
83.8%	16.2%

Question 14: Which of these statements best describes you?

Live in SF 6 months +	Live in SF 3-5 months	Tourist
77.2%	5.5%	17.3%

Table 44 - Galleria Questionnaire Results
(Continued)

Question 15: Age?

Under 24	25-44	45-54	55-64	65+
17.9%	41.6%	13.4%	10.9%	16.3%

Question 16: Occupation?

Employed	Retired	Homemaker	Student	Unemployed
66.3%	17.9%	5.5%	7.1%	3.3%

Question 17: Household Income?

Under 25 K	25-50 K	50-75 K	75-100 K	100 K +
23.1%	34.6%	19.4%	11.7%	11.1%

Question 18: Size of Household?

One	Two	Three	Four	Five +
21.6%	39.8%	16.5%	13.6%	8.4%

Question 19: Number of vehicles in household?

None	One	Two	Three	Four	Five +
3.1%	21.8%	40.3%	16.7%	13.8%	8.5%

Question 20: Type of housing here?

Single Family	Duplex	Townhouse	Mobile Home	Hotel/ Motel	Apt/ Condo 1-3 Stories	Apt/ Condo > 3 Stories	Other
41.8%	5.8%	9.5%	0.3%	13.6%	15.3%	13.1%	0.8%

Internalization

As was done with the previously discussed sites, the number of internal trips was estimated for users and workers. Only two trip stratifications were developed for this site. The stratifications included the major land uses of office, commercial, residential, other and browse. The second stratification provides additional refinement of offices, commercial and residential uses. Tables 45 - 46 identify the internalization results for the Galleria Area. Table 45 indicates that of the 819 primary trips generated by the Galleria Area, 1,638 external and 1,015 additional internal trips were produced. For users, 720 internal trips were produced from 643 primary trips. For workers, 295 internal trips were produced from 176 primary trips.

Pass-by Trips

Tables 47 and 48 present the result of the pass-by analysis. For the Galleria Shopping Mall, forty (40%) percent of the respondents were estimated to be pass-by trips. For the Galleria Area, excluding the Galleria Shopping Mall, 15.6% of the respondents were pass-by trips.

Trip Length

Figure 27 provides a bar chart of the distribution of total trip lengths and the cumulative distribution. Figure 28 provides a map of the trip distribution in radial miles around the site.

Table 45 - Galleria (1)
1st Stratification

Destination	Major Destination (5)	External Trips (2)	Destination +1	Internal Trips	Destination +2	Internal Trips	Destination +3	Internal Trips	Destination +4	Internal Trips	Total Internal Trips	% of Internal Trips	Live/ Stay Galleria
Users (3)													48
Office	53	106	20	20	1	1			2	2	23	3.2%	
Commercial	549	1098	450	450	134	134	48	48	9	9	641	89.0%	
Residential	19	38	19	19	13	13	7	7	1	1	40	5.6%	
Other	8	16	6	6	8	8	2	2			16	2.2%	
Browse	14	28											
Sub-Total	643	1286	495	495	156	156	57	57	12	12	720	100.0%	48
Workers (4)													
Office	75	150	15	23	3	3					26	8.7%	2
Commercial	84	168	115	173	52	52	20	20	4	4	249	84.4%	4
Residential	13	26	6	9	1	1	1	1			11	3.7%	2
Other	4	8	3	5	2	2	1	1	2	2	10	3.2%	
Browse													
Sub-Total	176	352	139	209	58	58	22	22	6	6	295	100.0%	8
Total	819	1638	634	704	214	214	79	79	18	18	1015		56

Source: Walter H. Keller, Inc.

(1) Based on questionnaire population.
(2) Primary purpose visits to the site generate two (2) external trips.
(3) Secondary visits made by users of the site are assumed to generate one (1) internal trip.
(4) Secondary visits made by workers at the site are assumed to generate 1.5 trips per visit for the first additional destination and then one (1) trip per destination for additional on-site destinations.
(5) The major destination is the primary trip purpose.

Table 46 - Galleria Area (1)
2nd Stratification

Destination	Major Destination (5)	External Trips (2)	Destination +1	Internal Trips	Destination +2	Internal Trips	Destination +3	Internal Trips	Destination +4	Internal Trips	Total Internal Trips	% of Internal Trips	Live/ Stay Galleria
Users (3)													48
Office-General	30	60	6	6							6	0.8%	
Office-Med/ Dent	19	38	2	2							2	0.3%	
Galleria Center	465	930	370	370	121	121	48	48	8	8	547	76.0%	
Retail	59	118	61	61	1	1					62	8.6%	
Bank w/ Drive Thru	3	6	2	2	1	1	3	3			6	0.8%	
Restaurant-Fast Food	38	76	37	37	25	25					62	8.6%	
Cinema-4 Screens	5	10	5	5	1	1	4	4	4	4	14	1.9%	
SFH	1	2			1	1	1	1			2	0.3%	
MFH	2	4	1	1	1	1					2	0.3%	
Hotel	16	32	10	10	3	3	1	1			14	1.9%	
Other	1	2	1	1	2	2					3	0.4%	
Browse	4	8											
Sub-Total	643	1286	495	495	156	156	57	57	12	12	720	100.0%	48
Workers (4)													
Office-General	58	116	3	5	2	2					7	2.2%	1
Office-Med/ Dent	4	8	2	3	1	1					4	1.4%	
Galleria Center	78	156	71	107	32	32	14	14	5	5	158	53.5%	4
Retail	14	28	27	41	5	5					46	15.4%	
Bank w/ Drive Thru	2	4	5	8	1	1	1	1			10	3.2%	
Restaurant-Fast Food	5	10	22	33	15	15	1	1			49	16.6%	1
Cinema-4 Screens	1	2	1	2			4	4	1	1	7	2.2%	
SFH	1	2	1	2							2	0.5%	
MFH			1	2							2	0.5%	
Hotel	10	20	4	6			1	1			7	2.4%	2
Other	3	6	2	3	2	2	1	1			6	2.0%	
Browse													
Sub-Total	176	352	139	209	58	58	22	22	6	6	295	100.0%	8
Total	819	1638	634	704	214	214	79	79	18	18	1015		56

Source: Walter H. Keller, Inc.

(1) Based on questionnaire population.
(2) Primary purpose visits to the site generate two (2) external trips.
(3) Secondary visits made by users of the site are assumed to generate one (1) internal trip.
(4) Secondary visits made by workers at the site are assumed to generate 1.5 trips per visit for the first additional destination and then one (1) trip per destination for additional on-site destinations.
(5) The major destination is the primary trip purpose.

Table 47 - Galleria Pass-By (vehicle trips)

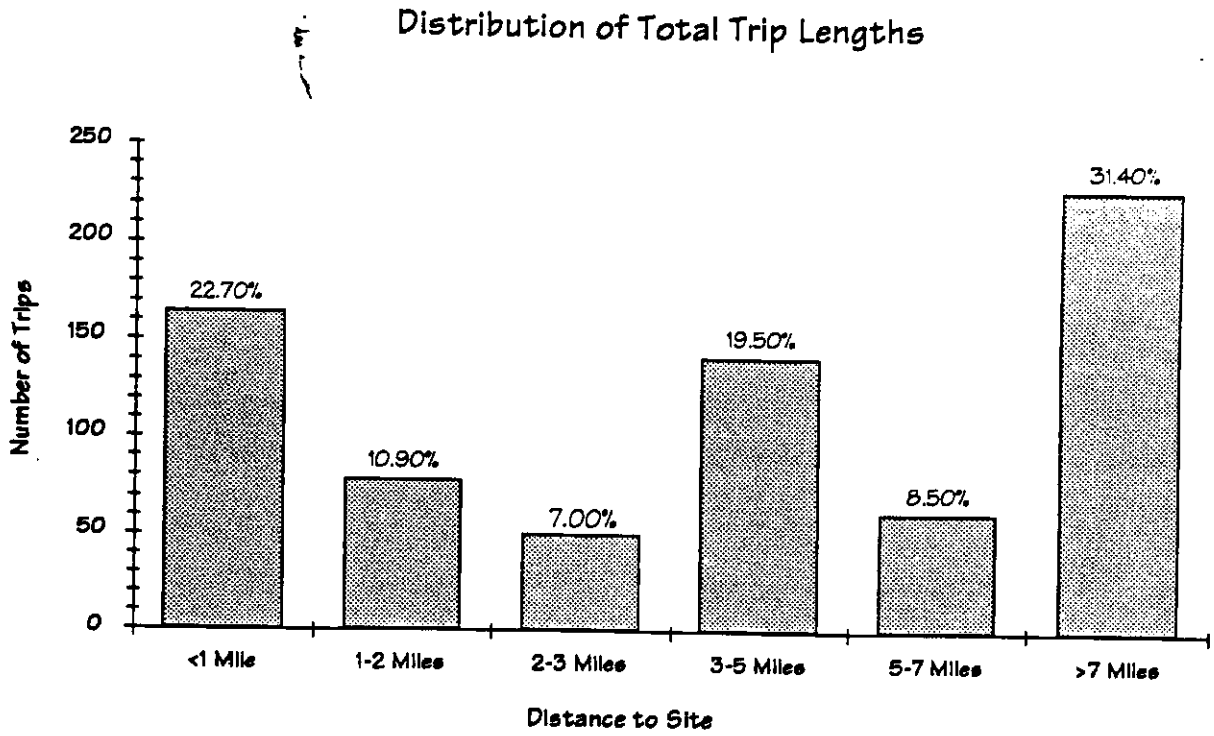
Galleria Shopping Center Pass-by Trips		
Land Use	**Number**	**%**
Retail	3	1.4%
Restaurant	193	88.9%
Personal Service	19	8.8%
Business	0	0.0%
Browse	2	0.9%
Total (Site Pass-by)	**217**	**100.0%**
Total (Site Respondents)	**543**	**40.0%**

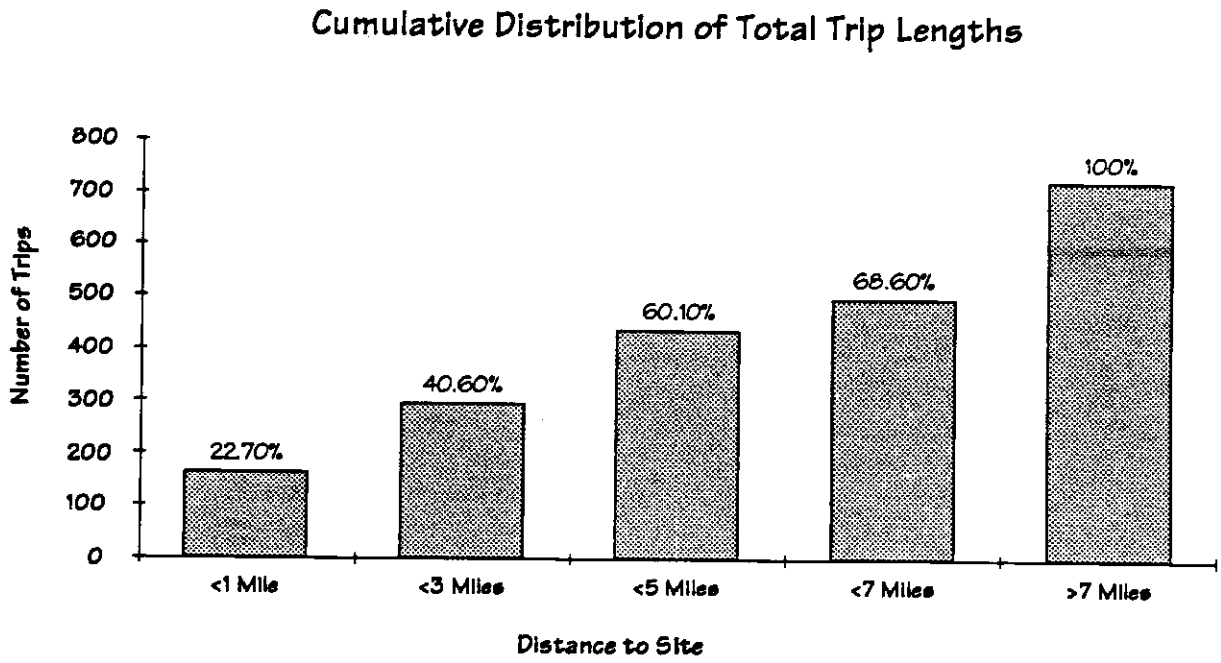
Source: Walter H. Keller, Inc.

Table 48 - Galleria Pass-By (vehicle trips)

Galleria Area Pass-by Trips		
Land Use	**Number**	**%**
Retail	17	39.5%
Restaurant	12	27.9%
Personal Service	1	2.3%
Business	12	27.9%
Browse	1	0.5%
Total (Pass-by)	**43**	**100.0%**
Total (Respondents)	**276**	**15.6%**

Source: Walter H. Keller, Inc.





Districtwide Trip Generation Study

Figure 27 - Galleria Site

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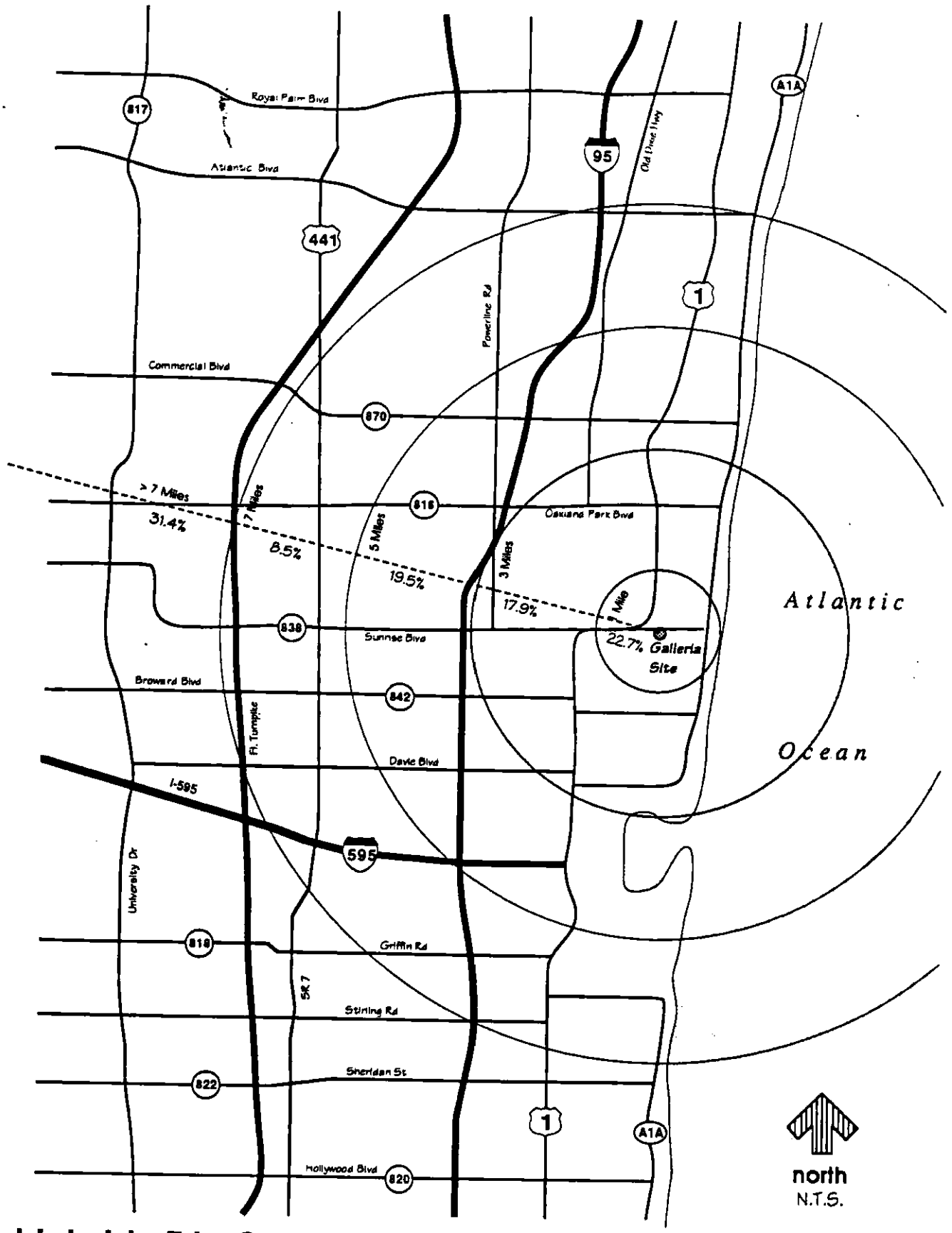

Districtwide Trip Genereration Study

Figure 28 - Galleria Site, Trip Length Distribution

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Statistical Relevance of Questionnaire Sampling

The statistical relevance of the questionnaire sampling is predicated on the analysis of mixed use trip characteristics. Vehicle trips have been categorized by primary destination (i.e., type of function visited) and by whether the trip maker works on the site or does not (i.e., is a user). External trips originate or end off-site, internal trips originate on-site and end on-site.

The internal trips of the study sites were used for the first statistical assessment. Questionnaire results were stratified into users and workers based on the primary trip destination. Total person trips were calculated and separated into external and internal trips. The proportion of person trips external and internal were also computed. Classified by initial primary land use visited, the tables present the proportion of all trips made by workers and users that are external and that are internal, the sum of both proportions must be 1.0 (that is, all trips captured in the trip maker surveys must be categorized as either external or internal).

For the purpose of examination of trip internalization ratios, the minimum number of trips needed in the sample to achieve a fifteen (15%) percent accuracy at a ninety (90%) percent confidence level is derived from the equation below. This equation is from "Sampling in Education and the Social Sciences" by Richard M. Jaeger published in New York by Longman, Inc. in 1984. The equation uses the standard assumption of a normal approximation to the distribution of the sample (internal trip) proportion:

$$n = \frac{(t/\varepsilon)^2 P(1-P)}{1 + (1/N)[(t/\varepsilon)^2 P(1-P) - 1]}$$

For example, if the internal trip proportion is 0.5, the minimum sample size needed for a fifteen (15%) percent accuracy at a ninety (90%) percent confidence level of statistical significance is thirty-one (31). Because the unit of concern is trips, thirty-one (31) trips are needed to meet sample size requirements. If the internal trip proportion is 0.2, the minimum sample size needed is twenty (20) trips or ten (10) surveys.

The standard errors and the lower and the upper bounds for the ninety (90%) percent confidence interval for each land use category are derived from the equation below also by Jaeger:

$$S_p = \sqrt{\frac{p(1-p)}{n}}$$

The confidence interval lower limit (CI_l) and the upper limits (CI_u) are:

$$CI_l = p - 1.645(S_p)$$

$$CI_u = p + 1.645(S_p)$$

Three tables have been prepared to identify the statistical analysis results for each study site. The tables have been stratified to the most detailed land use category by site users, workers and total site.

Table 49 provides the statistical results for the third level of land use stratification for Crocker Center. At the ninety (90%) percent confidence level, the majority of the land use categories internal person trip proportions meet the required statistical accuracy. For example, for the Office land use the combined Users and Workers (Both) category has an accuracy of 2.1 percent. That is, the calculated internal person trip proportion of 0.114 (11.4 percent of all trips made to Offices at Crocker Center were internal trips) has an accuracy of 0.021 (2.1 percent). This means there is a ninety (90%) percent confidence level that the true internal person trip proportion for this land use is between 0.093 (9.3 percent) and 0.135 (13.5 percent) for multi-use developments similar to Crocker Center. Similarly structured statements can also be made for the other land uses at Crocker and for the other study sites. The specific level of accuracy is given in the last column of these tables (Tables 49, 50 & 51). For few specific land uses, the fifteen (15%) percent accuracy level was not obtained due to the small number of persons in the survey who indicated visiting these functions.

For Crocker Center as a whole, the internal trip proportion was 0.411 (41.1 percent). It can be concluded that in 9 out of 10 repeated samplings, the internal trip ratios would be similar, within the band of 0.394 to 0.428 inclusive.

Table 50 provides the statistical results for the second level of land use stratification for Mizner Park. Again using the ninety (90%) percent level of confidence and all trip makers (Both Users and Workers), all of the land uses have estimated internal trip proportions better than the fifteen (15%) percent accuracy goal. Only when examining the data for the trip making behavior of site workers is this standard not met and then only for specialized land uses. For example, Cinema's would not be expected to draw many site workers during midweek daylight hours when the majority of these workers are likely to be working. The internal trip proportion for Mizner Park as a whole is 0.402

(40.2 percent), has an accuracy level of 0.016 (1.6 percent) which is well within the required level of accuracy.

Table 49 - Statistical Analysis Crocker Center Questionnaire

Destination	Trips External	Trips Internal	Trips Total	External Proportion	Internal Proportion	Minimum Trips (n) 90% Confd 15% Accur	Calculated Standard Error of Proportion	Confidence Band for Internal Proportion Min	Confidence Band for Internal Proportion Max	Accuracy Level at 90% Confidence
Users										
Office	168	24	192	0.875	0.125	13.2	0.024	0.086	0.164	3.9%
Retail	176	102	278	0.633	0.367	27.9	0.029	0.319	0.414	4.8%
Restaurant-Sit Down	202	85	287	0.704	0.296	25.1	0.027	0.252	0.341	4.4%
Restaurant- Fast Food	170	41	211	0.806	0.194	18.8	0.027	0.150	0.239	4.5%
Hotel	38	10	48	0.792	0.208	19.8	0.059	0.112	0.305	9.6%
Other	4	1	5	0.800	0.200	19.2	0.179	0.000	0.494	29.4%
Browse		184	184	0.000	1.000	0.0	0.000	1.000	1.000	0.0%
Sub-Total	758	447	1,205	0.629	0.371	28.1	0.014	0.348	0.394	2.3%
Workers										
Office	392	48	440	0.891	0.109	11.7	0.015	0.085	0.134	2.4%
Retail	80	45	125	0.640	0.360	27.7	0.043	0.289	0.431	7.1%
Restaurant-Sit Down	54	216	270	0.200	0.800	19.2	0.024	0.760	0.840	4.0%
Restaurant- Fast Food		18	18	0.000	1.000	0.0	0.000	1.000	1.000	0.0%
Hotel	16	13	29	0.552	0.448	29.7	0.092	0.296	0.600	15.2%
Other		3	3	0.000	1.000	0.0	0.000	1.000	1.000	0.0%
Browse		117	117	0.000	1.000	0.0	0.000	1.000	1.000	0.0%
Sub-Total	542	460	1,002	0.541	0.459	29.9	0.016	0.433	0.485	2.6%
Both										
Office	560	72	632	0.886	0.114	12.1	0.013	0.093	0.135	2.1%
Retail	256	147	403	0.635	0.365	27.9	0.024	0.325	0.404	3.9%
Restaurant-Sit Down	256	301	557	0.460	0.540	29.9	0.021	0.506	0.575	3.5%
Restaurant- Fast Food	170	59	229	0.742	0.258	23.0	0.029	0.210	0.305	4.8%
Hotel	54	23	77	0.701	0.299	25.2	0.052	0.213	0.385	8.6%
Other	4	4	8	0.500	0.500	30.1	0.177	0.209	0.791	29.1%
Browse	0	301	301	0.000	1.000	0.0	0.000	1.000	1.000	0.0%
Total	1,300	907	2,207	0.589	0.411	29.1	0.010	0.394	0.428	1.7%

Source: Regional Research Associates, Inc.

Table 50 - Statistical Analysis Mizner Park Questionnaire

Destination	Trips External	Trips Internal	Total	External Proportion	Internal Proportion	Minimum Sample n 90% Confd 15% Accur	Calculated Standard Error of Proportion	Confidence Band for Internal Proportion Min	Confidence Band for Internal Proportion Max	Accuracy Level at 90% Confidence
Users										
Office-General	26	4	30	0.867	0.133	13.9	0.062	0.031	0.235	10.2%
Office-Med/Dent	20	4	24	0.833	0.167	16.7	0.076	0.042	0.292	12.5%
Retail	612	250	862	0.710	0.290	24.8	0.015	0.265	0.315	2.5%
Restaurant-Sit Down	278	238	516	0.539	0.461	29.9	0.022	0.425	0.497	3.6%
Bank w/ Drive Thru	34	22	56	0.607	0.393	28.7	0.065	0.285	0.500	10.7%
Cinema-8 Screens	138	34	172	0.802	0.198	19.1	0.030	0.148	0.248	5.0%
MFH	20	3	23	0.870	0.130	13.6	0.070	0.015	0.246	11.6%
Other	28	11	39	0.718	0.282	24.4	0.072	0.164	0.401	11.9%
Browse	36	164	200	0.180	0.820	17.8	0.027	0.775	0.865	4.5%
Sub-Total	1,192	730	1,922	0.620	0.380	28.3	0.011	0.362	0.398	1.8%
Workers										
Office-General	100	12	112	0.893	0.107	11.5	0.029	0.059	0.155	4.8%
Office-Med/ Dent	2	0	2	1.000	0.000	0.0	0.000	0.000	0.000	0.0%
Retail	96	52	148	0.649	0.351	27.4	0.039	0.287	0.416	6.5%
Restaurant-Sit Down	32	97	129	0.248	0.752	22.4	0.038	0.689	0.814	6.3%
Bank w/ Drive Thru	6	15	21	0.286	0.714	24.5	0.099	0.552	0.876	16.2%
Cinema-8 Screens	4	9	13	0.308	0.692	25.6	0.128	0.482	0.903	21.1%
MFH	4	0	4	1.000	0.000	0.0	0.000	0.000	0.000	0.0%
Other	4	2	6	0.667	0.333	26.7	0.192	0.017	0.650	31.7%
Browse		51	51	0.000	1.000	0.0	0.000	1.000	1.000	0.0%
Sub-Total	248	238	486	0.510	0.490	30.1	0.023	0.452	0.527	3.7%
Both										
Office-General	126	16	142	0.887	0.113	12.0	0.027	0.069	0.156	4.4%
Office-Med/ Dent	22	4	26	0.846	0.154	15.7	0.071	0.037	0.270	11.6%
Retail	708	302	1,010	0.701	0.299	25.2	0.014	0.275	0.323	2.4%
Restaurant-Sit Down	310	335	645	0.481	0.519	30.0	0.020	0.487	0.552	3.2%
Bank w/ Drive Thru	40	37	77	0.519	0.481	30.0	0.057	0.387	0.574	9.4%
Cinema-8 Screens	142	43	185	0.768	0.232	21.5	0.031	0.181	0.284	5.1%
MFH	24	3	27	0.889	0.111	11.9	0.060	0.012	0.211	9.9%
Other	32	13	45	0.711	0.289	24.7	0.068	0.018	0.400	11.1%
Browse	36	215	251	0.143	0.857	14.8	0.022	0.820	0.893	3.6%
Total	1,440	968	2,408	0.598	0.402	28.9	0.010	0.386	0.418	1.6%

Source: Regional Research Associates, Inc.

Table 51 gives the second level stratification results for the Galleria Area. The overall results are very similar to the previous two sites. The internal trip ratio is 0.383 (38.3 percent), slightly lower than Crocker Center and Mizner Park. The accuracy level is 0.016 (1.6 percent) at the ninety (90%) percent confidence level. Several of the land use categories have large standard errors due to the low number of respondents in the sample and thus the accuracy of their estimated internal trip proportion is higher than fifteen (15%) percent.

The overall trip generation statistical parameters for the three (3) study sites are presented in Table 52. At the ninety (90%) percent confidence limit, the confidence intervals (bands) overlap. Thus, the null hypothesis that the overall site internal trip ratios are equal can not be rejected. Combining (pooling) the surveys for the three sites yields an internal trip proportion of 0.398 (39.8 percent), with an accuracy level of 0.009 (0.9 percent). Therefore there is a ninety (90%) percent confident level the proportion parameter for mixed-use sites similar to Crocker Center, Mizner Park, and Galleria lie within the band of 0.388 to 0.407 inclusive.

In summary, the minimum sample size needed to achieve fifteen (15%) percent accuracy at a ninety (90%) percent confidence level for each development site has been met. This accuracy condition also extends to the major land uses at each development site and for most cross-tabulations of Users and Workers.

Table 51 - Statistical Analysis Galleria Area Questionnaire

Destination	External	Trips Internal	Total	External Proportion	Internal Proportion	Minimum Sample n 90% Confd 15% Accur	Calculated Standard Error of Proportion	Confidence Band for Internal Proportion Min	Max	Accuracy Level at 90% Confidence
Users										
Office-General	60	6	66	0.909	0.091	9.9	0.035	0.033	0.149	5.8%
Office-Med/ Dent	38	2	40	0.950	0.050	5.7	0.034	0.007	0.107	5.7%
Galleria Center	930	547	1,477	0.630	0.370	28.0	0.013	0.350	0.391	2.1%
Retail	118	62	180	0.656	0.344	27.2	0.035	0.286	0.403	5.8%
Bank w/ Drive Thru	6	6	12	0.500	0.500	30.1	0.144	0.263	0.737	23.7%
Restaurant-Fast Food	76	62	138	0.551	0.449	29.8	0.042	0.380	0.519	7.0%
Cinema-4 Screens	10	14	24	0.417	0.583	29.2	0.101	0.418	0.749	16.6%
SFH	2	2	4	0.500	0.500	30.1	0.250	0.089	0.911	41.1%
MFH	4	2	6	0.667	0.333	26.7	0.192	0.017	0.650	31.7%
Hotel	32	14	46	0.696	0.304	25.5	0.068	0.193	0.416	11.2%
Other	2	3	5	0.400	0.600	28.9	0.219	0.240	0.960	36.0%
Browse	8	0	8	1.000	0.000	0.0	0.000	0.000	0.000	0.0%
Sub-Total	1,286	720	2,006	0.641	0.359	27.7	0.011	0.341	0.377	1.8%
Workers										
Office-General	116	7	123	0.943	0.057	6.5	0.021	0.023	0.091	3.4%
Office-Med/ Dent	8	4	12	0.667	0.333	26.7	0.136	0.109	0.557	22.4%
Galleria Center	156	158	314	0.497	0.503	30.1	0.028	0.457	0.550	4.6%
Retail	28	46	74	0.378	0.622	28.3	0.056	0.529	0.714	9.3%
Bank w/ Drive Thru	4	10	14	0.286	0.714	24.5	0.121	0.516	0.913	19.9%
Restaurant-Fast Food	10	49	59	0.169	0.831	16.9	0.049	0.750	0.911	8.0%
Cinema-4 Screens	2	7	9	0.222	0.778	20.8	0.139	0.550	1.006	22.8%
SFH	2	2	4	0.500	0.500	30.1	0.250	0.089	0.911	41.1%
MFH		2	2	0.000	1.000	0.0	0.000	1.000	1.000	0.0%
Hotel	20	7	27	0.741	0.259	23.1	0.084	0.121	0.398	13.9%
Other	6	6	12	0.500	0.500	30.1	0.144	0.263	0.737	23.7%
Browse										0.0%
Sub-Total	352	298	650	0.542	0.458	29.9	0.020	0.426	0.491	3.2%
Both										
Office-General	176	13	189	0.931	0.069	7.7	0.018	0.038	0.099	3.0%
Office-Med/ Dent	46	6	52	0.885	0.115	12.3	0.044	0.043	0.188	7.3%
Galleria Center	1,086	705	1,791	0.606	0.394	28.7	0.012	0.375	0.413	1.9%
Retail	146	108	254	0.575	0.425	29.4	0.031	0.374	0.476	5.1%
Bank w/ Drive Thru	10	16	26	0.385	0.615	28.5	0.095	0.458	0.772	15.7%
Restaurant-Fast Food	86	111	197	0.437	0.563	29.6	0.035	0.505	0.622	5.8%
Cinema-4 Screens	12	21	33	0.364	0.636	27.8	0.084	0.499	0.774	13.8%
SFH	4	4	8	0.500	0.500	30.1	0.177	0.209	0.791	29.1%
MFH	4	4	8	0.500	0.500	30.1	0.177	0.209	0.791	29.1%
Hotel	52	21	73	0.712	0.288	24.6	0.053	0.201	0.375	8.7%
Other	8	9	17	0.471	0.529	30.0	0.121	0.330	0.729	19.9%
Browse	8	0	8	1.000	0.000		0.000	0.000	0.000	0.0%
Sub-Total	1,638	1,018	2,656	0.617	0.383	28.4	0.009	0.368	0.399	1.6%

Source: Regional Research Associates, Inc.

Table 52 - Overall Statistical Analysis All Sites

Destination	Trips External	Trips Internal	Total	External Proportion	Internal Proportion	Minimum Sample n 90% Confd 15% Accur	Calculated Standard Error of Proportion	Confidence Band for Internal Proportion Min	Confidence Band for Internal Proportion Max	Accuracy Level at 90% Confidence
Users										
Crocker Center	758	447	1,205	0.629	0.371	28.1	0.014	0.035	0.394	2.3%
Mizner Park	1,192	730	1,922	0.620	0.380	28.3	0.011	0.362	0.398	1.8%
Galleria Area	1,286	720	2,006	0.641	0.359	27.7	0.011	0.410	0.377	1.8%
Sub-Total	3,236	1,897	5,133	0.630	0.370	27.7	0.011	0.341	0.377	1.1%
Workers										
Crocker Center	542	460	1,002	0.541	0.459	29.9	0.016	0.433	0.485	2.6%
Mizner Park	248	238	486	0.510	0.490	30.1	0.023	0.452	0.527	3.7%
Galleria Area	352	298	650	0.542	0.458	29.9	0.020	0.426	0.491	3.2%
Sub-Total	1,142	996	2,138	0.534	0.466	29.9	0.011	0.448	0.484	1.8%
Both										
Crocker Center	1,300	907	2,207	0.589	0.411	29.1	0.010	0.394	0.428	1.7%
Mizner Park	1,440	968	2,408	0.598	0.402	28.9	0.010	0.386	0.418	1.6%
Galleria Area	1,638	1,018	2,656	0.617	0.383	28.4	0.009	0.368	0.399	1.6%
Sub-Total	4,378	2,893	7,271	0.602	0.398	28.8	0.006	0.388	0.407	0.9%

Source: Regional Research Associates, Inc.

VI. SITE COMPARISONS AND ANALYSIS SUMMARY

Land Use Characteristics

Two of the three study sites were located in the City of Boca Raton. Both of these sites, Crocker Center and Mizner Park, are master planned developments with excellent pedestrian amenities, and with spatial separations that encourage trip interchanges (internalization). The Boca Raton sites are also approximately equal in size encompassing about thirty (30) acres with comparable non residential floor areas of 250 - 300,000 square feet.

The Galleria Area is quite different in scale and layout. The Galleria Area is located in Fort Lauderdale, and was developed without master planning. The Galleria Area has less pedestrian amenities than the other two sites. The Galleria Shopping Mall is the predominant feature and totals approximately 1,150,000 gross square feet of floor area. The Area also includes a wide variety of residential uses including single family, multi-family, high rise apartments and a suite hotel. Other non-residential uses include offices, medical offices, retail, banking, and a fast food restaurant. The Galleria Area totals 165 acres.

A tabular comparison of the three study sites is provided in Table 53.

Traffic Characteristics

Tabular comparisons have been prepared to review the traffic characteristics of the three study sites. Table 54 compares trip purpose, destination, origin, internalization and pass-by trips between sites. This table also reviews selected demographic characteristics such as resident make-up, age and household income.

Table 55 provides additional traffic characteristics of the three sites. Included in this table are total trips (from machine counts), auto occupancy, trip distribution and average trip length.

Table 53 - Site Characteristics

Characteristic	Crocker Center	Mizner Park	Galleria Area
General:			
Location	Boca Raton Fringe	Boca Raton CBD	Ft. Lauderdale Fringe
Area (Acres)	29	30	165
Non-Residential Flr Area	296,040	251,022	1,286,915
Residential & Hotel Units	256	136	951
Estimated Parking Spaces	1,662	1,588	NA
Number of Access Points	3	6	9
Master Planned ?	Yes	Yes	No
Pedestrian Features	High	High	Limited
Transit Available ?	No	Yes	Yes
Land Use Detail:			
Office Uses:	*208,883*	*88,279*	*120,940*
Law	19,019	11,403	3,850
Securities	89,150	28,193	0
Medical	2,434	10,724	21,490
Other	85,696	37,959	61,750
Vacant	12,584	0	33,850
Commercial:	*87,157*	*162,743*	*50,400*
Retail	33,495	86,632	5400
Restaurant	30,201	29,697	0
Fast Food	14,861	0	5,600
Movie Theater	0	31,000	29,000
Bank w/Drive Thru	0	3,653	3,400
Vacant	8,600	11,761	7000
Reg. Shopping Center:	*0*	*0*	*1,115,575*
Medical Offices			7,330
Securities Offices			5,719
Other Offices			3,707
Retail			974,378
Banking			6,756
Fast Food			9,685
Vacant			108,000
Hotel:	*256*	*0*	*229*
Residential (du's):	*0*	*136*	*722*
Single Family			184
Apartment		136	252
High-Rise Apartment			286

Source: Walter H. Keller, Inc.

Table 54 - Traffic Characteristics

	Crocker Center		Mizner Park		Galleria Area	
No. of Surveys	650		720		819	
Trip Purpose (%)	Work	42%	Shopping	29%	Shopping	47%
	Eating	25%	Work	17%	Work	22%
	Per Business	10%	Eating	16%	Browse	10%
Destination (%)	Office	39%	Retail	49%	Galleria Mall	67%
	Restaurant	33%	Restaurant	22%	Office	11%
	Retail	20%	Theater	10%	Other Retail	9%
Trip Origin(%)	Off-Site Home	62%	Off-Site Home	61%	Off-Site Home	57%
	Off-Site Work	18%	Off-Site Work	12%	Off-Site Work	11%
	On-Site Hotel	3%	On-Site Apts.	3%	On-Site Resid	7%
% Pass-by Trips	26%		29%		32%	
% Internalization	41%		40%		38%	
Travel Mode (%)	Auto/Van	97%	Auto/Van	96%	Auto/Van	87%
	Walk/Bike	2%	Walk/Bike	2%	Walk/Bike	6%
	Transit	0%	Transit	1%	Transit	5%
% Residents	91%		84%		77%	
% Seasonal Residents	2%		4%		6%	
% Tourists	8%		13%		17%	
Age (%)	< 24	10%	< 24	17%	< 24	18%
	25 - 64	81%	25 - 64	71%	25 - 64	66%
	65+	9%	65+	13%	65+	16%
Household Income (%)	< $25K	11%	< $25K	20%	< $25K	23%
	$25-$50K	28%	$25-$50K	26%	$25-$50K	35%
	$51-$75K	25%	$51-$75K	20%	$51-$75K	19%
	$75-$100K	13%	$75-$100K	12%	$75-$100K	12%
	$100K+	24%	$100K+	22%	$100K+	11%

Source: Walter H. Keller, Inc.

Table 55 - Additional Traffic Characteristics

Characteristic	Crocker Center	Mizner Park	Galleria Area
Total Trips	9,963	12,155	23,819
Auto Occupancy			
Mid-Day	1.34	1.51	1.45
PM Peak	1.35	1.57	1.47
Trip Distribution			
Less Than 1 Mile	9%	20%	23%
1-2 Miles	8%	11%	11%
2-3 Miles	20%	13%	7%
3-5 Miles	25%	10%	20%
5-7 Miles	2%	12%	9%
More Than 7 Miles	37%	34%	31%
Avg. Trip Length	5.4 mi.	5.4 mi.	6.6 mi.

Source: Walter H. Keller, Inc.

Trip Generation Comparison

Several trip generation estimates were prepared to project the external vehicle trips associated with the multi-use study sites. These estimates were based on disaggregated land uses and aggregated land uses. For example, under the disaggregated land use procedure, individual buildings were separately used to project trip generation. Under the aggregated scheme, various commercial land uses such as retail, restaurants and banks were combined into one commercial total. The various trip generation estimates were compared with the results of the traffic count machines.

This analysis was previously provided in Tables 23 - 25 (Crocker Center), Tables 26 -28 (Mizner Park) and Tables 29 - 32 (Galleria Area). Review of these tables indicates the aggregated land use procedure produced the closest fit to the external ADT traffic count results. Peak hour synthesis of external traffic was not projected with similar results. While the ADT analysis indicates replication of the traffic count results varying between 93.3% to 100.6% of machine counts, the peak hour replication varied between 78.9% to 137.1% of machine counts.

Factors which influence the accuracy of the peak hour replication include the time frame of the count comparison and the reliability of the trip rates. The peak hour condition for the machine counts are based on a set time frames of 8:00 AM to 9:00 AM and 5:00 PM to 6:00 PM, while the ITE analysis is based on the highest one (1) hour between 7:00 AM to 9:00 AM and 5:00 PM to 6:00 PM. The trip generation procedure normally utilizes a formula to estimate generation. The reliability of the formula can be approximated by the R^2 value. The R^2 value provides the percentage of the variance in the number of trips associated with the independent variable. The closer the R^2 value is to 1, the better correlation in the equation. The ITE R^2 values are generally lower for peak hour estimates and in some instances formulas can not be used due to the low R^2 value. This factor will tend to produce greater variability in the trip generation estimate.

Table 56 shows the results of this analysis for the ADT and peak hour conditions associated with the aggregate trip generation procedure.

Table 56 - Best Trip Generation Estimates

ITE Code	Land Use	Size	Unit	% Occup	External Daily Trips	% of ADT Trips	Peak Hour Trips AM In	AM Out	PM In	PM Out
	Crocker Center :									
710	Office Uses	208,883	SF	93.98%	2,336	23.7%	287	35	52	254
820	Commercial	87,157	SF	90.13%	6,078	61.6%	89	52	281	281
310	Hotel	256	Occ. Rms	66.00%	1,448	14.7%	61	41	68	58
				Total Trips Per ITE TG =	9,862			566		995
						100.7%		78.9%		122.5%
				Total Trips per Machine Counts =	9,791			717		812
	Mizner Park:									
710	Office Uses	88,279	SF	100.00%	1,277	11.3%	154	19	29	141
820	Commercial	131,743	SF	91.07%	7,920	70.3%	114	67	368	368
444	Movie Theater (8 Screens)	8	Screens	100.00%	1,227	10.9%	38	38	105	47
223	Residential - Apartment	136	Occ. Du's	100.00%	846	7.5%	12	58	58	27
				Total Trips Per ITE TG =	11,269			500		1,144
						93.2%		137.1%		130.7%
				Total Trips per Machine Counts =	12,086			365		875
	Galleria Area:									
710	Office Uses	120,940	SF	72.01%	1,264	5.5%	153	19	29	139
820	Commercial	1,136,975 †	SF	89.89%	16,594	71.8%	205	120	767	767
444	Movie Theater (4 Screens)	4	Screens	100.0%	613	2.7%	19	19	53	24
210	Residential - Single Family	184	Occ. Du's	97.50%	1,765	7.6%	35	99	119	64
220	Residential - Apartment	286	Occ. Du's	59.70%	1,081	4.7%	15	72	71	34
222	Residential - High Rise Apartment	252	Occ. Du's	35.00%	395	1.7%	7	20	20	13
310	Hotel	229	Occ. Rms	72.50%	1,402	6.1%	60	40	67	57
				Total Trips Per ITE TG † =	23,115			882		2,222
						100.6%		91.9%		119.0%
				Total Trips per Machine Counts =	22,971			960		1,867

Source: Walter H. Keller, Inc.
ITE Trip Generation, 5th Edition

† - Shopping Center further reduced to 50.87% per Ped Counts

1 NOTE: No Reductions have been credited to the ITE Estimates for Internalization or Pass-By

??

but driveway counts include pass-by

average 23% PM higher Projected by ITE

These are considered Aggregated

Comparison with Prior Trip Generation Study

The Department had a prior Trip Generation Study performed by the consulting firm of Tindale Oliver and Associates (TOA). In this study completed in January 1994, three (3) sites were also selected for detailed trip generation review. The sites were located in the western unincorporated area of Broward County (known as the Country Isles site), in the City of West Palm Beach (Village Commons site) and in the City of Boca Raton (Boca Del Mar site).

In the TOA study, the observed site traffic volumes were based on driveway counts and ITE procedures were used to estimate trip generation. TOA generally found the disaggregate land use breakdown best represented the observed traffic volumes. Through use of on-site interviews, TOA also developed estimates on the percentage of internalization, pass-by, and trip length.

Differences exist between the results of the two studies. In this current study, the aggregate trip generation estimate is very close to the external trip generation. In the prior study, the disaggregate trip generation estimate was closer to the trip generation. All three of the study sites were crossed by collector or arterial roadways. While driveway and crossing roadways were counted, trip classifications were not identified at the study boundaries. Because of this, internal trips, internal to external trips and external to external trips are co-mingled. Furthermore, internal trips are also included in the driveway counts.

In order to make a meaningful comparison of the results from both studies, the TOA study results were adjusted to reflect site external trips. After a review of the TOA study sites, it was estimated a twenty (20) percent reduction should be made in the driveway counts for Country Isles and Boca Del Mar observed trip generation numbers to account for internal vehicle trips. For Village Commons, a seventeen and one-half (17.5) percent reduction should be made to account for internal vehicle trips. The estimates were developed after considering the trip generation and questionnaire results of the TOA study.

A comparison of the results of the Phase 2 (current study) and Phase 1 (prior study) results is provided in Table 57. Table 57 first provides the results from the current study, then the results from the prior study (with total trips reduced as indicated above) and an average of the two studies. The total (external) trips associated with each site is

Table 57 - Traffic Characteristics • Phase 1 & 2 Results

Characteristic	Phase 2 Study: Crocker Center	Phase 2 Study: Mizner Park	Phase 2 Study: Galleria Area	Phase 2 Avg.	Country Isles	Village Commons	Boca Del Mar	Phase 1 Avg.	Ph 1 & 2 Avg.
Total External ADT Trips	9,791	12,086	22,971	14,949	22,419 [4]	18,075 [5]	22,846 [4]	21,114	18,031
Ext. AM Peak Hr Trips [6]	717	365	960	681	1,335 [4]	881 [5]	1,164 [4]	1,127	904
Ext. PM Peak Hr Trips [7]	812	875	1,867	1,185	1,740 [4]	1,431 [5]	1,715 [4]	1,629	1,407
Disagg ADT Trip Gen	11,944	10,730	32,273 [1]	18,316	31,068	26,196	32,642	29,969	24,142
Aggregate ADT Trip Gen	9,862	11,269	23,115 [1]	14,749	21,558	16,997	23,263	20,606	17,677
ATG AM Pk Hr Trips	566	500	882	649	1,213	959	1,098	1,090	870
ATG PM Pk Hr Trips	995	1,144	2,222	1,454	2,057	1,799	2,355	2,070	1,762
DTG% Total Trips	122.0%	88.8%	140.5%	117.1%	138.6%	144.9%	142.9%	142.1%	129.6%
ATG% Total Trips	100.7%	93.2%	100.6%	98.2%	96.2%	94.0%	101.8%	97.3%	97.8%
ATG% AM Pk Hr Trips	78.9%	137.0%	91.9%	102.6%	90.8%	108.8%	94.3%	98.0%	100.3%
ATG% PM Pk Hr Trips	122.5%	130.7%	119.0%	124.1%	118.2%	125.7%	137.3%	127.1%	125.6%
% Non-Residential	86.5%	92.5%	79.9%	86%	92.2%	90.4%	73.6%	85.4%	85.9%
% Residential	13.5%	7.5%	20.1%	14%	7.8%	9.6%	26.4%	14.6%	14.2%
% Internal Trips	41%	40%	38%	40%	33%	28%	33%	31.1%	35.4%
% Pass-By Trips	26%	29%	32%	29%	28%	14%	29%	23.2%	26.1%
Avg Trip Length	5.40	5.40	6.60	5.80	6.08	3.06 [2]	4.04	4.39	5.10
Auto Occupancy	1.34	1.53	1.45	1.44	1.44	1.21	1.24	1.30	1.37

Source: Walter H. Keller, Inc.

1 - Based on reduced Regional Shopping Center trip generation estimate
2 - Non-Residential uses only
3 - Phase 1 Study by Tindale Oliver and Associates, Inc.
4 - Total trips reduced by 20% to account for internalization.
5 - Total trips reduced by 17.5% to account for internalization.
6 - Based on 8:00 - 9:00 AM
7 - Based on 5:00 - 6:00 PM

compared to disaggregate (DTG) and aggregate (ATG) trip generation estimates. Percentages are provided to compare each procedures trip generation estimate with total external vehicle trips. Comparisons are also provided for percentage of total trips by use (non-residential and residential), internalization, and pass-by. The average trip length and auto occupancy is also provided.

With the reductions previously noted in the TOA driveway counts, the ITE aggregate ADT trip generation estimate procedure is very close in both studies to replicating the external daily vehicle trips as determined by the traffic count effort.

VII. MULTI-USE TRIP GENERATION SOFTWARE

This chapter reviews the design and operation of the Multi-Use Development Trip Generation (MUTG) software developed to project the trip generation of multi-use developments. This software was developed to estimate trip generation characteristics based on the land use mix of a multi-use development.

The MUTG software has been developed to operate on computers running Windows 3.1 or a later version. MUTG is spreadsheet based but macro driven providing "user-friendly" operation. Trip generation reports can be printed and the file can be saved, modified and retrieved.

Methodology

The results of the Districtwide Trip Generation Study of Multi-Use Developments indicates there is a high correlation between the external trips of a multi-use project when the trip generation procedure aggregates land uses. Comparisons with the earlier Department study by Tindale Oliver Associates, Inc., also revealed consistency with the current study when reductions were made in the observed trip generation to account for internal trips which were not accounted for, due to the fact that each site has roadways which cut through the site. As such, internal trips which used the roadway to access different parts of the site were included in the driveway counts.

The methodology for the MUTG software aggregates land uses to major categories of commercial, office, movie theater and residential. ITE trip generation rates from the 5th Edition are then used to calculate vehicle trips. The resulting calculation of trips is the external vehicle trips. Factors developed in the current study are then used to project the internalization and pass-by trips associated with each multi-use project.

System Overview

MUTG has been developed as a template for use with the Quattro-Pro Spreadsheet by Borland. The template is macro driven such that initiation of the software template will produce a base screen and system menu. The spreadsheet shown on the screen will activate the various modules without the need for complex computer programming skills. The base software has four (4) modules including: **Main Menu**; **Land Use Characteristics**; **View Results** and Macros. Through the **Main Menu**, the user can start a new file, retrieve an existing file or save the individual analysis.

The primary function of the software is to estimate the daily external trip generation of multi-use developments given site development land use characteristics. A flow chart of the system is provided in Figure 29.

Data Input Requirements

MUTG is menu driven and requires a series of inputs to be provided by the user. From the input menu, the user provides information on Project Name, Reviewer, Date and Location. The user is supplied (on screen) with a list of possible land uses. The user provides the gross square footage (for non-residential) and number and type of dwelling units (for residential) for a particular multi-use development analysis. For example, if a particular development includes retail, office and residential uses, the user would fill in the appropriate size/scale of a particular use until all uses of the development have been accounted for.

Example Problem

An example of the MUTG software is provided to illustrate the simplicity of the software's use. The mixed-use development is based on Crocker Center. Table 58 describes the land uses for the example.

Table 58 - Land Uses for Trip Generation Example

Land Use	Sq. Ft.	Occupied Uses
Office Uses	217,000	**204,416**
Office Tower I	113,500	
Office Tower II	90,916	
Vacant	12,584	
Commercial Uses	87,157	**78,557**
Retail Shops	33,495	
Restaurant (Quality)	30,201	
Restaurant (Sit Down)	9,250	
Fast Food (McDonald's)	5,611	
Vacant	8,600	
Residential - Hotel Uses		**169**
Rooms	256	
Room Occupancy	66%	
Mtg. Rooms	10,000	
Restaurant/ Lounge	3,000	

Source: Walter H. Keller, Inc.

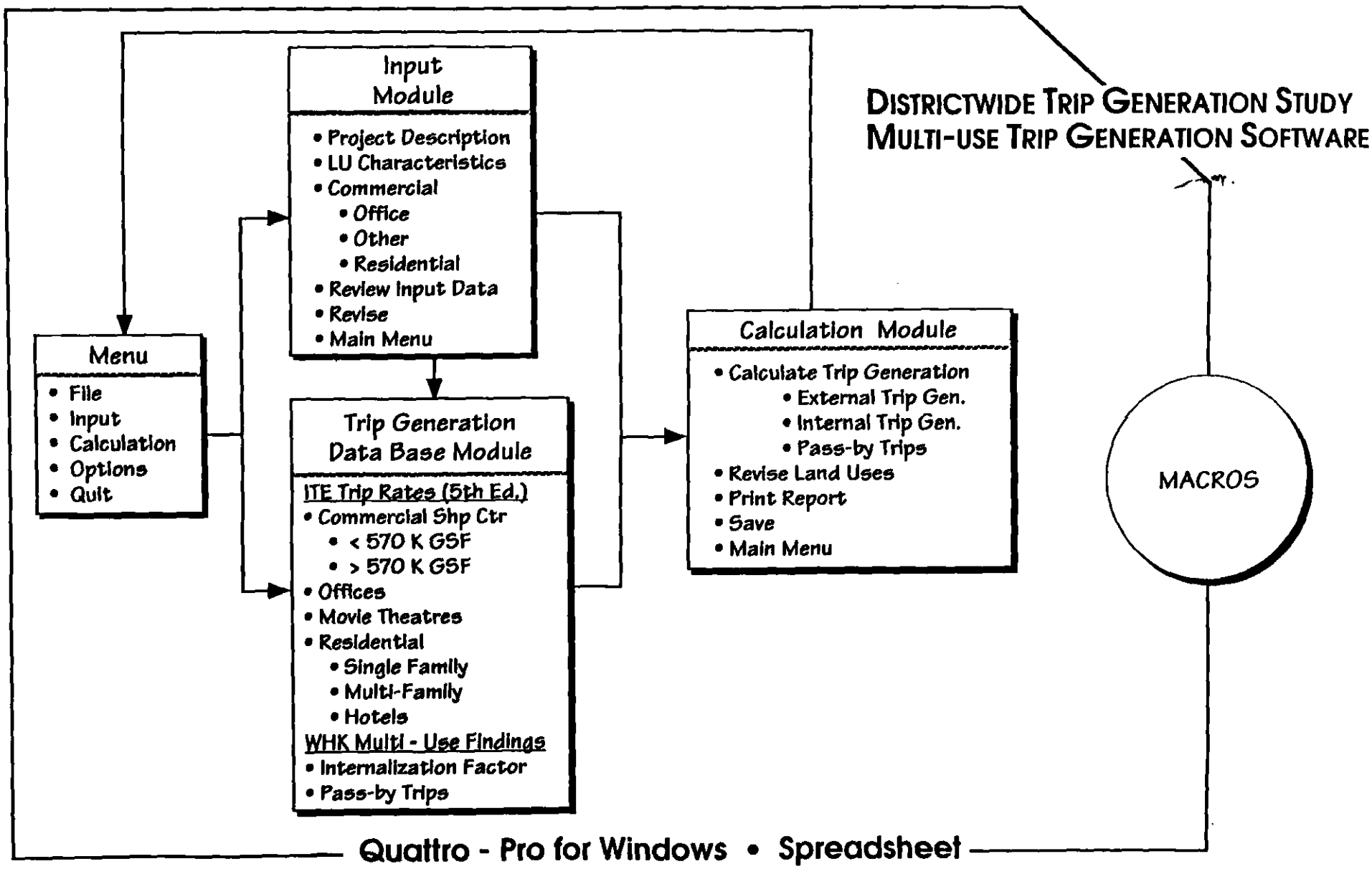

Figure 29 - MUTG Sysytem Overview

Walter H. Keller, Inc.
Consulting Engineers & Planners

The MUTG Software is activated by importing the MUTG Template file through Quattro Pro. A **Main Menu** is displayed with the loading of the template. Triggering the **Project Description** category from the **Main Menu** allows the input of Project Name, Reviewer, Date and Location. The user can only access these input boxes. A Carriage Return (**CR**) takes the user back to the **Main Menu**. Accessing **Land Use Characteristics** provides the land use input screen. The size of each applicable land use is input by gross square feet of building floor area through the available land use boxes on the screen. Exceptions to this include movie theaters which are based on the number of screens and residential uses which are either occupied dwelling units or occupied hotel rooms. Figure 30 provides the input results for the Crocker Center example. A **CR** returns the user to the **Main Menu**. The trip generation calculations are automatically initiated when leaving the **Land Use Characteristics** Module.

View Results is accessed from the **Main Menu**. In this Module, the results of the trip generation calculations are displayed on the screen. The user can choose to print the results for a hard copy, save the results or go back to the input module and revise the land use inputs.

The trip generation results for the Crocker Center example are illustrated in Figure 31. Note that the Total Daily External Vehicle Trips (i.e., 9,915 in example) are total external vehicle trips and include pass-by trips.

Figure 30 - Land Use Input Screen

Florida Department of Transportation
District IV
Trip Generation of Multi-Use Developments
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PROPOSED LAND USE

Residential Uses	Size	Unit
Single Family		DU's
Multi-Family Apts		DU's
High Rise Apts		DU's
Hotel-Motel	169	Rooms
Commercial Uses		
Shopping Center		GSF
Sit-Down Restaurant	9,250	GSF
Fast-Food Restaurant	5,611	GSF
Restaurant	30,201	GSF
Gas Station		GSF
Convenience Store		GSF
Discount Store		GSF
Bank		GSF
Savings and Loan		GSF
Retail	33,495	GSF
Other Commercial		GSF
Offices		
General Office	113,500	GSF
Medical Office		GSF
Day-Care Center		GSF
Other	90,916	GSF
Movie Theater		Screen

Figure 31 - Trip Generation Results

Florida Department of Transportation
District IV
Trip Generation of Multi-Use Developments

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GENERAL INFORMATION

Project Name: Crocker Center

Reviewer: Walter H. Keller, Inc. **Date:** 26-Jan-95

Location: Boca Raton

LAND USE AND TRIP GENERATION ESTIMATES

Land Use	Size	Unit	Daily Trips
Residential Uses			
Single Family			
Multi-Family Apts			
High-Rise Apts			
Hotel-Motel	169	Rooms	1,428
Commercial Uses	78,557	GSF	6,078
Offices	204,416	GSF	2,409
Movie Theater			

Total Daily External Vehicle Trips = 9,915

Daily Internal Person Trips = 6,571

Pass By Vehicle Trips = 2,895

VIII. SUMMARY AND RECOMMENDATIONS

This Final Report documents a comprehensive trip generation study of three (3) multi-use developments in Broward and Palm Beach Counties. The multi-use study sites were selected through a screening process and included Crocker Center and Mizner Park in the City of Boca Raton and the Galleria Area in the City of Fort Lauderdale. The study site's land use and operation characteristics were reviewed, mapped and documented. While the Boca Raton sites were recently developed mixed-use PUD type projects occupying approximately thirty (30) acres, the Galleria Area, is an older, non-master planned multi-use area totaling 165 acres that is dominated by the Galleria Mall.

An involved data collection effort was initiated to: quantify site traffic characteristics such as traffic volumes, auto occupancy and traffic flow; identify pedestrian movements in the mid-day and afternoon peak hours; and, to collect on-site face to face questionnaire interviews with site users and workers over a two day period. External daily traffic volumes varied from 9,791 at Crocker Center to 22,971 at the Galleria Area. Traffic volumes at all sites was highest during the mid-day (12:00 PM - 1:00 PM) period as compared to the traditional morning (8:00 AM- 9:00 AM) and afternoon (5:00 PM - 6:00 PM) peak times.

A total of 2,189 face to face questionnaire interviews were performed to ascertain the trip purpose, trip end origin and destination, internalization characteristics, travel mode and demographic information. The results of the interviews reveal that approximately twenty-nine (29%) percent of trips are pass-by and forty (40%) percent of all trips are internal. Average trip length was approximately 5.8 miles with auto occupancy ranging from 1.34 persons per vehicle at Crocker Center to 1.53 persons per vehicle at Mizner Park.

Trip generation estimates were developed using ITE procedures considering disaggregated and aggregated land uses. The best procedure for estimating external ADT vehicle trips of mixed use developments occurs when ITE trip generation rates are applied to aggregated land uses. Pedestrian counts were utilized at Galleria Shopping Mall to confirm a significantly lower external trip generation for the shopping center consistent with the traffic count results. Incorporating this adjustment with the trip generation results enabled external ADT trip generation estimates to approximate 98% of the traffic count results. Future trip generation research should incorporate parking occupancy counts to help assist in quantifying multi-use activity characteristics.

A comparison of the current study results with the Department's prior study indicate some potentially significant differences until adjustments are made to the prior study's observed traffic counts. Because the prior study reported driveway counts and since the driveway counts include internal vehicle counts, adjustments are warranted for comparing similar conditions. The prior study indicated internalization of 33.0% (Country Isles), 27.5% (Village Commons) and 32.7% (Boca Del Mar). Since not all of these trips are included in the driveway counts, reductions of 17.5% (Village Commons) and 20.0% (Country Isles and Boca Del Mar) are reasonable. With these reductions in the observed driveway counts, the external ADT trip generation results approximate 97% of traffic counts.

The approximation of peak hour trip generation using ITE procedures for aggregated land uses was not found to produce satisfactory results when compared to the ADT results. Peak hour trip generation estimates varied from 78.9% to 137.3% of traffic count volumes. The basis for the peak hour differences may be influenced by more variable trip generation characteristics (as evidenced with lower ITE R^2 values) and time differences in selecting the peak hour traffic volume (two hour ITE peak period versus a set one hour period). Further research is necessary to quantify the peak hour characteristics of multi-use developments.

A computer software program was developed to estimate the trip generation characteristics of multi-use developments. The software (MUTG) utilizes a macro controlled spreadsheet template to activate a series of project screens. Information on project description is input by gross square feet of occupied floor area for all non-residential land uses except theaters which uses number of screens. Residential land uses are also input by occupied dwelling units for single family, multi-family apartment and high-rise apartment categories. MUTG automatically aggregates land uses and calculates the external ADT vehicle trips associated with the development. The software also estimates the amount of internal person trips generated and the number of vehicle trips associated with pass-by capture based on the results of this study. The software does not estimate peak hour traffic volumes due to the variability previously discussed.

C2. Florida Mall Substantial Deviation RI Application

– see Table 7 Trip Generation showing use of Shopping Center Pass-by Equation to derive 15.4% for Regional Commercial Use

ECFRPC DRI 5165
October 18, 2000

FLORIDA MALL

SUBSTANTIAL DEVIATION

Development of Regional Impact

East Central Florida Regional Planning Council
631 N. Wymore Rd, Suite 100
Maitland, FL 32751-4246
407/623-1075

Project Background and Description

The Florida Mall is an approved Development of Regional Impact that was approved by the Orange County Board of County Commissioners on September 2, 1975. It is located on 286 acres on the southeast quadrant of Orange Blossom Trail (US 441) and Sand Lake Road (SR 482) in south central Orlando (Figure 1). The approval included 1,938,977 square feet of mall retail, 609,983 square feet of general commercial, 130,462 square feet of office and 500 hotel rooms. This proposal would add 150 hotel rooms and 411,023 square feet of gross leasable area that would be added to the existing hotel and existing mall. The mall area is proposed to be built where a portion of the existing parking for the hotel is located and the hotel expansion would be vertically added to the existing hotel.

This analysis is also going to incorporate an 111,850 square feet expansion that was previously approved as a part of a non-substantial amendment to the development order. This square footage was added as the sixth amendment to the development order, and was the only amendment that was approved for additional square footage.

The entire project is summarized below and is expected to be completed in 2005.

Table 3 Project Development Plan

Land Use	Gross Leasable Area in Square Feet	Gross Floor Area in Square Feet	Hotel Rooms
Regional Mall	2,150,000	2,397,272	
Hotel			650
General Commercial	609,983	609,983	
General Office	130,462	130,462	
Total	2,890,445	3,137,717	650

Figure 2 depicts the Master Development Plan and Figure 3 depicts the Illustrative Plan.

The patrons to the mall are largely tourists with about 46% being Orlando metro residents. Of the 54% tourist component, 11% are domestic and 43% foreign. The 54% of tourist shoppers account for 68% of the mall purchases. As expected, there is a high degree of interaction between the mall and the tourist areas to the west.

The resident trade area consists of an area containing approximately 652,000 residents (1998) with growth in this area consistent with the regions overall development. By 2003, the trade area population is expected to reach 708,000. Also for 1998, the average income for the resident population was just over $50,000 per household and this should increase 3.6% a year for the next 5 years, reaching $60,000 per household by 2003.

Summary of Regional Issues

TABLE 1 Summary of Regional Issues Considered in Evaluating the Sierra Land SD DRI*	
Regional Issue	**Regionally Significant Impact**
Environment	
Air Quality	Yes
Natural Resources	
Soils	No
Wetlands	No
Floodplains	No
Vegetation/Wildlife	No
Water resources	
Future conditions	No
Proposed surface drainage/stormwater management system	No
Public Facilities	
Sewage treatment/wastewater management	No
Water supply	No
Recreation and open space	No
Hazardous waste	No
Schools	No
Transportation	
Available roadway capacity	Yes
Impacts to surrounding network	Yes
Affordable housing	
Housing availability	No
* Note: This table provides a summary of regional issues common in DRI reviews and indicates those for which an unmitigated impact has been identified and a condition of approval recommended. Supporting information is provided in the following text. The table is not a statement of Council policy, but rather indicates the significance of a given issue when related specifically to the Sierra Land Substantial Deviation DRI Application.	

Applicant Information

Table 2 Applicant Information	
Project Name	Florida Mall Substantial Deviation DRI
Applicant	Florida Mall Associates, a Florida General Partnership, c/o Simon Property Group, Inc 115 West Washington Street Indianapolis, IN 46204
Authorized Agent	F. Carl Dieterle, Jr., Senior Vice President, Simon Property Group, Inc. 115 West Washington Street Indianapolis, IN 46204 and: Nicholas A. Pope Lowndes Drosdick Doster Kantor & Reed 215 North Eola Drove Orlando, FL 32801
Project Manager	Steven K. Luce, AICP URS Greiner Woodward Clyde, Inc. 7650 West Courtney Campbell Causeway Tampa, FL 33607
Submittal of Application	March 17, 2000
Submittal of First Information Response	June 2, 2000
ECFRPC Hearings	ECFRPC Review – October 18, 2000
Local Government of Jurisdiction	Orange County

Transportation

Operational Levels of Service

Six levels of service are defined in the Highway Capacity Manual. They are labeled A through F and are described as follows:

A. Free flow with low volume, high speed and unrestricted maneuverability

B. Stable flow with speed somewhat restricted by traffic and maneuverability relatively unrestricted. Lower limit of this level associated with rural highway design.

C. Stable flow with restrictions on speed and maneuverability. Generally accepted level of design for urban highways.

D. Approaching unstable flow with tolerable operating speeds and little freedom to maneuver.

E. Unstable flow with operating speeds below level D and momentary stoppages.

F. Forced flow at low speeds with stoppages of possibly long duration.

Existing Conditions

Tables 5 & 6 depict existing levels of service for 1999 on roadways and intersections, respectively. It is evident that unacceptable levels of service currently exist on Sand lake Road from I-4 to Presidents Drive, on OBT from Kaley Ave to I-4 and on John Young Parkway from Sand Lake Road to SR 528 (Beeline). The only intersection identified as deficient was John Young Parkway at Sand Lake Road.

Future Traffic Growth

Future traffic is comprised of project traffic and background or ambient traffic growth. Project traffic was derived from the Institute of Transportation Engineers Trip Generation manual, Sixth Edition. These trip statistics and the project's development program are displayed in Table 7. Background traffic impacts were derived through the Orlando Urban Area Transportation Study (OUATS).

Assumptions

The applicant made several assumptions in order to conduct the traffic analysis:

Internal Capture relates to the trips by any mode, which begin and end on the site and do not impact any external roadways. Internal interaction is assumed to occur between the commercial areas and the hotel rooms. For buildout this was assumed to be 5.4% for the PM peak hour, or 340 peak hour trip ends (please refer to Table 7).

Passer-by capture describes the circumstance in which background vehicles on the adjacent roadway stop to shop at the project's commercial site while they are on a trip for another

Table 5
Florida Mall Substantial Deviation

Existing Roadway Link Service Volumes

Roadway Link	Geometry	LOS [1] Service Volume	1999 Average Annual Peak Hour Traffic		1999 Level of Service Existing Traffic	
			NB/EB	SB/WB	NB/EB	SB/WB
Sand Lake Road						
I-4 to International Dr.	6LD	2780	3100	2540	F	C
International Dr. to Kirkman Rd.	4LD	1850	2000	1900	F	F
Kirkman Rd. to Mandarin Dr.	4LD	1850	1993	1844	F	D
Mandarin Dr. to John Young Pkw	4LD	1850	1908	1784	F	D
John Young Pkwy. tp Presidents	4LD	1850	1791	1922	D	F
Presidents Dr. to Chancellor Dr.	4LD	1850	1482	1653	C	C
Chancellor Dr. to OBT	4LD	1850	1710	1446	C	C
OBT to Summer Day Ln.	6LD	2780	1989	1622	C	B
Summer Day Ln. to Golden Sky	6LD	2780	1855	1535	B	B
Golden Sky Ln. to Voltaire Dr.	6LD	2780	1902	1602	C	B
Voltaire Dr. to Winegard Rd.	6LD	2780	2032	1593	C	B
Winegard Rd to Orange Ave	6LD	2780	1721	1345	B	B
Orange Ave. to Gondola Dr.	4LD	1850	1619	1271	C	C
Gondola Dr. to Mc Coy Rd.	4LD	1850	1619	1271	C	C
Orange Blossom Trail						
Kaley Av to I-4	4LD	1850	1891	1916	F	F
I-4 to 39th St	6LD	2780	2154	1664	C	B
39th St to Holden Ave.	6LD	2780	2103	1608	C	B
Holden Ave. to Americana Blvd.	6LD	2780	1894	1363	C	B
Americana Blvd. to Oak Ridge R	6LD	2780	1835	1583	B	B
Oak Ridge Rd. to Lancaster Rd	6LD	2780	1810	1508	B	B
Lancaster Rd. to Chancery Ln	6LD	2780	1577	1424	B	B
Chancery Ln. to Skyview Dr.	6LD	2780	1632	1595	B	B
Skyview Dr. to Sand Lake Rd.	6LD	2780	1581	1447	B	B
Sand lake Rd. to August Ln	6LD	2780	1672	1628	B	B
August Ln. to Sun Lite Path	6LD	2780	1621	1608	B	B
Sun Lite Path to Bee Line Exp	6LD	2780	1765	1882	B	B
Bee Line Exp to Taft-Vineland Rd	6LD	2780	1310	1617	B	B
Taft-Vineland Rd. to Central Fla	6LD	2780	944	1381	B	B
John Young Parkway						
Oak Ridge Rd. to Sand Lake Rd.	4LD	1850	1640	1319	C	C
Sand Lake Rd. to SR 528	4LD	1850	2309	2070	F	F
Winegard Road						
Sand Lake Rd. to Lancaster Rd.	2L	880	395	269	B	B
Lancaster Rd. to Oak Rdige Rd.	2L	880	395	269	B	B
Orange Ave						
Landstreet Rd. to Sand Lake Rd	4LD	1850	1369	1125	C	B
Sand Lake Rd. to Lancaster Rd	4LD	1850	1740	1444	C	C

1 - Peak hour peak direction service volumes obtained from Table5-1 of the 1998 FDOT LOS Standards and Guidelines Manual.
2 - Link Volumes obtain by averageing the upstream intersection approach volume and the downstream intersection departure volume shown on map J-3

Table 6

INTERSECTION LEVELS OF SERVICE
EXISTING CONDITIONS (1999)
FLORIDA MALL SUBSTANTIAL DEVIATION

Intersection	LOS	Required Improvement	Improved LOS
Orange Blossom Trail and 39th Street	A	N/A	N/A
Orange Blossom Trail and Holden Avenue	C	N/A	N/A
Orange Blossom Trail and Americana Boulevard	A	N/A	N/A
Orange Blossom Trail and Oak Ridge Road	D	N/A	N/A
Orange Blossom Trail and Lancaster Road	C	N/A	N/A
Orange Blossom Trail and Chancery Lane	B	N/A	N/A
Orange Blossom Trail and Skyview Drive	B	N/A	N/A
Orange Blossom Trail and Sand Lake Road	D	N/A	N/A
Orange Blossom Trail and August Lane	C	N/A	N/A
Orange Blossom Trail and Sun Lite Path	B	N/A	N/A
Orange Blossom Trail and Consulate Drive	C	N/A	N/A
Orange Blossom Trail and Taft Vineland Road	C	N/A	N/A
Sand Lake Road and Mandarin Drive	A	N/A	N/A
Sand Lake Road and John Young Parkway	F	NB Thru / SB Thru	D
Sand Lake Road and Presidents Drive	C	N/A	N/A
Sand Lake Road and Chancellor Drive	C	N/A	N/A
Sand Lake Road and Summer Day Lane	D	N/A	N/A
Sand Lake Road and Golden Sky Lane	C	N/A	N/A
Sand Lake Road and Target	B	N/A	N/A
Sand Lake Road and Voltaire Drive	C	N/A	N/A
Sand Lake Road and Winegard Road	B	N/A	N/A
Sand Lake Road and Orange Avenue	D	N/A	N/A

Table 7
TRIP GENERATION
FLORIDA MALL SUBSTANTIAL DEVIATION

Land Use	Size	Gross[1,4]		Internal[1]		Capture[3]		Transit		Net	
		In	Out	In	Out	In	Out	In	Out	In	Out
Approved Constructed											
Regional Mall	1 119 771 sf	1,280	1,388	49	37	217	236	32	35	982	1,080
Peripheral	609,983 sf	698	755	26	20	118	128	17	19	537	588
Office	130 462 sf	38	187	4	19	0	0	1	4	33	164
Hotel	500 rooms	177	185	53	56	0	0	4	5	120	124
Total		**2,193**	**2,515**	**132**	**132**	**335**	**364**	**54**	**63**	**1,672**	**1,956**
Approved Total[5]											
Regional Commercial	1,627,127 sf	1,704	1,847	55	41	268	291	43	46	1 338	1,469
General Commercial	609,983 sf	639	692	20	16	101	109	16	17	502	550
Office	130,462 sf	38	187	4	19	0	0	1	4	33	164
Hotel Rooms	500 rooms	177	185	53	56	0	0	4	5	120	124
Total		**2,558**	**2,911**	**132**	**132**	**369**	**400**	**64**	**72**	**1,993**	**2,307**
Proposed[6]											
Regional Commercial	2 150,000 sf	2,100	2,278	78	64	313	339	52	57	1 657	1,818
General Commercial	609,983 sf	592	639	16	12	86	93	14	16	476	518
Office	130 462 sf	38	187	4	19	0	0	1	4	33	164
Hotel Rooms	650 rooms	240	250	72	75	0	0	4	5	164	170
Total		**2,970**	**3,354**	**170**	**170**	**399**	**432**	**71**	**82**	**2,330**	**2,670**

1 Based on ITE Trip Generation, Sixth Edition, 1996 Trips for commercial development were derived using a combined total square footage
2 Internalization rates based on 30% of Hotel and 10% of Office trips internalized with the Retail Land Use
3 Based on ITE Trip Generation Handbook, 1998, passerby capture equation
4 PM traffic volumes
5 Does not include 111,850 square feet of retail approved as part of the 6th Amendment to the Development Order
6 Includes approved 111,850 square feet increment of development

purpose. *Diverted trips* are those trips, which are also already on the roadway network, but must divert to another route in order to stop at the project's commercial site while they are on a trip for another trip purpose. In these instance the stop to shop at one of the Florida Mall is a secondary trip purpose, so Florida Mall is not assessed for this trip impact since the car was on the road already for another reason. For this project, passer-by reductions amounted to 12.6% of the PM peak hour commercial shopping trips (refer back to table 7).

Mode Split pertains to the percentage of trips that are taken via transit, including private charter. For this analysis, it is assumed that transit would be available both through LYNX and through private providers. It was assumed that 153 peak hour trips would occur via transit, which is about 3.0% of the PM peak hour trips.

Planned and programmed improvements for future years are listed in Table 8 below. Programmed improvements are those within the first 5 years of the adopted work program of the Florida Department of Transportation or local government, and have a guaranteed funding source. The Department of Community Affairs' rules will recognize projects scheduled for construction within the first 3 years of the list as applicable for mitigation purposes. Roadway improvements within this timeframe are assumed built for the analysis of the first phase.

Table 8 Programmed Improvements

Year of Completion	Roadway	From	To	Improvement
2001/2002	John Young Parkway	Osceola County	Interstate 4	4 to 6 lanes
1998/1999	OBT (US 441)	Taft-Vineland Road	¼ mile south of OBT	4 to 6 lanes
2002/2003	Taft-Vineland Road	US 441	Orange Avenue	2 to 4 lanes
2001/2002	Landstreet Road	US 441	Orange Avenue	2 to 4 lanes
2001/2002	Landcaster Road	US 441	Orange Avenue	2 to 4 lanes
2002/2003	Holden Avenue*	John Young Parkway	Orange Avenue	2 to 4 lanes and new 4 lane

* MetroplanOrlando had removed this improvement from the Transportation Improvement Program after agreement of the methodology. Consequently, it was assumed to be constructed in the analysis. Requests were made to have the analysis redone; however the applicant asserted that the outcome would be unchanged since it is not a nearsite roadway.

Future Traffic Conditions

Table 9 depicts the traffic levels of service for the impact area based on the Florida Standard Urban Transportation Model Structure (FSUTMS) model for new the trips. It also shows the amount of project traffic, both existing, approved and proposed, along with the background traffic numbers all for the 2005 buildout year. Where the traffic contributes greater than 5% of the roadway's service volume at the adopted level of service, the project is considered significant. If the roadway operates at below the adopted level of service, the roadway is

Table 9

Florida Mall Substantial Deviation
2005 Roadway LOS Determination

Roadway Link	Geometry	LOS[1] Service Volume	Model PSWT[2] 1990	Model PSWT[2] 2020	Model PSWT[2] Project Trace	Annual Model Growth	1999 Orange County Peak Hour Traffic NB/EB	1999 Orange County Peak Hour Traffic SB/WB	Existing 1999 Project Traffic NB/EB	Existing 1999 Project Traffic SB/WB	2005[3] Background Traffic NB/EB	2005[3] Background Traffic SB/WB	Approved New Project Traffic NB/EB	Approved New Project Traffic SB/WB	Proposed 2005 New Project Traffic NB/EB	Proposed 2005 New Project Traffic SB/WB	2005 Total Traffic NB/EB	2005 Total Traffic SB/WB	2005 LOS With Project Traffic NB/EB	2005 LOS With Project Traffic SB/WB	Project Traffic % of Service Volume NB/EB	Project Traffic % of Service Volume SB/WB
Sand Lake Road																						
I-4 to International Dr	6LD	2780	35700	45500	2540	3 00%	3100	2540	91	92	3551	2889	14	15	15	16	3671	3012	F	F	4 3%	4 4%
International Dr to Kirkman Rd	4LD	1850	34800	37900	2950	3 00%	2000	1900	123	125	2215	2095	16	18	17	18	2371	2256	F	F	8 4%	8 7%
Kirkman to Mandenn Dr	4LD	1850	28800	43800	4970	3 00%	2261	1945	189	192	2445	2069	27	30	28	31	2689	2322	F	F	13 2%	13 7%
Mandenn Dr to John Young Pkwy	4LD	1850	33600	50400	5560	3 00%	2261	1945	205	207	2426	2051	30	33	32	34	2693	2325	F	F	14 4%	14 8%
John Young Pkwy to Presidents Dr	4LD	1850	39300	32000	5800	3 00%	1476	1904	331	335	1351	1851	32	35	33	36	1747	2257	C	F	21 4%	21 9%
Presidents Dr to Chancellor Dr	4LD	1850	35000	37000	7610	3 00%	1476	1904	348	352	1331	1831	42	45	44	47	1765	2275	D	F	23 5%	24 0%
Chancellor Dr to OBT	4LD	1850	33900	38900	8170	3 00%	1807	1640	431	437	1624	1420	45	49	47	50	2147	1956	F	F	28 3%	29 0%
OBT to Summer Day Ln	6LD	2780	40700	48200	23280	3 00%	1744	1348	540	442	1421	1069	87	94	92	99	2140	1704	C	B	25 9%	22 8%
Summer Day Ln to Golden Sky Ln	6LD	2780	40700	48200	23280	3 00%	1744	1348	336	299	1661	1238	58	61	61	62	2116	1660	C	B	16 4%	15 2%
Golden Sky Ln to Voltaire Dr	6LD	2780	40700	48200	12760	3 00%	1744	1348	373	401	1618	1117	70	70	73	71	2134	1659	C	B	18 6%	19 5%
Voltaire Dr to Winegard Rd	6LD	2780	33200	36000	12760	3 00%	1744	1348	368	363	1624	1162	76	70	79	73	2147	1668	C	B	18 8%	18 2%
Winegard Rd to Orange Ave	6LD	2780	23500	34100	10940	3 00%	1757	1282	318	314	1698	1142	65	60	68	63	2149	1579	C	B	16 2%	15 7%
Orange Ave to Gondola Dr	4LD	1850	33900	54000	7770	3 00%	1642	1369	186	183	1718	1399	46	42	48	45	1998	1669	F	C	15 1%	14 6%
Gondola Dr to McCoy Rd	4LD	1850	31300	54100	7550	3 00%	1642	1369	179	177	1726	1407	45	41	47	43	1997	1668	F	C	14 6%	14 1%
Orange Blossom Trail																						
Kaley Ave to I-4	4LD	1850	55800	88200	2630	3 00%	1891	1918	36	35	2189	2220	16	14	16	15	2257	2284	F	F	3 7%	3 5%
I-4 to 39th St	6LD	2780	65800	143300	10530	3 39%	2286	2199	117	116	2611	2507	63	57	65	60	2856	2740	D[4]	C[4]	8 8%	8 4%
39th St to Holden Ave	6LD	2780	65800	128200	10930	3 00%	2286	2199	120	119	2556	2454	65	60	67	63	2808	2696	B[4]	D[4]	9 1%	8 7%
Holden Ave to Amencana Blvd	6LD	2780	64000	128200	11530	3 00%	2502	1991	147	145	2779	2178	69	63	71	66	3066	2452	C[4]	C[4]	10 3%	9 9%
Amencana Blvd to Oak Ridge Rd	6LD	2780	60000	128800	12110	3 15%	2466	1978	161	159	2741	2163	72	66	75	69	3049	2457	B[4]	C[4]	11 1%	10 6%
Oak Ridge Rd to Lancaster Rd	6LD	2780	51600	111100	12050	3 07%	1998	1781	196	194	2133	1879	72	66	74	69	2475	2208	C	C	12 3%	11 8%
Lancaster Rd to Chancery Ln	6LD	2780	47300	112300	13570	3 62%	1998	1781	228	225	2155	1894	81	74	84	78	2548	2271	C	C	14 1%	13 6%
Chancery Ln to Skyview Dr	6LD	2780	48300	117200	15550	3 68%	1840	1978	257	254	1933	2105	93	85	96	89	2379	2533	C	C	16 0%	15 4%
Skyview Dr to Sand Lake Rd	6LD	2780	43200	119400	15810	4 66%	1840	1978	285	282	1990	2170	94	86	98	91	2467	2629	C	C	17 2%	16 5%
Sand Lake Rd to August Ln	6LD	2780	44200	128900	14230	5 31%	1332	1701	228	225	1456	1947	49	44	49	45	1782	2261	B	C	11 7%	11 3%
August Ln to Sun Lite Path	6LD	2780	50400	135000	20360	4 25%	1332	1701	225	228	1389	1848	56	72	59	74	1729	2222	B	C	12 2%	13 5%
Sun Lite Path to Bee Line Exp	6LD	2780	46900	132300	20360	4 62%	534	1394	351	355	234	1327	111	122	117	126	813	1930	B	C	20 8%	21 7%
Bee Line Exp to Taft-Vineland Rd	6LD	2780	32500	84000	9120	4 35%	534	1394	120	122	522	1604	50	54	52	56	744	1836	B	B	8 0%	8 3%
Taft-Vineland Rd to Central Fla Pkwy	6LD	2780	35900	78800	6340	3 39%	1108	2064	74	75	1245	2394	35	38	36	39	1390	2546	B	C	5 2%	5 5%
Central Fla Pkwy to Wetherbee Road	4LD	1850	28500	87000	4418	6 33%	1916	1640	28	28	2605	2224	20	22	20	22	2673	2296	F	F	3 7%	3 9%
John Young Pkwy																						
Oak Ridge Rd to Sand Lake Rd	6LD	2780	N/A	19800	220	3 00%	1738	1490	34	34	2011	1718	1	1	1	1	2047	1754	C	B	1 3%	1 3%
Sand Lake Rd to SR 528	6LD	2780	25800	31700	0	3 00%	2228	2452	92	94	2520	2782	0	0	0	0	2612	2876	C	F	3 3%	3 4%
Winegard Road																						
Sand Lake Rd to Lancaster Rd	2LU	880	10500	4800	1820	3 00%	345	368	50	49	348	376	11	10	11	10	420	445	B	B	8 2%	7 8%
Lancaster Rd to Oak Ridge Rd	2LU	880	11000	6300	1120	3 00%	345	368	30	29	372	400	7	6	7	6	416	441	B	B	5 0%	4 7%
Orange Avenue																						
Landstreet Rd to Sand Lake Rd	4LD	1850	35700	64400	920	3 00%	1368	1442	62	62	1541	1628	5	5	5	6	1613	1701	C	C	3 9%	3 9%
Sand Lake Rd to Lancaster Rd	4LD	1850	25800	57800	1350	3 96%	1763	1639	70	69	2095	1943	8	7	8	8	2181	2027	F	F	4 6%	4 5%

1- Peak hour peak direction service volumes obtained from Table 5-1 of the 1998 FDOT LOS Standards and Guidelines Manual
2- Project traffic distribution derived using FSUTMS vine trace routine
3- 2005 Background Traffic does not include existing project traffic
4- The LOS for these links fell below the standard with the inclusion of the 1999 Orange County traffic
The LOS shown is calculated using a detailed ART_PLAN analysis
The intersections on these links were the only intersections updated with the new volumes

= 1999 Average Annual Peak Hour Traffic Volume used as calculated in original (Feb 2000) analysis
1999 Orange County data was not available on these links

adverse. If both significance and adversity is evident, then the project must provide mitigation as provided by statute. Table 10 summarizes improvement needs for both roadways and intersections.

Significant and adverse impacts are expected on Sand Lake Road from International Drive to OBT and from Orange Avenue to McCoy Road. Total improvement costs are estimated by the applicant to be between $11.6 million and $29.9 million, depending on which standard cost figures are used and if right-of-way is available or needs to be purchased. Intersections operating significantly and adversely include

OBT at Oak Ridge Road

OBT at Holden Road

Sand Lake Road at John Young Parkway

The cost for intersection improvements are estimated by the applicant at $2,200,000. Total combined costs estimates are $32.1 million at the high end and $13.8 million at the low end.

Issues

This DRI received its initial approval in 1975, only two years after the DRI process had begun. At that time, mitigation for traffic was not subject to any specific rule or specific method of assessing impacts. It was in 1984 that this regional planning council initiated what was to become the "10% rule[1]." This method was subsequently adopted by most of the regional planning councils as the method to assess if a project was responsible for roadway impacts. The third and current method[2] is one based on the second method (10% rule), but is more stringent. It is codified in DCA "safe harbor" Rule 9J-2.045, FAC.

Since this project was initially assessed for mitigation of impacts based on the "non-specific method", there is no way to precisely add the additional trips to a formula to assess cumulative impacts. Policies exist for converting impacts from the 10% rule to the 5% rule, but none exists for this situation. As mentioned above, up to $32 million in roadway improvements are needed in the impact area. After discussions with Orange County staff, FDOT staff, the representatives of the mall and ourselves, it was generally agreed that the widening of Sand Lake Road from OBT to Presidents Drive from 4 to 6 lanes was a fair and appropriate improvement. It would "pipeline" the project's fairshare portion of the various improvement needs to one improvement that would actually be immediately constructed by Florida Mall. The consultants for the applicant is still discussing the issue with the applicant, but they agreed that this improvement, or one just short of reaching Presidents Drive that would extend the improvement to Chancellors Drive, was appropriate. The question of whether the cost of the improvement would be credited against impact fees was discussed. Orange County representatives said they would consider a request, but could not commit at this time. The county has an alternative impact fee procedure for these

[1] This ECFRPC rule required mitigation if the project contributed 10% to the roadways LOS "C" service volume (significant impact) and if the roadway operated below LOS "D" (or LOS "C" in rural areas and LOS "E" in downtown)
[2] DCA's safe harbor rule requires various mitigation options where the project contributes 5% to the roadway facility's service volume based at the adopted level of service and the facility operates below the adopted level of service

Table 10

Roadway Improvement Summary
Florida Mall Substantial Deviation

Intersection	Existing Lanes	LOS Before Improvement	Required Improvement	Improved LOS
Sand Lake Road				
Orange Blossom Trail to International Drive	4L	F	EBThru / WB Thru	D
Orange Avenue to Bee Line Expressway	4L	F	EBThru / WB Thru	C

Intersection Improvement Summary
Florida Mall Substantial Deviation

Intersection	LOS	Required Improvement	Improved LOS
Orange Blossom Trail and Sand Lake Road	F	EB Thru	E
Sand Lake Road and Mandarin Drive	C	EB Thru / WB Thru	B
Sand Lake Road and John Young Parkway	F	NB Thru / SB Thru	E
Sand Lake Road and Presidents Drive	D	EB Thru / WB Thru	C
Sand Lake Road and Chancellor Drive	E	EB Thru / WB Thru	D
Sand Lake Road and Orange Avenue	E	EB Thru / WB Thru	D

APPENDIX I-A10:
ADM Matrix - Status of Requested Transportation Analysis -2-23-16

Status of the Transportation Impact Analysis Report for the American Dream Miami and The Graham Project CDMP Amendment Applications

Requirements for Traffic Impact Reports for CDMP Standard Amendment Applications[1]	DRI Requirements Relating to Transportation (Question 21, 22, and 32)[4]	Comments	Status
Traffic Impact Analysis study	Transportation Resource Impacts Analysis (Question 21 - Transportation)	• TIA Report submitted on Dec. 31, 2015.	• Submitted--incomplete.
Study Area. • Distribute trips generated by projects and evaluate for impacts on roadway network based on 5% Rule of the maximum service volume at the adopted Level of Service (LOS) standard to determine the impact study area.	• Study Area. Evaluate for impacts on roadway network based on 5% Rule of the maximum service volume at the adopted Level of Service (LOS) standard.	• Revise Figures 3 and 4 to show trips in all directions until percentages reach 5% or less of maximum service volumes.	• Submitted--incomplete. • Pending revision by applicant.
Analysis Years • Existing LOS conditions (2015) • Year 2020 (short-term) • Year 2040 (long-term).	• Existing and buildout year conditions on roadway network within study area.	• Figures 6, 7 and 8 - show only LRTP Cost-Feasible roadway improvements.	• Submitted--incomplete. • Pending revision by applicant.
• Existing Conditions analysis.	Existing Conditions. • Use map/table as a base to indicate existing conditions within the study area.	• Provide analysis in Table 1 and Appendix C for all FDOT and County traffic stations. For state roadways maximum service volumes use FDOT's Generalized Tables. For County roadways maximum service volumes use ARTPLAN.	• Submitted--incomplete. • Pending revision by applicant.
Short Term analysis (Concurrency Analysis) • Based on the average of the two highest consecutive hours.			• Concurrency analysis - Not submitted.
Background Traffic • Increase in non-development traffic and traffic from other development should be accounted for in future years.		• The County Platting Division as well as other municipalities indicate that there is substantial development in the vicinity of the application areas. Consider the traffic impact of these developments in the analyses.	• Submitted--incomplete.
• **Roadway improvements**--consider roadway capacity improvements in the adopted Metropolitan Planning Organization's (MPO) Adopted 2016 Transportation Program (TIP), and planned roadway capacity improvements listed in the Cost Feasible Plan (funded Priorities I through IV) in the adopted 2040 Long Range Transportation Plan.	• Identify what improvements or new facilities within the study area are planned, programmed, or committed for improvements.	• Figures 6, 7, 8 must show only LRTP Cost-Feasible roadway improvements	• Submitted--incomplete. • Pending revision by applicant.
Trip Generation. • Use the ITE's 9th Edition Manual (trip rates).	• Projection of vehicle trips expected to be generated by development, including trip end generation rates by land use types, sources of data, model split, persons per vehicle, etc. as appropriate.	• Pass-by trips versus diverted trips. • Seasonal characteristics: MOA versus Miami seasonal variations. • Gross floor area versus gross leased area. • Entertainment adjustment. • Explain the adjustment for light rail. • Trip generation depends on the survey conducted--Staff wants to look at alternative sources. • Clarify methodology used to calculate occupancy value rate of 2.3% and include calculations supporting text in the report. • Revise trip generation analysis accordingly for both ADM and Graham projects.	• Submitted--incomplete. • Revised by applicant. • Pending review by Staff.
Trip Distribution. • For short-term concurrency analysis perform trip distribution manually. • For long-term use the computerized travel demand forecasting model.	• Project total peak hour directional traffic on the highway network within the study area at the end of each phase of development. • Show link projections on maps or tables of the study area network, one map/table for each phase. • Assign trips on separate maps and tables for each phase.	• For Figures 9 and 10, expand the study areas for each application and for the combined applications. • Provide the percentages in trip distribution all the way until the percentages reach 5% or less. • The impact of the solution of study area links definition must also be assessed and described in the report.	• Submitted--incomplete. • Pending revision by applicant.

Status of the Transportation Impact Analysis Report for the American Dream Miami and The Graham Project CDMP Amendment Applications

Requirements for Traffic Impact Reports for CDMP Standard Amendment Applications[1]	DRI Requirements Relating to Transportation (Question 21, 22, and 32)[4]	Comments	Status
Future Conditions (Year 2040) analysis • Include the 2040 LOS conditions on the roadway network within the study area with and without the proposed land use change and with the land use change impacts. • Identify which roadway segments will violate the adopted minimum LOS standards.	• Analysis for buildout year and for each phase, estimate the percent impact in terms of peak hour directional DRI trips on each regionally significant roadway on the study area.	• Expand the study area for each application and for the combined applications based on the 5% rule analysis and revise Table 10 accordingly.	• Submitted--incomplete. • Pending revision by applicant.
Mitigation Analysis. • Determine the mitigation measures to be taken (range of alternatives) and indicate the capacity improvements needed to mitigate the impacts. • Provide maps and exhibits to show the impacts and mitigation measures.	• Identify the facility type, number of lanes and projected signal locations for the regionally significant roads. • What provisions, included but not limited to sidewalks, bicycle paths, internal shuttles, ride-sharing and public transit will be made available for the movement of people by means other than private automobile.	• Clarify the commitment of funding for the improvements identified in the mitigation analysis, and the entity responsible for constructing those improvements. • Include in the report consideration for multimodal or transit mitigation measures.	• Submitted--incomplete.
• Traffic impact analyses for each Application separately and for the combined applications.[2]		• Accordingly provide text, figures and tables for the combined analysis.	• Submitted--incomplete. • Pending revision by applicant.
• AM Traffic concurrency analysis for schools on major roadway segments.[3]			• Not submitted.
• Traffic Impact analysis for weekends[2] and 3			• Not submitted.
• A separate short-term analysis (Year 2020) without the advancement of Priority IV.[2]			• Not submitted.
	Intersection analysis • Indicate what intersection modifications will be necessary to attain and maintain local and regional LOS standards.		• Not submitted.
	Question 22 - Air Quality. Substantially impacted intersections within the study area and all parking facilities associated with project, determine if air quality modeling for carbon monoxide is completed for any facility listed. Air quality analysis to be completed concurrently and in conjunction with traffic analysis with the project.	•To be submitted with TIA Report.	• Not submitted.
	• Question 32 - Attractions and Recreation Facilities. What is the projected high, low, and average daily attendance? Specify the seasons, if applicable. Estimate the number of customers utilizing transportation other than the automobile. Identify transportation facilities to be owned and operated by the applicant.	•To be submitted with TIA Report.	• Not submitted.

Notes

[1] Source: *Instructions For Preparing Applications Requesting Amendments to the Miami-Dade County Comprehensive Development Master Plan* Report

[2] Requested by RER Planning Division Staff.

[3] Requested by DTPW Staff.

[4] Source: *Development of Regional Impact Application for Development Approval Under Section 380.06, Florida Statutes* Report

Compiled by RER, Planning Division, February 23, 2016

APPENDIX I-A11:
Miami Dade Trip Gen Response_031816

Scott, my understanding is that Public Works is ok with the revisions you made. I have not heard back from FDOT.
Mark

Sent from my iPhone

On Mar 18, 2016, at 2:42 PM, "Scot Leftwich, Ph.D., P.E." <scot.leftwich@lce-fl.com> wrote:

Mark
How is the Trip Generation review coming?
Scot

D. Scot Leftwich,Ph.D.,P.E.
President
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12151 Science Drive Suite 101
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Telephone: (407) 281-8100 ext 203
Facsimile: (407) 249-2212
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From: Woerner, Mark (RER) [mailto:MWOERNER@miamidade.gov]
Sent: Tuesday, March 08, 2016 12:11 PM
To: Scot Leftwich, Ph.D., P.E. (scot.leftwich@lce-fl.com); 'Robert Gorlow' (rgorlow@comcast.net); 'Andre Groenhoff' (andre.groenhoff@gmail.com)
Subject: FW: American Dream Miami Trip Generation Discussion 02.19.16 Materials

Here you go Scot.

Mark R. Woerner, AICP
Assistant Director for Planning
Planning Division
Miami-Dade County Department of Regulatory and Economic Resources
305-375-2835
"Delivering Excellence Every Day"

From: Colmenares, Lisa [mailto:Lisa.Colmenares@dot.state.fl.us]
Sent: Monday, March 07, 2016 4:10 PM
To: Somoza, Napoleon (RER) <NVS@miamidade.gov>; Woerner, Mark (RER) <MWOERNER@miamidade.gov>
Cc: Desdunes, Harold <Harold.Desdunes@dot.state.fl.us>; Miller, Stacy <Stacy.Miller@dot.state.fl.us>; Braun, Steve <Steve.Braun@dot.state.fl.us>; Filer, Carl <Carl.Filer@dot.state.fl.us>; Meitin, Omar <Omar.Meitin@dot.state.fl.us>; Dykstra, Lisa <Lisa.Dykstra@dot.state.fl.us>; Isabel Cosio Carballo

<isabelc@sfrpc.com>
Subject: RE: American Dream Miami Trip Generation Discussion 02.19.16 Materials

Dear Napoleon:

Attached please find District 4 and District 6 comments in regards to the trip generation methodology analysis and revised Trip Generation Summary for American Dream Miami.

Please feel free to contact Lisa Dykstra or you can contact me if you have any questions or need additional information.

Thank you,

Lisa

Lisa Colmenares, AICP
Planning Manager
Intermodal Systems Development Office
Florida Department of Transportation, Distirct Six
1000 NW 111th Avenue
Miami, FL 33172
Phone: (305) 470-5386
E-mail: lisa.colmenares@dot.state.fl.us

From: Somoza, Napoleon (RER) [mailto:NVS@miamidade.gov]
Sent: Monday, February 29, 2016 4:22 PM
To: Colmenares, Lisa; Dykstra, Lisa
Subject: FW: American Dream Miami Trip Generation Discussion 02.19.16 Materials

Hello ladies,

Please find attached the revised Trip Generation rate for the American Dream Miami Mall. Please review and let Mark Woerner and me know if you have any comments or concerns. Thank you for your assistance with this CDMP amendment application.

Napoleon V. Somoza, Supervisor
Miami-Dade County Department of Regulatory and Economic Resources Planning
111 NW 1st Street, Suite 1220
Miami, FL 33128-1972
Tel. No. (305) 375-2835
nvs@miamidade.gov

From: Woerner, Mark (RER)
Sent: Tuesday, February 23, 2016 4:15 PM
To: Guyamier, Frank (MDT) <frankg@miamidade.gov>; Somoza, Napoleon (RER) <NVS@miamidade.gov>; Fernandez, Darlene (PWWM) <Darlene.Fernandez@miamidade.gov>; Khan, Muhammad (PWWM) <khanm@miamidade.gov>
Cc: Osterholt, Jack (Office of the Mayor) <josterholt@miamidade.gov>; Gomez, Lourdes (RER)

<lgomezt@miamidade.gov>
Subject: FW: American Dream Miami Trip Generation Discussion 02.19.16 Materials

Hi all;
This is just their revised trip gen based on last Friday's meeting. We need to review this material by Friday to determine if it is sufficient for the analysis.
thanks,
Mark

From: James Taylor [jmt@lce-fl.com]
Sent: Tuesday, February 23, 2016 1:09 PM
To: Woerner, Mark (RER)
Cc: 'Scot Leftwich, Ph.D., P.E.'; Andre Groenhoff; 'Robert Gorlow'
Subject: American Dream Miami Trip Generation Discussion 02.19.16 Materials

Mark,

Thank you again for taking the time on Friday to discuss the American Dream Miami CDMP TIA comments to date. For your review, please find attached a summary of the proposed revision for Table 6: Trip Generation Summary for American Dream Miami for upcoming CDMP TIA revision. We have also included the Table 6 from the December submittal and the alternative analysis discussed on Friday showing another method which arrives at nearly the same result.

We propose to include the proposed revision in the revised CDMP TIA to address all agency comments received to date on trip generation. We appreciate that you have offered to review the new trip generation proposal within a week's time. We have reached out to FDOT to discuss the same.

Most of the source material used to revise the trip generation summary is already included in the CDMP TIA submitted in December 2015, however, some additional back-up materials has been included per our trip generation discussion on Friday. Additionally, here are links to a couple of reports we made mention of during the presentation:

http://www.miamiandbeaches.com/~/media/files/gmcvb/partners/research%20statistics/annual_report_2014

http://www.teaconnect.org/images/files/TEA_103_49736_150603.pdf

Please feel free to have your staff reach out with any questions or concerns.

Regards,
James

James M. Taylor, P.E.
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Tel: (407) 281-8100, ext. 205
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Email: jmt@lce-fl.com

APPENDIX I-A12:
FDOT Review Letter for ADA Trip Generation_032416

Florida Department of Transportation

RICK SCOTT
GOVERNOR

1000 NW 111 Avenue
Miami, FL 33172

JIM BOXOLD
SECRETARY

March 24, 2016

Napoleon Somoza, Supervisor
Miami-Dade County Department of Regulatory and Economic Resources Planning
111 NW 1st Street, Suite 1220
Miami, FL 33128-1972

Subject: American Dream Miami Trip Generation for Comprehensive Development Master Plan (CDMP) Amendment

Dear Mr. Somoza:

The Florida Department of Transportation, District Six, in cooperation with District Four, completed a joint review of the resubmitted trip generation analysis and Technical Memorandum for American Dream Miami (ADM) and Graham Project, which was dated March 14, 2016. The technical memorandum includes responses to comments concerning the trip generation analysis for the development projects presented in December 2015.

Based on the joint District Four and Six review of the Technical Memorandum dated March 14, 2016, the Applicant has satisfactorily addressed all comments concerning the trip generation analysis.

Please contact me at 305-470-5386, or Lisa Dykstra at 954-777-4360, if you have any questions concerning our comments.

Sincerely,

For: Lisa Colmenares, AICP
Planning Manager

cc: Harold Desdunes, Florida Department of Transportation, District Six
Stacie Miller, Florida Department of Transportation, District Four
Steve Braun, Florida Department of Transportation, District Four
Carl Filer, Florida Department of Transportation, District Six
Lisa Dykstra, Florida Department of Transportation, District Four
Isabel Cosio-Caraballo, South Florida Regional Council

APPENDIX I-A13:
ADM Graham TIA RAI 1 Set_LCE Comment Response_06 22 2016

AMERICAN DREAM MIAMI & GRAHAM PROJECT
Transportation Impact Analysis (TIA)
For Comprehensive Development Master Plan (CDMP) Amendment
Miami-Dade County, Florida

COMMENT SET & RESPONSES
June 22, 2016

Introduction to CDMP TIA Comment Responses

Attached are the responses to comments received from seven (7) reviewing agencies and interested parties on the Traffic Impact Analysis for the CDMP amendment, with FDOT Districts 4 and 6 submitting a joint set of comments. In summary, comments were received from Miami-Dade County Department of Regulatory and Economic Resources, Miami-Dade County Transit, Broward County Planning and Development Management Division, Florida Districts 4 and 6, Town of Miami Lakes, and City of Miramar. The comments and responses were numerous while many pertained to the same topic.

As we respond to the December 22, 2015 CDMP TIA submittal comments and responses, it is helpful to keep in mind all the traffic studies that were yet to be performed and have since been completed. For example, aside from the CDMP traffic study, an additional traffic study was prepared for to meet the Miami-Dade County Zoning requirements. The Zoning analysis generally follows the requirements for the Response to Question-21 of a Development of Regional Impact (DRI). Both the CDMP and the Zoning analyses follow many of the same guidelines, including establishing roadway link existing conditions and background traffic, trip distribution, and total project impacts. The main differences between the two studies is that the Zoning Analysis is limited to three years of committed roadway projects and it also include intersection analyses and evaluations. The updated analysis also includes information pertaining to the Concurrency response, a review of Weekend traffic conditions compared to Weekday conditions, Air Quality determination (DRI Question 22), brigde model run comparisons for NW170th Street and NW154th Street, and preliminary traffic impact fee analyses for the two Projects. Some of these additional analyses are included as appendices to the updated Main Document.

In addition to these traffic studies, the interchanges themselves must undergo State and Federal studies including but not limited to; Reevaluations of the interchange analysis included in the I-75 PD&E, Interchange Access Requests (IAR), and Turnpike Interchange Justification Reports (TIJR). All these studies will be reviewed and coordinated by the FDOT and FHWA, and are very comprehensive with detailed State and Federal guidelines. The freeway analyses are prepared separately from the updated document submitted at this time.

With the expansion of the updated CDMP TIA to address also the Zoning and the Concurrency requirements, along with other mentioned supporting studies, the team is hopeful that we have addressed all significant items pertaining to the CDMP per the comments contained herein. We are available to address any follow-up comments that any agency has in regards to the revised CDMP study and other submitted studies and supporting information.

Miami-Dade County Department of Regulatory and Economic Resources and Department of Transportation and Public Works – January 22, 2016

Page 1, Section 1.0 Introduction

Figure 1 Map, Project Location and Existing Roadways

- Map must show all roadway improvements proposed for each of these two projects, such as NW 102 Avenue as indicated on Figure 2 Map.

  LC: Based on other comments received, the Figure titled Location and Existing Roadways has been modified to just show the existing roadway network. The ADM and Graham project boundaries are also added for illustrative purposes. Future roadway improvements such as NW 102 Avenue are addressed elsewhere in the document.

- Some existing interchange locations are incorrect. For example, the interchanges at the HEFT and NW 67 Avenue and at I-75 and NW 87 Avenue do not exist. The interchange at I-75 and NW 87 is a planned future improvement. Please revise map accordingly.

  LC: The figure has been updated to reflect only existing interchanges. Also see comment above.

Figure 2 Map, Preliminary Access Plan

- Show all the planned roadway improvements proposed within the application site for the Graham project, such as NW 102 Avenue.

  LC: The figure has been updated to include the proposed NW 102th Avenue, along with the NW 107th Avenue roadway also requested by the County.

Page 5, Section 2.0 Analysis Years

- Provide Concurrency Analyses for each application including identifying the traffic count station for each roadway segment analyzed, and for the combined applications as requested in the *Instructions For Applications Requesting Amendments to the Miami-Dade County Comprehensive Development Master Plan May 2015-16 Amendment Cycle*.

  LC: Concurrency analyses have been added to the revised CDMP and Zoning analyses report as requested. The information is consistent with the latest vested project trip information provided by the Miami-Dade County Department of Regulatory and Economic Resources as of April 2016 and includes both FDOT and County traffic count stations. The vested trips are included in the Background Summary table presented in Table I-15 and includes reference to the individual traffic count stations referenced for the vested trips.

Page 5, Section 3.0 Study Area

Figure 3, ADM and Graham 2020 Study Area and Figure 4, ADM and Graham 2040 Study Area Maps

- Clarify the information regarding the ADM Study Area Roadway and Graham Study Area Roadway.

  LC: The referenced figures have been revised to include the overall year 2020 and year 2040 study areas associated with the combined impacts of the ADM and Graham Project as requested by review agencies. Also included are the individual ADM and Graham study area roadway significant links. Notably, three separate figures are shown; namely one for the Year 2020 CDMP and Zoning analyses, one for the Year 2040 CDMP and one for the year 2040 Zoning.

Page 8, Section 4.0 Existing Conditions (Year 2015)

Figure 5, FDOT and County Stations

- Provide analyses in Table 1 and Appendix C for all FDOT and County traffic count stations shown on Figure 5.

  LC: As previously noted, the traffic study area has been revised to reflect all significant roadway links based on the combined ADM and Graham project trips for both the years 2020 and 2040 CDMP and Zoning analyses. The Count Station map has been updated to show only those traffic count locations utilized for the analyses.

Table 1, Existing (Year 2015) Study Area Roadway Segments LOS Analysis.

- Identify the traffic count station for each roadway segment analyzed.

  LC: The traffic count stations have been added to the Existing (2015) Study Area Roadway Segment LOS Analysis table and the Background Summary table presented in Table I-15.

- Maximum service volumes for State roadways should be determined using FDOT's Generalized Table and the County's adopted LOS standards. Maximum service volumes for County roadways must be calculated using ARTPLAN and the County's adopted LOS standards.

  LC: The Maximum Service Volumes are reflective of the referenced criteria for determining the capacities to be used for the revised CDMP (as well as the other traffic analyses contained in the updated document). The capacities have been based on FDOT's Generalized Tables and coordinated to ensure they do not exceed the County's MSVs referenced in the County's Vested Trips database with updates as needed. This includes Miami Gardens Drive which has been updated to be consistent with the County's adopted MSV. The County's adopted LOS standards are also used throughout.

- Peak Hour Period volumes (PHP) are calculated using the average of the two highest consecutive hours, when 24-hour traffic counts are available. If 24-hour traffic counts are not available, then use the K factor. See *Instructions For Applications Requesting Amendments to the Miami-Dade County Comprehensive Development Master Plan May 2015-16 Amendment Cycle)*.

  LC: All link analyses tables have been updated to reflect the above mentioned guidelines. The procedure for achieving the requested existing PHP volumes are described in the report, along with supporting tables with existing and future PHPs.

- For the Existing analysis, use the actual hourly traffic counts available from FDOT and the County. For the 2020 and 2040 analyses, the growth factors must be applied to the hourly volumes.

  LC: The existing FDOT and County counts have been established for all analyzed roadway links and hourly and 15-minute traffic volumes applied were available. Again, the updated Count Location figure shows which counts were utilized. The PHP volumes derived for the various scenarios and analyses are detailed in the report. A review of the development of PHP volumes for the AM and PM existing and future traffic conditions, by peak and off-peak direction (NB/EB and SB/WB), is detailed. The future PHP background volume development, without neither the ADM nor the Graham Project included, are based on percent growth factors applied directly to the PHP volumes as requested. The process for preparing the growth is identified in the updated report along with supporting tables.

<u>Page 11, Section 5.0 Trip Generation</u>

- Use of the ITE Land Use code 820 for the pass-by trips does not seem to be appropriate because of the unique nature of this proposed development.

  LC: Both the ADM and Graham Project Trip Generations were revised and finalized between the time of the December 2015 CDMP TIA submittal and the submittal of the updated and expanded report. The Trip Generation for the ADM Project was unique due to the nature of the ADM site and its land uses. The ADM Trip Generation was ultimately finalized in March, 2016 after extensive coordination with all applicable review agencies. Miami-Dade provided approval in an email dated March 18 and FDOT's letter was dated March 24. The final ADM and Graham Trip Generation tables are included in the updated report. An appendix is dedicated exclusively to the development and final approval of the Trip Generation.

- Do the pass-by trips only apply to the retail-oriented land uses?

  LC: Yes, please refer to the updated Trip Generation table.

- 10% of the adjacent street traffic is a rule of thumb for pass-by values, according to the FDOT Transportation Site Impact Handbook.

LC: Acknowledged. All roadways have been checked to ensure that the passer-by trips do not exceed the 10 percent threshold.

- Provide a separate table showing the combined trip generation and combined analyses for both the ADM and Companies Applications for years 2020 and 2040.

  LC: The combined analyses are included in the revised report, as requested. The trip generations continues to be separate for the individual Projects since they have distinct trip distributions. The combined project trips for the two sites are included in all Combined traffic analyses, as requested. The revised report has been divided into distinct sections that pertains individually to the ADM, the Graham, and the Combined analyses and resulting traffic impacts, along with a general section that provides an overview of information that is relevant regardless of the analysis being presented. Furthermore, Concurrency analyses, CDMP analyses, and Zoning analyses are included in the three separate "project" scenario sections. The same approach has been taken to the Appendices. As summarized in the report, the individual sections and the precluding general section can be removed from the report, along with corresponding Appendices, to obtain just the information that relates to either the ADM, the Graham, or the Combined analyses.

Table 6, Trip Generation Summary for ADM

- Explain how the vehicle occupancy was applied for the light rail adjustment.

  LC: As noted previously, all issues related to the Trip Generation approach for the ADM have been finalized and are included in the updated ADM Trip Generation reflected in the revised report.

- Trip generation depends on the survey conducted – we want to look at alternatives.

  LC: As noted previously, all issues related to the Trip Generation approach for the ADM have been finalized and are included in the updated ADM Trip Generation reflected in the revised report.

<u>Page 17, Section 6.0 Background conditions (Years 2020 & 2040)</u>

- The County Platting Division has indicated that there is substantial development along NW 97 Avenue in the City of Hialeah. Provide information regarding these developments and consider their traffic impact in the analyses.

  LC: Noted. The County has provided a list of planned platted projects to include in the analysis. The projects have been added to the travel demand forecasting socio-economic data for study years 2020 and 2040 and are considered in both the CDMP and the Zoning analyses and supporting traffic studies.

Figures 6, 7, and 8, Cost-Feasible and Planned Improvements

- Show only the Cost Feasible Roadway improvements (funded Priorities I through IV roadway improvements) listed in the adopted 2040 LRTP.

  LC: The Cost Feasible Plan Priorities I through IV roadway improvements have been shown separately as requested. The additional projects are based on requests from the County, City of Hialeah or direction from ADM and are addressed separately in the report. It is understood that any roadway improvement referenced for the report and its analyses for respectively the ADM and the Graham Projects will have to be in place by the year 2020. Any modification could require a reanalysis of the traffic impacts as applicable.

Page 25, Section 7.0 Project Trip Distribution and Assignment

- Provide the plots showing the new TAZs with the centroids and connectors. Figure 9, 2020 Daily Project Distribution, and Figure 10, 2040 Daily Project Distribution

  The model plots included in the revised report are contained in a supporting Appendix and have network plots for the updated analyses which show the centroid connectors.

- Expand the study areas for each application and for the combined applications. It is unclear how trips are distributed. Review of Figures 9 and 10 indicate that only individual application trip attenuations were performed based on the 5% Rule methodology. Provide a trip distribution for the combined trips generated by both applications. Furthermore, the percentages along the expressways stopped at higher numbers, such as 11.6% (11.3%) along the HEFT going south and 15.4% (17.9%) along I-75 going east. Trips should be extended farther, in all directions and distributed to surface streets until the percentages reach 5% or less. Provide a new Study Area map for the combined ADM and Graham Companies traffic impacts equivalent to or greater than 5% of the maximum service volumes on the 2020 and 2040 roadway networks.

  LC: The updated report has been expanded to review the combined impacts of the two developments as the criteria for determining the traffic analyses study area. The ADM and Graham project traffic are also reviewed separately for their individual traffic impacts and potential mitigation needs. Particular focus has been given to regional facilities such as HEFT, the Turnpike, and I-75 were substantial additionally roadway links were reviewed. In short, the updated study area was refined to ensure that all roadway were extended one link past the 5% criteria, where applicable.

- Provide the supporting information in the Appendix H for all these maps.

  LC: The revised report contains the requested update to the model network plots. Since the study area was expanded, the model network plots have been expanded to provide a separate plot for the Northeast, the Northmiddle, the Northwest, the Southeast, the Southmiddle, and the Southwest areas of the ADM/Graham Project study area. Plots are provided for three model runs; namely the 2020 land use on the 2020 network (CDMP

and Zoning analyses), the 2040 land use on the 2040 network (CDMP only), and the 2040 land use on the 2020 network (Zoning only).

Page 29, Section 8.0 Build-Out Conditions (Years 2020 & 2040)

Tables 9, Short-Term (Year 2020) Study Area Roadway Segment LOS Analysis and Figure 10, Long –Term (Year 2040) Roadway Segment LOS Analysis.

- Clarify if two-way analyses are also included, particularly for the 2020 and 2040 scenarios.

  LC: The Peak Hour Peak Direction was analyzed in the previously submitted December 2015 report. The revised report includes both the peak directional and non-directional traffic, as requested. This is done for respectively the CDMP and the Zoning analyses, along with many of the supporting studies as applicable. The Concurrency review is also based on directional traffic.

Page 35, Section 9.0 Mitigation Analysis

- As indicated in the *Instructions Report*, the analysis must consider only on the Cost-Feasible Plan of the 2040 LRTP (funded Priority I through IV) roadway improvements and should not consider partially funded, unfunded, or private projects. The applicants must be responsible for any additional roadway or transit improvements needed as a result of the impacts of their applications.

  LC: Please refer to earlier response to Miami-Dade Department of Regulatory and Economic Resources comments relating to Figures 6, 7, and 8 and the expanded roadway improvement figures and tables presented in the updated report.

Appendixes

- Review of Appendix B indicated higher growth for expressways. For example, for I-75 and the HEFT the historical volumes for most of the segments will result in higher growth rates. Please verify and revise accordingly.

  LC: The traffic growth review has been revised to include not only additional roadway links, as determined based on the study area review, but also by setting several criteria for future year growth projections. For example numerous roadway links were identified to have annual growth rates higher than ten percent per year. It is unrealistic to expect that background, without project trips, will continue to grow at these historically observed growth rates through the year 2040. Similarly, there are roadways which have negative historical growth forecasts. To provide more reasonable background volume forecasts, the growth rates for year 2020 was set at a minimum of 1 percent and a maximum of 5 percent for the time period 2015 through 2020, except expressways which were limited to 2.5 percent. The growth rates for the year 2040 background traffic was once again set at a minimum of 1 percent but with a maximum of 2 percent for the time period 2015 through 2040, except freeways which were limited to 1.5

percent. Also, any 2014 traffic counts were applied a conservative 2 percent growth to forecast year 2015 existing conditions. Again, as previously mentioned, a detailed review of growth rates and above mentioned criteria are documented in the report.

- Provide detailed modular plots for the entire impact study area in Appendix H1. Also, provide plots for the combined analysis in order to identify the impact of the combined applications.

  LC: Updated plots have been included for both the ADM and the Graham Project trip distributions and have been expanded to encompass the revised study area. A separate trip distribution is not applicable for the Combined Project trips, since the traffic analyses distinctly show the two Projects separately throughout. The Combined analyses do contain the addition of the two Project site traffic volumes for a Combined Total Project Traffic projection.

Additional Comments

- Provide the County with any information or traffic analyses provided to other agencies as input and for review, such as the interchange justification and interchange modification reports.

  LC: Comment noted. We will continue to work corporately with County staff to ensure that all efforts are coordinated. No separate information has been furnished to any other agencies at this point. The upcoming efforts for the federally and state guided freeway efforts will be coordinated with the County.

- Identify roadways where schools exists or are planned and performed the corresponding AM Peak Hour analyses.

  LC: The traffic analyses for the revised report and its analyses have been enhanced to include the AM traffic, along with the PM traffic, for all study links and therefore addresses the coverage of any schools located within the study area.

- Provide information regarding any plans for future transit service to serve the subject application sites.

  LC: The report addresses all the roadway needs for each the ADM and the Graham Projects. The ADM Team has previously indicated that shuttle service will be provided to and from its Site to nearby location such as the Miami International Airport. The specifics of transit commitments will be addressed following the completion of the CDMP and Zoning analyses.

- Add a new column to Tables 1, 9 and 10 identifying the traffic count station of each roadway segment analyzed. Also, include every major section roadways, arterials and collectors in the analyses.

  LC: The traffic count stations have been added to the Existing Study Area Roadway Segment LOS Analysis table and other tables were traffic counts are referenced directly

such as the Background Summary table. As previously noted, the study area has been expanded to include the combined ADM and Graham project trips based on the 5% criteria. A review was made to ensure that all major roadways were included in the analysis.

- Add a Table of contents and a one- or two- page Executive Summary to the report.

  LC: As requested, a Table of Contents has been added to the revised report and an Executive Summary has also been included.

- The County calculate the Impact Fees based on ITE trip generation codes. Provide information on the impact fees for the ADM Application.

  LC: Preliminary Impact Fee analyses for the ADM and Graham Project applications are included in supporting Appendices, as requested, and has been prepared in accordance with the County's guidelines. The Impact Fee analyses includes reference to site specific trip generation information and updated present day cost (PDC) factors.

Miami-Dade County Department of Regulatory and Economic Resources – January 28, 2016

The Miami-Dade County Department of Regulatory and Economic Resources provided a map and table listing approved plats, along with the traffic reports submitted. These are the plats in the vicinity of the Nov. 2015 CDMP App. Nos. 1 & 2, the ADM and Graham applications.

LC: The provided approved platted projects have been added to the updated socio-economic data for the year 2020 and year 2040 travel demand forecasting model runs to ensure that the platted projects are accounted for in the ADM and Graham analyses, as well as their Combined analyses. The requested projects are included in the Appendix as reference, along with a summary table of the TAZs that have been updated for the requested platted projects plus the ADM and the Graham site TAZs.

Miami-Dade County Transit – January 21, 2016

Requested Amendments

1. Re-designate the application site on the Land Use Map:

   From: "Industrial and Office"
   To: "Business and Office"

   These comments are addressed as part of the Land Use application.

2. Delete the 0.45 Floor Area Ratio (FAR) limitation on the portion of the Application area west of NW 97 Avenue

   These comments are addressed as part of the Land Use application.

3. Release the Declaration of Restrictions, recorded in Official Records Book 24479 at Page 0689 of the Public Records of Miami-Dade County, Florida, as it applies to portions of land within the subject property

   These comments are addressed as part of the Land Use application.

4. Add the proffered Declaration of Restrictions in the Restrictions Table in Appendix A of the CDMP Land Use Element, if accepted by the Board;

   These comments are addressed as part of the Land Use application.

5. Amend the Transportation Element Figure 1- Planned Year 2030 Roadway Network; Figure 2 – Roadway Classification 2012; and Figure 3 – Roadway Functional Classification 2030).

   These comments are addressed as part of the Land Use application.

Broward County Planning and Development Management Division–January 25, 2016

1. The study area maps (Figure 3 for Year 2020 and Figure 4 for Year 2040) show the impacts associated with the ADM and Graham individually. The study areas should be calculated based on both ADM and Graham collectively.

   LC: The updated analyses have been expanded to review the combined traffic associated with the two developments and serve as the criteria for determining the study area. The Combined analyses are presented for informational purposes only since each individual project will be responsible for its own transportation impacts. Updated mitigation figures and tables include Combined mitigation information with footnotes pertaining to how they relate to the individual ADM and Graham Projects and their mitigation needs.

2. Additionally, the traffic impacts of major developments in northwestern Dade County on southern Broward County should be modeled and evaluated. In addition to the ADM and Graham projects, the projected development of the Landmark property (between NW 47 and NW 57 Avenues and between NW 199 Street and Snake Creek Canal) should be included in the analysis.

   LC: The model socio-economic data represented in the model year 2020 and year 2040 zdata files represents the latest adopted land use information within the area. In addition, Miami-Dade County provided a list of 20 platted projects to include in the analysis. These projects have been added to the year 2020 and year 2040 model socio-economic data. No further refinements were made to the zdata.

3. Trip generation for ADM is based on an adjustment to the GLA-based rate for Mall of America (MOA). ADM will be about 35% larger than MOA and trip generation is increased a like amount to estimate trip generation for ADM (49,800 vs. 67,251). However, the theme park and related features are included within the gross floor area (GFA) but not within the gross leasing area (GLA). For this application, the non-leasable area of ADM could reasonably be expected to generate trips. The GFA for the ADM will be 41% larger than MOA (vs. 35% for the GLA); given the unique nature of these developments, the trip adjustment should be based on GFA.

   LC: Both the ADM and Graham Project Trip Generations were revised and finalized between the time of the December 2015 CDMP TIA submittal and the submittal of the updated and expanded report. The Trip Generation for the ADM Project was unique due to the nature of the ADM site and its land uses. The ADM Trip Generation was ultimately finalized in March, 2016 after extensive coordination with all applicable review agencies. Miami-Dade provided approval in an email dated March 18 and FDOT's letter was dated March 24. The final ADM and Graham Trip Generation tables are included in the updated report. An appendix is dedicated exclusively to the development and final approval of the Trip Generation.

4. The light rail transit (LRT) adjustment is stated to be 10.8 percent, but the adjusted increase in trip generation is only about 7 percent. The justification for this appears to be that MOA has an average vehicle occupancy (AVO) of 2.3 but the study assumes that ADM will have an AVO of 4.0 based on AVO's calculated for Orlando area theme parks. However,

ADM will be a retail/entertainment complex congruous in nature to MOA, so much so that trip generation is based on MOA. Orlando theme parks are primarily entertainment complexes vs. retail/entertainment complexes. Therefore, it is reasonable to expect the AVO for ADM to be similar to be similar to that of MOA and the effective LRT adjustment should reflect the 10.8 percent value.

LC: As noted previously, all issues related to the Trip Generation approach for the ADM have been finalized and are included in the updated ADM Trip Generation reflected in the revised report.

5. Information is limited in the report for the hotel component of MOA. Per our research, it appears MOA has a maximum of 850 on-site hotel rooms whereas 2,000 rooms are planned for ADM. This ratio of hotel rooms for ADM to MOA is not consistent with the 35% adjustment in trip generation and further puts into question the values used in the study to estimate ADM traffic.

   LC: As noted previously, all issues related to the Trip Generation approach for the ADM have been finalized and are included in the updated ADM Trip Generation reflected in the revised report.

6. The MOA trip data provided by Cambridge Systematics (included as an appendix to the TIA) indicates that a significant amount of the trips to and from MOA that have origins within an approximate 15-mile radius, however, there are also significant numbers of trips being made from approximately 60 miles of more. Approximately half of the trips have travel times in excess of 30 minutes, with 23% of trips having travel times greater than one hour. Given the fact that the ADA site has land uses that could attract trips from even further distances than the MOA site, the dissipation of ADM and Graham Property trips shown on the submitted TIA trip distribution maps seems to be more rapid than what would be expected based on the MOA site data. In other words, the TIA trip length distributions seem shorter than expected, reducing the size of the impact area. Please provide the SERPM model trip distribution plots for the ADM and Graham project zones for a 10-mile radius for the 2020 and 2040 model runs so that trip lengths can be further evaluated. If trip-length distribution curves are available for the project zones from the model outputs, please provide those as well. The longer project trip lengths also puts into question the diverted trip credit assumed for the TIA as it appears a substantial portion of ADM trips will be destination-oriented rather than diverted link or pass-by.

   LC: The revised report contains updated network plots. Since the study area was expanded, the model network plots have been expanded to provide a separate plot for the Northeast, the Northmiddle, the Northwest, the Southeast, the Southmiddle, and the Southwest areas of the ADM/Graham Project study area. Plots are provided for three model runs; namely the 2020 land use on the 2020 network (CDMP and Zoning analyses), the 2040 land use on the 2040 network (CDMP only), and the 2040 land use on the 2020 network (Zoning only).

   The sub-area model obtained from the Turnpike SERPM 6.5.4 Model utilized for the ADM and Graham traffic analyses is restricted to the areas contained in the provided network percent project distribution plots. For regional trips, manual adjustments were made to the

model distributions to extend the trips for the regional HEFT, I-75, and Turnpike facilities. The revised report therefore addresses the adjustment of trip distribution to account for more regional trip making.

The diverted trips have been finalized as part of the final Trip Generation approved in March 2016 and adjustments have been made to ensure more regional trips are assigned on regional facilities.

7. Please provide the SERPM model loaded total volumes and v/C ratio plots for the surrounding network for an approximate 10-mile radius surrounding the project zones (it is acknowledged that the model v/C's are not equivalent to the segment v/C's using FDOT planning level-of-service procedures).

   LC: The background trips utilized in the analyses were obtained from existing PHP traffic volumes derived from local FDOT and County traffic counts and are based on historical growth projections as detailed in response to MDC RER Comment on the Appendices. The only referenced model volumes are for non-existing roadway facilities. The resulting future volume therefore will vary for the majority of roadway links from the SERPM model forecasts trips. It would therefore not make sense to review the volume-to-capacity ratios from the model when a more detailed analysis is contained in the various traffic analyses presented in the updated report.

8. Please provide a summary table of the model land use data files (ZDATA files) for the study area traffic analysis zones for the various 2020 and 2040 model runs.

   LC: A summary table of the ZDATA refinements included for the ADM and Graham CDMP analysis are included in supporting Appendix. The table summarizes the zdata information for the two Projects and their TAZs, as well as County requested Platted Projects also updated in the model zdata.

9. Based on the TIA narrative, the Applicant indicates that there will be additional traffic analysis provided beyond that currently included in the CDMP traffic impact analysis. Broward County staff has concerns about the frictional impacts that the expanded I-75 interchange will have on an already congested I-75 mainline as well as what impacts the proposed access ramps onto the HEFT will have on the adjacent HEFT mainline operations. Please describe what additional traffic operations analysis will be provided to address these areas.

   LC: As stated in the introduction to the comment responses, "In addition to these traffic studies, the interchanges themselves must undergo State and Federal studies including but not limited to; Reevaluations of the interchange analysis included in the I-75 PD&E, Interchange Access Requests (IAR), and Turnpike Interchange Justification Reports (TIJR). All these studies will be reviewed and coordinated by the FDOT and FHWA, and are very comprehensive with detailed State and Federal guidelines." These further studies will focus on the operational aspects of these nearby freeway facilities and their respective ramps.

10. Continuing from the above comment, an operational analysis of the I-75 @ Miramar Parkway interchange and adjacent should be performed as more than 5% of the current project distribution impacts this interchange. Broward County staff has concerns regarding impacts to the interchange operations as well as the arterial mainline of Miramar Parkway. Additionally, existing Broward MPO data show Miramar Parkway east and west of I-75 significantly overcapacity (peak-hour v/C's of 1.47 and 1.21) whereas the TIA analysis for existing conditions shows those links operating at LOS "C".

    LC: Please see above response related to more detailed operational review being performed in other future freeway studies.

    In regards to the traffic volumes for the Miramar Parkway, the traffic volume used for the analyses is based on the January 24, 2014 traffic count information provided by Broward County. The provided count does not reflect V/C ratios exceeding the adopted LOS.

11. Please provide the project distributions along the segment of Flamingo Road/Ludlam Road from Red Road in Broward County to NW 188 Street in Miami-Dade County. This corridor is one of the few continuous north/south corridors that crosses county lines other than the expressways in the area. It is currently a two lane facility and could potentially become a parallel reliever to other roadways forecasted to be over-capacity.

    LC: Please refer to the supporting Appendix model distribution plots for information relating to distribution of ADM and Graham Project trips on Flamingo Road/Ludlam Road. As noted no project traffic is assigned for either of the two Projects to this facility and therefore the roadway was not added to the traffic analyses performed in the updated report.

12. The TIA narrative essentially indicates that the ADM and Graham projects generally have no significant impacts or capacity mitigation requirements beyond the project access needs due to the fact that the significantly impacted roadway segments that are forecasted to operate below the adopted LOS standard were already forecasted to operate below the standard without the projects. However, some of the project's impacts represent a significant percentage of the adopted level-of-service capacity of the failing links, creating a much more severely failing condition on these segments. It seems that a land plan application that further degrades a failing links should be required to mitigate at least its additional impact to the failing links, or propose other mitigation, potentially on parallel facilities to offset these impacts. Please clarify the projects' mitigation responsibilities relative to these impacts as part of the CDMP process.

    LC: The mitigation impacts associated with each the ADM and the Graham Projects are clearly defined in the revised report and take into consideration all segments with deteriorated LOS conditions <u>and</u> Project trips exceeding the 5% of the Maximum Service Volume criteria for significant links. The mitigation impacts are addressed according to whether the traffic volumes exceeding roadway capacity is due to it being backlogged trips or Project only impacts and are consistent with State guidelines established in HB 7207.

13. For the American Dream project, ITE land use code 820 was not considered an acceptable source of data. Please explain why it is acceptable for calculating trip diversion. The number of diverted trips appears to be overestimated, especially given the fact that the

study states that "30% of MOA visits were made from outside the region" and that "nearly half of MOA trips travel over 30 minutes to arrive at the site." A smaller number of diverted trips and longer trip lengths would have a more negative effect on Broward County facilities.

LC: As noted previously, all issues related to the Trip Generation approach for the ADM have been finalized and are included in the updated ADM Trip Generation reflected in the revised report. Also, please refer to response to Broward County Planning and Development Management Division No. 6 in regards to adjustments made to account for more regional trip making.

14. During the review meeting held at SFRPC on January 22, 2016, there was discussion of extending transit to this site and construction of park and ride facilities. Whilst Miami-Dade Transit will be the primary service provider, staff would encourage the applicant to explore option for transit service north of the site with Broward County Transit. Transit riders are likely to be employees working in retail, hotel and park components of the project. South Broward County has many residential neighborhoods which would be included in the future labor pool.

    LC: Transit is not directly referenced in the traffic analysis. Transit will be addressed subsequent to the completion of the CDMP TIA and supporting traffic analyses contained in the updated report. Discussion will include Broward County as it relates to any transit services extended within its County boundaries. The CDMP and Zoning analyses address transit in general with further information to be established separately.

Florida Department of Transportation, District 6, District 4 – January 28, 2016

General Comments

1. Pursuant to House Bill (HB) 359 and Florida Statute (F.S.) 373.4149 (Miami-Dade County Lake Belt Area), *"Rezonings, or amendments to local zoning and subdivision regulations, and amendments to local comprehensive plans concerning properties that are located within 1 mile of the Miami-Dade Lake Belt Area shall be compatible with limestone mining activities. No rezonings, variances, amendments to local zoning and subdivision regulations which would result in an increase in residential density, or amendments to local comprehensive plans for any residential purpose may be approved for any property located in sections 35 and 36 and the east one-half of sections 24 and 25, Township 53 South, Range 39 East until such time as there is no active mining within 2 miles of the property."*

   Given that the proposed comprehensive plan amendments are located within one mile of the Lake Belt Area and an increase in residential development intensity is planned on The Graham Project site, please provide sufficient documentation that demonstrates this comprehensive plan amendment compiles with HB 359 and F.S. 373.4149.

   These comments are addressed as part of the Land Use application.

2. ADM and the Graham Project propose improvements that affect existing interchanges, a future full interchange, and a future partial interchange (Miami Gardens Drive at I-75, HEFT at I-75, a new interchange at HEFT and NW 170th Street, and a partial interchange at NW 178th Street and I-75). An Interchange Access Request (IAR) document, consistent with the FDOT Interchange Access Request – User's Guide, will be required for each of the interchange modifications. Additional traffic analyses will be required to evaluate impacts upon Strategic Intermodal System (SIS) facilities and interchanges during morning, afternoon and weekend periods, and to identify improvements to accommodate the additional future traffic.

   LC: We acknowledge FDOT's comment. As noted in the introduction to the comment responses, there will be further traffic analyses beyond the revised CDMP and Zoning report. At such time, the specific Federal/FDOT requirements will be addressed.

3. Several transportation improvements projects are relied upon to demonstrate adequate public facilities will be present by 2020 to accommodate the expected travel demand generated by ADM and The Graham Project. These include an interchange modification at HEFT and I-75, a new interchange at HEFT and NW 170th Street, a new partial interchange at I-75 and Miami Gardens Drive. Each of these interchange improvements ultimately requires approval by FDOT and the Federal Highway Administration (FHWA).

   If any of the interchange improvements fail to be approved and/or constructed by 2020, the base transportation network that is the foundation of ADM and The Graham Project's traffic analysis is invalid. This would result in additional transportation impacts to area roadways that were not analyzed. Therefore, it is recommended that a condition of approval be included for the ADM and The Graham Project CDMP submittals that they are contingent

upon obtaining the requisite FDOT and FHWA approvals for the proposed interchange access changes. If any of the relied upon traffic impact analysis will be necessary.

LC: Acknowledged. The ADM and Graham Project CDMP analyses are based on the mentioned interchange improvements being in place by the year 2020 and it is understood that if these interchanges are not implemented by that time that there may need to be updated traffic analyses.

4. In Table 8, there are projects funded in Priority IV of the 2040 Long Range Transportation Plan (LRTP) and assumed to open in different years, such as NW 170th Street from HEFT to NW 97th Avenue. Please provide clarification about how the applicant intends to advance these projects such that they are constructed by the year used in the traffic analysis. The funding source and commitment must be clarified for these improvements.

   LC: The five Priority IV roadway projects accelerated to 2020 and presented in the December 2015 CDMP TIA were:

   - *I-75, SR 826 (Palmetto) to NW 170 St - Widen with Express Lanes*
   - *I-75 at Miami Gardens Drive - Modify Interchange*
   - *SR 821 (HEFT), NW 57 Ave (Red) to Turnpike (Mainline) - Widen to 8 Lanes*
   - *SR 821 (HEFT), I-75 to NW 57 Ave (Red) - Widen to 8 Lanes*
   - *Miami Gardens Dr/NW 186 St, NW 97 Ave to I-75 - New 4 Lane Road (6L Assumed)*

   In addition, the NW 170th Street project referenced in above comment is accelerated from Phase III to the year 2020:

   - *NW 170 St, SR 821 (HEFT) to NW 97 Ave - 6 Lane Divided Road*

   The ADM representatives understand the necessity of these projects being in place by the year 2020 for not only the CDMP analysis and its findings but also for the viability of the ADM Project being implemented. The Client will work with local agencies to ensure that they are completed. The funding source and commitment are part of the efforts which are being pursued to ensure that the projects become a reality.

<u>Section 4.0 Existing Conditions (Year 2015)</u>

5. As noted on page 8, please clarify the source for the directional split factors used to convert non-directional service volumes from the Miami-Dade database.

   LC: The revised existing traffic conditions analyses are based on traffic counts from either FDOT, Miami-Dade County or Broward County. In a few cases, such as the Florida's Turnpike, K and D factors were obtained from the FDOT daily counts (where 15 minute synopses or hourly counts were not available) and were applied to obtain directional and non-directional existing traffic volumes. Supporting information provided in Table I-15 shows the process used to identify the existing traffic counts and specifies the directional NB/EB and SB/WB volumes.

6. Please describe the source and justification for applying an assumed 1% growth to extrapolate 2014 volumes to 2015 existing conditions.

   LC: The updated report provides a historical as well as existing summary of available traffic counts. When reviewing Table I-13, it is clear that historically there is varying traffic growth on individual facilities. Some roadways have experienced extensive annual growth since 2010 and others have decreased in traffic volumes over the same time period. The 1 percent growth was therefore a conservative approach for the area and represented a reasonable assumptions for reviewing the increase in traffic between 2014 and 2015, and beyond. For purposes of converting existing 2014 FDOT counts to the year 2015, a 2 percent is now being applied for the June 2016 Update to be more conservative. Notably, the percentage growth between 2014 and 2015 does not impact the projected traffic forecasts through the year 2020 and 2040 since historical trends (generally from 2009 through 2014) was the main resource for estimating the future year background traffic volumes. Notably, many roadways are estimated to have this minimal 1 percent growth beyond year 2015 based on the final percent growth estimates derived for the analyses and as reflected in Table I-13. Also, please note the maximum growth rates set for the two analyses years.

7. In the first bullet on page 8, please consider adjusting the eastern limit of the HEFT project to NW 27th Avenue.

   LC: The study area for the CDMP has been expanded based on the combined traffic from the ADM and Graham Projects and to ensure that a regional focus is represented for the ADM trips. As a result, the study area now includes extension of HEFT beyond the December 2015 CDMP TIA study boundary.

<u>Section 5.0 Trip Generation</u>

8. The total acreage for The Graham Project in Table 3 does not match the total acreage in Table 2. Please revise the appropriate table to maintain consistency of the property's acreage throughout the report.

   LC: Table 2 shows the overall acreage for the ADM and Graham Projects as respectively 194.1 and 340.1 acres. Table 3 includes the total 194.1 acres for ADM and incorrectly shows the 279.9 acres West of NW 97th Avenue and 60.2 acres East of NW 97th Avenue as 345.8 acres. The Trip Generation table has been updated in the revised report to reflect the 340.1 acres obtained by summing the East and West sides.

9. Pursuant to the ITE Trip Generation Handbook, "Diverted linked trips are trips that are attracted from the traffic volume on roadways within the vicinity of the generator but require a diversion from that roadway to another roadway to gain access to the site." Since trips to ADM and The Graham Project travel to both generators via limited access facilities adjacent to the sites, they add traffic to streets that directly connect to the sites. As a result, these trips are classified as diverted linked trips and not pass-by trips. Please revise the trip generation analysis accordingly for both ADM and The Graham Project.

In addition, such diverted linked trips must be accounted for when evaluating the project's impact on the on the adjacent streets that connect directly to both sites. Please revise the roadway link analysis (summarized in Tables 9 and 10) and include diverted linked trips assigned to Miami Gardens Drive, NW 170th Street and 178th Street. The revised roadway link analysis should include these diverted linked trips, a text description of what these diverted linked trips represent, a summary of the calculations to quantify these trips and a graphic that depicts where these trips are assigned to the roadway network.

LC: Both the ADM and Graham Project Trip Generations were revised and finalized between the time of the December 2015 CDMP TIA submittal and the submittal of the updated and expanded report. The Trip Generation for the ADM Project was unique due to the nature of the ADM site and its land uses. The ADM Trip Generation was ultimately finalized in March, 2016 after extensive coordination with all applicable review agencies. Miami-Dade provided approval in an email dated March 18 and FDOT's letter was dated March 24. The final ADM and Graham Trip Generation tables are included in the updated report. An appendix is dedicated exclusively to the development and final approval of the Trip Generation.

The traffic analysis has been prepared in accordance with the described methodology for applying diverted vs. non-diverted trips. To demonstrate that the diverted trips are in fact included on the indicated links, the Net External Trip Generation (applied for diverted trips links) have been added to Tables I-17 through I-19 and are highlighted in green to match with the green highlighted diverted trips.

10. Regarding the pass-by trips percentages from ITE code 820: Shopping Center, The Graham Project uses 35% in 2020 (150 KSF) and 20% in 2040 (1,000 KSF). ADM uses 14% (3,500 KSF). There is no fitted curve in the 3rd edition of the ITE Handbook (latest version), and there is no evidence to suggest that the curve would flatten at 900 KSF, beyond which there are only four data points. A fitted curve for this data would most likely be under 20% for the 2040 Graham Companies property and below 10% for the ADM (which would be 3 graph lengths away from the end of this plot). Basing the pass-by rate on the three data points over 1,000 KSF is not a statistically valid methodology. A more appropriate methodology would utilize a curve or other observed data.

    Please revise the trip generation analysis accordingly for both ADM and The Graham Project.

    Additionally, please provide the calculations confirming the "pass-by"/diverted linked trip reduction reasonableness check to ensure it represents no more than 10% of the volume of the adjacent street. Such a check should be performed separately for ADM and The Graham Project.

    LC: As noted previously, all issues related to the Trip Generation approach for the ADM have been finalized and are included in the updated ADM Trip Generation reflected in the revised report.

11. In Table 6, an auto occupancy factor of 2.3 is reported, but it is not clear how this factor was derived. The Mall of America (MOA) Survey data cited in Appendix G indicates that the size of a typical party surveyed at MOA breaks down as 44% 1 person, 35% 2 person, 21 % 3+ people. Assuming the average party size in the 3+category is 3.5, then the average

party size would be 1.9. It is unclear if a cross-classification of mode of travel and size of party was analyzed to specify the size of party for users of personal automobiles. Please clarify the methodology used to calculate the reported auto occupancy value of 2.3, and include in the report the calculations supporting the text.

LC: As noted previously, all issues related to the Trip Generation approach for the ADM have been finalized and are included in the updated ADM Trip Generation reflected in the revised report.

12. The assumption that trip rates derived for GLA (Retail) from MOA can be applied directly to the retail GLA of ADM is questionable. The implicit assumption is that the non-retail portions of the MOA and ADM will have similar trip generation characteristics. Currently, the only support provided is that the retail square footage as a proportion of the gross floor area is similar. But a comparison of the non-retail square footage of the two developments is not discussed in the application

    From previous information provided by ADM, the non-retail portion of MOA consists of 31% common areas, compared to 19% common areas in the ADM development. While the proportion of retail GLA in the two developments is comparable (at 56% for ADM and 59% for MOA), the proportion of non-retail attractions in the two developments is not (with 24% in ADM and 11% in MOA). Given this discrepancy, FDOT recommends that Gross Floor Area (GFA) be used as the independent variable for the trip generation analysis to ensure that the total proposed development intensity of 6.2 million square feet is included in the analysis.

    Finally, please clarify the apparent discrepancy of GLA square footage reported in Tables 4 and 6 that distinguish between entertainment and retail uses.

    LC: As noted previously, all issues related to the Trip Generation approach for the ADM have been finalized and are included in the updated ADM Trip Generation reflected in the revised report.

13. For internal capture calculations for the Graham Companies property, please consider using the internal capture rates for origins and destinations within a multi-use development found in the FDOT Trip Generation Recommendations Report, October 2014, as well as National Cooperative Highway Research Program (NCHRP) Report 684. Excerpts of the relevant pages from this document and the ITE Trip Generation Handbook are attached for your convenience.

    LC: As noted previously, all issues related to the Trip Generation approach for the ADM have been finalized and are included in the updated ADM Trip Generation reflected in the revised report.

<u>Section 7.0 Project Trip Distribution and Assignment</u>

14. Using MOA data, ADM and The Graham Project assumed that approximately 30% of all trips are non-regional. It is stated in the CDMP traffic analysis that modelling efforts were made to distribute this magnitude of volume to HEFT and I-75. To verify the travel characteristics

associated with MOA in Minneapolis are comparable to ADM in Miami, it is recommended that additional documentation be provided to substantiate the non-regional trip assumption. This should include a tabular summary comparing several trip generators that attract non-regional trips to document and verify the proposed 30% assignment. Potential large scale retail uses to review that attract non-regional traffic include Sawgrass Mills Mall which also happens to be located within the area covered by the Southeast Regional Planning Model (SERPM).

This additional documentation also should include accurate model network plots in Appendix H to depict all centroids for ADM. Please note that the impact of the study area links definition must be described in the report. If ADM's trip length frequency distribution is underestimated, it is possible that the impacts to roadways and the number of impacted roadway segments also are underestimated.

LC: The revised report addresses the adjustment of trip distribution to account for more regional trip making. For regional trips, manual adjustments were made to the model distributions to extend the trips for the regional HEFT, I-75, and Turnpike facilities. The revised report therefore addresses the adjustment of trip distribution to account for more regional trip making.

The model plots are included in the revised report as part of the Appendix. Plots have been enhanced to show the requested centroid connectors, along with the expanded study area.

The 30 percent trips assigned via HEFT are based on the observed patterns from the MOA site. Similar distribution patterns are not likely to occur even at large shopping malls within the area, so no further review was completed in relation to the utilized 30 percent.

15. The land use data factoring cited in the second paragraph on page 25 is unclear. The applicant should add text to the report clarifying what is meant by factoring and the impact of doing so.

    LC: The text contained in the referenced paragraph has been expanded to more clearly detail the process for ensuring that the model assignments at the corresponding traffic analysis zones used for distributing the ADM and the Graham Project trips match those identified in the Trip Generation summary.

16. Please include text in the report describing the reasonableness of the model's performance. The applicant must analyze and document the study area link volumes relative to counts. Study area links representing new roadways are of particular concern because model volumes are utilized as the only source of traffic data for these links.

    LC: The model volumes are only used for new facilities. It is acknowledged that new traffic links are always a concern because there is no historical information to relate to. Text has been added to the report.

Section 8.0 Build-Out Conditions (Years 2020 & 2040)

17. The method utilized to compute 2020 and 2040 build-out level of service (LOS) in Tables 9 and 10, respectively, distinguishes diverted trip route segments for which pass-by reduction is not applied (shaded in green in the tables). The project trip estimates used to compute volumes for these links should be the Net External Trips, rather than New External Trips (from Table 6). Neither appear to be used for the diverted trip route segment. The computations for project traffic on those links must be clarified and revised, as applicable.

    LC: The project trips assigned for the links were the pass-by reduction is not applied IS computed utilizing the Net External Trips.

Section 9.0 Mitigation Analysis

18. The transportation improvements identified in the submitted CMDP traffic impact analysis are based on PM peak hour traffic conditions. Please note that additional transportation improvements may be identified as part of the IAR documentation to address adverse impacts during AM and weekend peak periods that were not required as part of this CDMP evaluation.

    The mitigation analysis portion of the traffic report also must clarify the funding commitment for the improvements and the entity responsible for constructing each improvement, and consider multimodal or transit mitigation measures.

    LC: The report has been expanded to include not only the revised CDMP PM analyses but also requested AM and Weekend analyses. The Weekend analysis is presented in the Appendix along with a comparison to weekday traffic.

    The mitigation for the ADM and the Graham Information pertaining to funding commitments and responsibilities are not included in the tables. Nor are multimodal assumptions addressed in the CDMP analysis. Both of these will be addressed later in the Project discussions with MDC staff. Projects are presented for all future year traffic analyses as part of the updated report.

Also Note that an Appendix was received and reviewed from FDOT relating to their Comment No. 13

LC: As noted previously, all issues related to the Trip Generation approach for the ADM have been finalized and are included in the updated ADM Trip Generation reflected in the revised CDMP TIA report.

Town of Miami Lakes – January 22, 2016

Page 5: The study says that "… the study area for each development extends to all significant roadways where external trips for each project are forecast to be equivalent to or greater than five percent (5%) of the maximum service volume (MSV) …" What does "significant roadways" mean? Is there a definitions, or can you identify those roadways that are not considered to be significant? We are concerned that the analysis seems to arbitrarily exclude all roads within the Town of Miami Lakes.

LC: The intend of the analyses is to show all roadways which has significant impact based on the Project contributing 5% of Maximum Service Volume criteria. To make sure the study addresses the Town's concerns, NW 154th Street (Miami Lakes Blvd) has been extended to include the segments between NW 82nd Ave and NW 57th Avenue. Note none of these links meet the 5% significance test. Further review of the project distribution plots contained in Appendix to the updated report shows that very little Project traffic is assigned within the Town of Miami Lakes boundaries.

2. Page 5: The study area should be defined by a five percent threshold for of MSV for *both projects* combined. Distinguishing the two projects for traffic analysis purposes is essentially a fiction.

   LC: The revised report has been updated to include not only the individual ADM and Graham Project traffic impacts but also the Combined impacts. The combined traffic serves as the parameter used to identify the overall study area for the traffic analyses. The individual Project findings are consulted for determining any needs associated with their individual Project's mitigation requirements. The Combined impacts and mitigations are shown for informational purposes only.

3. Page 13: The use of the Mall of America (MOA) as a model for trip generation, with further any further adjustments, needs more analysis and justification. While we agree that the MOA is in general a reasonably close comparable case for a unique project, the MOA is geographically situated very differently within its metropolitan area than this potential mall would be. Given such limited sample sizes, it is essential to at least try to account for how such a difference might affect trip generation. For example, on page 14 it is explained that the MOA's internal capture rate was applied to this project. But would geographic location affect internal capture rate? If so, how?

   LC: Both the ADM and Graham Project Trip Generations were revised and finalized between the time of the December 2015 CDMP TIA submittal and the submittal of the updated and expanded report. The Trip Generation for the ADM Project was unique due to the nature of the ADM site and its land uses. The ADM Trip Generation was ultimately finalized in March, 2016 after extensive coordination with all applicable review agencies. Miami-Dade provided approval in an email dated March 18 and FDOT's letter was dated March 24. The final ADM and Graham Trip Generation tables are included in the updated report. An appendix is dedicated exclusively to the development and final approval of the Trip Generation.

4. Page 14: Regarding the reduction for diverted trips, and the use of the standard percentage of diverted trips for Shopping Center being used, it seems at least plausible that the percent

of diverted trips for the proposed mall would be significantly lower, given its size and (it seems likely) significant time commitment getting into and out of the facility (i.e. it is less likely to "stop-in" for a meal if it will take significant time to get into and out of the mall). Additionally, this "Shopping Center" diverted trip factor seems to have been applied to all generated trips, even those that are very different from retail (i.e. hotels, amusement parks, etc.), some of which common sense would suggest would have close to zero diverted trips. Is there a justification for applying the "Shopping Center" rate to all trips?

LC: As noted previously, all issues related to the Trip Generation approach for the ADM have been finalized and are included in the updated ADM Trip Generation reflected in the revised report.

5. Page 29 (and elsewhere): Regarding Miami Gardens Drive between I-75 and NW 87th Avenue in the short term (2020), in several places the traffic study discusses an existing deficiency that WOULD BE existing if the adopted LOS was something other than what it is. However, the LOS on this roadway is adopted partially for policy reasons related to transit and other alternative modes, and not simply as an exception. The analysis should focus on the LOS for this roadway as actually adopted.

   LC: The capacity for Miami Gardens Drive has been revised to reflect the County's adopted LOS information.

6. Pages 29 and 30: Regarding the long term (2040) LOS of the HEFT from NW 106thStreet to US 27 and I-75 from Miramar Parkway to Miami Gardens Drive, the study states that "Regression of historical count data shows Year 2040 background volumes could be higher than the available capacity even with the capacity improvement before any project trips are added." This appears to mean that the model does not show such a failure with the proposed capacity improvement, which would mean that if the project's trip cause the LOS failure, then the applicant would have responsibility for mitigation.

   LC: The statement has been removed from the text. Further note that the future background volumes have been updated to ensure that further constraints exist for forecasting these trips (as described elsewhere in response to comments and as detailed in Table I-13). The CDMP and supporting traffic studies and their respective analyses review all roadway links based on the criteria that 1) if a future year link volume exceeds capacity <u>and</u> 2) the Project trips exceed the 5% of MSV <u>and</u> 3) the facility is not backlogged due to background traffic, then the link is identified as being deficient and mitigation will need to be assessed for the Project.

7. Page 35: the study states that "All improvements were assumed to be place [sic] by the Short-term Year 2020." Does County staff believe this is feasible?

   LC: We cannot infer as to what the County believes to be feasible. We do reiterate that it is the ADM's intend that the improvements not reflected in the Cost Feasible Plan will be fully pursued to ensure that they are in place by the year 2020. It is understood that IF for any reason this does not occur that there may need to be reanalyzes completed for the ADM and the Graham sites.

8. General: the only mitigation proposed in this analysis is for Miami Gardens Drive, in the short term year (2020), which is to minimize left turns and provide an uninterrupted flow section as part of the I-75 interchange improvement. However, if that is the mitigation proposed, there should be an analysis as to what the impact of that mitigation would be.

   LC: The revised CDMP and added Zoning analyses expands on the projected impacts associated with the ADM and Graham projects. The mitigation recommendations have been reviewed for both the roadway segments (all link analyses) and the intersections (Zoning analyses only) to verify that the recommendations needed to achieve acceptable operating conditions have been incorporates, where feasible. For the roadway links, the mitigation results are presented in Appendix II-D for the ADM Project, Appendix III-C for the Graham Project, and Appendix IV-A for the Combined ADM and Graham Projects. Each of the mitigation summaries include the necessary widenings and corresponding capacities to ensure that acceptable LOS operating conditions are achieved.

   For the intersections, Appendices II-I and II-J summarize the ADM mitigation needs, Appendices III-H and III-I summarize the Graham mitigation needs, and Appendices IV-F and IV-G summarize the Combined ADM and Graham mitigation needs. In the case of the intersections, a maximum number of one exclusive right, three throughs, and two left turns were utilized, which means that there are operating conditions which could not be mitigated.

   The Combined mitigation results are provided for informational purposes only.

9. General: It is unfortunate that the CDMP amendment rules do not require analysis of modes of transportation other than automobile. While looking only at traffic numbers, it is straightforward to simply conclude that adding more lanes here or there or creating an "uninterrupted flow section" would result in achieving an adopted LOS, but ignoring the potential impact that such action might have on transit mobility which, after all, requires walkability that is often degraded through automobile "capacity enhancements." Given the significance of this project, not only on its own terms but through its potential as a catalyst impacting a large area around it, this opportunity should be seized upon to evaluate impacts and potential improvements (and including alternative improvements, such as a rail transit connection) to all modes of transportation simultaneously and holistically, such that this significant project could be a starting point to achieving a more multimodal transportation system in the larger vicinity of the project. This opportunity should not be wasted, even if it requires more time than simply applying once again a system that has proven many times over that it does not work.

   LC: We acknowledge the limitation of the CDMP analysis in regards to transit and other non-roadway capacity enhancements. The ADM Project recognizes that there is potential application of transit and other non-motorized enhancements to the Site in the future. No evaluation for transit has been included in the analysis. Transit will be addressed as part of efforts following the CDMP and Zoning analyses.

City of Miramar / Miami-Dade County Department of Regulatory and Economic Resources – February 2, 2016

1. Direct transit service should be provided from the American Dream Miami Mall and Graham industrial/retail development to the park and ride lot at Miramar Regional Park and the Miramar Town Center/Park and Ride.

   LC: The ADM Project recognizes that there is potential application of transit and other non-motorized enhancements to the Site in the future. This would also potentially apply to the Graham Site. Detailed route-specific transit has not been addressed at this time. Transit will be coordinated as part of future discussions.

2. At a minimum, the analysis should evaluate traffic impacts to Miramar Parkway, Pembroke Road, Red Road/NW 57th Avenue and Flamingo Road/NW 67th Avenue. A level of service analysis at project buildout should be provided for all of these roadways.

   LC: Please refer to the response to Broward County Planning and Development Management Division comment No. 11.

3. The Miramar Parkway buildout year volumes shown in Tables 9 and 10 of the Transportation Impact Analysis are lower than projections prepared by the Broward Metropolitan Planning Organization. The developer's traffic consultant should meet with the City of Miramar, Broward County, and Broward Metropolitan Planning Organization to discuss the impacts to City roadways and potential mitigation. The City is in the process of updating its Capital Improvement Program to include the extension of Miramar Parkway from its current terminus at SW 192 Terrace to Pembroke Road at SW 196 Avenue, The extension of Miramar Parkway to Pembroke Road will help alleviate the current traffic problem at Miramar Parkway/1-75 Interchange, improve the Level of Service at this intersection and provide an alternate north-south route via US 27.

   LC: Please refer to response to Broward County Comment No. 10. In regards to the traffic volumes for the Miramar Parkway, the traffic volume used for the analyses is based on the January 24, 2014 traffic count information provided by Broward County. The provided count does not reflect V/C ratios exceeding the adopted LOS.

   The Extension of Miramar Parkway is already included in the Year 2020 Cost Feasible Plan and the Year 2040 Cost Feasible Plan model networks and are therefore already included in the model trip distributions. The roadway segment analyses have also been expanded to include additional segments on Miramar Parkway, as demonstrated in the revised report.

4. Please provide the housing demand expected to be generated by both projects.

   These comments are addressed as part of the Land Use application.

APPENDIX I-A14:
NEW Sample Calculation for MDC
- From Traffic Count to PHP to Future Volume 07 18 2016

RESPONSE TO MIAMI-DADE COUNTY REQUEST FOR SAMPLE CALCULATION

SAMPLE LOCATION:

Miami-Gardens Dr from I-75 Eastern Ramps to NW 87th Ave

SAMPLE CALCULATIONS:

From Raw Traffic Count to Future Year Background Volume And Verification with Weekend Analysis Volumes

Prepared by:

Leftwich Consulting Engineers, Inc.

July 18, 2016

Raw Count Calculation for AM and PM PHP Volumes

Appendix I-B (PDF pg 730) – FDOT Station 872518 MGD W of NW 87th Ave Raw Count

COUNTY: 87
STATION: 2518
DESCRIPTION: SR 860/MIAMI GARDENS DR, 800' W OF NW 87 AV
START DATE: 06/17/2014
START TIME: 0000

TIME	DIRECTION: E 1ST	2ND	3RD	4TH	TOTAL	DIRECTION: W 1ST	2ND	3RD	4TH	TOTAL	COMBINED TOTAL
0000	83	83	62	54	282	40	39	28	32	139	421
0100	45	33	31	25	134	29	10	17	13	69	203
0200	22	20	16	17	75	7	13	14	13	47	122
0300	11	15	19	17	62	16	13	24	16	69	131
0400	11	11	15	22	59	20	32	36	57	145	204
0500	24	26	30	45	125	44	71	128	154	397	522
0600	44	54	72	99	269	162	239	406	435	1242	1511
0700	94	104	147	183	528	458	584	691	654	2387	2915
0800	204	189	207	244	844	571	535	563	519	2188	3032
0900	195	187	185	202	769	406	348	338	303	1395	2164
1000	206	186	156	190	738	255	271	258	252	1036	1774
1100	192	186	193	224	795	212	219	215	222	868	1663
1200	221	209	255	240	925	203	204	209	203	819	1744
1300	208	215	250	191	864	245	211	252	213	921	1785
1400	224	264	261	321	1070	217	228	226	219	890	1960
1500	269	302	340	365	1276	226	228	229	221	904	2180
1600	428	450	429	503	1810	195	220	228	224	867	2677
1700	600	639	631	678	2548	241	279	252	260	1032	3580
1800	630	640	544	481	2295	297	263	243	260	1063	3358
1900	468	427	373	350	1618	246	252	219	252	969	2587
2000	342	336	309	285	1272	213	185	207	186	791	2063
2100	291	286	322	270	1169	151	153	135	126	565	1734
2200	236	261	244	161	902	90	92	61	68	311	1213
2300	157	158	108	129	552	45	58	59	141	303	855
24-HOUR TOTALS:					20981					19417	40398

PEAK VOLUME INFORMATION

	DIRECTION: E HOUR	VOLUME	DIRECTION: W HOUR	VOLUME	COMBINED DIRECTIONS HOUR	VOLUME
A.M.	800	844	715	2500	730	3174
P.M.	1730	2579	1715	1088	1715	3666
DAILY	1730	2579	715	2500	1715	3666

TRUCK PERCENTAGE 2.35 2.33 2.34

CLASSIFICATION SUMMARY DATABASE

DIR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TOTTRK	TOTVOL
E	77	17526	2885	31	371	25	3	34	29	0	0	0	0	0	0	493	20981
W	56	16452	2456	32	315	27	0	41	38	0	0	0	0	0	0	453	19417

Raw AM PHP

Raw PM PHP

AM Peak Hour EB
AM 7:00-9:00 Total = 528+844 = 1372
Avg Hour = 1372/2
Avg Hour = 686

AM Peak Hour WB
AM 7:00-9:00 Total = 2387+2188 = 4575
Avg Hour = 4575/2
Avg Hour = 2288

PM Peak Hour EB
AM 7:00-9:00 Total = 1810+2548 = 4358
Avg Hour = 4358/2
Avg Hour = 2179

PM Peak Hour WB
AM 7:00-9:00 Total = 867+1032 = 1899
Avg Hour = 1899/2
Avg Hour = 950

Convert Raw AM and PM PHP Volumes to Seasonal Adjusted PHP Volumes

Table I-1 (pg 25) – Existing AM and PM PHP Summary

			Count Station							15 min FDOT/MDC/Broward Counts									FDOT Daily Only counts								Final 2015 PHP Counts Used			
										Raw Counts					Adjusted Counts							Adjusted Counts				2%	Adjusted Counts			
			MDC		Broward County		FDOT			AM		PM			AM PHP		PM PHP					AM PHP		PM PHP			AM PHP		PM PHP	
Roadway	From	To	No.	Year	No.	Year	No.	Year	Note	NB/EB	SB/WB	NB/EB	SB/WB	PSCF	NB/EB	SB/WB	NB/EB	SB/WB	AADT	K factor	D factor	NB/EB	SB/WB	NB/EB	SB/WB	2014 - 2015 Growth %	NB/EB	SB/WB	NB/EB	SB/WB
Florida's Turnpike/ HEPT/SR 821	SW 8th St	SR 836					972250	2014											164000	0.085	56.3	6092	7848	7848	6092	2	6214	8005	8005	6214
	SR 836	NW 12th Street					972526	2014											109000	0.095	56.3	4525	5830	5830	4525	2	4616	5946	5946	4616
	NW 12th Street	NW 41th Street					972230	2014											116000	0.095	56.3	4816	6204	6204	4816	2	4912	6328	6328	4912
	NW 41th Street	NW 74th Street					972269	2014											116000	0.095	56.3	4816	6204	6204	4816	2	4912	6328	6328	4912
	NW 74th Street	NW 106th Street					972268	2014											108000	0.095	56.3	4484	5776	5776	4484	2	4573	5892	5892	4573
	NW 106th Street	US 27/ Okeechobee Rd					972272	2014											101000	0.095	56.3	4193	5402	5402	4193	2	4277	5510	5510	4277
	US 27/ Okeechobee Rd	NW 170th St					972248	2014											93000	0.095	56.3	3861	4974	4974	3861	2	3938	5074	5074	3938
	NW 170th St	Interstate 75					972248	2014											93000	0.095	56.3	3861	4974	4974	3861	2	3938	5074	5074	3938
	Interstate 75	CR 823/Red Rd					972285	2014											51000	0.095	56.3	2728	2117	2117	2728	2	2782	2160	2160	2782
	CR 823/Red Rd	CR 817/NW 27th Ave					971996	2014											69000	0.095	56.3	3690	2865	2865	3690	2	3764	2922	2922	3764
	CR 817/NW 27th Ave	Florida's Turnpike/SR 91					971998	2014											58000	0.095	56.3	3102	2408	2408	3102	2	3164	2456	2456	3164
Florida's Turnpike/ SR 91	I-595	Griffin Rd					971904	2014											113000	0.095	55.4	5947	4788	4788	5947	2	6066	4884	4884	6066
	Griffin Rd	Pines Blvd					971902	2014											116000	0.095	55.4	6105	4915	4915	6105	2	6227	5013	5013	6227
	Pines Blvd	Florida's Turnpike/HEPT/SR 821					971900	2014											112000	0.095	55.4	5895	4745	4745	5895	2	6012	4840	4840	6012
	Florida's Turnpike/HEPT/SR 821	NW 203rd St					970502	2014											91000	0.085	56.3	4355	3380	3380	4355	2	4442	3448	3448	4442
Interstate 75	W. Sunrise Blvd	I-595					973000	2014											94000	0.100	51.9	4879	4521	4521	4879	2	4976	4612	4612	4976
	I-595	Royal Palm Blvd					862005	2014		6641	8158	6464	7195	1.26	8368	10279	8145	9066								2	8535	10485	8308	9247
	Royal Palm Blvd	Griffin Rd					862004	2014		6792	8885	6095	8431	1.00	6792	8885	6095	8431								2	6928	9063	6217	8600
	Griffin Rd	Sheridan St					862003	2014		7950	6966	6461	6143	1.02	8109	7105	6590	6266								2	8271	7247	6722	6391
	Sheridan St	Pines Blvd					862002	2014											150000	0.085	62.7	4756	7994	7994	4756	2	4851	8154	8154	4851
	Pines Blvd	Miramar Pkwy/ S 33rd St					862001	2014		5709	6896	7521	4622	0.99	5652	6827	7446	4576								2	5765	6964	7595	4667
	Miramar Pkwy/ S 33rd St	Florida's Turnpike					860362	2014											163084	0.085	62.7	5171	8692	8692	5171	2	5274	8865	8865	5274
	Florida's Turnpike	Miami Gardens Dr/NW 186 St					872503	2014		5700	8728	7961	5363	1.01	5757	8815	8041	5417								2	5872	8992	8201	5525
	Miami Gardens Dr/NW 186 St	NW 179th St					872501	2014		3160	6562	6714	3782	1.01	3192	6628	6781	3820								2	3255	6760	6917	3896
	NW 179th St	NW 138th Street					872501	2014		3160	6562	6714	3782	1.01	3192	6628	6781	3820								2	3255	6760	6917	3896
	NW 138th Street	SR 826					872500	2014		6379	3571	3673	6397	1.01	6443	3607	3710	6461								2	6572	3679	3784	6590
	SR 826	NW 57th Ave (Red Road)					872511	2014		3188	1898	1646	3420	1.01	3220	1877	1662	3454								2	3284	1914	1696	3523
	NW 57th Ave (Red Road)	Douglas(Le Jeune Connector)					872512	2014		1964	1403	2207	2737	1.01	1984	1417	2229	2764								2	2023	1445	2274	2820
	Douglas(Le Jeune Connector)	NW 32nd Ave					872510	2014		2128	1213	1514	1962	1.04	2213	1262	1575	2040								2	2257	1287	1606	2081
NW 107th Ave	NW 122nd St	NW 138th St					(4)	2014											8000	0.09	54.5	392	328	328	392	2	400	334	334	400
	NW 138th St	NW 170th St	NOT EXISTING ROADWAY LINK																											
NW 102nd Ave	NW 170th St	NW 178th St	NOT EXISTING ROADWAY LINK																											
	NW 178th St	ADM Project Access Rd	NOT EXISTING ROADWAY LINK																											
Miami Gardens Dr	ADM Project Access Rd	Interstate 75 Western Ramps	NOT EXISTING ROADWAY LINK																											
	Interstate 75 Western Ramps	Interstate 75 Eastern Ramps	NOT EXISTING ROADWAY LINK																											
	Interstate 75 Eastern Ramps	NW 87th Ave					872518	2014		686	2288	2179	950	1.02	700	2334	2223	969								2	714	2380	2267	988
	NW 87th Ave	NW 82nd Ave					872518	2014		686	2288	2179	950	1.02	[illegible]	2334	2223	969								2	714	2380	2267	988
	NW 82nd Ave	NW 77nd Ave					872517	2014		1314	874	1314	1962	1.04	[illegible]	909	1367	1624								2	1394	927	1394	1657
	NW 77nd Ave	NW 67nd Ave					872517	2014		1314	874	1314	1962	1.04	1367	[illegible]	1367	1624								2	1394	927	1394	1657
	NW 67nd Ave	NW 57nd Ave					872516	2014		988	712	1108	1298	1.04	1028	74[illegible]	152	1350								2	1048	755	1175	1377
	NW 57th Ave	NW 47th Ave					871233	2014		1077	893	1156	1302	1.00	1077	893		1302								2	1099	911	1179	1328

ZOOM: MGD from I-75 Eastern Ramps to NW 87th Ave PHPs

FDOT			Raw Counts					Adjusted Counts			
			AM		PM			AM PHP		PM PHP	
No.	Year	Note	NB/EB	SB/WB	NB/EB	SB/WB	PSCF	NB/EB	SB/WB	NB/EB	SB/WB
872518	2014		686	2288	2179	950	1. 02	700	2334	2223	969

Obtain Final Existing Seasonally Adjusted PHP 2015 Volumes

Table I-1 (pg 25) – Existing AM and PM PHP Summary

Roadway	From	To	Count Station: MDC No.	MDC Year	Broward County No.	Broward County Year	FDOT No.	FDOT Year	FDOT Note	15 min FDOT/MDC/Broward Counts: Raw Counts AM NB/EB	Raw Counts AM SB/WB	Raw Counts PM NB/EB	Raw Counts PM SB/WB	PSCF	Adjusted Counts AM PHP NB/EB	Adjusted Counts AM PHP SB/WB	Adjusted Counts PM PHP NB/EB	Adjusted Counts PM PHP SB/WB	FDOT Daily Only counts: AADT	K factor	D factor	Adjusted Counts AM PHP NB/EB	Adjusted Counts AM PHP SB/WB	Adjusted Counts PM PHP NB/EB	Adjusted Counts PM PHP SB/WB	2% 2014 - 2015 Growth %	Final 2015 PHP Counts Used: Adjusted Counts AM PHP NB/EB	Adjusted Counts AM PHP SB/WB	Adjusted Counts PM PHP NB/EB	Adjusted Counts PM PHP SB/WB
Florida's Turnpike/ HEPT/SR 821	SW 8th St	SR 836					972250	2014											164000	0.085	56.3	6092	7848	7848	6092	2	6214	8005	8005	6214
	SR 836	NW 12th Street					972526	2014											109000	0.095	56.3	4525	5830	5830	4525	2	4616	5946	5946	4616
	NW 12th Street	NW 41th Street					972230	2014											116000	0.095	56.3	4816	6204	6204	4816	2	4912	6328	6328	4912
	NW 41th Street	NW 74th Street					972269	2014											116000	0.095	56.3	4816	6204	6204	4816	2	4912	6328	6328	4912
	NW 74th Street	NW 106th Street					972268	2014											108000	0.095	56.3	4484	5776	5776	4484	2	4573	5892	5892	4573
	NW 106th Street	US 27/ Okeechobee Rd					972272	2014											101000	0.095	56.3	4193	5402	5402	4193	2	4277	5510	5510	4277
	US 27/ Okeechobee Rd	NW 170th St					972248	2014											93000	0.095	56.3	3861	4974	4974	3861	2	3938	5074	5074	3938
	NW 170th St	Interstate 75					972248	2014											93000	0.095	56.3	3861	4974	4974	3861	2	3938	5074	5074	3938
	Interstate 75	CR 823/Red Rd					972285	2014											51000	0.095	56.3	2728	2117	2117	2728	2	2782	2160	2160	2782
	CR 823/Red Rd	CR 817/NW 27th Ave					971996	2014											69000	0.095	56.3	3690	2865	2865	3690	2	3764	2922	2922	3764
	CR 817/NW 27th Ave	Florida's Turnpike/SR 91					971998	2014											58000	0.095	56.3	3102	2408	2408	3102	2	3164	2456	2456	3164
Florida's Turnpike/ SR 91	I-595	Griffin Rd					971904	2014											113000	0.095	55.4	5947	4788	4788	5947	2	6066	4884	4884	6066
	Griffin Rd	Pines Blvd					971902	2014											116000	0.095	55.4	6105	4915	4915	6105	2	6227	5013	5013	6227
	Pines Blvd	Florida's Turnpike/HEPT/SR 821					971900	2014											112000	0.095	55.4	5895	4745	4745	5895	2	6012	4840	4840	6012
	Florida's Turnpike/HEPT/SR 821	NW 203rd St					970502	2014											91000	0.085	56.3	4355	3380	3380	4355	2	4442	3448	3448	4442
Interstate 75	W. Sunrise Blvd	I-595					973000	2014											94000	0.100	51.9	4879	4521	4521	4879	2	4976	4612	4612	4976
	I-595	Royal Palm Blvd					862005	2014		6641	8158	6464	7195	1.26	8368	10279	8145	9066								2	8535	10485	8308	9247
	Royal Palm Blvd	Griffin Rd					862004	2014		6792	8885	6095	8431	1.00	6792	8885	6095	8431								2	6928	9063	6217	8600
	Griffin Rd	Sheridan St					862003	2014		7950	6966	6461	6143	1.02	8109	7105	6590	6266								2	8271	7247	6722	6391
	Sheridan St	Pines Blvd					862002	2014											150000	0.085	62.7	4756	7994	7994	4756	2	4851	8154	8154	4851
	Pines Blvd	Miramar Pkwy/ S 33rd St					862001	2014		5709	6896	7521	4622	0.99	5652	6827	7446	4576								2	5765	6964	7595	4667
	Miramar Pkwy/ S 33rd St	Florida's Turnpike					860362	2014											163084	0.085	62.7	5171	8692	8692	5171	2	5274	8865	8865	5274
	Florida's Turnpike	Miami Gardens Dr/NW 186 St					872503	2014		5700	8728	7961	5363	1.01	5757	8815	8041	5417								2	5872	8992	8201	5525
	Miami Gardens Dr/NW 186 St	NW 178th St					872501	2014		3160	6562	6714	3782	1.01	3192	6628	6781	3820								2	3255	6760	6917	3896
	NW 178th St	NW 138th Street					872501	2014		3160	6562	6714	3782	1.01	3192	6628	6781	3820								2	3255	6760	6917	3896
	NW 138th Street	SR 826					872500	2014		6379	3571	3673	6397	1.01	6443	3607	3710	6461								2	6572	3679	3784	6590
	SR 826	NW 57th Ave (Red Road)					872511	2014		3188	1858	1646	3420	1.01	3220	1877	1662	3454								2	3284	1914	1696	3523
	NW 57th Ave (Red Road)	Douglas(Le Jeune Connector)					872512	2014		1964	1403	2007	2737	1.01	1984	1417	2229	2764								2	2023	1445	2274	2820
	Douglas(Le Jeune Connector)	NW 32nd Ave					872510	2014		2128	1213	1514	1962	1.04	2213	1262	1575	2040								2	2257	1287	1606	2081
NW 107th Ave	NW 122nd St	NW 138th St					(4)	2014											8000	0.09	54.5	392	328	328	392	2	400	334	334	400
	NW 138th St	NW 170th St	NOT EXISTING ROADWAY LINK																											
NW 102nd Ave	NW 170th St	NW 178th St	NOT EXISTING ROADWAY LINK																											
	NW 178th St	ADM Project Access Rd	NOT EXISTING ROADWAY LINK																											
Miami Gardens Dr	ADM Project Access Rd	Interstate 75 Western Ramps	NOT EXISTING ROADWAY LINK																											
	Interstate 75 Western Ramps	Interstate 75 Eastern Ramps	NOT EXISTING ROADWAY LINK																											
	Interstate 75 Eastern Ramps	NW 87th Ave					872518	2014		686	2288	2179	950	1.02	700	2334	2223	969								2	714	2380	2267	988
	NW 87th Ave	NW 82nd Ave					872518	2014		686	2288	2179	950	1.02	700	2334	2223	969								2	714	2380	2267	988
	NW 82nd Ave	NW 77nd Ave					872517	2014		1314	874	1314	1562	1.04	1367	909	1367	1624								2	1394	927	1394	1657
	NW 77nd Ave	NW 67nd Ave					872517	2014		1314	874	1314	1562	1.04	1367	909	[illegible]	1624								2	[illegible]	927	1394	1657
	NW 67nd Ave	NW 57nd Ave					872516	2014		988	712	1108	1298	1.04	1028	740	[illegible]	1350								2	1048	755	1175	1377
	NW 57th Ave	NW 47th Ave					871233	2014		1077	893	1156	1302	1.00	1077	893	[illegible]	1302									1099	911	1179	1328

ZOOM: MGD from I-75 Eastern Ramps to NW 87th Ave PHPs

SAMPLE Calculation:
686 = 2014 raw EB PHP
686x1.02 pscf = 700 adjst EB PHP
700x(1.01)^(2015-2014) = 714
2015 adjst EB PHP

Adjusted Counts			
AM PHP		PM PHP	
NB/EB	SB/WB	NB/EB	SB/WB
700	2334	2223	969

Final 2015 PHP Counts Used			
Adjusted Counts			
AM PHP		PM PHP	
NB/EB	SB/WB	NB/EB	SB/WB
714	2380	2267	988

Year 2020 and Year 2040 Growth Rate Summary

Table I-13 (pg 46) – 2015 to 2020 and 2015 to 2040 %Growth Summary

Roadway	To	From	MDC HISTORICAL COUNTS (1) Count STA No.	MDC 2014	MDC 2015	BROWARD COUNTY COUNTS (2) Count STA No.	BC 2015	FDOT AADT HISTORICAL COUNTS (3) Count STA No.	2009	2010	2011	2012	2013	2014	EXISTING DAILY VOLUMES (4) 2015 County Count	2015 2% FDOT w/ Growth	Final 2015 Daily Traffic Volume	2015-2020 SHORT-TERM BACKGROUND GROWTH 2020 1% 2015 Plus 5Yr Growth	2020 MDC Forecast	Eqvlt Annual Growth %	2020 FDOT Forecast	Eqvlt Annual Growth %	2015-2020 Adj Final Annual Growth % (5)	2015-2040 LONG-TERM BACKGROUND GROWTH 2040 1% 5Yr Growth	2040 MDC Forecast Yr Forecast	Eqvlt Annual Growth %	2040 FDOT Forecast Yr Forecast	Eqvlt Annual Growth %	Initial Annual Growth %	2040 2% 2020 Plus 20Yr Growth	2015-2040 Adj Final Annual Growth % (6)
Florida's Turnpike/ HEFT/SR 821	SW 8th St	SR 836						972250	140,900	146,200	148,000	150,000	150,000	164,000		167,280	167,280	175,813			181,154	1.6%	1.6%	214,525			254,811	1.7%	1.7%	269,186	1.5%
	SR 836	NW 12th Street						972526	92,000	95,500	93,000	98,000	99,000	109,000		111,180	111,180	116,851			122,157	1.9%	1.9%	142,581			179,586	1.9%	1.9%	181,519	1.5%
	NW 12th Street	NW 41th Street						972230	94,800	98,300	98,000	104,000	106,000	116,000		118,320	118,320	124,356			135,660	2.8%	2.5%	151,737			212,860	2.4%	2.4%	198,921	1.5%
	NW 41th Street	NW 74th Street						972269		94,700	97,000	102,000	104,000	116,000		118,320	118,320	124,356			142,420	3.8%	2.5%	151,737			241,620	2.9%	2.9%	198,921	1.5%
	NW 74th Street	NW 106th Street						972268	89,600	93,100	95,000	96,000	96,000	108,000		110,160	110,160	115,779			120,982	1.9%	1.9%	141,273			179,096	2.0%	2.0%	179,773	1.5%
	NW 106th Street	US 27/ Okeechobee Rd						972272	83,100	85,700	89,000	89,000	90,000	101,000		103,020	103,020	108,275			114,502	2.1%	2.1%	132,116			173,016	2.1%	2.1%	170,144	1.5%
	US 27/ Okeechobee Rd	NW 170th St						972248	78,100	80,300	83,000	83,000	84,000	93,000		94,860	94,860	99,699			104,355	1.9%	1.9%	121,651			153,270	1.9%	1.9%	155,066	1.5%
	NW 170th St	Interstate 75						972248	78,100	80,300	83,000	83,000	84,000	93,000		94,860	94,860	99,699			104,355	1.9%	1.9%	121,651			153,270	1.9%	1.9%	155,066	1.5%
	Interstate 75	CR 823/Red Rd						972285	44,700	42,200	45,000	47,000	47,000	51,000		52,020	52,020	54,674			57,783	2.1%	2.1%	66,712			85,154	2.0%	2.0%	85,862	1.5%
	CR 823/Red Rd	CR 817/NW 27th Ave						971996	60,000	61,100	63,000	64,000	64,000	69,000		70,380	70,380	73,970			76,801	1.8%	1.8%	90,258			108,058	1.7%	1.7%	114,122	1.5%
	CR 817/NW 27th Ave	Florida's Turnpike/SR 91						971998	51,300	51,900	53,000	54,000	54,000	58,000		59,160	59,160	62,178			63,659	1.5%	1.5%	75,869			86,923	1.6%	1.6%	94,519	1.5%
Florida's Turnpike/ SR 91	I-595	Griffin Rd						971904	109,400	111,700	112,000	112,000	107,000	113,000		115,260	115,260	121,139			111,797	-0.6%	1.0%	147,813			114,026	0.0%	1.0%	180,027	1.6%
	Griffin Rd	Pines Blvd						971902	108,300	110,600	112,000	111,000	108,000	116,000		118,320	118,320	124,356			118,196	0.0%	1.0%	151,737			135,168	0.5%	1.0%	184,786	1.6%
	Pines Blvd	Florida's Turnpike/HEFT/SR 821						971900	103,900	106,200	108,000	107,000	98,000	112,000		114,240	114,240	120,067			109,669	-0.8%	1.0%	146,505			117,983	0.1%	1.0%	178,414	1.6%
	Florida's Turnpike/HEFT/SR 821	NW 203rd St						970502	76,000	79,800	81,000	84,000	84,000	91,000		92,820	92,820	97,555			104,636	2.4%	2.4%	119,035			156,408	2.1%	2.1%	155,484	1.5%
Interstate 75	W. Sunrise Blvd	I-595						975000	85,700	88,300	89,000	89,000	89,000	94,000		95,880	95,880	100,771			99,755	0.8%	1.0%	122,960			124,670	1.1%	1.1%	149,740	1.1%
	I-595	Royal Palm Blvd						862005	142,000	145,000	140,500	146,000	163,500	171,500		174,930	174,930	183,853			202,052	2.9%	2.5%	224,336			321,195	2.5%	2.5%	294,095	1.5%
	Royal Palm Blvd	Griffin Rd						862004	140,500	143,000	136,500	149,500	183,000	185,000		188,700	188,700	198,326			242,586	5.2%	2.5%	241,995			445,729	3.5%	3.5%	317,245	1.5%
	Griffin Rd	Sheridan St						862003	126,500	127,500	144,500	151,000	155,000	180,000		183,600	183,600	192,965			233,995	5.0%	2.5%	235,455			437,710	3.5%	3.5%	308,671	1.5%
	Sheridan St	Pines Blvd						862002	150,500	152,000	142,000	143,000	145,000	150,000		153,000	153,000	160,805			141,619	-1.5%	1.0%	196,212			128,762	-0.7%	1.0%	238,947	1.6%
	Pines Blvd	Miramar Pkwy/ S 33rd St						862001	146,500	147,500	135,500	137,000	147,500	151,000		154,020	154,020	161,877			149,995	-0.5%	1.0%	197,520			163,710	0.2%	1.0%	240,540	1.6%
	Miramar Pkwy/ S 33rd St	Florida's Turnpike						860362		150,236	150,500	151,562	157,485	163,084		166,346	166,346	174,831			180,718	1.7%	1.7%	213,327			246,080	1.6%	1.6%	268,538	1.5%
	Florida's Turnpike	Miami Gardens Dr/NW 186 St						872503	148,000	148,000	148,500	148,500	141,500	167,000		170,340	170,340	179,029			168,586	-0.2%	1.0%	218,449			211,729	0.9%	1.0%	266,028	1.6%
	Miami Gardens Dr/NW 186 St	NW 178th St						872501	114,000	110,000	110,000	112,000	120,000	123,500		125,970	125,970	132,396			134,224	1.3%	1.3%	161,548			179,652	1.4%	1.4%	199,450	1.4%
	NW 178th St	NW 138th Street						872501	114,000	110,000	110,000	112,000	120,000	123,500		125,970	125,970	132,396			134,224	1.3%	1.3%	161,548			179,652	1.4%	1.4%	199,450	1.4%
	NW 138th Street	SR 826						872500	127,000	127,000	115,500	112,000	111,500	130,500		133,110	133,110	139,900			112,690	-3.3%	1.0%	170,705			94,119	-1.4%	1.0%	207,884	1.6%
	SR 826	NW 57th Ave (Red Road)						872511	63,000	59,500	58,000	47,000	56,500	60,000		61,200	61,200	64,322			48,833	-4.4%	1.0%	78,485			28,833	-3.0%	1.0%	95,579	1.6%
	NW 57th Ave (Red Road)	Douglas(Le Jeune Connector)						872512	36,500	33,000	38,500	27,000	42,000	47,500		48,450	48,450	50,921			54,538	2.4%	2.4%	62,134			94,824	2.7%	2.7%	81,041	1.5%
	Douglas(Le Jeune Connector)	NW 32nd Ave						872510	39,500	37,000	38,500	45,500	35,500	43,000		43,860	43,860	46,097			44,690	0.4%	1.0%	56,247			56,119	1.0%	1.0%	68,498	1.6%
NW 107th Ave	NW 122nd St	NW 138th St						(7)						8,000		8,160	8,160	8,576					1.0%	10,465					1.0%	12,764	1.6%
	NW 138th St	NW 170th St						NOT EXISTING ROADWAY LINK																							
NW 102nd Ave	NW 170th St	NW 178th St						NOT EXISTING ROADWAY LINK																							
	NW 178th St	ADM Project Access Rd						NOT EXISTING ROADWAY LINK																							
Miami Gardens Dr	ADM Project Access Rd	Interstate 75 Western Ramps						NOT EXISTING ROADWAY LINK																							
	Interstate 75 Western Ramps	Interstate 75 Eastern Ramps						NOT EXISTING ROADWAY LINK																							
	Interstate 75 Eastern Ramps	NW 87th Ave						872518		42,000	38,000	41,000	42,000	41,000		41,820	41,820	43,953			42,400	0.3%	1.0%	53,631			46,400	0.4%	1.0%	65,312	1.6%
	NW 87th Ave	NW 82nd Ave						872518		42,000	38,000	41,000	42,000	41,000		41,820	41,820	43,953			42,400	0.3%	1.0%	53,631			46,400	0.4%	1.0%	65,312	1.6%
	NW 82nd Ave	NW 77nd Ave						872517		41,000	46,500	47,500	41,500	41,500		42,330	42,330	44,489			40,400	-0.9%	1.0%	54,285			32,400	-1.1%	1.0%	66,109	1.6%

2015-2020 %

2015-2040 %

ZOOM: MGD from I-75 Eastern Ramps to NW 87th Ave Growth

2015-2020 SHORT-TERM BACKGROUND GROWTH

2020	2020 MDC Forecast		2020 FDOT Forecast		2015-2020 Adj Final Annual Growth % (5)
1% 2015 Plus 5Yr Growth	MDC 5-Yr Forecast	Eqvlt Annual Growth %	FDOT 5-Yr Forecast	Eqvlt Annual Growth %	
43,953			42,400	0.3%	1.0%

2015-2040 LONG-TERM BACKGROUND GROWTH

2040	2040 MDC Forecast		2040 FDOT Forecast		Initial Annual Growth %	2040	2015-2040 Adj Final Annual Growth % (6)
1% 5Yr Growth	Yr Forecast	Eqvlt Annual Growth %	Yr Forecast	Eqvlt Annual Growth %		2% 2020 Plus 20Yr Growth	
53,631			46,400	0.4%	1.0%	65,312	1.0%

FDOT Count Applied:

- 1% growth rate
- -5yr historical annual growth rate
  - -0.3% for 2015-2020
  - -0.4% for 2015-2040

Conclusion:

1% annual growth rate selected for both

Obtain Year 2020 and 2040 Background PHP 2015 Volumes

Table I-15 (pg 50) – Future Background AM and PM PHP Summary

Roadway	To	From	Count Station No.	EXISTING 2015 PHP (1)				VESTED MDC DATABASE TRIPS							2020 CONCURRENCY BACKGROUND TRIPS				2020 CDMP & ZONING BACKGROUND					2040 CDMP BACKGROUND (5)					2040 ZONING BACKGROUND				
				AM PHP		PM PHP		MDC April 2016 Database (2)			Estimated AM/PM Directional DOS Trips (3)				AM PHP+Vested		PM PHP+Vested		2015-2020	AM PHP		PM PHP		2015-2040	AM PHP		PM PHP		2015-2040	AM PHP		PM PHP	
				NB/EB	SB/WB	NB/EB	SB/WB	Agency	Sta No.	DOS	AM DOS NB/EB	AM DOS SB/WB	PM DOS NB/EB	PM DOS SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	% Growth (4)	NB/EB	SB/WB	NB/EB	SB/WB	% Growth (4)	NB/EB	SB/WB	NB/EB	SB/WB	% Growth (4)	NB/EB	SB/WB	NB/EB	SB/WB
Florida's Turnpike/ HEFT/SR 821	SW 8th St	SR 836	972250	6,214	8,005	8,005	6,214	FDOT	2250	0	0	0	0	0	6,214	8,005	8,005	6,214	1.6%	6,729	8,669	8,669	6,729	1.5%	9,016	11,615	11,615	9,016	1.5%	9,016	11,615	11,615	9,016
	SR 836	NW 12th Street	972526	4,616	5,946	5,946	4,616	n/a	n/a	n/a	0	0	0	0	4,616	5,946	5,946	4,616	1.9%	5,071	6,534	6,534	5,071	1.5%	6,697	8,628	8,628	6,697	1.5%	6,697	8,628	8,628	6,697
	NW 12th Street	NW 41th Street	972230	4,912	6,328	6,328	4,912	n/a	n/a	n/a	0	0	0	0	4,912	6,328	6,328	4,912	2.5%	5,558	7,160	7,160	5,558	1.5%	7,127	9,182	9,182	7,127	1.5%	7,127	9,182	9,182	7,127
	NW 41th Street	NW 74th Street	972269	4,912	6,328	6,328	4,912	n/a	n/a	n/a	0	0	0	0	4,912	6,328	6,328	4,912	2.5%	5,558	7,160	7,160	5,558	1.5%	7,127	9,182	9,182	7,127	1.5%	7,127	9,182	9,182	7,127
	NW 74th Street	NW 106th Street	972268	4,573	5,892	5,892	4,573	n/a	n/a	n/a	0	0	0	0	4,573	5,892	5,892	4,573	1.9%	5,023	6,471	6,471	5,023	1.5%	6,636	8,549	8,549	6,636	1.5%	6,636	8,549	8,549	6,636
	NW 106th Street	US 27/ Okeechobee Rd	972272	4,277	5,510	5,510	4,277	FDOT	2272	104	45	59	59	45	4,322	5,569	5,569	4,322	2.1%	4,754	6,124	6,124	4,754	1.5%	6,206	7,995	7,995	6,206	1.5%	6,206	7,995	7,995	6,206
	US 27/ Okeechobee Rd	NW 170th St	972248	3,938	5,074	5,074	3,938	FDOT	2248	0	0	0	0	0	3,938	5,074	5,074	3,938	1.9%	4,332	5,581	5,581	4,332	1.5%	5,714	7,361	7,361	5,714	1.5%	5,714	7,361	7,361	5,714
	NW 170th St	Interstate 75	972248	3,938	5,074	5,074	3,938	FDOT	2248	0	0	0	0	0	3,938	5,074	5,074	3,938	1.9%	4,332	5,581	5,581	4,332	1.5%	5,714	7,361	7,361	5,714	1.5%	5,714	7,361	7,361	5,714
	Interstate 75	CR 823/Red Rd	972285	2,782	2,160	2,160	2,782	n/a	n/a	n/a	0	0	0	0	2,782	2,160	2,160	2,782	2.1%	3,091	2,399	2,399	3,091	1.5%	4,037	3,133	3,133	4,037	1.5%	4,037	3,133	3,133	4,037
	CR 823/Red Rd	CR 817/NW 27th Ave	971996	3,764	2,922	2,922	3,764	n/a	n/a	n/a	0	0	0	0	3,764	2,922	2,922	3,764	1.8%	4,108	3,188	3,188	4,108	1.5%	5,462	4,239	4,239	5,462	1.5%	5,462	4,239	4,239	5,462
	CR 817/NW 27th Ave	Florida's Turnpike/SR 91	971998	3,164	2,456	2,456	3,164	n/a	n/a	n/a	0	0	0	0	3,164	2,456	2,456	3,164	1.5%	3,402	2,641	2,641	3,402	1.5%	4,591	3,564	3,564	4,591	1.5%	4,591	3,564	3,564	4,591
Florida's Turnpike/ SR 91	I-595	Griffin Rd	971904	6,066	4,884	4,884	6,066	n/a	n/a	n/a	0	0	0	0	6,066	4,884	4,884	6,066	1.0%	6,376	5,133	5,133	6,376	1.0%	7,779	6,263	6,263	7,779	1.0%	7,779	6,263	6,263	7,779
	Griffin Rd	Pines Blvd	971902	6,227	5,013	5,013	6,227	n/a	n/a	n/a	0	0	0	0	6,227	5,013	5,013	6,227	1.0%	6,545	5,269	5,269	6,545	1.0%	7,986	6,429	6,429	7,986	1.0%	7,986	6,429	6,429	7,986
	Pines Blvd	Florida's Turnpike/HEFT/SR 821	971900	6,012	4,840	4,840	6,012	n/a	n/a	n/a	0	0	0	0	6,012	4,840	4,840	6,012	1.0%	6,319	5,087	5,087	6,319	1.0%	7,711	6,207	6,207	7,711	1.0%	7,711	6,207	6,207	7,711
	Florida's Turnpike/HEFT/SR 821	NW 203rd St	970502	4,442	3,448	3,448	4,442	n/a	n/a	n/a	0	0	0	0	4,442	3,448	3,448	4,442	2.4%	5,007	3,887	3,887	5,007	1.5%	6,445	5,003	5,003	6,445	1.5%	6,445	5,003	5,003	6,445
Interstate 75	W. Sunrise Blvd	I-595	973000	4,976	4,612	4,612	4,976	n/a	n/a	n/a	0	0	0	0	4,976	4,612	4,612	4,976	1.0%	5,230	4,847	4,847	5,230	1.1%	6,470	5,997	5,997	6,470	1.1%	6,470	5,997	5,997	6,470
	I-595	Royal Palm Blvd	862005	8,535	10,485	8,308	9,247	n/a	n/a	n/a	0	0	0	0	8,535	10,485	8,308	9,247	2.5%	9,657	11,862	9,399	10,462	1.5%	12,384	15,213	12,054	13,417	1.5%	12,384	15,213	12,054	13,417
	Royal Palm Blvd	Griffin Rd	862004	6,928	9,063	6,217	8,600	n/a	n/a	n/a	0	0	0	0	6,928	9,063	6,217	8,600	2.5%	7,838	10,254	7,034	9,730	1.5%	10,052	13,149	9,020	12,478	1.5%	10,052	13,149	9,020	12,478
	Griffin Rd	Sheridan St	862003	8,271	7,247	6,722	6,391	n/a	n/a	n/a	0	0	0	0	8,271	7,247	6,722	6,391	2.5%	9,358	8,200	7,605	7,231	1.5%	12,001	10,516	9,753	9,273	1.5%	12,001	10,516	9,753	9,273
	Sheridan St	Pines Blvd	862002	4,851	8,154	8,154	4,851	n/a	n/a	n/a	0	0	0	0	4,851	8,154	8,154	4,851	1.0%	5,098	8,570	8,570	5,098	1.0%	6,221	10,457	10,457	6,221	1.0%	6,221	10,457	10,457	6,221
	Pines Blvd	Miramar Pkwy/ S 33rd St	862001	5,765	6,964	7,595	4,667	n/a	n/a	n/a	0	0	0	0	5,765	6,964	7,595	4,667	1.0%	6,059	7,319	7,982	4,905	1.0%	7,393	8,930	9,740	5,985	1.0%	7,393	8,930	9,740	5,985
	Miramar Pkwy/ S 33rd St	Florida's Turnpike	860362	5,274	8,865	8,865	5,274	n/a	n/a	n/a	0	0	0	0	5,274	8,865	8,865	5,274	1.7%	5,730	9,631	9,631	5,730	1.5%	7,652	12,863	12,863	7,652	1.5%	7,652	12,863	12,863	7,652
	Florida's Turnpike	Miami Gardens Dr/NW 186 St	872503	5,872	8,992	8,201	5,525	FDOT	2503	20	8	12	12	8	5,880	9,004	8,213	5,533	1.0%	6,172	9,450	8,620	5,807	1.0%	7,531	11,531	10,518	7,085	1.0%	7,531	11,531	10,518	7,085
	Miami Gardens Dr/NW 186 St	NW 178th St	872501	3,255	6,760	6,917	3,896	FDOT	2501	256	83	173	164	92	3,338	6,933	7,081	3,988	1.3%	3,469	7,203	7,370	4,152	1.4%	4,643	9,641	9,864	5,557	1.4%	4,643	9,641	9,864	5,557
	NW 178th St	NW 138th Street	872501	3,255	6,760	6,917	3,896	FDOT	2501	256	83	173	164	92	3,338	6,933	7,081	3,988	1.3%	3,469	7,203	7,370	4,152	1.4%	4,643	9,641	9,864	5,557	1.4%	4,643	9,641	9,864	5,557
	NW 138th Street	SR 826	872500	6,572	3,679	3,784	6,590	FDOT	2500	0	0	0	0	0	6,572	3,679	3,784	6,590	1.0%	6,907	3,867	3,977	6,926	1.0%	8,428	4,718	4,853	8,451	1.0%	8,428	4,718	4,853	8,451
	SR 826	NW 57th Ave (Red Road)	872511	3,284	1,914	1,696	3,523	n/a	n/a	n/a	0	0	0	0	3,284	1,914	1,696	3,523	1.0%	3,452	2,012	1,782	3,703	1.0%	4,212	2,455	2,175	4,518	1.0%	4,212	2,455	2,175	4,518
	NW 57th Ave (Red Road)	Douglas(Le Jeune Connector)	872512	2,023	1,445	2,274	2,820	n/a	n/a	n/a	0	0	0	0	2,023	1,445	2,274	2,820	2.4%	2,278	1,627	2,559	3,174	1.5%	2,936	2,097	3,299	4,091	1.5%	2,936	2,097	3,299	4,091
	Douglas(Le Jeune Connector)	NW 32nd Ave	872510	2,257	1,287	1,606	2,081	n/a	n/a	n/a	0	0	0	0	2,257	1,287	1,606	2,081	1.0%	2,373	1,352	1,688	2,187	1.0%	2,895	1,650	2,060	2,669	1.0%	2,895	1,650	2,060	2,669
NW 107th Ave	NW 122nd St	NW 138th St	n/a	400	334	334	400	n/a	n/a	n/a	0	0	0	0	400	334	334	400	1.0%	421	351	351	421	1.0%	513	429	429	513	1.0%	513	429	429	513
	NW 138th St	NW 170th St	-	NOT EXISTING ROADWAY LINK				n/a	n/a	n/a	0	0	0	0	n/a	n/a	n/a	n/a		n/a	n/a	n/a	n/a		166	139	139	166		n/a	n/a	n/a	n/a
NW 102nd Ave	NW 170th St	NW 178th St	-	NOT EXISTING ROADWAY LINK				n/a	n/a	n/a	0	0	0	0	n/a	n/a	n/a	n/a		n/a	n/a	n/a	n/a		211	176	176	211		n/a	n/a	n/a	n/a
	NW 178th St	ADM Project Access Rd	-	NOT EXISTING ROADWAY LINK				n/a	n/a	n/a	0	0	0	0	n/a	n/a	n/a	n/a		234	195	195	234		302	252	252	302		192	160	160	192
Miami Gardens Dr	ADM Project Access Rd	Interstate 75 Western Ramps	-	NOT EXISTING ROADWAY LINK				n/a	n/a	n/a	0	0	0	0	n/a	n/a	n/a	n/a		234	195	195	234		302	252	252	302		192	160	160	192
	Interstate 75 Western Ramps	Interstate 75 Eastern Ramps	-	NOT EXISTING ROADWAY LINK				n/a	n/a	n/a	0	0	0	0	n/a	n/a	n/a	n/a		1,181	986	986	1,181		1,211	1,011	1,011	1,211		1,067	891	891	1,067
	Interstate 75 Eastern Ramps	NW 87th Ave	872518	714	2,380	2,267	988	FDOT	2518	8	2	6	6	2	716	2,386	2,273	990	1.0%	750	2,502	2,383	1,039	1.0%	915	3,053	2,907	1,268	1.0%	915	3,053	2,907	1,268
	NW 87th Ave	NW 82nd Ave	872518	714	2,380	2,267	988	FDOT	2518	8	2	6	6	2	716	2,386	2,273	990	1.0%	750	2,502	2,383	1,039	1.0%	915	3,053	2,907	1,268	1.0%	915	3,053	2,907	1,268
	NW 82nd Ave	NW 77nd Ave	872517	1,394	1,527	1,394	1,657	FDOT	2517	26	16	10	12	14	1,410	937	1,406	1,671	1.0%	1,465	974	1,465	1,741	1.0%	1,788	1,189	1,788	2,125	1.0%	1,788	1,189	1,788	2,125

See Page 3: Adjusted 2015 PHP

See Page 4: Percent Growth

SAMPLE Calculation 2015-2020:
714x(1.01)^(2020-2015) = 750

SAMPLE Calculation 2015-2040:
714x(1.01)^(2040-2015) = 915

Calculated Future BG Volumes: Applying 1% Growth per Year

Year 2020 and 2040 Background PHP Volumes Match Weekend Analysis Weekday Volumes

Appendix II-C– Future Weekday vs. Weekend Analysis

Table 10A
Year 2020 Short-Term CDMP Weekday and Weekend Roadway Conditions

Roadway	From	To	No. of Lanes CF + Proposed	Adopted LOS	Peak Hour Peak Dir Service Vol LOS B	LOS C	LOS D	LOS E	BACKGROUND TRIPS Peak Hour Peak Dir NB/EB (Vol / LOS)		SB/WB (Vol / LOS)		GRAHAM PROJECT TRIPS TG: IN= 396 OUT= 467 Daily PD NB/EB	Daily PD SB/WB	Project Peak Dir	PK Hr Trips NB/EB	PK Hr Trips SB/WB	BACKGROUND W GRAHAM Peak Hour Peak Dir NB/EB (Vol / LOS)		SB/WB (Vol / LOS)		ADM PROJECT TRIPS TG IN= 3,221 = 2,110 Daily PD NB/EB	Daily PD SB/WB	Project Peak Dir	Hr Trips NB/EB	Hr Trips SB/WB	TOTAL TRIPS NB/EB (Vol / LOS)		SB/WB (Vol / LOS)	
Weekday PM Peak Analysis																																
Miami Gardens Drive	I-75 Eastern Ramps	NW 87th Ave	4	E	0	2,292	2,400	2,400	2583	D	1039	C	8.81%	8.58%	E	76	74	2459	F	1113	C	6.96%	7.20%	W	371	384	2,830	F	1,497	C
Florida's Turnpike(HEFT/SR 821)	US 27/ Okeechobee	NW 170th St	6+4	D	5,620	7,600	9,160	10,020	5581	B	4332	B	6.44%	4.99%	S	56	43	5637	C	4375	B	10.51%	9.72%	N	560	518	6,197	C	4,893	B
Interstate 75	Florida's Turnpike	Miami Gardens Dr	8+4	D	6,760	9,100	10,980	12,160	8620	C	5807	B	18.19%	17.91%	N	157	155	8777	C	5962	B	19.92%	13.58%	S	1,062	724	9,838	D	6,685	B

Roadway	From	To	No. of Lanes CF + Proposed	Adopted LOS	Peak Hour Peak Dir Service Vol LOS B	LOS C	LOS D	LOS E	BACKGROUND TRIPS Peak Hour Peak Dir NB/EB (Vol / LOS)		SB/WB (Vol / LOS)		GRAHAM PROJECT TRIPS TG: IN= 508 OUT= 386 Daily PD NB/EB	Daily PD SB/WB	Project Peak Dir	PK Hr Trips NB/EB	PK Hr Trips SB/WB	BACKGROUND W GRAHAM Peak Hour Peak Dir NB/EB (Vol / LOS)		SB/WB (Vol / LOS)		ADM PROJECT TRIPS TG IN= 4,351 = 4,203 Daily PD NB/EB	Daily PD SB/WB	Project Peak Dir	Hr Trips NB/EB	Hr Trips SB/WB	TOTAL TRIPS NB/EB (Vol / LOS)		SB/WB (Vol / LOS)	
Weekend Peak Hour of Gnerator Analysis																																
Miami Gardens Drive	I-75 Eastern Ramps	NW 87th Ave	4	E	0	2,292	2,400	2,400	1352	C	1093	C	8.81%	8.58%	E	79	77	1431	C	1169	C	6.96%	7.20%	W	595	616	2,026	C	1,786	C
Florida's Turnpike(HEFT/SR 821)	US 27/ Okeechobee	NW 170th St	6+4	D	5,620	7,600	9,160	10,020	3987	B	3095	B	6.44%	4.99%	S	58	45	4045	B	3140	B	10.51%	9.72%	N	899	831	4,944	B	3,971	B
Interstate 75	Florida's Turnpike	Miami Gardens Dr	8+4	D	6,760	9,100	10,980	12,160	6158	B	4148	B	18.19%	17.91%	N	163	160	6321	B	4309	B	19.92%	13.58%	S	1704	1162	8,025	C	5,470	B

Note: Trip distributions percentages are by direction and are applied to the total In and Out trip generation sum

Table 10B
Year 2040 Long-Term CDMP Weekday and Weekend Roadway Conditions

Roadway	From	To	No. of Lanes CF + Proposed	Adopted LOS	Peak Hour Peak Dir Service Vol LOS B	LOS C	LOS D	LOS E	BACKGROUND TRIPS Peak Hour Peak Dir NB/EB (Vol / LOS)		SB/WB (Vol / LOS)		GRAHAM PROJECT TRIPS TG: IN= 2,138 OUT= 3,177 Daily PD NB/EB	Daily PD SB/WB	Project Peak Dir	PK Hr Trips NB/EB	PK Hr Trips SB/WB	BACKGROUND W GRAHAM Peak Hour Peak Dir NB/EB (Vol / LOS)		SB/WB (Vol / LOS)		ADM PROJECT TRIPS IN= 3,221 OUT= 2,110 Daily PD NB/EB	Daily PD SB/WB	Project Peak Dir	PK Hr Trips NB/EB	PK Hr Trips SB/WB	TOTAL TRIPS NB/EB (Vol / LOS)		SB/WB (Vol / LOS)	
Weekday PM Peak Analysis																																
Miami Gardens Dr	I-75 Eastern Ramps	NW 87th Ave	4	E	0	2,292	2,400	2,400	2,907	F	1,268	C	6.90%	8.23%	E	367	437	3274	F	1705	C	5.86%	6.80%	W	313	362	3,587	F	2,067	C
Florida's Turnpike(HEFT/SR 821)	US 27/ Okeechobee	NW 170th St	6+4	D	5,620	7,600	9,160	10,020	7,361	C	5,714	C	5.39%	4.28%	S	286	228	7648	D	5942	C	9.93%	9.08%	N	529	484	8,177	D	6,426	C
Interstate 75	Florida's Turnpike	Miami Gardens Dr	8+4	D	6,760	9,100	10,980	12,160	10,518	D	7,085	C	16.83%	15.26%	N	894	811	11412	E	7897	C	19.89%	12.55%	S	1,060	669	12,472	F	8,565	C

Roadway	From	To	No. of Lanes CF + Proposed	Adopted LOS	Peak Hour Peak Dir Service Vol LOS B	LOS C	LOS D	LOS E	BACKGROUND TRIPS Peak Hour Peak Dir NB/EB (Vol / LOS)		SB/WB (Vol / LOS)		GRAHAM PROJECT TRIPS TG: IN= 2,417 OUT= 1,950 Daily PD NB/EB	Daily PD SB/WB	Project Peak Dir	PK Hr Trips NB/EB	PK Hr Trips SB/WB	BACKGROUND W GRAHAM Peak Hour Peak Dir NB/EB (Vol / LOS)		SB/WB (Vol / LOS)		ADM PROJECT TRIPS IN= 4,351 OUT= 4,203 Daily PD NB/EB	Daily PD SB/WB	Project Peak Dir	PK Hr Trips NB/EB	PK Hr Trips SB/WB	TOTAL TRIPS NB/EB (Vol / LOS)		SB/WB (Vol / LOS)	
Weekend Peak Hour of Gnerator Analysis																																
Miami Gardens Dr	I-75 Eastern Ramps	NW 87th Ave	4	E	0	2,292	2,400	2,400	2,077	C	906	C	6.90%	8.23%	E	301	359	2378	D	1265	C	5.86%	6.80%	W	502	581	2,880	F	1,846	C
Florida's Turnpike(HEFT/SR 821)	US 27/ Okeechobee	NW 170th St	6+4	D	5,620	7,600	9,160	10,020	5,259	B	4082	B	5.39%	4.28%	S	235	187	5495	B	4269	B	9.93%	9.08%	N	850	777	6,344	C	5,046	B
Interstate 75	Florida's Turnpike	Miami Gardens Dr	8+4	D	6,760	9,100	10,980	12,160	7,514	C	5062	B	16.83%	15.26%	N	735	667	8249	C	5728	B	19.89%	12.55%	S	1702	1073	9,951	D	6,802	C

Note: Trip distributions percentages are by direction and are applied to the total In and Out trip generation sum

Weekday

Year 2020 BG PM PHP Volumes matches pg. 5 Volumes

Year 2040 BG PM PHP Volumes matches pg. 5 Volumes

APPENDIX I-A15:
NEW MDC Request for Detail on Differences between CDMP and Zoning Scenarios 08 11 2016

Charlotte Davidson

From: Charlotte Davidson [cnd@lce-fl.com]
Sent: Thursday, August 11, 2016 12:01 PM
To: 'Mark R. Woerner (mwoerner@miamidade.gov)'
Cc: 'Scot Leftwich, Ph.D., P.E.'
Subject: RE: Status Update on Delivery of ADM/Graham CDMP and Supporting Studies Hard Copies

Mark,

The differences between the CDMP and the Zoning scenarios are as follows:

- The CDMP analyses year 2020 and year 2040 future traffic conditions based on the assumption that all planned cost feasible projects are in place by their respective years, as per Table I-11. In other words, the TIP improvements referenced as "Year 2020 Committed Projects" and the MPO LRTP projects referenced as "Year 2040 Cost Feasible Plan Improvements" serve as the roadway networks for the short-term and the long-term traffic forecasts and analyses. Also included in the two networks are the improvements identified in the Table as "Year 2020 Planned Improvements" which are assumed to be in place for both of the study years. The networks are referenced both for the model runs and for the capacity level of service analyses. No intersection analyses are performed for the CDMP scenario.

- The Zoning analyses represent the "mini-DRI" analyses and includes only those improvements which are funded within the first three years. As such, the "Year 2020 Committed Improvements" from Table I-11, along with the "Year 2020 Planned Improvements", represent the roadway network for both the short-term 2020 and the long-term 2040 Zoning model runs and link level of service analyses. Again, the 2020 roadway network is the basis for both the Zoning model runs and the roadway link analyses. The Zoning results also include intersection Level of Service evaluations, again with the limit of only considering any improvements committed for funding for the first three years of the TIP.

As a side note, the Year 2020 CDMP and the Year 2020 Zoning roadway link analyses are <u>exactly</u> the same and present the same traffic forecasts and results. A detailed description of the background traffic roadway networks is provided in Sections 8.1 and 8.2 of the CDMP *TIA and Supporting Traffic Studies* report submitted on June 22, 2016.

The methodology for preparing background and total traffic volume assignments on the previously described years 2020 and 2040 CDMP and Zoning roadway networks is as follows:

1. Existing AM and PM PHP volumes were grown to years 2020 and 2040 based on the procedure furnished in Section 8.3 and as illustrated in subsequent Tables I-13 (for roadway links) and I-14 (for intersections). The resulting without Project traffic background forecasts (aka "pure background") serve as the basis for both the CDMP and the Zoning analyses (e.g. there are no differences between the two scenarios) and are shown in Table I-15 for both the AM and the PM PHP future year link volumes and in Appendix I-K for the future year intersection turning movement volumes.
2. Three model runs were prepared for the various analyses to derive the ADM and the Graham Project % Distributions, as detailed in Section 9 and as illustrated in Figures I-10A through I-11C. Specifically the following runs were made:
   - Year 2020 SE Data on Year 2020 Network (both CDMP and Zoning 2020 analyses)
   - Year 2040 SE Data on Year 2040 Network (2040 CDMP analyses only)
   - Year 2040 SE Data on Year 2020 Network (2040 Zoning analyses only)
3. As further described in Section 9, the individual Project % Distributions were applied to the Trip Generation for respectively the ADM (Table I-9) traffic and the Graham Site traffic (Table I-10), as shown in Tables I-17 through I-19 for respectively years 2020 (CDMP/Zoning), 2040 (CDMP) and 2040 (Zoning). Presented ADM and Graham

Project trips apply regardless of whether they later are referred to as ADM or Graham added to the background trips or they are *the* analyzed Site's Project trips.

4. Chapters II, III, and IV provide the various combinations of background (with other Site's Project trips) and total trips (with the analyzed Site or in case of Chapter IV the Combined Sites Project trips) for the CDMP and the Zoning scenarios. For example for the Chapter II ADM analyses, the "other Site's background trips" are represented by the Graham trips and the ADM trips reflect the "analyzed Project trips." In Chapter IV, both the ADM and the Graham identified trips are added together to represent the combined "analyzed Project trips" and the background trips are represented by the "pure background" trips (see Item 1 above).
5. Intersection trips are treated similarly as detailed in Items 2 through 4 above and are presented in Appendix I-K.

We hope the above further clarifies what the differences between the two scenarios are and how the different roadway link and intersection traffic forecasts are derived and subsequently analyzed in the report.

If we can clarify further, please let us know.

Regards,

Charlotte

Charlotte N. Davidson, P.E.
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From: Woerner, Mark (RER) [mailto:Mark.Woerner@miamidade.gov]
Sent: Wednesday, August 10, 2016 2:35 PM
To: 'Scot Leftwich, Ph.D., P.E.'
Subject: RE: Status Update on Delivery of ADM/Graham CDMP and Supporting Studies Hard Copies

Not what I asked, what I want to know is what does CDMP scenario vs zoning mean? What is the distinction between the 2 terms?

Mark R. Woerner, AICP
Assistant Director for Planning
Planning Division
Miami-Dade County Department of Regulatory and Economic Resources
305-375-2835
"Delivering Excellence Every Day"

From: Scot Leftwich, Ph.D., P.E. [mailto:scot.leftwich@lce-fl.com]
Sent: Wednesday, August 10, 2016 11:42 AM
To: Woerner, Mark (RER) <Mark.Woerner@miamidade.gov>
Subject: RE: Status Update on Delivery of ADM/Graham CDMP and Supporting Studies Hard Copies

Mark
CDMP and Zoning SE data for 2020 and 2040 is the same.
Scot

From: Woerner, Mark (RER) [mailto:Mark.Woerner@miamidade.gov]
Sent: Wednesday, August 10, 2016 9:54 AM
To: 'Scot Leftwich, Ph.D., P.E.'
Subject: RE: Status Update on Delivery of ADM/Graham CDMP and Supporting Studies Hard Copies

Scot, I have one overarching question. What is the difference in data presented for CDMP vs Zoning in all tables and maps for 2020 and 2040 intersection or link data? It's not explained anywhere and I am a bit confused by its presentation.
Thanks.
Mark

Mark R. Woerner, AICP
Assistant Director for Planning
Planning Division
Miami-Dade County Department of Regulatory and Economic Resources
305-375-2835
"Delivering Excellence Every Day"

From: Scot Leftwich, Ph.D., P.E. [mailto:scot.leftwich@lce-fl.com]
Sent: Monday, August 08, 2016 3:32 PM
To: Woerner, Mark (RER) <Mark.Woerner@miamidade.gov>
Cc: 'Andre Groenhoff' <andre.groenhoff@gmail.com>; 'Robert M. Gorlow' <rgorlow@comcast.net>; 'Charlotte Davidson' <cnd@lce-fl.com>
Subject: RE: Status Update on Delivery of ADM/Graham CDMP and Supporting Studies Hard Copies

Mark
When do you expect comments to us on the CDMP? Thanks
Scot

D. Scot Leftwich,Ph.D.,P.E.
President
Leftwich Consulting Engineers, Inc.
12151 Science Drive Suite 101
Orlando, Florida 32826

Telephone: (407) 281-8100 ext 203
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Mobile: (407) 406-4455

From: Woerner, Mark (RER) [mailto:MWOERNER@miamidade.gov]
Sent: Monday, June 27, 2016 11:58 AM
To: 'Scot Leftwich, Ph.D., P.E.'
Cc: Somoza, Napoleon (RER); Stillings, Noel (RER); 'Charlotte Davidson'; 'Andre Groenhoff'; 'Robert M Gorlow'; Gomez, Lourdes (RER); Bell, Jerry (RER); Osterholt, Jack (Office of the Mayor); Fernandez, Darlene (DTPW)
Subject: RE: Status Update on Delivery of ADM/Graham CDMP and Supporting Studies Hard Copies

Scott, that's fine but I don't know who will actually be available from our transportation agencies would probably benefit from your walk thru of the info you just sent us.

APPENDIX I-A16:
Response to Agency Comments for 06 22 2016 ADM Graham CDMP TIA as of 09 07 2016

AMERICAN DREAM MIAMI & GRAHAM PROJECT
Comprehensive Development Master Plan (CDMP) Amendment
Transportation Impact Analysis (TIA) and Supporting Traffic Studies
Submitted June 22, 2016

COMMENT SET & RESPONSES
As of September 7, 2016

Introduction to CDMP TIA Comment Responses

Attached are the responses to comments received from four (4) reviewing agencies and interested parties on the CDMP TIA and Supporting Studies dated June 22, 2016, with FDOT Districts 4 and 6 submitting a joint set of comments. In summary, comments were received and responded to from Florida Districts 4 and 6, Miami-Dade County Transit, the Florida's Turnpike District, and Broward County. Additionally, comments were also received from Miami-Dade County Department of Transportation and Public Works (DTPW) and Department of Regulatory and Economic Resources (RER). The applicant has not had the opportunity to fully review these comments, as of September 7, 2016, but will furnish responses following the September 9, 2016 meeting with review agencies at the South Florida Regional Planning Council (SFRPC).

The applicant has made every effort to address the agencies comments and is fully committed to working with all applicable parties to obtain final consensus on the CDMP TIA and the various supporting studies. Furthermore, the applicant is proceeding forward towards finalizing an updated version of the June 22, 2016 report that incorporates all responses addressed in this Comment Set and Responses. The intent is to resubmit the report within a reasonable time and allow the agencies to review the updated report and ensure that it has adequately accommodated all requests.

One issue which should be further elaborated on is the approach for analyzing background trips. The June 22, 2016 included the assumption that each Project was analyzed individually while considering the other Project's trips as part of the background trips and that this served as the basis for the mitigation recommendations. The request to include Graham project trips for the ADM analysis was first introduced in the Comment and Response Set dated October 16, 2015, as part of comments received from respectively FDOT, Southeast Florida Regional Planning Council, and the City of Hialeah (refer to Appendix I-A-3). Graham trips were included in the analysis presented in the December 22, 2015 CDMP TIA, following addendum to add the Graham Project to the methodology originally derived for the ADM site. As late as May of 2016, a summary of the different analysis scenarios were shared with Miami-Dade County, in part to demonstrate the extensive number of intersection and roadway segment analyses which were being prepared for the sites and to share the length of time required to complete these analyses (due in great extend to the approach of having the other Project in the background traffic and now having three separate Chapters for the ADM, the Graham, and the Combined scenarios). We stand by the analyses which was presented in the report with the statement that this was our understanding of the approach that was intended for the analyses. The applicant is amenable to work with agencies to resolve any issues of concern related to the presented approach and in an effort to make sure that all parties are comfortable with the findings is prepared to reevaluate the analyses without the other Project being included as background trips. Responses to comments on the background trip approach reflect our commitment.

FDOT DISTRICTS FOUR AND SIX, DATED AUGUST 05, 2016:

General Comments

FDOT No. 1: Since ADM and Graham Property traffic analyses assume interchange improvements that affect an existing or future interchange, an Interchange Access Request (IAR) document, consistent with the *FDOT Interchange* Access *Request – User's Guide* will be required for each of the interchange modifications. The noted improvements affect an existing, future full interchange, or future partial interchange (Miami Gardens Drive at I-75, HEFT at I-75, a new interchange at HEFT and NW 170th Street, and a partial interchange at NW 178th Street and I-75). Additional traffic analyses beyond that submitted for the CDMP will be required to evaluate impacts upon SIS facilities and interchanges during morning, afternoon, and weekend periods, and identify improvements to accommodate the additional future traffic.

The applicant will work with FDOT to ensure that all applicable traffic study documents are prepared as needed. The HEFT and NW 170th TIJR is already in progress and coordination is being made with the Florida's Turnpike.

FDOT No. 2: Several transportation improvements projects are relied upon to demonstrate adequate public facilities are present by 2020 to accommodate the expected travel demand generated by ADM and Graham Project. These include an interchange modification at HEFT and I-75; a new interchange at HEFT and NW 170th Street; a partial new interchange at I-75 and NW 178th Street; and an interchange modification at I-75 and Miami Gardens Drive. Each of these interchange improvements ultimately requires FDOT and FHWA approval. Please note that current FHWA policy discourages partial interchange configurations and access serving private property. Although FHWA Policy Point #4 stipulates that each case is evaluated on its own merits, it is the Department's experience that obtaining approval for partial interchanges is a difficult and long process that may present scheduling challenges.

The applicant acknowledges FDOT comment and will continue to work with the Department to ensure that these improvements are in place by the year 2020.

FDOT No. 2 Cont'd: If any of the interchange improvements fail to be approved and/or constructed by 2020, the base transportation network that is the foundation of ADM and Graham Project's traffic analysis is invalid. This would result in additional transportation impacts to area roadways that were not analyzed. Therefore, it is recommended that a condition of approval be included for the ADM and Graham Project COMP submittals contingent upon obtaining the requisite FDOT and FHWA approvals for the proposed interchange access changes. If any of the relied upon transportation improvements are not approved, a re-evaluation of the traffic impact analysis will be necessary.

The applicant acknowledges the above statements and understands that the submitted CDMP TIA has been based on the presented projects being in place. In the event that a proposed transportation improvement is not in place as planned, this may necessitate additional traffic analysis.

FDOT No. 3: Please provide the electronic Synchro files so that they may be reviewed.

The electronic Synchro files will be included once the updated *CDMP TIA and Supporting Traffic Studies* report is resubmitted accommodating the responses to agency comments, per the introductory overview.

FDOT No. 5: Please add delay and v/C ratio values to all intersection LOS summary tables for ease of comparison between the various analyses conducted and for verification with the Synchro analysis. Such information is beneficial for understanding the intersection mitigation improvements if the approach and movement specific delay and LOS were provided in tabular format.

Delay will be been added to all intersection LOS summary tables, as requested. Specifically Tables I-16, II-4, II-7, III-4, III-7, IV-4, and IV-7 will be updated to include the final delay along with the overall intersection LOS results. Overall intersection volume to capacity ratios are not produced in the updated intersection results (e.g. HCM 2010, as requested). Information on approach volume to capacity ratios will be maintained within the

Appendices showing the individual intersection analysis outputs.

FDOT No. 5: Page 99, 128, & 157, Mitigation Summary, Intersection Improvements: Why were intersection improvements limited to only three variations (1 exclusive right turn lane, 3 through lanes, and 2 left turn lanes)? Each intersection depending on location and geometry should have been assessed separately. Unique lane geometries should be tested to determine what is necessary for the intersection to function at an acceptable LOS.

The mitigation limits were set to ensure that reasonable assumptions were made in regards to the potential future layout of intersections. At this point in time, there are many uncertainties in regards to what nearby land use and associated access points could exist by the time the Projects are being implemented (e.g. 2020 and 2040). Mentioned "unique" lane configurations, such as two right turn lanes or three left turn lanes, are complicated by the need to have receiving lanes to accommodate such geometries and in turn depend on numerous other supporting factors such as potentially having to merge the traffic back to its original number of receiving lanes. The most conservative and realistic approach is to set the intersection configurations to the identified maximum mitigations (e.g. 1 exclusive right turn lane, 3 through lanes, and 2 left turn lanes).

FDOT No. 6: Please check the page numbering of the report documents. There seems to be some skipped numbers.

The first page of several of the tables were accidentally left out when compiling the submitted June 22, 2016 *CDMP TIA and Supporting Traffic Studies* report. The missing pages that will be added back into the updated report are:

Page No.	Item
53	1st pg of Table I-16, Year 2020 and 2040 Background Intersection LOS Analysis
64	1st pg of Table I-17, Year 2020 SE Data on Year 2020 Roadway Network Project % Distribution & PM Trips
82	1st pg of Table II-3B, Zoning Short Term (Year 2020) Study Area Roadway Segment LOS Analysis - ADM PM Impacts
87	1st pg of Table II-5A, CDMP Short Term (Year 2040) Study Area Roadway Segment LOS Analysis - ADM AM Impacts
94	1st pg of Table II-6B, Zoning Long Term (Year 2040) Study Area Roadway Segment LOS Analysis - ADM PM Impacts
111	1st pg of Table III-3B, Zoning Short Term (Year 2020) Study Area Roadway Segment LOS Analysis - Graham PM Impacts
121	1st pg of Table II-6A, Zoning Long Term (Year 2040) Study Area Roadway Segment LOS Analysis - Graham AM Impacts

Referenced page numbers are with respect to the June 22, 2016 *CDMP TIA and Supporting Traffic Studies* report.

Executive Summary

FDOT No. 7: There are 9 improvements, including interchange improvements at I-75/HEFT/Miami Gardens Drive, a new interchange at HEFT and NW 170th Street, and I-75 ramps at NW 178th Street to/from southbound I-75, that are assumed to be constructed by 2020. These improvements form the basis of the 2020 roadway network used for the submitted concurrency analysis, zoning analysis, and comprehensive development master plan analysis. It is suggested that these improvements be identified in the Executive Summary, and specified as roadway improvements necessary to accommodate both developments' traffic. This comment also extends to the Mitigation Summary section for Chapters 2 and 3.

The addition of the above mentioned improvements will be added to the Executive Summary and are part of the Mitigation Summaries (please also refer to response to FDOT Comment No. 41).

Chapter 1, Section 6 - Existing Conditions

FDOT No. 8: In some instances, FDOT daily traffic volumes were adjusted using K and D factors to estimate peak hour, peak directional volumes for roadways. Please consider using synopsis reports for those count stations to obtain an actual peak hour, peak directional volume for the existing conditions. Such synopsis reports can be provided by FDOT upon request.

Synopsis reports have been requested from FDOT and will be incorporated into the updated analyses.

FDOT No. 9: In Appendix I-D, please include the name of the intersection in the header of all Synchro output worksheets. Also, please identify the type of analysis (HCM 2010 or Synchro 9) and results represented on each worksheet. This applies to all Synchro output worksheets provided for each scenario in each chapter of this submittal package.

The intersection name will be included in the header for all Synchro output worksheets. As indicated in response to FDOT Comment No. 11, the outputs will be updated to represents HCM2010 results.

FDOT No. 10: Page 25, Table I-1: For Segment NW 107th Avenue from NW 122nd Street to NW 138th Street, please place Note number (4) under the appropriate column. Also, it is understood that no data was available for this segment, however please explain why the assumption of an AADT of 8,000 was used. How was this value determined?

Footnote number 4 reference is already included in the NW 107th Avenue roadway segment under the column header "No.", referring to the FDOT count station number (e.g. eight column in the table). The footnote will be maintained here since the "no count" estimate is treated similar to other FDOT Daily Only counts which have K and D factors applied. Please note that the footnote and data assumptions are highlighted in a light purple to stress that no traffic counts were available for this roadway segment. The 8,000 estimate is very much an estimate. We have no roadway segment nor intersection turning movement counts in the vicinity to assist in preparing a more detailed estimate.

FDOT No. 11: Page 31, 1st Paragraph: It is stated that Synchro's HCM 2010 methodology will be used for the output results; however the results provided throughout the document and the Synchro outputs in the appendix are not of the HCM methodology. They are instead the calculated delay and LOS from the Synchro system, which does not calculate the results according to HCM. You must choose to print the HCM 2000 or 2010 version outputs within the software. Please provide the HCM output results for all existing conditions and future Synchro analysis.

Correct, the report did state that the HCM 2010 results was being produced for the Synchro outputs. The report should have stated the Synchro results were produced. In fact for the June 22, 2016 submittal, the decision was made to reference the Synchro results in lieu of the HCM 2010 results due to the more realistic vehicular operations which are referenced in Synchro. For example, Synchro is specifically set-up to evaluate the queuing of vehicles at intersections and also has the option to include the free-flow right on red movements.

Since FDOT's comment specifically requests that the HCM results be included instead, the applicant will revise its approach and the newly updated CDMP TIA report will include HCM 2010 results. All intersection analyses and summary tables will be updated accordingly.

Chapter 1, Section 8 - Background Conditions

FDOT No. 12: Identified in Appendix I-D, unusual cycle lengths were used to analyze many of the intersections. For example, at the intersection of Florida's Turnpike ramp termini and Okeechobee Road a 133-second cycle length was analyzed for the south ramp termini intersection. However, the north ramp termini intersection was analyzed with a 80- second cycle length, even though they were evaluated as an actuated-coordinated system (See page 526 of Appendix I-D). Similarly, at Florida's Turnpike and Red Road, the west ramp termini intersection was studied with a 69.4-second cycle length, and at I-75 and Miramar Parkway, the south ramp termini intersection was analyzed with a 65.4-second cycle length (see pages 532 and 540 of Appendix I-D). It is recommended that all intersection analyses be revised to reflect the cycle lengths and phasings from existing signal timing sheets. Future year analyses should maintain cycle lengths and phasings, although splits may be optimized to reflect different green time needs due to

traffic volume changes.

For consistency, the intersection analyses will be revised to reference the existing timings. This will be included for all future intersection analyses and results will be provided in the updated appendices and corresponding intersection summary and mitigation tables.

Chapter 2, Section8–Weekend Review

FDOT No. 13: The text provided for the Weekend Review (page 94 of the PDF) indicates that no further review of weekend conditions is needed based on the findings. However, no specific findings are written in support of this statement. Please provide additional details concerning the weekend evaluation to justify not analyzing weekend conditions further. For example, a comparison of ADM and Graham Property project volumes for a typical weekday and weekend should be provided; a comparison of total traffic volumes for a weekend and weekday should be included; and an assessment of directional volume changes that may impact SIS facilities and nearby interchanges in a manner different from what is experienced currently.

As indicated in Section 8.0, the weekend analysis is contained in Appendix II-C and includes the referenced comparison of typical p.m. weekday traffic versus Saturday peak hour of generator traffic associated with the ADM site. The analysis includes assignments on Miami Gardens Drive from I-75 Eastern Ramps to NW 87th Ave, on Florida's Turnpike/HEFT/SR 821 from US 27/Okeechobee Road to NW 170th Street, and on I-75 from Florida's Turnpike to Miami Gardens Drive. The analysis addressed all the above mentioned criteria for the weekend analysis and concluded that the weekend p.m. peak hour is the highest traffic period during the week. It was therefore determined that there was not a need to analyze all roadway segments within the study area for the weekend period and that the traditional weekday period served as the worst case traffic conditions.

Chapter 1, Section 6 –Existing Conditions

FDOT No. 14: In section 6.2, the PHP is defined as the average of the two highest consecutive hours of traffic and defined as the average of traffic volume between 7-9 AM and 4-6 PM. Are these the highest consecutive hours of traffic for all links? The two highest consecutive hours should be determined from traffic counts and defined for SIS facilities, Turnpike facilities, Other State Facilities, and County Facilities separately. This methodology should be consistent with the Interchange Access Request methodology.

The applicant acknowledges FDOT's comment and the County's procedure for deriving PHP volumes based on the two highest consecutive hours of the day. For the intersection turning movement counts, the field counts were based on the AM hours between 7:00 am and 9:00 am and the PM hours between 4:00 pm and 6:00 pm, the traditional highest hours of the day. As such, the existing intersection TMVs are based on an average of the field observed two-hour period counts. For consistency purposes, it is the applicants' traffic consultant's professional opinion is that it makes the most sense to use the same two-hour peak periods for all intersection and roadway segment counts are therefore recommending not to revise the approach for the development of PHP volumes.

Chapter 1, Section 7 - Trip Generation

FDOT No. 15: The Department does not dispute the 10.8% LRT adjustment to net external trips which was previously approved as part of the methodology and shown in Table I-9. However, the calculation of the LRT adjustment should be reviewed. If 10.8% of person trips to MOA took LRT then this 10.8% should be applied to the person trips visiting ADM. Assuming a vehicle occupancy of 2.3 for ADM to match the vehicle occupancy of MOA then 69,822 daily net external vehicle trips translates to 160,591 person trips. To add the 10.8% back divide 160,951 person trips by 1-.108 = .892 so 180,438 person trips to American Dream Mall. Converting back to vehicle trips with a 2.3 auto occupancy gives 78,451 vehicle trips. The difference between 78,451 and 69,822 vehicle trips is 8,629 additional vehicle trips. Please clarify the difference between the 8,629 vehicle trips calculated vs. the 6,481 vehicle trips provided in Table I-9.

There has been extensive efforts to ensure that a final trip generation was achieved which could be approved by both FDOT and Miami-Dade County, with correspondence and numerous meetings extending from September of 2015 through March of 2016. Every aspect, including the vehicle occupancy, was scrutinized to a great extend and does not warrant further review.

FDOT No. 16: In the Addendum to TIA Methodology for CDMP (Nov. 24, 2015) PM internal capture was 15.1% in 2020 and 10.8% in 2040 for the Graham project, but the current analysis shows 24.48% in 2020 and 18.38% in 2040 . Unless otherwise approved, use the same internal capture rates that were previously approved in the methodology.

The trip generation table presented in the June 22, 2016 TIA varies from the November 24, 2015 information and again was coordinated with review agencies during the early months of 2016. No further refinements are warranted at this time, as all issues related to the trip generation is considered to have been finalized.

Chapter 1, Section 8 - Background Conditions

FDOT No. 17: Florida's Turnpike from I-595 to Pines Blvd in Broward County is included as a Year 2040 Cost Feasible Plan improvement but this project is not included in the Broward MPO 2040 LRTP. The identified source in Table I-12 is the SERPM7.0 model. The model is a tool and should not be used a source. Please reference the appropriate agency plan as the source for this project. If the model does not properly reflect agency plans, FDOT should be notified and the project should be removed.

The model travel demand forecasts and all the Year 2040 CDMP roadway LOS tables will be updated to reflect that the Florida's Turnpike from I-595 to Pines Blvd is not widened. Table I-12 will also been updated along with all corresponding roadway link LOS analyses. Please consider this as notification to FDOT that there is an inconsistency between the 2040 Broward LRTP and the SERPM7.0 model.

FDOT No. 18: Okeechobee Road from NW 154th St to Florida's Turnpike in Miami-Dade County is included as a Year 2040 Cost Feasible Plan improvement but this project is not included in the Miami-Dade MPO 2040 LRTP. The identified source in Table I-12 is the SERPM 7.0 model. The model is a tool and should not be used as a source. Please reference the appropriate agency plan as the source for this project. If the model does not properly reflect agency plans, FDOT should be notified andthe project should be removed.

The model travel demand forecasts and all the Year 2040 CDMP roadway LOS tables will be updated to reflect that Okeechobee Road from NW 154th St to Florida's Turnpike is not widened. Table I-12 will also been updated along with all corresponding roadway link LOS analyses. Please consider this as notification to FDOT that there is an inconsistency between the 2040 Miami-Dade LRTP and the SERPM7.0 model.

FDOT No. 19: SERPM 7.0 model is identified as a source for three projects in Table I-12 but the methodology identified SERPM 6.5/Managed Lanes PD&E model, plus Turnpike edits for their planned future projects, plus the approved SERPM 7 socioeconomic data integrated in. Please clarify which model was used for this analysis.

In fact, the "SERPM6.5/Managed Lanes PD&E Model plus Turnpike Edits Plus the Approved SERPM 7.0 SE Data" serve as the basis for the model runs prepared for the submitted *CDMP TIA and Supporting Traffic Studies*. The only changes which have been made to the model runs were to accommodate: 1) The latest committed and cost feasible LRTP roadway improvements, 2) The planned roadway improvements as presented in the June 22, 2016 report, 3) The ADM and the Graham Projects land use data, and 4) The requested additional platted projects. The network improvements will be identified in revised Tables I-11 and I-12 presented in the updated CDMP TIA report and will include the previously referenced removal of the three SERPM 7.0 model projects (see response to FDOT Comments No. 17 and 18). The platted projects were detailed in Appendix I-L.

FDOT No. 20: Section 8.3 indicates that growth rate caps were imposed on all facilities. In the approved methodology no growth rate cap was included. Please clarify in the report how and why the growth rate caps were determined, and provide any numerical support of this determination.

Correct, the methodology did not address setting a cap for the project traffic growth rates. When reviewing historical growth rates, though, there were links with both negative and extremely high growth rates. For example, Hialeah Gardens Blvd has had an average growth of 19.3 percent per year over the period 2009 through 2014. If 19.3 percent growth is maintained through the year 2040, this would equate to the traffic growing by 100 times its existing value which obviously would not be realistic. It was therefore decided to err on the conservative side and set lower growth rate percent maximum values; keeping in mind that higher growth rates would only serve to make the background traffic automatically fail. The justification is further substantiated by the fact that once a roadway becomes saturated (which even with the conservative estimates, many of the roads are forecast to become), then there comes a point where no further traffic can be accommodated. For example, the freeways have existing high traffic volumes and with further growth show warrant for substantial increases in number of lanes to meet capacity. Notably by the time 2040 becomes a reality there will be many new innovations, such as connected vehicles, which will override the need for such extreme number of lane needs and therefore the growth projections are more than reasonable for purposes of forecasting trips through the year 2040. We recommend maintaining the proposed growth rate caps, with the exception of the HEFT facility which has been requested by the Florida's Turnpike to use higher rates.

FDOT No. 21: Page 48, Table I-14: Please label and explain the difference between the 1st and 2nd columns labeled as "Referenced Intersection % Growth". It appears in the Appendix that there are two sets of intersection growth rates for the two Phases (Phase I and Phase II). Please define the Phases in a footnote and label the column appropriately.

Headers will be included in the updated report that identify the two columns as respectively 2015-2020 and 2015-2040 percent growth rates. Column headers match with the column headers from the Appendix I-J which detail initial growth percentages based on the roadway link historically observed growth rates which served as the basis for the development of the estimates presented in Table I-14.

FDOT No. 22: Page 53-54, Table I-16: Please check for missing intersections and revise as necessary. Only Intersections 16 through 54 are provided.

Please refer to response to FDOT Comment No. 6 which addresses the missing page.

Chapter 1, Section 9 - Project Trip Distribution

FDOT No. 23: Socio-economic data was factored to match the daily ITE trip generation calculations for the external trip quantities. How was this performed? The model plots show % trips from the select zone analysis but not the model volumes in Appendix I-M. Please include model volume plots for this select zone analysis.

The model does not automatically produce the same trip generations as were prepared for the AMD and the Graham sites based on ITE and MOA field studies since the model relies on its own trip generation procedures. The initial SERPM model trips generated for the ADM and the Graham TAZs were adjusted to ensure that the final assigned traffic volumes from these TAZs match with the daily trip generation forecasts presented in Tables I-9 and I-10, respectively. Select zone model volume plots will be added to Appendix I-M of the updated report.

FDOT No. 24: Please provide the methodology for determining the number of households with and without children and vehicle ownership for the Graham Property households where there were not households previously.

The number of household statistics were based on the existing TAZ referenced for the Graham Project and a review of nearby TAZs. Appendix I-L provided a summary of the original versus revised TAZ household characteristics.

FDOT No. 25: Consistent with the traffic methodology, a new TAZ was created for ADM to force access to HEFT and NW 170th Street. There appears to be a centroid connector near the HEFT and NW 170th Street in the submitted material, though it is not identified as an ADM TAZ and the percent distribution is not depicted. When adding the percent trips on the centroid connectors for the ADM TAZ in Appendix I-M, the percentage sums to only 70% indicating that the other 30% is distributed from the new centroid. Please identify the number of the TAZ added near HEFT and NW 170th Street and what socio-economic data was assigned. The table in Appendix I-L should be updated to reflect this TAZ. Additionally, please denote the TAZ with a star for ADM on the map in Appendix I-L.

Appendix I-L does include both the "main" ADM and the near HEFT/NW 170th 30% ADM TAZs. It should be pointed out that TAZ 2705 is incorrectly shown in the appendix table titled "Platted Parcels in the Cities of Hialeah Gardens, and Unincorporated Miami-Dade County and Potential Development" but should in fact be TAZ 2748. The table will be refined and the new plots to be provided in an updated Appendix I-M will show the HEFT/NW 170th 30% ADM TAZ.

FDOT No. 26: Please include model plots from the newly created ADM TAZ near the HEFT and NW 170th St interchange showing the select zone analysis in both model volumes and percent of project traffic volumes. This will serve as a check that this methodology for matching the expected regional long distance trip making characteristics works as intended.

A separate select zone analysis will be prepared for the ADM TAZ located near the HEFT/NW 170th Street interchange. The resulting model plots will be added to Appendix I-M. Three separate plot sets will be provided for respectively the Year 2020 Land Use on 2020 Network, the Year 2040 Land Use on 2020 Network, and the Year 2040 on 2040 Network. Please note that additional manual adjustments were included for the Florida's Turnpike/HEFT/SR 821, the Florida's Turnpike/SR 91, and I-75 to increase the regional distributions and extend the trips beyond the SERPM6.5 subarea model area.

FDOT No. 27: On page 63, a typographical error was noted. References to Table I-8 and Table I-9 should be changed to Table I-9 and Table I-10 instead.

The ADM and the Graham trip generation table references within the text will be corrected to reflect Tables I-9 and I-10, as correctly noted in the above comment.

Chapter 1, Section 10 - Project Assignment

FDOT No. 28: Page 58, 60, and 62, Figures I-10B, 11B, and 12B: Please explain why no traffic to/from the Graham Project is assigned for the link of NW 170th Street from NW 102nd Avenue/NW 107th Avenue to NW 97th Avenue, particularly since there is an access point at the location of NW 102nd Avenue/NW 107th Avenue. The 0.0% value is present for both 2020 and 2040 project distributions.

The model distribution for the referenced roadway link is zero percent due to the fact that three different centroid connectors are available for trips to exit the Graham TAZ. The model assigns the trips based on the "quickest" path. Acknowledging that there will be travelers exiting Graham via the referenced roadway segment, a manual adjustment will be made to the trip distribution figures and the future year roadway link analyses and will be subsequently included in the updated report.

FDOT No. 29: Page 58, 60, and 62, Figures I-10B, 11B, and 128: Please explain why no traffic is assigned to/from the link of NW 170th Street from NW 82nd Avenue to NW 78th Avenue when both the links to the east and west have project traffic assigned to them.

Based on the available roadway network, the trips are choosing to take alternate routes to by-pass the indicated roadway link (please refer to the Appendix I-M model plots. No changes are deemed necessary for the analyses since minimal trips are distributed within this general area.

FDOT No. 30: Page 63, Table I-17: Please check the percent distribution values for the link of NW 178th Street between Graham Access and NW 97th Avenue. The values do not match those shown in Figure I-10B.

The information presented in Table I-17 is the correct. Figure I-10B is simply missing the ADM and the Graham percent distributions for this roadway segment. The same applies for Figures I-11B and I-12B. All three figures will be updated to include the missing percent project distributions.

<u>Chapters 2 through 4 – Link Analysis</u>

FDOT No. 31: The use of ADM or Graham Property traffic should not be included as "background" traffic in the analysis when determining if a facility is backlogged. The determination of backlogged facilities must be re-done to include only approved background traffic. Throughout the submitted analysis, it is stated that backlogged facilities include traffic generated by either ADM or Graham Property, depending on which project was being analyzed. This means that links which fail due to trips from Graham property or ADM are considered backlogged and not subject to mitigation. This approach to evaluating backlogged facilities is included in the Zoning Link Analysis and CDMP analysis tables in Chapters 2 through 4. Below are examples of roadways identified as backlogged facilities (and failing) because of either ADM or Graham Property traffic.

a. *I-75 from Miramar Parkway to Florida's Turnpike (Table III-5A)*
b. I-75 *from Miramar Parkway to Florida's Turnpike (Tables III-5B and III- 5B)*
c. I-75 *from Florida 's Turnpike to Miami Gardens Drive (Tables II-5B and III-5B)*
d. *Okeechobee Road from Hialeah Gardens to NW 103rd Street (Tables II-5B and 11I-5B)*
e. *Okeechobee Road from NW 103rd Street to SR 826 (Tables II-5B and III-5B)*
f. *Miami Gardens Drive from I-75 Eastern Ramps to NW 87th Avenue (Tables II-2B and III-2B -)*
g. *Miami Gardens Drive from NW 87th Avenue to NW 82nd Avenue (Tables ll-2B and III-2B)*

The June 22, 2016 approach for generating background traffic included the approach that the other Project was part of the background traffic and therefore was used to identify the traffic impacts for the other Site. As indicated in the introduction to the Comment Response Set, the request to include Graham project trips for the ADM analysis was first introduced in October 2015 as part of comments received from respectively FDOT, Southeast Florida Regional Planning Council, and the City of Hialeah and the Graham trips were included in the analysis presented in the December 22, 2015 CDMP TIA, following addendum to add the Graham Project to the methodology originally derived for the ADM site. As late as May of 2016, a summary of the different analysis scenarios were shared with Miami Dade County.

The June 22, 2016 includes the Combined ADM and Graham analyses, as per the understanding of the applicant, and does show the overall traffic impacts associated with both projects being in place. The intent of this Chapter was to comply with the agency request but was not intended to override the individual Projects' approach of analyzing the other site as background traffic. Therefore the statement that the results were for "informational purposes only" was included.

In order to comply with agency concerns and to ensure that the CDMP applications remain on schedule, revised analyses will be prepared to review each Project relative to background traffic without the other Project. Furthermore, the analyses will be updated with new traffic counts as per agency comments, adjustments to the roadway improvement tables also per agency comments, and further review of individual segments to ensure that the latest most appropriate assumptions are being applied.

FDOT No. 32: It was noted in several tables in Chapter 4, particularly Tables VI-5A, VI-5B, and VI-6B, that two segments of I-75 fail in 2020 and 2040 because of ADM and Graham Property traffic. Yet these two segments (I-75 from Miramar Parkway to Florida's Turnpike, and I-75 from Florida's Turnpike to Miami Gardens Drive) are not listed in Mitigation Summary sections or the Executive Summary of the report. Planned improvements to both I-75 segments will increase capacity to accommodate background growth traffic through 2040 and allow the roadway to operate at an acceptable level of service. However, the addition of ADM and Graham Property traffic causes these I-75 segments to fail, according to the submitted analysis. As a result, please identify the necessary improvements for these two I-75 segments to allow them to operate at an acceptable level of service with both project's traffic, and include these improvements under each Mitigation Summary section of the report.

Please see response to FDOT Comment No. 31 above.

FDOT No. 33: In Chapters 2 through 4, the volumes and lane geometries for various roadways segments for the 2020 and 2040 Zoning and COMP analysis tables differ. When comparing Table ll-5A (2040 CDMP Analysis) with Table ll-6A (2040 Zoning Analysis) the total trips for a particular roadway segment are not the same. In some cases, the number of lanes (CF + proposed) are different. For example, SR 826 shows 10 lanes in the zoning analysis for 2040 and 10+4/12+4 in the CDMP analysis for 2040. Also, the segment of Florida's Turnpike from SW 8th Street to SR 836 was assigned 311 combined northbound trips for the 2040 PM peak hour CDMP analysis, but only 307 combined northbound trips for the 2040 PM peak hour Zoning analysis.

Please clarify the apparent project trip assignment and roadway geometry inconsistencies and revise the analyses, as appropriate.

The 2040 CDMP and the 2040 Zoning analyses represent two different traffic assignments and thus analyses. For the 2040 CDMP analysis, the year 2040 SE data is assigned on the cost feasible network (a.k.a. 2040 network); whereas for the 2040 Zoning analysis, the year 2040 SE data is assigned on just three years of committed roadway improvements similar to the previously utilized "DRI" methodology (a.k.a. year 2020 network). As a result there are two different project percent distributions (Figures I-11A/B vs. Figures I-12A/B) and two different project assignments (as noted by the reviewer). This also explains why there are differences in the number of lanes, and corresponding roadway capacities, shown in the two sample tables as mentioned in the above comment. For the 2020 CDMP and the 2020 Zoning analyses, the results are identical since both rely on year 2020 SE assigned on the 2020 network. Accordingly, no changes are necessary to the analyses presented in Chapters 2 through 4.

FDOT No. 34: The Mitigation Summary in each chapter does not include intersection mitigation. Please add the intersection mitigation summary to this section. This summary is included in the executive summary but does not differentiate between Graham and ADM responsibilities.

Intersection mitigation summaries will be added to Chapters 2, 3, and 4, as requested. Mitigation responsibilities between the two Sites will be identified as well.

FDOT No. 35: Please revise the analysis of backlogged facilities such that ADM and Graham Property project traffic are not considered as background traffic. In the Intersection ADM Mitigation Summary appendices (II-I, II-J, III-H, III-I), items that are significant are highlighted in yellow. In some cases (e.g., NW 186th Street / Miami Gardens Drive & NW 57th Avenue) mitigation is proposed for turning movements, which includes traffic impacts from both ADM and Graham Property. Intuitively, if both projects contribute significant traffic impacts to a turning movement requiring mitigation, then the mitigation costs should be shared between the two developments. Please clarify how the projects included in the intersection needs of the executive summary were determined to be significantly impacted by ADM and Graham Property developments.

The updated CDMP report will include reanalysis of all intersections including updating default assumptions, as referenced in earlier FDOT comments. Results will be summarized in each Chapter mitigation section and the Executive summary as requested.

FDOT No. 36: In comparing Table II-4 Zoning Short Term (Year 2020) Study Area Intersection LOS Analysis – ADM Impacts and III-4 Zoning Short Term (Year 2020) Study Area Intersection LOS Analysis – Graham Impacts, the LOS with both ADM and Graham Property included do not match. Given that this column should include all trips from both projects, it is expected that the LOS would be the same. Please correct the apparent discrepancy.

Correct, the intersection LOS values for the two tables should match for the final column with total traffic volumes included when the total volumes are the same, as was the case. In line with the approach to no longer include the other Project as background traffic, the results will no longer have the same results.

FDOT No. 37: Page 83, Table II-4 and Page 112, Table III-4: Please check LOS values for Intersection ID 9 (NW 57th Avenue at Miami Gardens Drive), and explain why this intersection operates better with the additional project trips than with just the background traffic only.

The intersection should not in theory operate better for the With Project trips than the With Background Only trips but did in few cases due to the fact that individual signal timings were revised. We acknowledge that there were a few cases which should have been better analyzed.

FDOT No. 38: Page 95, Table 1I-7 and Page 156, Table IV-7: Please check LOS values for Intersection ID 16 (SR 823/Red Road at Turnpike Ramp (E)), and explain why this intersection operates better with the additional project trips than with just the background traffic only.

Please see response to FDOT Comment No. 37.

FDOT No. 39: Table II-7 is included in both Chapters 2 and 3. Chapter III is specific to the Graham property but the Table II-7 states it is for the ADM impacts. The table appears to be identical including the headers of the table. Please replace Table II-7 in Chapter III with the correct Table III-7.

The table will be updated to correctly reflect the intersection LOS results for the Scenario being analyzed.

FDOT No. 40: Table II-7 states "Zoning Short Term (Year 2040)." Please change to "Zoning Long Term (Year 2040)."

The table name will be revised as indicated.

Chapter 2, Section 8 - Mitigation Summary

FDOT No. 41: Page 127, Second Paragraph (sentence before bulleted list): Please clarify if the listed improvements are for the ADM and/or Graham Project. ADM is referenced twice in the noted sentence. This also occurs again on Page 149 in the same location under Section 6.0 Mitigation Summary.

The text for the Chapters II, III, and IV Mitigation summaries will be updated to state that "A summary of the improvements proposed as part of the study area roadway improvement plan for American Dream Miami and the Graham Project are summarized below and reflect those improvements that are baseline for the two projects, prior to reviewing additional mitigation needs:"

Chapter 3, Section 5 –Year 2040 AM and PM Zoning Analyses

FDOT No. 42: Page 116 – 119, Tables III-5A & 5B: Please check for an error in the font color for columns under Background Trips Peak Hour Peak Dir Analysis NB/EB (Vol/LOS). Not all values in red font are failing.

The font color will be refined to ensure that just those LOS values which exceed the adopted LOS are indicated as red.

Missing Tables

FDOT No. 43: There appear to be several tables missing from the submittal package (see cursory list below). Please revise the report to include all summary tables.

a. *The first half of Table II-3B is missing*
b. *The first half of Table II-5A is missing.*
c. *The first half of Table II-6B is missing.*
d. *Table III-5B should be renamed "Table II-5B" to be consistent with the report's naming conventions.*
e. *The first half of Table 1II-3B is missing.*
f. *The first half of Table III-6A is missing.*

Please refer to response to FDOT Comment No. 6 in regards to the pages missing. Item d will be revised to "Table II-5B."

General Synchro Comments

FDOT No. 44: After reviewing the output from the Synchro analyses there are some discrepancies in the inputs used for the existing and future conditions.

a. *The peak hour factor for all intersections/approaches was used the default value.* Was *this discussed and agreed upon during the methodology agreement?*
b. *Cycle length/offsets and minimum initial (minimum green) did not correspond to Miami Dade County Signal Systems TOD sheets.* Also *please provide the Signal Timing sheets used as reference for the Synchro inputs within the appendix area.*

c. *It is not possible to verify the truck percentage used in the analyses due to the output sheets provided. It is important to account for this input in the Synchro analyses. Please provide both the methodology and process for how the truck percentage was chosen for the approaches or intersections and provide the appropriate HCM output from Synchro.*

d. *For the reference (yield) point, "beginning of green" is used for actuated- coordinated intersections. Was this verified with the Miami Dade County area engineer for these signals? Typically, the majority of signals in the County have a reference point of "beginning of yellow" for the main movements. Please check data and update the analyses with the correct input.*

e. *Some intersections between the existing conditions and future analyses get switched from actuated-coordinated operation to uncoordinated in the future. Please clarify the reason for this change.*

f. *For the future analyses, was the signal timing optimized for the "without mitigation" and the "with mitigation" scenarios? Please clarify when optimization was used and if there were any manual adjustments to the timing or other system parameters for the Synchro files.*

All changes requested above will be included in the updated intersection analyses. For the peak hour and the truck percentages, the factors are based on local traffic counts. The peak hour factors will be included in the updated intersection volume spreadsheets (Appendix I-K) and the development of truck factors will be included in a new appendix. Miami Dade County Signal System TOD sheets will also be included in a new appendix. For all other comments relating to signal timing, please refer to response to FDOT Comment No. 12.

MIAMI-DADE COUNTY TRANSIT, DATED AUGUST 26, 2016 (Revision No. 6):

Miami-Dade County has submitted a report titled "Transit Impact Report" for CDMP Applications the for ADM and the Graham Projects which outlined the forecast transit needs for the two Sites, along with estimated annual operating costs.

The applicant acknowledges receipt of the transit report and intends to work joint with the County to address transit needs and requirements associated with the two Sites.

FLORIDA'S TURNPIKE DISTRICT, DATED AUGUST 26, 2016:

The County can consider the District's comments representative of important Turnpike input as well, with regard to the applicant's submittal. A couple of additional Turnpike facility specific comments are provided below:

Turnpike Comment No. 1: Turnpike projects on the Homestead Extension of the Florida's Turnpike (HEFT), south of SR 836 (inclusive of managed Express Lanes) are let for construction (Design-Build). The analysis should include these projects.

The proposed improvement tables will be updated to include the mentioned additional project (TIP 435543-1) and the analysis will likewise reflect the improved number of lanes. The applicant has prepared an updated review of the most recent Transportation Improvement Plans for respectively Broward and Miami-Dade Counties and will be updating Tables I-11 and I-12 accordingly.

Turnpike Comment No. 2: Turnpike has additional count/toll information available which is not included in the FDOT FTI. The availability of this information was shared with the applicant during the methodology meetings but was not requested by the applicant for the preparation of the analysis.

The applicant appreciates the Turnpike's offer to supply additional traffic count information and has reached out to request those counts so they can be reflected in an update of the June 22, 2016 report.

Turnpike Comment No. 3: HEFT, in the project vicinity, has sustained considerable growth rates (with the exception of recession years). The calculated annualized growth rate (which included recession years) from 2000 – 2015 is 3.5% north of SR 836 and 3.0% south of SR 836. The development of growth rates for this facility should be assessed independently of the other limited access facilities. Information from the Turnpike's Annual evaluation is provided below for information/reference.

North of SR 836

Weighted Average Growth Rate																	Trend		'00-'15 Average Growth
2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012		2013	2014	2015	2000	2015	
45,400	51,100	53,800	59,700	64,600	68,500	71,900	75,200	74,600	73,000	75,500	76,200	78,400		77,900	81,400	89,600	52,051	87,549	3.50%
2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2008 to 2009	2009 to 2010	2010 to 2011	2011 to 2012	2012 to 2013	2013 to 2014	2014 to 2015					
12.60%	5.30%	11.00%	8.20%	6.00%	5.00%	4.60%	-0.80%	-2.10%	3.40%	0.90%	2.90%	-0.60%	4.50%	10.10%					

South of SR 836

Weighted Average Growth Rate																	Trend		'00-'15 Average Growth
2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012		2013	2014	2015	2000	2015	
48,700	53,300	55,600	60,300	70,300	77,400	81,100	82,200	76,900	72,600	74,300	76,200	78,300		80,400	83,700	90,500	56,598	88,627	3.00%
2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2008 to 2009	2009 to 2010	2010 to 2011	2011 to 2012	2012 to 2013	2013 to 2014	2014 to 2015					
9.40%	4.30%	8.50%	16.60%	10.10%	4.80%	1.40%	-6.40%	-5.60%	2.30%	2.60%	2.80%	2.70%	4.10%	8.10%					

The growth rates provided with the Turnpike's comment have been reviewed and the analyses will be updated to reflect the higher historical growth rates for HEFT, as requested.

If additional Turnpike comments should be noted, time permitting, they will be submitted to MDC or will bring on Sept 9.

BROWARD COUNTY, DATED SEPTEMBER 1, 2016:

Broward County Comment No. 1: It is unclear how the 10.8-percent upward adjustment for light rail transit (LRT) resulted in the addition of 6,481 daily trips and 491 PM peak hour trips. These values do not agree with our calculations. Please provide a worksheet outlining the LRT adjustment calculations and please provide backup for any assumptions accepted for this adjustment.

There has been extensive efforts to ensure that a final trip generation was achieved which could be approved by both FDOT and Miami-Dade County, with correspondence and numerous meetings extending from September of 2015 through March of 2016. Every aspect, including the LRT, was scrutinized to a great extent and does not warrant further review.

Broward County Comment No. 2: It is maintained in the study that the hotel component is an ancillary/complementary land use and was reflected in the trip generation estimates for ADM derived from count data collected at Mall of America (MOA). It was further stated in a reply to a previous comment about the hotel component that the ADM site is not near other Miami-Dade attractions such as the beaches or airport and therefore is not expected to generated trips other than visitors to ADM. In response to the ancillary/complementary land use comment, MOA has 506 rooms on-site to accommodate approximately 4,400,000 square feet (SF) of gross floor area (GFA), or about one room per 8,700 SF of GFA. ADM is proposed to have 2,000 rooms for 6,200,000 SF of GFA which equates to one room per 3,100 SF of GFA. Proportionally, ADM will have 2.8 times more hotel rooms per SF of GFA than MOA and accordingly, it is not reasonable to expect that all guests will be visiting the hotels as an ancillary use of ADM. With regard to the response that the location of ADM is not near other Miami-Dade attractions, it should be noted that there are at least four hotels comprising over 500 hotel rooms in the Miami Lakes Main Street area, located within two to three miles of the site, also similarly remotely located from the airport and beaches. Therefore, it is not a reasonable assumption that the project's hotels will not generate trips other than ancillary to ADM. Furthermore, as the area develops with other planned and committed projects, the demand for hotel rooms will increase. For the above reasons, we continue to recommend that an adjustment to trip generation be made to account for hotel visits not specifically associated with ADM.

There has been extensive efforts to ensure that a final trip generation was achieved which could be approved by both FDOT and Miami-Dade County, with correspondence and numerous meetings extending from September of 2015 through March of 2016. Every aspect, including the land use and corresponding trip generation assumptions, was scrutinized to a great extent and does not warrant further review.

Broward County Comment No. 3: The analysis shows that Miramar Parkway west of I-75 operates at Level of Service (LOS) C and will continue to do so for future conditions. This was brought up in our previous comments and the response was that the analysis was based on 2014 traffic count data. 2015 traffic counts for the intersection of Miramar Parkway and Dykes Road/SW 160 Avenue (Attachment A) indicating that Miramar Parkway is currently operating overcapacity. Furthermore, Synchro analysis (Attachment B) shows that during the PM peak, the intersection of Miramar Parkway and Dykes Road operates at LOS F.

The analysis will be updated to reflect the furnished updated traffic count data for Miramar Parkway and the analyses will be revised accordingly.

Broward County Comment No. 4: During the review meeting held at SFRC on January 22, 2016, there was discussion of extending transit to this site and construction of park and ride facilities. Whist Miami-Dade Transit will be the primary service provider, staff would encourage the applicant to explore option for transit service north of the site with Broward County Transit. Transit riders are likely to employees working in retail, hotel and park components of the project. South Broward County has many residential neighborhoods which would be included in the future labor pool.

Comment and request noted. Additional efforts will be coordinated in regards to transit for the two sites and will be addressed.

ADDITIONAL COMMENTS RECEIVED BUT NOT ADDRESSED AS OF 9/7/2016

NOTE: Comments were also received from Miami-Dade County DTPW and RER. The comments were received on September 7, 2016 and the applicant has not had the opportunity to thoroughly review and respond to the comments as of this date.

MIAMI-DADE COUNTY DTPW, DATED SEPTEMBER 7, 2016:

County DTPW Comment No. 1: Executive Summary: Please explain the 220 [sic 22] various scenarios listed for the intersection analyses. It would appear that only 18 scenarios would be required, 9 alternatives for both AM and PM Peak Hours: 1-Existing, 2 & 3 - Future No-Build (2020 & 2040), 4 & 5- ADM Alternative Only (2020 & 2040), 6 & 7 - Graham Project Alternative Only (2020 & 2040), 8 & 9 – Total Combined Projects (2020 & 2040).

County DTPW Comment No. 2: Section 1-Overview: What is the difference in the CDMP versus the Zoning analyses? From a traffic analysis perspective, the concern mainly exists with the worst-case scenarios. Please advise.

County DTPW Comment No. 3: Figure I-3 through 6: Please zoom into the study area and identify the highlighted roadway segments with their street names.

County DPTW Comment No. 4: Section 6.2-Existing Roadway Link Directional PHPs: Please clarify and provide an example for the following statement:

> *"For the MDC counts, the PHPs were ratio'ed to the official PHPs identified by the County in its count reports and the directional distributions observed from the raw counts were then used to derive northbound/eastbound (NB/EB) and southbound/westbound (SB/WB) PHP directional volumes."*

County DTPW Comment No. 5: Section 6.3-Existing Roadway Link Directional LOS: Please provide the data assumptions for the roadway segments used to determine the maximum service volume thresholds. Also, there were no FDOT tables included in Appendix I-C, only Intersection TMCs.

County DTPW Comment No. 6: Table I-4: The PM LOS is missing for ID #10. Also, please show the intersection delays for all the LOS Summary tables throughout the report.

County DTPW Comment No. 7: Table I-10: The Diverted Trip to Retail Use volumes which were calculated from the ITE Trip Generation Handbook Pass-by Trip volumes for Land Use Code 820 are only valid for the PM Peak Hour since the data was collected for a weekday during the PM Peak Period. No diverted trips should be calculated for the Daily or AM peak analysis. Furthermore, caution should be exercised when using the pass-by fitted curve equation in lieu of non-pass-by trip data as listed in Table F.9 from the ITE Handbook, which includes diverted trip percentages.

County DTPW Comment No. 8: Table I-10, Note 2: This states that "Diverted Trips to Retail Use for the Year 2020 proposed development program is Limited to 35% of the External Retail Trips (calculated using the ITE Pass-by Formula) and is further limited to 10% of the Adjacent Street Traffic calculated using the closest adjacent FDOT Count Stations 2518 on Miami Gardens Drive and 7048 on NW 138 Street." The table shows the net external trips with the pass-by reductions. Please advise if the pass-by trips were reduced only for the existing roadway facilities. The traffic at the sites' driveways and new roadways must show 100% trips as these are all new.

County DTPW Comment No. 9: Section 8.3-Background Growth: According to ITE Transportation Impact Analysis for Site Development, growth rates should not normally be employed for horizons beyond 4 to 5 years (i.e. through 2020) because of the variability in growth rates over time and the magnitude of error that can result from a relatively small error in the growth rate over a long period of time (such as using these to generate 2040 volumes).

County DTPW Comment No. 10: Table I-16: the first half is missing for ID # 1-15.

County DTPW Comment No. 11: Figures I-10A through 12B: Please explain the major differences in the project distribution percentages between the Zoning and CDMP analyses. For example, the ADM Project Distribution on Figure I-11B is 23.41% for the north-south 4-lane segment near the Graham project. This same link however, is listing a 43.19% ADM Project Distribution in Figure I-12B. Otherwise, most of the percentages are similar to their counterparts as compared in the figures.

County DTPW Comment No. 12: Section 10-Project Assignment: The diverted trips for the TMVs shown are not shown in detail in Appendix I-K. Please include separate figures to show these volumes.

County DTPW Comment No. 13: Table IV-7: This table is numbered IV but should be sequentially numbered VI. Also, this is titled 'Zoning Short Term (Year 2040)' but should be Long Term. Also, please confirm that the signal cycle lengths used in the future analyses were the same as existing. Any deviation from these needs to be documented.

County DTPW Comment No. 14: Mitigation Summary (all scenarios): Please ensure that the future LOS intersection analyses does not include improvements at the intersections, such as additional/increased turn bay storages, signal optimization, etc. A comparison of the Future No-Build and Build scenarios needs to be evident. A separate LOS analysis should be made for those intersections requiring mitigation. Also, were there any unsignalized intersections that were identified for signalization in the future?

County DTPW Comment No. 15: Appendix I-K1: Some of the turning movement volumes do not appear to be adding up correctly. For example, assuming a 1% growth rate from existing to 2020, the background volumes for the AM WB through movement at NW 87th Avenue and Miami Gardens Drive should be 1,544; and then adding the ADM and Graham project trips should result in 1,637 instead of 1,621. Please clarify. Also, why are the peak directions different for the two projects during the same peak period?

MIAMI-DADE COUNTY RER, DATED SEPTEMBER 7, 2016:

General Comments

County RER Comment No. 1: For each application, include a proportionate share analysis that identifies the applicant's fair share of the cost of the required transportation improvements.

County RER Comment No. 2: Number all of the pages in the report, including tables and maps.

County RER Comment No. 3: Some pages appear to be missing, i.e. pages 54, 69, 85, 90, 97, 114, 126, 155, and 156.

County RER Comment No. 4: All tables, maps, and corresponding roadway analyses must show all the roadway segments impacted by 5% or more by the projects' impact.

County RER Comment No. 5: All maps and tables need to be labelled to show the major roadways and corridors, and identify all the state roadways.

County RER Comment No. 6: List all roadway segments in an orderly fashion from north to south and west to east.

County RER Comment No. 7: The roadway links for the existing and year 2040 should correspond to the maps.

County RER Comment No. 8: Only projects listed in the Cost-Feasible Plan of the County's 2040 Long Range Transportation Plan (LRTP) should be considered for future 2020 and 2040 analysis.

County RER Comment No. 9: Reference to "FDOT Comments" refers to FDOT's letter dated August 5, 2016.

County RER Comment No. 10: RER staff reserves the right to provide additional comments later and will continue to finalize review of the Revised Traffic Impact Analysis (TIA).

Page 1, Executive Summary

County RER Comment No. 11: Clarify if the 70,000 and 10,000 external trips (paragraph three) are daily or PM peak hour trips.

County RER Comment No. 12: Page 4, last paragraph, clarify locations in bullet point three and four, and for any other corresponding reference to these locations.

County RER Comment No. 13: Clarify the difference between the concurrency, CDMP, and zoning analyses performed.

CHAPTER I GENERAL INFORMATION

Page 16, Figure I-1 Project Location and Existing Roadways

County RER Comment No. 14: Show and label all major section line roadways, with the number of lanes, for the entire Study Area.

County RER Comment No. 15: Add the following missing interchanges on SR 826: NW 67 Avenue, NW 57 Avenue, and heading further east until the Golden Glades interchange.

County RER Comment No. 16: Correct mislabeled "I-75" icon depicted on SR 924/Gratigny Parkway, and on all other applicable maps.

Page 17, Figure 1-2 Preliminary Access Plan

County RER Comment No. 17: Site Plan does not show location of applicant's proposed park and ride facility for Miami-Dade Transit (MDT), please revise Site Plan to depict location of Park and Ride facility.

Page 19, Section 5 Study Area

County RER Comment No. 18: Provide a complete listing of the roadway links depicted in Figures I-3 through I-5.

County RER Comment No. 19: For Figure I-3, I-4 and I-5 label all major section line roadways and other roadway facilities that are impacted 5% or more by the projects to define the study area.

County RER Comment No. 20: The 5% analysis to determine the study area boundaries for the existing, future 2020 and 2040 should include all the major section line roadways within the study area.

Page 23, Figure 1-6 FDOT and County Count Station Map

County RER Comment No. 21: Label the corresponding roadways for the traffic count stations depicted.

County RER Comment No. 22: List all the traffic counts stations, not just ones impacted by the 5% of the projects' trips.

Page 24, Section 6.2 Existing Roadway Link Directional and Section 6.3 Existing Roadway Link Directional LOS

County RER Comment No. 23: List which peak season count factors were used.

County RER Comment No. 24: Correct reference to FDOT's Generalized Table to Appendix I-E (not I-C).

County RER Comment No. 25: Please consider using FDOT's synopsis reports to obtain the actual peak hour, peak direction volumes, when available.

County RER Comment No. 26: Utilize the County's 3-day traffic counts.

County RER Comment No. 27: Provide detailed explanation on how the directional peak hour period (PHP) volumes for the County stations were derived.

Pages 25-27, Table I-1 Year 2015 Area Roadway Segment Existing AM and PM PHP Summary

County RER Comment No. 28: Provide copies and identify source of the 15-minute FDOT/MDC/Broward County counts.

County RER Comment No. 29: Revise the table, corresponding maps and list all the roadway segments according to the identified study area, for example:

a. NW 107 Avenue needs to be depicted from Okeechobee Road to NW 170 Street;

b. SR 826/Palmetto Expressway needs to be depicted from SR 836/Dolphin Expressway to NW 27 Avenue;

c. Extend the analysis for the HEFT to the Mainline Turnpike;

d. Interstate I-75 ends at the Palmetto Expressway/SR 826, delete the roadway segment from NW 57 Avenue to LeJune as it is part of SR 924/Gratigny Parkway;

e. Miami Gardens Drive needs to be extended to NW 27 Avenue;

f. NW 138 Street ends at Okeechobee and does not continue to the HEFT;

g. NW 87 Avenue needs to be extended from NW 154 Street to Okeechobee Road.

h. NW 122 Street needs to be extended to LeJune Road;

i. SR 826/Palmetto Expressway needs to be extended south to SR 836/Dolphin Expressway.

Pages 28-29, Table I-2 Existing (Year 2015) Study Area Roadway Segment LOS Analysis

County RER Comment No. 30: Identify the FDOT and County traffic count stations for the roadway segments.

County RER Comment No. 31: Provide information used to determine the Peak Hour Peak Direction Service Volumes thresholds

County RER Comment No. 32: Adopted LOS values need to follow the Level of Service Standards in the Transportation Element of the CDMP.

Page 38, Table I-9 Trip Generation Summary for American Dream Miami

County RER Comment No. 33: Document the calculation used to arrive at the 6,481 Daily trips and 491 PM Peak Hour Trips based on the 10.8% LRT adjustment. RER concurs with FDOT Comment No. 15 which also questions this.

County RER Comment No. 34: Clarify the vehicle occupancy value used to calculate the LRT adjustment

County RER Comment No. 35: The AM/PM internal capture, although it is 0, is labeled incorrectly for each of these corresponding tables

Page 41, Table 1-11 Future Year 2020 Roadway Improvements

County RER Comment No. 36: Remove NW 97 Avenue from NW 154 Street to NW 170 Street from the Year 2020 Commited Improvements list as that roadway already exists.

Page 41, Table 1-12 Future Year 2040 Roadway Improvements

County RER Comment No. 37: Clarify that NW 107 Avenue from NW 138 Street to NW 170 Street and NW 102 Avenue from NW 170 Street to NW 178 Street are not part of the Cost Feasible Plan.

County RER Comment No. 38: Remove the following from list and corresponding analysis:

1. Okeechobee Road from NW 154 Street to HEFT, as the Priority IV project is for grade-intersections from Krome Avenue to SR 826/Palmetto Expressway. RER concurs with FDOT's Comment No. 18 that the SERPM model is a tool and should not be utilized as a source.
2. NW 138 Street to SR 924 (a state road only east of I-75), and correct listing of the project as the boundaries are from the HEFT to SR 826.
3. HEFT – correct reference from SW 8 Street to SR 836, as that will be widened to 10 lanes, not "10+4" lanes.
4. SR 826/Palmetto Expressway – reference should be corrected to I-75, from NW 170 Street to SR 826.
5. SR 826/Palmetto Expressway – correct the future number of lanes and corresponding analysis from "10+4" to 10 lanes (will be widened from 8 to 10 lanes).
6. Correct other two references to "12+4" lanes on SR 826, as West Flagler Street to I-75 and I-75 north to Dade/Broward County line will be widened with express lanes to a total of 8 to 10 lanes; SR 826 from I-75 to NW

103 Street will be widened with express lanes to a total of 8 to 10 lanes; and SR 826 from NW 103 Street to Flagler street will be widened with express lanes to a total of 10 to 12 lanes.

7. RER concurs with FDOT Comment No. 33 regarding the listing of the "10+4" and "12+4" lanes listed for the 2040 CDMP analyses.

Page 45 Section 8.3 Background Growth

County RER Comment No. 39: RER concurs with FDOT's Comment No. 20 questioning the rationale for the cap placed on growth rate. Florida's Turnpike Authority has indicated that their facilities sustained considerable growth rates, and due to this they request that independent growth rates be used for their facilities, separate from the rates used for other limited access facilities.

County RER Comment No. 40: RER Staff emailed on January 28, 2016 a map, table and corresponding traffic reports for approved plats within the vicinity of the ADM and Graham projects. As there is no reference to usage of said information, please revise for inclusion as background growth.

Pages 46-47, Table 1-13 Year 2020 and Year 2040 Roadway Background Future Growth Rate Summary

County RER Comment No. 41: Revise to provide analysis on the PM peak hour average of the County's traffic counts for the three-day period which provide a more comprehensive average, rather than the first day of the successive three-day count.

County RER Comment No. 42: For the background analysis for both ADM and Graham, revise to omit the background traffic of the other application.

Page 49, Section 8.5 Background Roadway Link Directional LOS

County RER Comment No. 43: Please provide information as to how the service volume values were converted into directional LOS values

Page 50, Table I-15 Year 2020 and Year 2040 Roadway Segment Future Background AM and PM PHP Summary

County RER Comment No. 44: Revise to provide a separate column for FDOT and County vested development orders (DOS) trips, instead of including them as part of the overall background.

Page 66, Section 10 Project Assignment

County RER Comment No. 45: RER concurs with FDOT's Comment No. 28 questioning the 0.0% trip assignment to/from the Graham project within the roadway link of NW 170 Street from NW 102 Avenue/NW 107 Avenue to NW 97 Avenue.

County RER Comment No. 46: RER concurs with FDOT's Comment No. 29 questioning why no trips were assigned for the roadway link of NW 170 Street from NW 82 Avenue to NW 78 Avenue.

Page 66, Section 9 Project Trip Distribution

County RER Comment No. 47: RER concurs with FDOT's Comment No. 23 regarding clarification of the socio-economic data and requesting inclusion of the model volume plots.

CHAPTER II ADM FUTURE TRAFFIC IMPACTS

County RER Comment No. 48: RER concurs with FDOT's extensive Comment No. 31 that backlogged facilities should only include traffic from approved development—it should not include traffic generated by either the ADM/Graham projects.

Page 72, Section 1.0 Year 2020 PM Concurrency Analysis

County RER Comment No. 49: Table I-13 reflects background growth rate summary and does not show the background PHP values with the DOS trips (vested trips) as shown in Table I-15.

Page 73, Table II-1 Concurrency Short Term (Year 2020) Study Area Roadway Segment LOS Analysis-ADM PM Impacts

County RER Comment No. 50: Provide a separate column to show the Traffic Count Station used for each corresponding roadway segment.

County RER Comment No. 51: Provide information used to determine the Peak Hour Peak Direction Service Volumes thresholds.

County RER Comment No. 52: The values in the "Adopted LOS" column need to be consistent with the adopted CDMP Level of Service Standards in the Transportation Element.

Page 91, Section 6 Impact Fee Assessment

County RER Comment No. 53: The response to Question 10 of the DRI analysis indicates that road impact fees are expected to be paid in the amount of $110 million. Appendix II-A ADM Preliminary Impact Fee Analysis lists an impact fee of $58,752,501 for ADM and an impact fee of $7,439,278 for Graham for a total of $66,191,779. Revise to resolve differences between the two figures.

Page 101, Section 1.0 Year 2020 PM Concurrency Analysis

County RER Comment No. 54: Table I-13 reflects background growth rate summary and does not show the background PHP values with the DOS trips (vested trips) as shown in Table I-15

Page 102, Table III-1 Concurrency Short Term (Year 2020) Study Area Roadway Segment LOS Analysis-Graham PM Impacts

County RER Comment No. 55: Provide a separate column to show the Traffic Count Station used for each corresponding roadway segment

County RER Comment No. 56: Provide information used to determine the Peak Hour Peak Direction Service Volumes thresholds

County RER Comment No. 57: The values in the "Adopted LOS" column need to be consistent with the adopted CDMP Level of Service Standards in the Transportation Element.

CHAPTER IV COMBINED FUTURE TRAFFIC IMPACTS

County RER Comment No. 58: Relabel Tables VI-2B, VI-3A, VI-5A, VI-5B, VI-6A, VI-6B to IV-2B, IV-3A, IV-5A, IV-5B, IV-6A, and IV-6B to be consistent with the rest of the tables in Chapter IV and listed in the table of contents.

Page 131, Table IV-1 Concurrency Short Term (Year 2020) Study Area Roadway Segment LOS Analysis – Combined ADM/Graham PM Impacts

County RER Comment No. 59: Please clarify how the information provided in this table differ from the information provided in Chapters II and III, Tables II-1 and III-1 Concurrency Short Term (Year 2020).

Pages 149 and 157, Section 9.0 Mitigation Summary

County RER Comment No. 60: Correct references in the first and second paragraph to the ADM project mentioned twice and include reference to the Graham project.

County RER Comment No. 61: First paragraph, Applicant states they are working with various agencies on a "study area roadway improvement plan to include…. with development timelines." Clarify which agencies they are working with, what formalized agreements have been entered, and provide development timelines.

County RER Comment No. 62: The applicant states the previously mentioned roadway improvement plan will "accelerate several cost feasible" priorities from the County's Adopted 2040 Long Range Transportation Plan (LRTP) into an "earlier timeline." However, Project No. 2 (the new interchange at HEFT and NW 170 Street) is not part of the Cost Feasible Plan, but is instead listed as a private improvement. Revise to include the appropriate reference to the non-cost feasible plan and to clarify which LRTP Priority the improvements fall under, or if they are not included in the 2040 LRTP.

County RER Comment No. 63: All the list of improvements with the exception of the NW 102 Avenue and NW 107 Avenue projects, were assumed to be in place by 2020. Please refer to previous comment and advise feasibility and method by which applicant proposes to advance and pay for the LRTP priorities. As noted, one project is not part of the 2040 LRTP Cost Feasible Plan, and the project on NW 170 Street from the HEFT to NW 97 Avenue is a Priority III (2026-2030).

County RER Comment No. 64: Page 98 in Chapter II of the ADM Mitigation Summary Section, projects 4 and 5 in the numbered 1 through 9 list of improvements refer to the "ADM Project Access Road", while on Page 127, Chapter III in the Graham Mitigation Summary Section, lists as project 13 and 14 the "Graham Project Access Road." Page 149 in Chapter IV of the Combined Future Traffic Impacts lists the previously mentioned projects 4, 5, 13, and 14 as the "Graham Project Access Road" with the improvements numbered 1 though 9. Please resolve those differences.

County RER Comment No. 65: Please clarify the two additional project improvements listed under "Year 2040". Also, the improvements do not show the backlogged facilities also needing roadway improvements in order to meet acceptable LOS operating conditions.

County RER Comment No. 66: Re-evaluate reference to backlogged facilities, in reference to RER previous comments under "Chapter II ADM Future Traffic Impacts."

County RER Comment No. 67: The last sentence on Page 157 states that "alternative travel modes" will be "addressed separate of this Report." As the application is currently undergoing review, that analysis needs to be provided now.

APPENDIX I-A17:
Appl 5-7 MDT Comments 8-4-16

TRANSIT IMPACT REPORT

MAY 2016 STANDARD APPLICATIONS 5, 6 AND 7 TO AMEND THE COMPREHENSIVE DEVELOPMENT MASTER PLAN (CDMP)

This report analyzes the impact of proposed changes to the Miami-Dade County Comprehensive Development Master Plan as they apply to transit services.

Data and information were updated as of December 2015. Financial information is current to the proposed start of fiscal year 2014-2015, as presented in the final 2015 Transit Development Plan (TDP).

Prepared by:

Department of Transportation and Public Works (DTPW)

Planning and Development

August 2016

Revision No. 6

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APPLICATION #5: INTERNATIONAL ATLANTIC, LLC (AMERICAN DREAM MIAMI)

Project Location: East of the HEFT and west of I-75 between NW 170 Street and the intersection of I-75 and HEFT

Size of Property: ±194.48 Gross Acres / ±169.77 Net Acres

Requested Amendments:

1. Re-designate the application site on the Land Use Map:

   From: "Industrial and Office"

   To: "Business and Office"

2. Delete the 0.45 Floor Area Ratio (FAR) limitation on the portion of the Application area west of NW 97 Avenue
3. Release the Declaration of Restrictions, recorded in Official Records Book 24479 at Page 0689 of the Public Records of Miami-Dade County, Florida, as it applies to portions of land within the subject property
4. Add the proffered Declaration of Restrictions in the Restrictions Table in Appendix A of the CDMP Land Use Element, if accepted by the Board; and
5. Amend the Transportation Element Figure 1- Planned Year 2030 Roadway Network; Figure 2 – Roadway Classification 2012; and Figure 3 – Roadway Functional Classification 2030).

Existing Transit Service:

There is no direct transit service in the immediate vicinity of the application site. The closest transit service is provided by Metrobus Routes 54, 183 and 267 (Ludlam Limited) at the intersection of NW 186 Street (Miami Gardens Drive) and NW 87 Avenue. It should be noted that said bus routes are located over one half mile (0.7 mile) to the east of Application No. 5 and are not accessible from the site due to the alignment of I-75 which acts as a physical barrier between the subject site and the existing transit network. Additional Metrobus Routes in the general vicinity of the site (all over one-mile away) include Routes 73, 95 (Golden Glades), 99, 183 and 286 (North Pointe Circulator). Table 1-1 indicates the existing service frequencies for existing bus routes in the area.

Table 1-1

Metrobus Route Service Summary
May 2016 CDMP Amendment Application #5

Route(s)	Service Headways (in minutes)						Proximity to Bus Stop (miles)	Proximity to Bus Route (miles)	Type of Service
	Peak (AM/PM)	Off-Peak (middays)	Evenings (after 8pm)	Overnight	Saturday	Sunday			
54	50	60	n/a	n/a	n/a	n/a	0.77	0.74	L
73	30	40	60	n/a	60	60	2.1	2.1	L
95 Golden Glades	35	n/a	n/a	n/a	n/a	n/a	2.1	2.1	E
99	60	60	60	n/a	40	40	2.1	2.1	L
183	24	40	50	n/a	40	48	0.77	0.74	L
267 Ludlam Limited	24	n/a	n/a	n/a	n/a	n/a	0.77	0.74	F/E
286 North Pointe Circulator	48	48	n/a	n/a	48	n/a	2.1	2.1	L

Notes: *L means Metrobus local route service*
F means Metrobus feeder service to Metrorail
E means Express or Limited-Stop Metrobus service

Sources: *Metrobus Route Headways, December 2015 as presented in Appendix A2 of the Draft 2016 Transit Development Plan (TDP)*

Transit Concurrency Level of Service Analysis:

Policy MT-1A of the Comprehensive Development Master Plan (CDMP) Mass Transit Subelement provides that the minimum peak-hour mass transit level-of-service shall be that all areas within the Urban Development Boundary (UDB) of the Land Use Plan (LUP) which have a combined resident and work force population of more than 10,000 persons per square mile shall be provided with public transit service having 30-minute headways and an average route spacing of one mile provided that:

1) The average combined population and employment density along the corridor between the existing transit network and the area of expansion exceeds 4,000 per square mile, and the corridor is 0.5 miles on either side of any necessary new routes or route extensions to the area of expansion;

2) It is estimated that there is sufficient demand to warrant the service;

3) The service is economically feasible; and

4) The expansion of transit service into new areas is not provided at the detriment of existing or planned services in higher density areas with greater need.

The subject site is not connected to the existing transit network and is located over one half mile to the west of the existing transit network (see Figure 1). The combined employment and resident population of the proposed development is 14,800 (within the 0.30 sq. mile application site), which

exceeds the 10,000 combined employment and resident population per sq. mile threshold stipulated in Policy MT-1A. The applicant has not proffered any transit improvements; therefore, Application No. 5 does not meet the Transit Level of Service Standard.

Transit Impacts:

The proposed development would have fiscal impacts on the existing bus operations and would necessitate extension of 5 existing Metrobus routes to serve the application site. The extension of 5 existing Metrobus routes results in an additional $3,153,000 in recurring annual operations and maintenance costs. Moreover, the extension of existing Metrobus routes necessitates purchase of additional buses (8 buses total; $3,600,000) in order to maintain existing service levels and achieve the extension of the routes. Table 1-2 lists capital as well as operations and maintenance cost estimates associated with extending existing Metrobus routes to serve the application site. Extension of the five Metrobus routes is warranted due to the fact that the average combined population and employment density along the corridor between the existing transit network and the area of expansion exceeds 4,000 per square mile. Thus, the population and employment densities generated by this application warrant a direct connection between the proposed mall development and the existing transit network. Notwithstanding the foregoing, the five route extensions are not financially feasible at this time since no available funding source has been identified to cover the estimated capital and operating and maintenance costs associated with these route extensions. Moreover, the applicant has not proffered any transit improvements; therefore Application No. 5 does not meet the adopted Transit Level of Service Standard as stipulated in Policy MT-1A.

Table 1-2 **
Annual Cost of Existing Metrobus Route Extensions: Application No. 5 - American Dream Miami

Route	Annual Operations and Maintenance Cost of Route Extensions	Additional Buses Required	Capital Cost of Additional Buses Required*
Route 54	$535,000	1	$450,000
Route 73	$714,000	2	$900,000
Route 95	$214,000	1	$450,000
Route 99	$832,000	1	$450,000
Route 183	$858,000	3	$1,350,000
TOTAL:	**$3,153,000**	**8**	**$3,600,000**

*Cost assumes purchase of 40 foot-standard diesel buses

**Information presented is calculated based on existing cost factors and assumes existing transit service levels will be maintained

Source : Department of Transportation and Pubic Works, Service Planning and Scheduling Division, January 2016

Transit Mitigation:

DTPW recognizes that FDOT has funded the I-75 Park-and-Ride Lot which is to be constructed on FDOT-owned property (Folio# 30-2004-000-0042) located north of the mall site across NW 186 Street. However, DPTW notes that the I-75 Park-and-Ride Lot (American Dream Station-North) is intended to serve commuters wishing to access express transit services and will not

adequately meet the needs of transit patrons wishing to access the mall site. In addition, DTPW has identified a need to incorporate a bus operator comfort station into the design of the I-75 Park-and-Ride Lot (American Dream Station – North). Funding to extend the water and sewer lines to the park-and-ride site have not yet been identified. As such, DTPW requests that should this application be approved, the applicant construct the necessary water and sewer line extensions and connections needed to provide water and sewer service to the FDOT I-75 Park-and-Ride Lot (American Dream Station – North).

Although the Transportation Impact Analysis states that the applicant is planning to incorporate a transit center within the parking system (similar to the one in Bloomington, Minnesota's Mall of America) along with having the FDOT I-75 Park-and-Ride lot just off the exit ramps from I-75/HEFT, the applicant has not formalized their commitment to construct said transit center (American Dream Station - South). Moreover the applicant has not provided any details regarding the proposed transit center as it relates to location of the transit center within the mall site. In the event, this application is approved, detailed site plans as well as a mechanism to provide funding to cover the operation and maintenance costs associated with the transit center (American Dream Station - South) must be provided by the applicant for DTPW's review as part of the site plan approval process.

The mitigation analysis submitted by the applicant states that mitigation measures will include "a range of options" but does not specifically refer to multimodal strategies. DTPW recommends that the applicant work closely with this agency to fund potential express bus services on the I-75, Homestead Extension of Florida's Turnpike (HEFT), and SR 826 express lanes, a transit center (American Dream Station - South) within the mall site as well as extension of existing Metrobus Routes 54, 73, 95, 99 and 183 connecting the site to the residential areas on the east side of I-75.

<u>Future Conditions for the Immediate Area:</u>

Funded Transit Improvements

The American Dream Miami project is a unique attraction and upon construction will be the largest self-contained shopping/entertainment experience in the United States. With a development of such magnitude, careful consideration should be given to planning of future transit service to connect the site to the County's existing transit network as a means of mitigating traffic impacts associated with future development of the site.

The 2016 Transportation Improvement Program (TIP) does not list any transit improvement projects within the immediate vicinity of the site.

The draft 2016 Transit Development Plan (TDP) - Ten Year Implementation Plan does not list any funded transit improvement projects within the immediate vicinity of the site.

The 2040 Long Range Transportation (LRTP) - Cost Feasible Plan does not list any transit improvement projects within the immediate vicinity of the site.

Florida Department of Transportation's (FDOT's) I-75 Multi-Modal Master Plan, from SR 826/Gratigny Parkway to I-595/Sawgrass Expressway which was completed in 2006 and revaluated in 2013, recommended a park-and-ride lot at the I-75/Miami Gardens Drive Interchange. The I-75 Park-and-Ride Lot (American Dream Station - North) is currently in the design phase of development and will include approximately 350 parking spaces to support new express bus service connections. The I-75 Park-and-Ride Lot (American Dream Station - North) is to be constructed on FDOT-owned property (Folio# 30-2004-000-0042) which is located north of the mall site. The I-75 Park-and-Ride Lot (American Dream Station - North) is funded by FDOT as part of the I-75 PD&E Study which includes the portion of I-75 from the Miami/Dade Broward Countyline to SR 826/Palmetto Expressway. (See attached FDOT Work Program Screen FM#420669-1). FDOT has included the I-75 Park-and-Ride Lot (American Dream Station - North) as a stand-alone project as part of the 2016-2021 Adopted Five-Year Work Program. Table 1-3 lists the project completion date and project costs associated with the I-75 Park-and-Ride Lot (American Dream Station - North).

Table 1-3
FDOT I-75 Park-and-Ride Lot Project (American Dream Station – North)
May 2016 CDMP Amendment Application #5

Route/Transit Center	Improvement Description	Implementation Year	Annual Operational Cost	Capital Cost
I-75 Park-and-Ride Lot (American Dream Station - North)	Construct new park-and-ride facility with approximately 350 parking spaces to support new express bus service connection.	Late 2018	$100,000*	$5,000,000 (Approximately)

**It is anticipated that DPTW will enter into a Memorandum of Agreement with FDOT for the operation and maintenance of this facility. Funding for operation and maintenance of the station is in the process of being identified.*

Unfunded Transit Improvements (Vision Projects)

DTPW is currently drafting the 2016 TDP annual update which serves as the agency's strategic guide for public transportation in Miami-Dade County over the course of the next ten years. It is important to note that the projects listed in Table 1-4 are currently unfunded, were not considered in the Transit Concurrency Level of Service Analysis, and are provided in order to illustrate various transit mobility options to serve mall site.

Table 1-4
Unfunded Transit Improvements (Vision Projects)
May 2016 CDMP Amendment Application #5

Route/Transit Center	Improvement Description	Implementation Year	Annual Operational Cost	Capital Cost
American Dream – MIC Express	Express bus service from American	TBD	$4,692,000	$15,200,000 – 16 Standard

	Dream Stations to MIC			(40') buses required
I-75/Gratigny Express	Express bus service from American Dream Stations to Miami-Dade College North Campus (Sharks North Station)	TBD	$2,639,000	$8,550,000 – 9 Standard (40') buses required
NW Miami-Dade Express**	Route will provide express bus service from the American Dream Stations to the Palmetto Metrorail Station. Headways will be 10 minutes during peak hours.	TBD	$1,458,000	*TBD – 8 Buses required
Florida Turnpike Express (North)	Route will provide express bus service from the FIU Panther Station to the American Dream Stations. This route will operate all day with 20 minute headways.	TBD	$2,220,826	*TBD – 4 Buses required
Okeechobee Link	Proposed rail project providing a premium transit connection between the MIC and American Dream Miami Project (as proposed in the South Florida Regional Transportation Authority (SFRTA) Miami-Dade County Rail Opportunities Report, April 2015)	TBD	TBD	$325,000,000
American Dream South Station	Construct Transit Center within American Dream Mall site with bus bays, passenger waiting areas, bus operator comfort station, ticket vending and other associated transit amenities.	TBD	$30,000	$2,000,000

**Bus model to be determined; Spare bus ratio is 20%*

*** In April 2016, the MPO Governing Board adopted Resolution Number 26-16 endorsing the Strategic Miami Area Rapid Transit (SMART) Plan and directing the MPO Executive Director to Work with the MPO Fiscal Priorities Committee to determine the costs and potential sources of funding for project development and environment study for six priority corridors as well as a Bus Express Rapid Transit (BERT) Network).*

Based on the CDMP threshold for traffic and/or transit service objectives within a ½ mile distance; the estimated operating and capital costs of the proposed new express bus routes and new transit center facility are associated with this application.

APPLICATION #6: THE GRAHAM PROPERTIES

Project Location: East of the HEFT and west of I-75 between NW 170 and NW 180 Streets

Size of Property: ±339 Gross Acres/±323.6 Net Acres

Requested Amendments:

1. Re-designate the application site on the Land Use Map:

   From: Parcel A: "Industrial and Office" (329 acres) and

   Parcel B: "Business and Office" (10 acres)

   To: "Business and Office" and "Employment Center"

2. Release the Declaration of Restrictions, recorded in Official Records Book 24479 at Page 0689 of the Public Records of Miami-Dade County, Florida, as it applies to portions of land within the subject property; and
3. Add the proffered Declaration of Restrictions in the Restrictions Table in Appendix A of the CDMP Land Use Element, if accepted by the Board

Existing Transit Service

There is no direct transit service in the immediate vicinity of the application site. The closest transit service is provided by Metrobus Route 54 at the intersection of NW 170 Street and NW 82 Avenue and is located over one mile to the east of the application site. Table 2-1 indicates the existing service frequency for Route 54 as well as other routes that could potentially be extended to serve the application site.

Municipal transit service is provided by the Miami Lakes Moover which operates along a segment of NW 170 Street just east of NW 87 Avenue and is located approximately 0.87 miles from the application site (1.21 miles to the nearest stop). The Miami Lakes Moover operates Monday through Friday during peak morning (6:00-10:00AM) and peak evening (2:15-7:00PM) travel periods circulating every 35-40 minutes.

Table 2-1

Metrobus Route Service Summary
May 2016 CDMP Amendment Application #6

Route(s)	Service Headways (in minutes)						Proximity to Bus Stop (miles)	Proximity to Bus Route (miles)	Type of Service
	Peak (AM/PM)	Off-Peak (middays)	Evenings (after 8pm)	Overnight	Saturday	Sunday			
54	50	60	n/a	n/a	n/a	n/a	0.77	0.74	L
73	30	40	60	n/a	60	60	2.1	2.1	L
95 Golden Glades	35	n/a	n/a	n/a	n/a	n/a	2.1	2.1	E
99	60	60	60	n/a	40	40	2.1	2.1	L
183	24	40	50	n/a	40	48	0.77	0.74	L
267 Ludlam Limited	24	n/a	n/a	n/a	n/a	n/a	0.77	0.74	F/E
286 North Pointe Circulator	48	48	n/a	n/a	48	n/a	2.1	2.1	L

Notes: L means Metrobus local route service
F means Metrobus feeder service to Metrorail
E means Express or Limited-Stop Metrobus service
Sources: Metrobus Route Headways, December 2015 as presented in Appendix A2 of the Draft 2016 Transit Development Plan (TDP)

Transit Concurrency Level of Service Analysis:

Policy MT-1A of the Comprehensive Development Master Plan (CDMP) Mass Transit Subelement provides that the minimum peak-hour mass transit level-of-service shall be that all areas within the Urban Development Boundary (UDB) of the Land Use Plan (LUP) which have a combined resident and work force population of more than 10,000 persons per square mile shall be provided with public transit service having 30-minute headways and an average route spacing of one mile provided that:

1) The average combined population and employment density along the corridor between the existing transit network and the area of expansion exceeds 4,000 per square mile, and the corridor is 0.5 miles on either side of any necessary new routes or route extensions to the area of expansion;

2) It is estimated that there is sufficient demand to warrant the service;

3) The service is economically feasible; and

4) The expansion of transit service into new areas is not provided at the detriment of existing or planned services in higher density areas with greater need.

The subject site is not connected to the existing transit network and is located over one half mile to the west of the existing transit network. The combined employment and resident population of the proposed development is 17,533 (within the 0.53 sq. mile application site), which exceeds the 10,000 combined employment and resident population per sq. mile threshold stipulated in Policy

MT-1A. The applicant has not proffered any transit improvements; therefore, Application No. 6 does not meet the Transit Level of Service Standard.

Transit Impacts:

The proposed development would have fiscal impacts on the existing bus operations and would necessitate extension of 5 existing Metrobus routes to serve the application site. The extension of 5 existing Metrobus routes results in an additional $3,153,000 in recurring annual operations and maintenance costs. Moreover, the extension of existing Metrobus routes necessitates purchase of additional buses (8 buses total; $3,600,000) in order to maintain existing service levels and achieve the extension of the routes. Table 2-2 lists capital as well as operations and maintenance cost estimates associated with extending existing Metrobus routes to serve the application site. Extension of the five Metrobus routes is warranted due to the fact that the average combined population and employment density along the corridor between the existing transit network and the area of expansion exceeds 4,000 per square mile. Thus, the population and employment densities generated by this application warrant a direct connection between the proposed development and the existing transit network. Notwithstanding the foregoing, the five route extensions are not financially feasible at this time since no available funding source has been identified to cover the estimated capital and operating and maintenance costs associated with these route extensions. Moreover, the applicant has not proffered any transit improvements; therefore Application No. 6 does not meet the adopted Transit Level of Service Standard as stipulated in Policy MT-1A.

Table 2-2 **
Annual Cost of Existing Metrobus Route Extensions: Application No. 6 - Graham Properties

Route	Annual Operations and Maintenance Cost of Route Extensions	Additional Buses Required	Capital Cost of Additional Buses Required*
Route 54	$535,000	1	$450,000
Route 73	$714,000	2	$900,000
Route 95	$214,000	1	$450,000
Route 99	$832,000	1	$450,000
Route 183	$858,000	3	$1,350,000
TOTAL:	**$3,153,000**	**8**	**$3,600,000**

*Cost assumes purchase of 40 foot-standard diesel buses

**Information presented is calculated based on existing cost factors and assumes existing transit service levels will be maintained

Source : Department of Transportation and Pubic Works, Service Planning and Scheduling Division, January 2016

Transit Mitigation:

DTPW recognizes that FDOT has funded the I-75 Park-and-Ride Lot (American Dream Station - North) which is to be constructed on FDOT-owned property (Folio# 30-2004-000-0042) located north of the mall site (Application No. 5) across NW 186 Street. However, DPTW notes that the I-75 Park-and-Ride Lot (American Dream Station - North) is intended to serve commuters wishing to access express transit services and is located approximately 1 mile north of Application No. 6.

Therefore, DTPW recommends that the applicant work closely with this agency to fund potential express bus services on the I-75, Homestead Extension of Florida's Turnpike (HEFT), and SR 826 express lanes as well as extension of existing Metrobus Routes 54, 73, 95, 99 and 183 connecting the site to the residential areas on the east side of I-75.

Future Conditions for the Immediate Area:

Funded Transit Improvements

Application No. 6 encompasses a large tract of land (339 Gross Acres) and if approved will consist of a combination of residential, retail, office and industrial uses. Application No. 5 (American Dream Miami) project will be the largest self-contained shopping/entertainment experience in the United States and will be located immediately north of Application No. 6. With two developments of such magnitude located in such close proximity to one another, careful consideration should be given to planning of future transit service to connect both sites to the County's existing transit network as a means of mitigating traffic impacts associated with future development of both sites.

The 2016 Transportation Improvement Program (TIP) does not list any transit improvement projects within the immediate vicinity of the site.

The draft 2016 Transit Development Plan (TDP) - Ten Year Implementation Plan does not list any funded transit improvement projects within the immediate vicinity of the site.

The 2040 Long Range Transportation (LRTP) - Cost Feasible Plan does not list any transit improvement projects within the immediate vicinity of the site.

Table 2-3
Unfunded Transit Improvements (Vision Projects)
May 2016 CDMP Amendment Application #6

Route/Transit Center	Improvement Description	Implementation Year	Annual Operational Cost	Capital Cost
American Dream – MIC Express	Express bus service from American Dream Stations to MIC	TBD	$4,692,000	$15,200,000 – 16 Standard (40') buses required
I-75/Gratigny Express	Express bus service from American Dream Stations to Miami-Dade College North Campus (Sharks North Station)	TBD	$2,639,000	$8,550,000 – 9 Standard (40') buses required
NW Miami-Dade Express**	Route will provide express bus service from the American Dream Stations to the Palmetto Metrorail Station. Headways will be 10	TBD	$1,458,000	*TBD – 8 Buses required

	minutes during peak hours.			
Florida Turnpike Express (North)**	Route will provide express bus service from the FIU Panther Station to the American Dream Stations. This route will operate all day with 20 minute headways.	TBD	$2,220,826	*TBD – 4 Buses required
Okeechobee Link	Proposed rail project providing a premium transit connection between the MIC and American Dream Miami Project (as proposed in the South Florida Regional Transportation Authority (SFRTA) Miami-Dade County Rail Opportunities Report, April 2015)	TBD	TBD	$325,000,000
American Dream South Station	Construct Transit Center within American Dream Mall site with bus bays, passenger waiting areas, bus operator comfort station, ticket vending and other associated transit amenities.	TBD	$30,000	$2,000,000

**Bus model to be determined; Spare bus ratio is 20%*

*** In April 2016, the MPO Governing Board adopted Resolution Number 26-16 endorsing the Strategic Miami Area Rapid Transit (SMART) Plan and directing the MPO Executive Director to Work with the MPO Fiscal Priorities Committee to determine the costs and potential sources of funding for project development and environment study for six priority corridors as well as a Bus Express Rapid Transit (BERT) Network).*

Based on the CDMP threshold for traffic and/or transit service objectives within a ½ mile distance; the estimated operating and capital costs of the proposed new express bus routes and new park-and-ride facility are associated with this application.

APPLICATION NO. 7: KENDALL ASSOCIATES I, LLLP

Project Location: 9400 SW 130 Avenue

Size of Property: 168.13 +/- acres

Requested Amendments:

1. Redesignation of the property from "Parks and Recreation" to "Low-Medium Density Residential (6-13 dwelling units per gross acre)"

2. A text amendment is requested on page I-52, "Parks and Recreation" in the Land Use Element of the CDMP

3. Release of the Declaration of Restrictions recorded in Official Records Book 5891 at Page 633 of the Public Records of Miami-Dade County, Florida

4. Acceptance of the applicant's proffered Declaration of Restrictions limiting density of the Property to a maximum of 8 dwelling units per acre

Existing Service:

The area surrounding Application No. 7 is served by Metrobus Routes 88, 104, 137 and 288. The existing service frequencies are provided in Table 7-1.

Table 7-1

Metrobus Route Service Summary
May 2016 Amendment Application No. 7

Route(s)	Service Headways (in minutes)						Proximity to Bus Stop (miles)	Proximity to Bus Route (miles)	Type of Service
	Peak (AM/PM)	Off-Peak (middays)	Evenings (8pm)	Overnight	Saturday	Sunday			
88	20	30	30	N/A	30	30	0.18	0.18	L
137	30	45	60	N/A	40	45	0.42	0.42	L
104	24	45	60	N/A	60	60	0.23	0.23	L
288	12	N/A	N/A	N/A	N/A	N/A	0.18	0.18	F/E

Notes: L= Local Service, E=Express/Limited Stop Service, F=Feeder service to Metrorail
**Metrobus Route Headways, December 2015 as presented in Appendix A2 of the Draft 2016 Transit Development Plan (TDP)*

In February 2016, DTPW deployed Transit Signal Priority (TSP) along Kendall Drive in order to optimize bus operations along the Kendall Corridor.

Future Conditions for the Immediate Area:

The draft 2016 Transit Development Plan (TDP) proposes the following improvements to the Kendall Corridor.

Table 7-2

Metrobus Recommended Service Improvements
May 2016 Amendment Application No. 7

Project Name	Project Description
Kendall Park & Ride at SW 127 Avenue	Construct park-and-ride facility along SW 88 Street (Kendall Drive) and SW 127 Avenue. Project is funded and scheduled for completion in 2017.
*Kendall Corridor (Kendall BRT)	Implement full Bus Rapid Transit (BRT) with dedicated bus lanes along SW 88 Street (Kendall Drive). This project is funded for a PD&E Study only (partially funded).

*MPO Resolution No. 31-15 amended the the TIP to delete selected Enhanced Bus Service Projects and reallocate said funds to three new projects as follows: "Implementation of Bus Rapid Transit along NW 27 Avenue, Flagler Street, and Kendall Drive Transit Corridors. MPO Resolution No. 01-15 prioritized this corridor to be evaluated in a Project Development and Environmental Study (PD&E) Study for the implementation of premium transit.

Major Transit Projects:

Kendall Corridor

On February, 19, 2015, the Miami-Dade MPO Governing Board directed that the Kendall Corridor be implemented in an expedited manner assuming full Bus Rapid Transit (BRT) as the transit modal technology, pursuant to MPO Resolution No. 01-15. FDOT is currently in the process of selecting a consultant to study the implementation of Bus Rapid Transit (BRT) service and infrastructure along SR 94/SW 88th Street/Kendall Drive from the West Kendall Transit Terminal at SW 162nd Avenue to the Dadeland North Metrorail Station. The primary study objective is to evaluate the implementation of a cost-effective, high-ridership BRT system within the Kendall Corridor that is to be part of an overall interconnected premium transit network. It is anticipated that FDOT will select a qualified consultant by the second quarter of 2016.

In September 2015, the MPO Governing Board adopted Resolution Number 31-15, which amended the FY 2016 Transportation Improvement Program (TIP) to delete selected Enhanced Bus Service Projects and reallocate said funds to three new projects as follows: “Implementation of Bus Rapid Transit along NW 27th Avenue, Flagler Street, and Kendall Drive Transit Corridors.” Therefore, the Kendall Enhanced Bus Service Project is no longer being pursued.

The Florida Department of Transportation (FDOT) has initiated a study to evaluate BRT and LRT along the Kendall Corridor with the objective of implementing a cost-effective, high-ridership rapid transit system that will be part of an overall interconnected rapid transit network. The County seeks to build upon the results of this study and pursue Federal New or Small Starts funds to ensure rapid transit connections between West Kendall and the Dadeland Area.

In February 2016, the MPO Governing Board adopted Resolution Number 06-16, unanimously approving a policy to set as highest priority the advancement of Rapid Transit Corridors and transit supportive projects in Miami-Dade County.

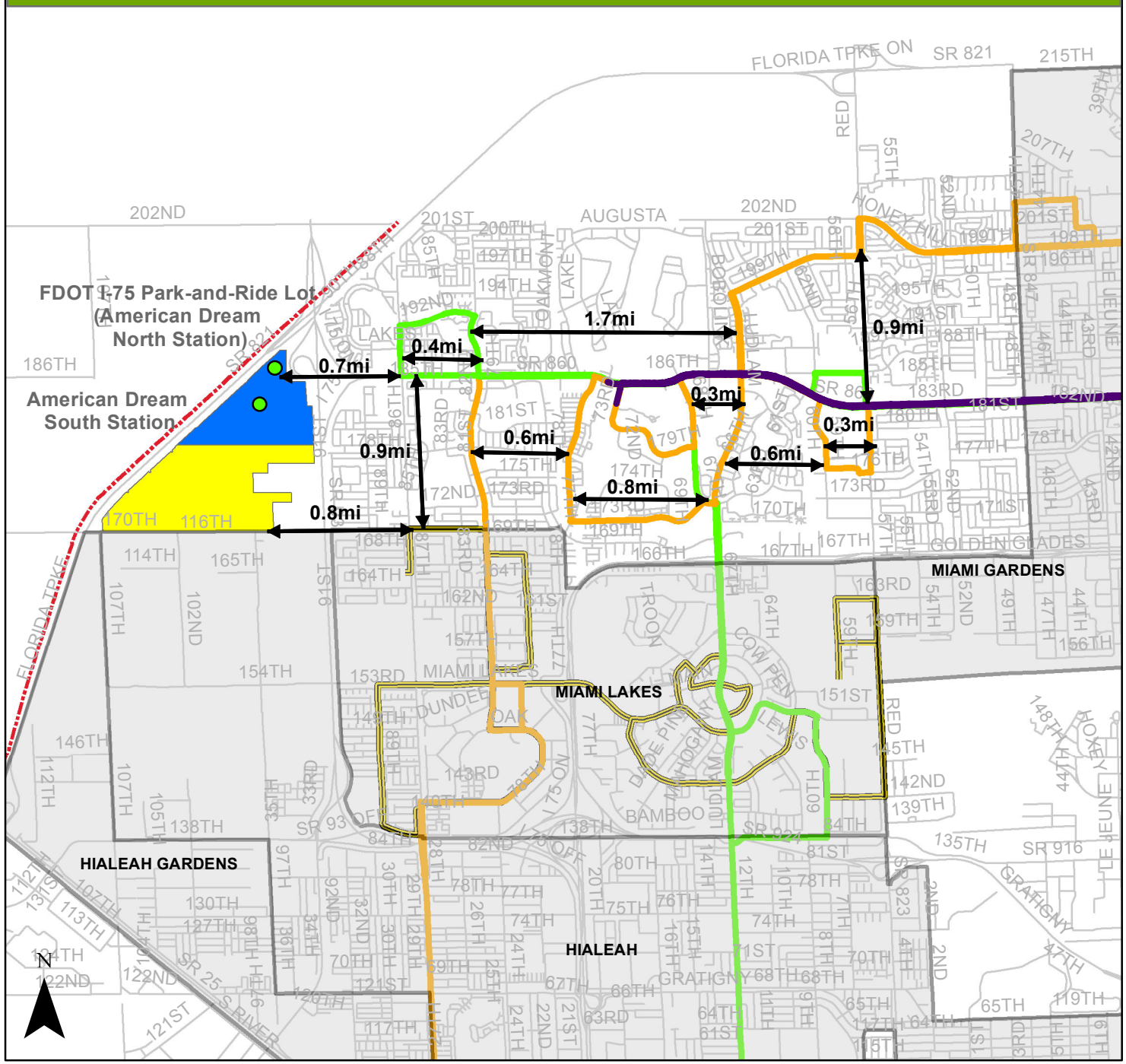
In April 2016, the MPO Governing Board adopted Resolution Number 26-16 endorsing the Strategic Miami Area Rapid Transit (SMART) Plan and directing the MPO Executive Director to Work with the MPO Fiscal Priorities Committee to determine the costs and potential sources of funding for project development and environment study for six priority corridors, one of which is the Kendall Corridor.

Application Impacts in the Traffic Analysis Zone:

In TAZ #1257 where Application #7 is sought, if granted, the expected transit impact produced by this application can be accommodated with the existing transit service levels.

Figure 1. November 2015 CDMP Amendment Applications No. 1 & 2
Transit Concurrency Level of Serivce Analysis: Route Spacing and Fequency

MIAMI-DADE COUNTY

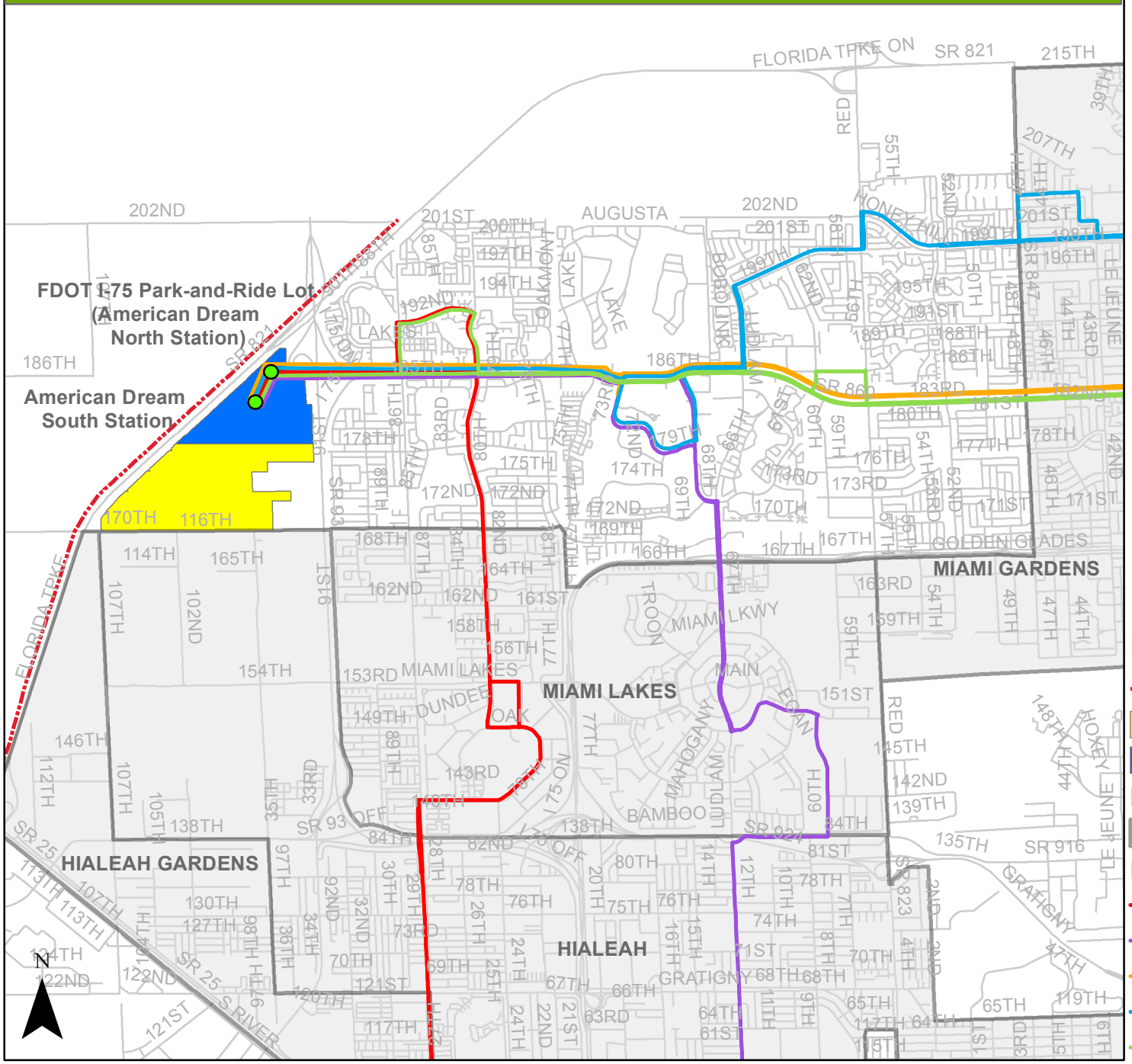


Legend

- Application No. 1 ADM
- Application No. 2 Graham
- Urban Development Boundary
- 30 min transit fequency (24 - 30 min)
- 45 min transit fequency (31 - 45 min)
- 60 min transit fequency (46 - 60 min)
- Miami Lakes Moover Municipal Route
- Municipality
- Transit Station

Prepared by DTPW Planning & Development, March 15, 2016

Figure 2: Existing Metrobus Route Extensions American Dream Miami & Graham Properties



Legend

- UrbanDevelopmentBoundary
- Graham Properties
- American Dream Mall

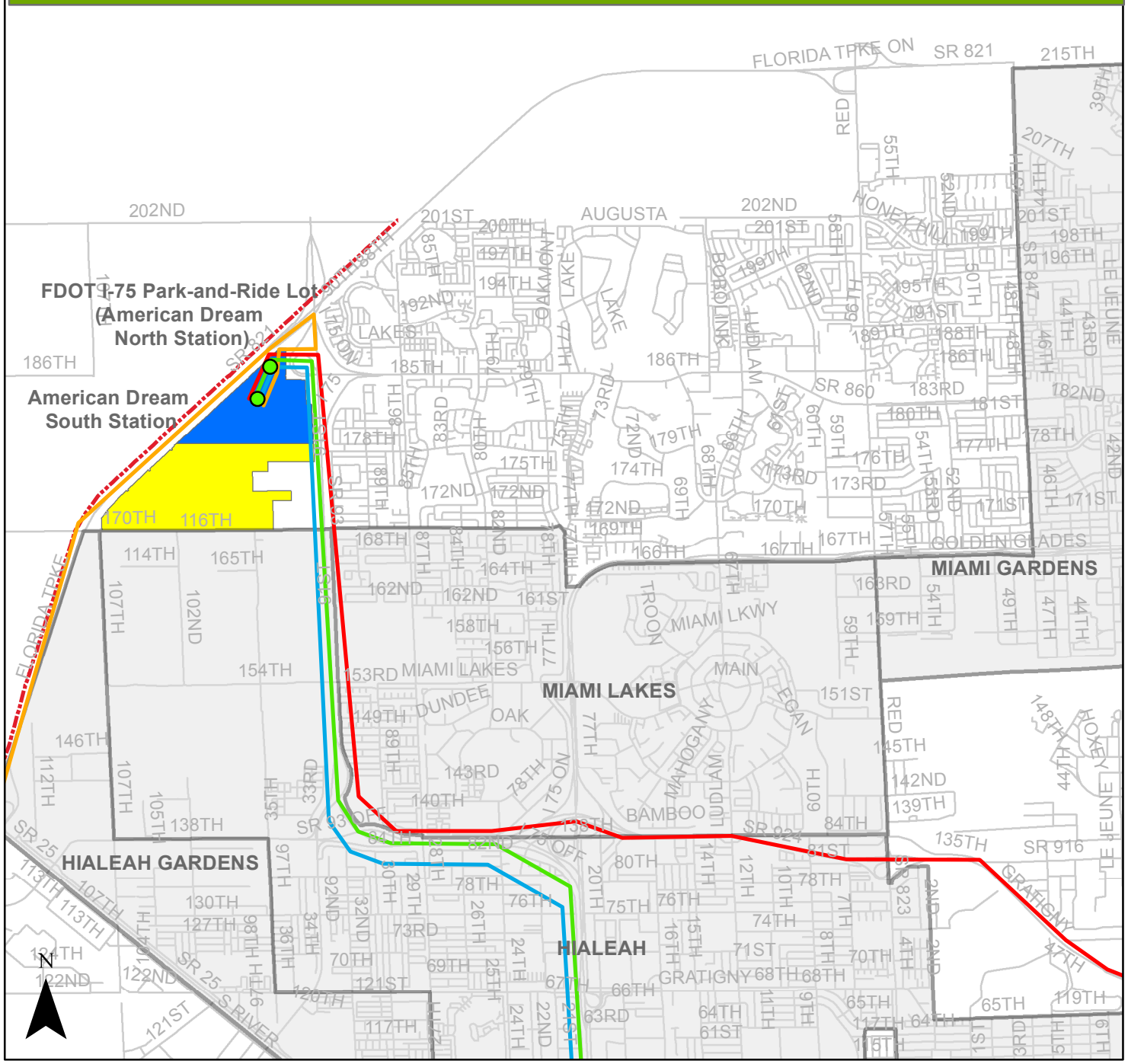
Municipalities

- Municipalities

Existing Metrobus Route Extensions

- 54
- 73
- 95 Express - Golden Glades
- 99
- 183

Figure 3: Unfunded Transit Impovements
American Dream Miami & Graham Properties



Legend

- UrbanDevelopmentBoundary
- Graham Properties
- American Dream Mall

Municipalities

- Municipalities

Unfunded Transit Improvements

- Gratigny Express West
- HEFT Express (North)
- NW Miami-Dade Express
- American Dream-MIC

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Office of Work Program and Budget

Lisa Saliba - Director

Five Year Work Program

Selection Criteria	
All in State (Updated: 7/22/2016-00.46.49)	2017-2021 AD Item Number:420669-1

Transportation System Description	District	Length	Type of Work	Item
INTRASTATE INTERSTATE	District 06 - Miami-Dade County	5.442	PD&E/EMO STUDY	420669-1
SR 93/I-75 FROM MIAMI-DADE/BROWARD LINE TO SR 826/PALMETTO EXPY.				SIS

Fiscal Year:	2017	2018	2019	2020	2021
Highways /PD & E ***(On-Going)***	$3,756				

This site is maintained by the Office of Work Program and Budget, located at 605 Suwannee Street, MS 21, Tallahassee, Florida 32399. For additional information please e-mail questions or comments to:
(Lisa Saliba: Lisa.Saliba@dot.state.fl.us or call 850-414-4622)

View Contact Information for Office of Work Program and Budget

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APPENDIX I-A18:
Response to Agency Comments for 06 22 2016
ADM Graham CDMP TIA Final

AMERICAN DREAM MIAMI & GRAHAM PROJECT
Comprehensive Development Master Plan (CDMP) Amendment
Transportation Impact Analysis (TIA) and Supporting Traffic Studies
Submitted June 22, 2016

COMMENT SET & RESPONSES
Dated October 7, 2016
With Final Revisions/Notes Added in Red

Introduction to CDMP TIA Comment Responses

Attached are the responses to comments received from eight (8) reviewing agencies and interested parties on the CDMP TIA and Supporting Studies dated June 22, 2016, with FDOT Districts 4 and 6 submitting a joint set of comments. In summary, comments were received and responded to from Miami-Dade County Transit, Miami-Dade County Department of Transportation and Public Works (DTPW), Miami-Dade County Department of Regulatory and Economic Resources (RER), Florida Districts 4 and 6, the Florida's Turnpike District, Broward County, Town of Miami Lakes, and City of Miramar.

The applicant has made every effort to address the agencies comments and is fully committed to working with all applicable parties to obtain final consensus on the CDMP TIA and the various supporting studies. Furthermore, the applicant is proceeding forward towards finalizing an updated version of the June 22, 2016 report that incorporates all responses addressed in this Comment Set and Responses. The intent is to resubmit the report within a reasonable time and allow the agencies to review the updated report and ensure that it has adequately accommodated all requests.

One issue which should be further elaborated on is the approach for analyzing background trips. The June 22, 2016 included the assumption that each Project was analyzed individually while considering the other Project's trips as part of the background trips and that this served as the basis for the mitigation recommendations. The request to include Graham project trips for the ADM analysis was first introduced in the Comment and Response Set dated October 16, 2015, as part of comments received from respectively FDOT, Southeast Florida Regional Planning Council, and the City of Hialeah (refer to Appendix I-A-3). Graham trips were included in the analysis presented in the December 22, 2015 CDMP TIA, following addendum to add the Graham Project to the methodology originally derived for the ADM site. As late as May of 2016, a summary of the different analysis scenarios were shared with Miami-Dade County, in part to demonstrate the extensive number of intersection and roadway segment analyses which were being prepared for the sites and to share the length of time required to complete these analyses (due in great extend to the approach of having the other Project in the background traffic and now having three separate Chapters for the ADM, the Graham, and the Combined scenarios). We stand by the analyses which was presented in the report with the statement that this was our understanding of the approach that was intended for the analyses. The applicant is amenable to work with agencies to resolve any issues of concern related to the presented approach and in an effort to make sure that all parties are comfortable with the findings is prepared to reevaluate the analyses without the other Project being included as background trips. Responses to comments on the background trip approach reflect our commitment.

Since the submittal of the "Comment Set & Responses" dated September 20, 2016, some minor revisions were made to the responses as part of incorporating the comments into the Updated CDMP TIA report. All edited text is indicated in red.

FDOT DISTRICTS FOUR AND SIX, DATED AUGUST 05, 2016:

General Comments

FDOT No. 1: Since ADM and Graham Property traffic analyses assume interchange improvements that affect an existing or future interchange, an Interchange Access Request (IAR) document, consistent with the *FDOT Interchange* Access *Request – User's Guide* will be required for each of the interchange modifications. The noted improvements affect an existing, future full interchange, or future partial interchange (Miami Gardens Drive at I-75, HEFT at I-75, a new interchange at HEFT and NW 170th Street, and a partial interchange at NW 178th Street and I-75). Additional traffic analyses beyond that submitted for the CDMP will be required to evaluate impacts upon SIS facilities and interchanges during morning, afternoon, and weekend periods, and identify improvements to accommodate the additional future traffic.

The applicant will work with FDOT to ensure that all applicable traffic study documents are prepared as needed. The HEFT and NW 170th TIJR is already in progress and coordination is being made with the Florida's Turnpike.

FDOT No. 2: Several transportation improvements projects are relied upon to demonstrate adequate public facilities are present by 2020 to accommodate the expected travel demand generated by ADM and Graham Project. These include an interchange modification at HEFT and I-75; a new interchange at HEFT and NW 170th Street; a partial new interchange at I-75 and NW 178th Street; and an interchange modification at I-75 and Miami Gardens Drive. Each of these interchange improvements ultimately requires FDOT and FHWA approval. Please note that current FHWA policy discourages partial interchange configurations and access serving private property. Although FHWA Policy Point #4 stipulates that each case is evaluated on its own merits, it is the Department's experience that obtaining approval for partial interchanges is a difficult and long process that may present scheduling challenges.

The applicant acknowledges FDOT comment and will continue to work with the Department to ensure that these improvements are in place by the year 2020.

FDOT No. 2 Cont'd: If any of the interchange improvements fail to be approved and/or constructed by 2020, the base transportation network that is the foundation of ADM and Graham Project's traffic analysis is invalid. This would result in additional transportation impacts to area roadways that were not analyzed. Therefore, it is recommended that a condition of approval be included for the ADM and Graham Project COMP submittals contingent upon obtaining the requisite FDOT and FHWA approvals for the proposed interchange access changes. If any of the relied upon transportation improvements are not approved, a re-evaluation of the traffic impact analysis will be necessary.

The applicant acknowledges the above statements and understands that the submitted CDMP TIA has been based on the presented projects being in place. In the event that a proposed transportation improvement is not in place as planned, additional analyses may be required to address mitigation including but not limited to development phasing, scale of development or alternative transportation mitigation.

FDOT No. 3: Please provide the electronic Synchro files so that they may be reviewed.

The electronic Synchro files will be included once the updated *CDMP TIA and Supporting Traffic Studies* report is resubmitted accommodating the responses to agency comments, per the introductory overview.

FDOT No. 5: Please add delay and v/C ratio values to all intersection LOS summary tables for ease of comparison between the various analyses conducted and for verification with the Synchro analysis. Such information is beneficial for understanding the intersection mitigation improvements if the approach and movement specific delay and LOS were provided in tabular format.

Delay will be been added to all intersection LOS summary tables, as requested. Specifically Tables I-16, II-4, II-7, III-4, III-7, IV-4, and IV-7 will be updated to include the final delay along with the overall intersection LOS results. Overall intersection volume to capacity ratios are not produced in the updated intersection results (e.g.

HCM 2010, as requested). Information on approach volume to capacity ratios will be maintained within the Appendices showing the individual intersection analysis outputs.

FDOT No. 5: Page 99, 128, & 157, Mitigation Summary, Intersection Improvements: Why were intersection improvements limited to only three variations (1 exclusive right turn lane, 3 through lanes, and 2 left turn lanes)? Each intersection depending on location and geometry should have been assessed separately. Unique lane geometries should be tested to determine what is necessary for the intersection to function at an acceptable LOS.

The mitigation limits were set to ensure that reasonable assumptions were made in regards to the potential future layout of intersections. At this point in time, there are many uncertainties in regards to what nearby land use and associated access points could exist by the time the Projects are being implemented (e.g. 2020 and 2040). Mentioned "unique" lane configurations, such as two right turn lanes or three left turn lanes, are complicated by the need to have receiving lanes to accommodate such geometries and in turn depend on numerous other supporting factors such as potentially having to merge the traffic back to its original number of receiving lanes. The most conservative and realistic approach is to set the intersection configurations to the identified maximum mitigations (e.g. 1 exclusive right turn lane, 3 through lanes, and 2 left turn lanes).

FDOT No. 6: Please check the page numbering of the report documents. There seems to be some skipped numbers.

The first page of several of the tables were accidentally left out when compiling the submitted June 22, 2016 *CDMP TIA and Supporting Traffic Studies* report. The missing pages that will be added back into the updated report are:

Page No.	Item
53	1st pg of Table I-16, Year 2020 and 2040 Background Intersection LOS Analysis
64	1st pg of Table I-17, Year 2020 SE Data on Year 2020 Roadway Network Project % Distribution & PM Trips
82	1st pg of Table II-3B, Zoning Short Term (Year 2020) Study Area Roadway Segment LOS Analysis - ADM PM Impacts
87	1st pg of Table II-5A, CDMP Short Term (Year 2040) Study Area Roadway Segment LOS Analysis - ADM AM Impacts
94	1st pg of Table II-6B, Zoning Long Term (Year 2040) Study Area Roadway Segment LOS Analysis - ADM PM Impacts
111	1st pg of Table III-3B, Zoning Short Term (Year 2020) Study Area Roadway Segment LOS Analysis - Graham PM Impacts
121	1st pg of Table II-6A, Zoning Long Term (Year 2040) Study Area Roadway Segment LOS Analysis - Graham AM Impacts

Referenced page numbers are with respect to the June 22, 2016 *CDMP TIA and Supporting Traffic Studies* report.

Executive Summary

FDOT No. 7: There are 9 improvements, including interchange improvements at I-75/HEFT/Miami Gardens Drive, a new interchange at HEFT and NW 170th Street, and I-75 ramps at NW 178th Street to/from southbound I-75, that are assumed to be constructed by 2020. These improvements form the basis of the 2020 roadway network used for the submitted concurrency analysis, zoning analysis, and comprehensive development master plan analysis. It is suggested that these improvements be identified in the Executive Summary, and specified as roadway improvements necessary to accommodate both developments' traffic. This comment also extends to the Mitigation Summary section for Chapters 2 and 3.

The addition of the above mentioned improvements will be added to the Executive Summary and are part of the Mitigation Summaries (please also refer to response to FDOT Comment No. 41).

Chapter 1, Section 6 - Existing Conditions

FDOT No. 8: In some instances, FDOT daily traffic volumes were adjusted using K and D factors to estimate peak hour, peak directional volumes for roadways. Please consider using synopsis reports for those count stations to obtain an actual peak hour, peak directional volume for the existing conditions. Such synopsis reports can be provided by FDOT upon request.

Synopsis reports have been requested from FDOT and will be incorporated into the updated analyses.

FDOT No. 9: In Appendix I-D, please include the name of the intersection in the header of all Synchro output worksheets. Also, please identify the type of analysis (HCM 2010 or Synchro 9) and results represented on each worksheet. This applies to all Synchro output worksheets provided for each scenario in each chapter of this submittal package.

The intersection name will be included in the header for all Synchro output worksheets. As indicated in response to FDOT Comment No. 11, the outputs will be updated to represents HCM2010 results.

FDOT No. 10: Page 25, Table I-1: For Segment NW 107th Avenue from NW 122nd Street to NW 138th Street, please place Note number (4) under the appropriate column. Also, it is understood that no data was available for this segment, however please explain why the assumption of an AADT of 8,000 was used. How was this value determined?

Footnote number 4 reference is already included in the NW 107th Avenue roadway segment under the column header "No.", referring to the FDOT count station number (e.g. eight column in the table). The footnote will be maintained here since there is "no count" but rather an estimate. Please note that the footnote and data assumptions are highlighted in a light purple to stress that no traffic counts were available for this roadway segment. The 8,000 estimate is very much an estimate. We have no roadway segment nor intersection turning movement counts in the vicinity to assist in preparing a more detailed estimate.

FDOT No. 11: Page 31, 1st Paragraph: It is stated that Synchro's HCM 2010 methodology will be used for the output results; however the results provided throughout the document and the Synchro outputs in the appendix are not of the HCM methodology. They are instead the calculated delay and LOS from the Synchro system, which does not calculate the results according to HCM. You must choose to print the HCM 2000 or 2010 version outputs within the software. Please provide the HCM output results for all existing conditions and future Synchro analysis.

Correct, the report did state that the HCM 2010 results was being produced for the Synchro outputs. The report should have stated the Synchro results were produced. In fact for the June 22, 2016 submittal, the decision was made to reference the Synchro results in lieu of the HCM 2010 results due to the more realistic vehicular operations which are referenced in Synchro. For example, Synchro is specifically set-up to evaluate the queuing of vehicles at intersections and also has the option to include the free-flow right on red movements.

Since FDOT's comment specifically requests that the HCM results be included instead, the applicant will revise its approach and the newly updated CDMP TIA report will include HCM 2010 results. All intersection analyses and summary tables will be updated accordingly.

Chapter 1, Section 8 - Background Conditions

FDOT No. 12: Identified in Appendix I-D, unusual cycle lengths were used to analyze many of the intersections. For example, at the intersection of Florida's Turnpike ramp termini and Okeechobee Road a 133-second cycle length was analyzed for the south ramp termini intersection. However, the north ramp termini intersection was analyzed with

a 80- second cycle length, even though they were evaluated as an actuated-coordinated system (See page 526 of Appendix I-D). Similarly, at Florida's Turnpike and Red Road, the west ramp termini intersection was studied with a 69.4-second cycle length, and at I-75 and Miramar Parkway, the south ramp termini intersection was analyzed with a 65.4-second cycle length (see pages 532 and 540 of Appendix I-D). It is recommended that all intersection analyses be revised to reflect the cycle lengths and phasings from existing signal timing sheets. Future year analyses should maintain cycle lengths and phasings, although splits may be optimized to reflect different green time needs due to traffic volume changes.

For consistency, the intersection analyses will be revised to reference the existing timings. This will be included for all future intersection analyses and results will be provided in the updated appendices and corresponding intersection summary and mitigation tables.

Chapter 2, Section 8 – Weekend Review

FDOT No. 13: The text provided for the Weekend Review (page 94 of the PDF) indicates that no further review of weekend conditions is needed based on the findings. However, no specific findings are written in support of this statement. Please provide additional details concerning the weekend evaluation to justify not analyzing weekend conditions further. For example, a comparison of ADM and Graham Property project volumes for a typical weekday and weekend should be provided; a comparison of total traffic volumes for a weekend and weekday should be included; and an assessment of directional volume changes that may impact SIS facilities and nearby interchanges in a manner different from what is experienced currently.

As indicated in Section 8.0, the weekend analysis is contained in Appendix II-C and includes the referenced comparison of typical p.m. weekday traffic versus Saturday peak hour of generator traffic associated with the ADM site. The analysis includes assignments on Miami Gardens Drive from I-75 Eastern Ramps to NW 87th Ave, on Florida's Turnpike/HEFT/SR 821 from US 27/Okeechobee Road to NW 170th Street, and on I-75 from Florida's Turnpike to Miami Gardens Drive. The analysis addressed all the above mentioned criteria for the weekend analysis and concluded that the weekday p.m. peak hour is the highest total traffic period during the week. It was therefore determined that there was not a need to analyze all roadway segments within the study area for the weekend period and that the traditional weekday period served as the worst case traffic conditions.

Chapter 1, Section 6 – Existing Conditions

FDOT No. 14: In section 6.2, the PHP is defined as the average of the two highest consecutive hours of traffic and defined as the average of traffic volume between 7-9 AM and 4-6 PM. Are these the highest consecutive hours of traffic for all links? The two highest consecutive hours should be determined from traffic counts and defined for SIS facilities, Turnpike facilities, Other State Facilities, and County Facilities separately. This methodology should be consistent with the Interchange Access Request methodology.

The applicant acknowledges FDOT's comment and the County's procedure for deriving PHP volumes based on the two highest consecutive hours of the day. For the intersection turning movement counts, the field counts were based on the AM hours between 7:00 am and 9:00 am and the PM hours between 4:00 pm and 6:00 pm, the traditional highest hours of the day. As such, the existing intersection TMVs are based on an average of the field observed two-hour period counts. For consistency purposes, it is the applicants' traffic consultant's professional opinion is that it makes the most sense to use the same two-hour peak periods for all intersection and roadway segment counts and is therefore recommending not to revise the approach for the development of PHP volumes.

Chapter 1, Section 7 - Trip Generation

FDOT No. 15: The Department does not dispute the 10.8% LRT adjustment to net external trips which was previously approved as part of the methodology and shown in Table I-9. However, the calculation of the LRT adjustment should be reviewed. If 10.8% of person trips to MOA took LRT then this 10.8% should be applied to the person trips visiting ADM. Assuming a vehicle occupancy of 2.3 for ADM to match the vehicle occupancy of MOA then 69,822 daily net external vehicle trips translates to 160,591 person trips. To add the 10.8% back divide 160,951 person trips by 1-.108 = .892 so 180,438 person trips to American Dream Mall. Converting back to vehicle trips with a 2.3 auto occupancy gives 78,451 vehicle trips. The difference between 78,451 and 69,822 vehicle trips is 8,629 additional vehicle trips. Please clarify the difference between the 8,629 vehicle trips calculated vs. the 6,481 vehicle trips provided in Table I-9.

There has been extensive efforts to ensure that a final trip generation was achieved which could be approved by both FDOT and Miami-Dade County, with correspondence and numerous meetings extending from September of 2015 through March of 2016. Every aspect, including the vehicle occupancy, was scrutinized to a great extend and does not warrant further review. Furthermore, we should point out that the calculations in the comment have overlooked the MOA person trips arriving by tour buses, hotel shuttles, local buses, etc which totaled 8% of the person trips. This is included in the vehicle counts. Given their higher vehicle occupancy, not adjusting for that first will yield the wrong conversion to vehicle trips. This was all accounted for in the trip generation negotiations and therefore is part of the agreed to trip generation methodology.

FDOT No. 16: In the Addendum to TIA Methodology for CDMP (Nov. 24, 2015) PM internal capture was 15.1% in 2020 and 10.8% in 2040 for the Graham project, but the current analysis shows 24.48% in 2020 and 18.38% in 2040 . Unless otherwise approved, use the same internal capture rates that were previously approved in the methodology.

The trip generation table presented in the June 22, 2016 TIA varies from the November 24, 2015 information and again was coordinated with review agencies during the early months of 2016. No further refinements are warranted at this time, as all issues related to the trip generation is considered to have been finalized.

Chapter 1, Section 8 - Background Conditions

FDOT No. 17: Florida's Turnpike [sic I-75] from I-595 to Pines Blvd in Broward County is included as a Year 2040 Cost Feasible Plan improvement but this project is not included in the Broward MPO 2040 LRTP. The identified source in Table I-12 is the SERPM7.0 model. The model is a tool and should not be used a source. Please reference the appropriate agency plan as the source for this project. If the model does not properly reflect agency plans, FDOT should be notified and the project should be removed.

~~**The model travel demand forecasts and all the Year 2040 CDMP roadway LOS tables will be updated to reflect that the Florida's Turnpike from I-595 to Pines Blvd is not widened. Table I-12 will also been updated along with all corresponding roadway link LOS analyses. Please consider this as notification to FDOT that there is an inconsistency between the 2040 Broward LRTP and the SERPM7.0 model.**~~ **The comment actually refers to I-75 from I-595 to Pines Blvd (response to comment was addressed for a different roadway segment). As such, the referenced project is actually an improvement included in the Broward Transportation Improvement Plan as a Design Build project and referenced as TIP# 4217076. The project will be added into the updated Table I-11, Year 2020 Committed Improvements.**

FDOT No. 18: Okeechobee Road from NW 154th St to Florida's Turnpike in Miami-Dade County is included as a Year 2040 Cost Feasible Plan improvement but this project is not included in the Miami-Dade MPO 2040 LRTP. The identified source in Table I-12 is the SERPM 7.0 model. The model is a tool and should not be used as a source. Please reference the appropriate agency plan as the source for this project. If the model does not properly reflect agency plans, FDOT should be notified andthe project should be removed.

The model travel demand forecasts and all the Year 2040 CDMP roadway LOS tables will be updated to reflect that Okeechobee Road from NW 154th St to Florida's Turnpike is not widened. Table I-12 will also been updated along with all corresponding roadway link LOS analyses. Please consider this as notification to FDOT that there is an inconsistency between the 2040 Miami-Dade LRTP and the SERPM7.0 model.

FDOT No. 19: SERPM 7.0 model is identified as a source for three projects in Table I-12 but the methodology identified SERPM 6.5/Managed Lanes PD&E model, plus Turnpike edits for their planned future projects, plus the approved SERPM 7 socioeconomic data integrated in. Please clarify which model was used for this analysis.

In fact, the "SERPM6.5/Managed Lanes PD&E Model plus Turnpike Edits Plus the Approved SERPM 7.0 SE Data" serve as the basis for the model runs prepared for the submitted *CDMP TIA and Supporting Traffic Studies*. The only changes which have been made to the model runs were to accommodate: 1) The latest committed and cost feasible LRTP roadway improvements, 2) The planned roadway improvements as presented in the June 22, 2016 report, 3) The ADM and the Graham Projects land use data, and 4) The requested additional platted projects. The network improvements will be identified in revised Tables I-11 and I-12 presented in the updated CDMP TIA report and will include the previously referenced removal of the three SERPM 7.0 model projects (see response to FDOT Comments No. 17 and 18). The platted projects were detailed in Appendix I-L.

FDOT No. 20: Section 8.3 indicates that growth rate caps were imposed on all facilities. In the approved methodology no growth rate cap was included. Please clarify in the report how and why the growth rate caps were determined, and provide any numerical support of this determination.

Correct, the methodology did not address setting a cap for the project traffic growth rates. When reviewing historical growth rates, though, there were links with both negative and extremely high growth rates. For example, Hialeah Gardens Blvd has had an average growth of 19.3 percent per year over the period 2009 through 2014. If 19.3 percent growth is maintained through the year 2040, this would equate to the traffic growing by 100 times its existing value which obviously would not be realistic. It was therefore decided to err on the conservative side and set lower growth rate percent maximum values; keeping in mind that higher growth rates would only serve to make the background traffic automatically fail. The justification is further substantiated by the fact that once a roadway becomes saturated (which even with the conservative estimates, many of the roads are forecast to become), then there comes a point where no further traffic can be accommodated. For example, the freeways have existing high traffic volumes and with further growth show warrant for substantial increases in number of lanes to meet capacity. Notably by the time 2040 becomes a reality there will be many new innovations, such as connected vehicles, which will override the need for such extreme number of lane needs and therefore the growth projections are more than reasonable for purposes of forecasting trips through the year 2040. We recommend maintaining the proposed growth rate caps, with the exception of the HEFT facility which has been requested by the Florida's Turnpike to use their provided rates.

FDOT No. 21: Page 48, Table I-14: Please label and explain the difference between the 1st and 2nd columns labeled as "Referenced Intersection % Growth". It appears in the Appendix that there are two sets of intersection growth rates for the two Phases (Phase I and Phase II). Please define the Phases in a footnote and label the column appropriately.

Headers will be included in the updated report that identify the two columns as respectively 2015-2020 and 2015-2040 percent growth rates. Column headers match with the column headers from the Appendix I-J which detail initial growth percentages based on the roadway link historically observed growth rates which served as the basis for the development of the estimates presented in Table I-14.

FDOT No. 22: Page 53-54, Table I-16: Please check for missing intersections and revise as necessary. Only Intersections 16 through 54 are provided.

Please refer to response to FDOT Comment No. 6 which addresses the missing page.

Chapter 1, Section 9 - Project Trip Distribution

FDOT No. 23: Socio-economic data was factored to match the daily ITE trip generation calculations for the external trip quantities. How was this performed? The model plots show % trips from the select zone analysis but not the model volumes in Appendix I-M. Please include model volume plots for this select zone analysis.

The model does not automatically produce the same trip generations as were prepared for the ADM and the Graham sites based on ITE and MOA field studies since the model relies on its own trip generation procedures. The initial SERPM model trips generated for the ADM and the Graham TAZs were adjusted to ensure that the final assigned traffic volumes from these TAZs match with the daily trip generation forecasts presented in Tables I-9 and I-10, respectively. Select zone model volume plots will be added to Appendix I-M of the updated report.

FDOT No. 24: Please provide the methodology for determining the number of households with and without children and vehicle ownership for the Graham Property households where there were not households previously.

The number of household statistics were based on the existing TAZ referenced for the Graham Project and a review of nearby TAZs. Appendix I-L provided a summary of the original versus revised TAZ household characteristics.

FDOT No. 25: Consistent with the traffic methodology, a new TAZ was created for ADM to force access to HEFT and NW 170th Street. There appears to be a centroid connector near the HEFT and NW 170th Street in the submitted material, though it is not identified as an ADM TAZ and the percent distribution is not depicted. When adding the percent trips on the centroid connectors for the ADM TAZ in Appendix I-M, the percentage sums to only 70% indicating that the other 30% is distributed from the new centroid. Please identify the number of the TAZ added near HEFT and NW 170th Street and what socio-economic data was assigned. The table in Appendix I-L should be updated to reflect this TAZ. Additionally, please denote the TAZ with a star for ADM on the map in Appendix I-L.

Appendix I-L does include both the "main" ADM and the near HEFT/NW 170th 30% ADM TAZs. It should be pointed out that TAZ 2705 is incorrectly shown in the appendix table titled "Platted Parcels in the Cities of Hialeah Gardens, and Unincorporated Miami-Dade County and Potential Development" but should in fact be TAZ 2748. The table will be refined and the new plots to be provided in an updated Appendix I-M will show the HEFT/NW 170th 30% ADM TAZ.

FDOT No. 26: Please include model plots from the newly created ADM TAZ near the HEFT and NW 170th St interchange showing the select zone analysis in both model volumes and percent of project traffic volumes. This will serve as a check that this methodology for matching the expected regional long distance trip making characteristics works as intended.

A separate select zone analysis will be prepared for the ADM TAZ located near the HEFT/NW 170th Street interchange. The resulting model plots will be added to Appendix I-M. Three separate plot sets will be provided for respectively the Year 2020 Land Use on 2020 Network, the Year 2040 Land Use on 2020 Network, and the Year 2040 on 2040 Network. Please note that additional manual adjustments were included for the Florida's Turnpike/HEFT/SR 821, the Florida's Turnpike/SR 91, and I-75 to increase the regional distributions and extend the trips beyond the SERPM6.5 subarea model area.

FDOT No. 27: On page 63, a typographical error was noted. References to Table I-8 and Table I-9 should be changed to Table I-9 and Table I-10 instead.

The ADM and the Graham trip generation table references within the text will be corrected to reflect Tables I-9 and I-10, as correctly noted in the above comment.

Chapter 1, Section 10 - Project Assignment

FDOT No. 28: Page 58, 60, and 62, Figures I-10B, 11B, and 12B: Please explain why no traffic to/from the Graham Project is assigned for the link of NW 170th Street from NW 102nd Avenue/NW 107th Avenue to NW 97th Avenue, particularly since there is an access point at the location of NW 102nd Avenue/NW 107th Avenue. The 0.0% value is present for both 2020 and 2040 project distributions.

The model distribution for the referenced roadway link is zero percent due to the fact that three different centroid connectors are available for trips to exit the Graham TAZ. The model assigns the trips based on the "quickest" path. Acknowledging that there will be travelers exiting Graham via the referenced roadway segment, a manual adjustment will be made to the trip distribution figures and the future year roadway link analyses and will be subsequently included in the updated report.

FDOT No. 29: Page 58, 60, and 62, Figures I-10B, 11B, and 128: Please explain why no traffic is assigned to/from the link of NW 170th Street from NW 82nd Avenue to NW 78th Avenue when both the links to the east and west have project traffic assigned to them.

Based on the available roadway network, the trips are choosing to take alternate routes to by-pass the indicated roadway link (please refer to the Appendix I-M model plots. No changes are deemed necessary for the analyses since minimal trips are distributed within this general area.

FDOT No. 30: Page 63, Table I-17: Please check the percent distribution values for the link of NW 178th Street between Graham Access and NW 97th Avenue. The values do not match those shown in Figure I-10B.

The information presented in Table I-17 is correct. Figure I-10B is simply missing the ADM and the Graham percent distributions for this roadway segment. The same applies for Figures I-11B and I-12B. All three figures will be updated to include the missing percent project distributions.

Chapters 2 through 4 – Link Analysis

FDOT No. 31: The use of ADM or Graham Property traffic should not be included as "background" traffic in the analysis when determining if a facility is backlogged. The determination of backlogged facilities must be re-done to include only approved background traffic. Throughout the submitted analysis, it is stated that backlogged facilities include traffic generated by either ADM or Graham Property, depending on which project was being analyzed. This means that links which fail due to trips from Graham property or ADM are considered backlogged and not subject to

mitigation. This approach to evaluating backlogged facilities is included in the Zoning Link Analysis and CDMP analysis tables in Chapters 2 through 4. Below are examples of roadways identified as backlogged facilities (and failing) because of either ADM or Graham Property traffic.

a. *I-75 from Miramar Parkway to Florida's Turnpike (Table III-5A)*
b. *I-75 from Miramar Parkway to Florida's Turnpike (Tables III-5B and III- 5B)*
c. *I-75 from Florida 's Turnpike to Miami Gardens Drive (Tables II-5B and III-5B)*
d. *Okeechobee Road from Hialeah Gardens to NW 103rd Street (Tables II-5B and 11I-5B)*
e. *Okeechobee Road from NW 103rd Street to SR 826 (Tables II-5B and III-5B)*
f. *Miami Gardens Drive from I-75 Eastern Ramps to NW 87th Avenue (Tables II-2B and III-2B -)*
g. *Miami Gardens Drive from NW 87th Avenue to NW 82nd Avenue (Tables ll-2B and III-2B)*

The June 22, 2016 approach for generating background traffic included the approach that the other Project was part of the background traffic and therefore was used to identify the traffic impacts for the other Site. As indicated in the introduction to the Comment Response Set, the request to include Graham project trips for the ADM analysis was first introduced in October 2015 as part of comments received from respectively FDOT, Southeast Florida Regional Planning Council, and the City of Hialeah and the Graham trips were included in the analysis presented in the December 22, 2015 CDMP TIA, following addendum to add the Graham Project to the methodology originally derived for the ADM site. As late as May of 2016, a summary of the different analysis scenarios were shared with Miami Dade County.

The June 22, 2016 includes the Combined ADM and Graham analyses, as per the understanding of the applicant, and does show the overall traffic impacts associated with both projects being in place. The intent of this Chapter was to comply with the agency request but was not intended to override the individual Projects' approach of analyzing the other site as background traffic. Therefore the statement that the results were for "informational purposes only" was included.

In order to comply with agency concerns and to ensure that the CDMP applications remain on schedule, revised analyses will be prepared to review each Project relative to background traffic without the other Project. Furthermore, the analyses will be updated with new traffic counts as per agency comments, adjustments to the roadway improvement tables also per agency comments, and further review of individual segments to ensure that the latest most appropriate assumptions are being applied.

FDOT No. 32: It was noted in several tables in Chapter 4, particularly Tables VI-5A, VI-5B, and VI-6B, that two segments of I-75 fail in 2020 and 2040 because of ADM and Graham Property traffic. Yet these two segments (I-75 from Miramar Parkway to Florida's Turnpike, and I-75 from Florida's Turnpike to Miami Gardens Drive) are not listed in Mitigation Summary sections or the Executive Summary of the report. Planned improvements to both I-75 segments will increase capacity to accommodate background growth traffic through 2040 and allow the roadway to operate at an acceptable level of service. However, the addition of ADM and Graham Property traffic causes these I-75 segments to fail, according to the submitted analysis. As a result, please identify the necessary improvements for these two I-75 segments to allow them to operate at an acceptable level of service with both project's traffic, and include these improvements under each Mitigation Summary section of the report.

Please see response to FDOT Comment No. 31 above.

FDOT No. 33: In Chapters 2 through 4, the volumes and lane geometries for various roadways segments for the 2020 and 2040 Zoning and COMP analysis tables differ. When comparing Table ll-5A (2040 CDMP Analysis) with Table ll-6A (2040 Zoning Analysis) the total trips for a particular roadway segment are not the same. In some cases, the number of lanes (CF + proposed) are different. For example, SR 826 shows 10 lanes in the zoning analysis for 2040 and 10+4/12+4 in the CDMP analysis for 2040. Also, the segment of Florida's Turnpike from SW 8th Street to

SR 836 was assigned 311 combined northbound trips for the 2040 PM peak hour CDMP analysis, but only 307 combined northbound trips for the 2040 PM peak hour Zoning analysis.

Please clarify the apparent project trip assignment and roadway geometry inconsistencies and revise the analyses, as appropriate.

The 2040 CDMP and the 2040 Zoning analyses represent two different traffic assignments and thus analyses. For the 2040 CDMP analysis, the year 2040 SE data is assigned on the cost feasible network (a.k.a. 2040 network); whereas for the 2040 Zoning analysis, the year 2040 SE data is assigned on just three years of committed roadway improvements similar to the previously utilized "DRI" methodology (a.k.a. year 2020 network). As a result there are two different project percent distributions (Figures I-11A/B vs. Figures I-12A/B) and two different project assignments (as noted by the reviewer). This also explains why there are differences in the number of lanes, and corresponding roadway capacities, shown in the two sample tables as mentioned in the above comment. For the 2020 CDMP and the 2020 Zoning analyses, the results are identical since both rely on year 2020 SE assigned on the 2020 network. Accordingly, no changes are necessary to the analyses presented in Chapters 2 through 4.

FDOT No. 34: The Mitigation Summary in each chapter does not include intersection mitigation. Please add the intersection mitigation summary to this section. This summary is included in the executive summary but does not differentiate between Graham and ADM responsibilities.

Intersection mitigation summaries will be added to Chapters 2, 3, and 4, as requested. Mitigation responsibilities between the two Sites will be identified as well.

FDOT No. 35: Please revise the analysis of backlogged facilities such that ADM and Graham Property project traffic are not considered as background traffic. In the Intersection ADM Mitigation Summary appendices (II-I, II-J, III-H, III-I), items that are significant are highlighted in yellow. In some cases (e.g., NW 186th Street / Miami Gardens Drive & NW 57th Avenue) mitigation is proposed for turning movements, which includes traffic impacts from both ADM and Graham Property. Intuitively, if both projects contribute significant traffic impacts to a turning movement requiring mitigation, then the mitigation costs should be shared between the two developments. Please clarify how the projects included in the intersection needs of the executive summary were determined to be significantly impacted by ADM and Graham Property developments.

The updated CDMP report will include reanalysis of all intersections including updating default assumptions, as referenced in earlier FDOT comments. Results will be summarized in each Chapter mitigation section and the Executive summary as requested.

FDOT No. 36: In comparing Table II-4 Zoning Short Term (Year 2020) Study Area Intersection LOS Analysis – ADM Impacts and III-4 Zoning Short Term (Year 2020) Study Area Intersection LOS Analysis – Graham Impacts, the LOS with both ADM and Graham Property included do not match. Given that this column should include all trips from both projects, it is expected that the LOS would be the same. Please correct the apparent discrepancy.

Correct, the intersection LOS values for the two tables should match for the final column with total traffic volumes included when the total volumes are the same, as was the case. In line with the approach to no

longer include the other Project as background traffic, the updated intersection analyses outputs will no longer have the same results since there will only be one set of analyses which will be presented (namely the Combined Scenario and for respectively the Year 2020 and the Year 2040 Zoning analyses). These with Combined intersection results, along with the intersection spreadsheets which summarizes individual Project trips, will serve as the basis for identifying the impacts associated with the ADM and the Graham Sites.

FDOT No. 37: Page 83, Table II-4 and Page 112, Table III-4: Please check LOS values for Intersection ID 9 (NW 57th Avenue at Miami Gardens Drive), and explain why this intersection operates better with the additional project trips than with just the background traffic only.

The intersection should not in theory operate better for the With Project trips than the With Background Only trips but did in few cases due to the fact that individual signal timings were revised. We acknowledge that there were a few cases which should have been better analyzed.

FDOT No. 38: Page 95, Table 1I-7 and Page 156, Table IV-7: Please check LOS values for Intersection ID 16 (SR 823/Red Road at Turnpike Ramp (E)), and explain why this intersection operates better with the additional project trips than with just the background traffic only.

Please see response to FDOT Comment No. 37.

FDOT No. 39: Table II-7 is included in both Chapters 2 and 3. Chapter III is specific to the Graham property but the Table II-7 states it is for the ADM impacts. The table appears to be identical including the headers of the table. Please replace Table II-7 in Chapter III with the correct Table III-7.

The table will be updated to correctly reflect the intersection LOS results for the Scenario being analyzed.

FDOT No. 40: Table II-7 states "Zoning Short Term (Year 2040)." Please change to "Zoning Long Term (Year 2040)."

The table name will be revised as indicated.

Chapter 2, Section 8 - Mitigation Summary

FDOT No. 41: Page 127, Second Paragraph (sentence before bulleted list): Please clarify if the listed improvements are for the ADM and/or Graham Project. ADM is referenced twice in the noted sentence. This also occurs again on Page 149 in the same location under Section 6.0 Mitigation Summary.

The text for the Chapters II, III, and IV Mitigation summaries will be updated to state that "A summary of the improvements proposed as part of the study area roadway improvement plan for American Dream Miami and the Graham Project are summarized below and reflect those improvements that are baseline for the two projects, prior to reviewing additional mitigation needs:"

Chapter 3, Section 5 – Year 2040 AM and PM Zoning Analyses

FDOT No. 42: Page 116 – 119, Tables III-5A & 5B: Please check for an error in the font color for columns under Background Trips Peak Hour Peak Dir Analysis NB/EB (Vol/LOS). Not all values in red font are failing.

The font color will be refined to ensure that just those LOS values which exceed the adopted LOS are indicated as red.

Missing Tables

FDOT No. 43: There appear to be several tables missing from the submittal package (see cursory list below). Please revise the report to include all summary tables.

a. *The first half of Table II-3B is missing*
b. *The first half of Table II-5A is missing.*
c. *The first half of Table II-6B is missing.*
d. *Table III-5B should be renamed "Table II-5B" to be consistent with the report's naming conventions.*
e. *The first half of Table 1II-3B is missing.*
f. *The first half of Table III-6A is missing.*

Please refer to response to FDOT Comment No. 6 in regards to the pages missing. Item d will be revised to "Table II-5B."

General Synchro Comments

FDOT No. 44: After reviewing the output from the Synchro analyses there are some discrepancies in the inputs used for the existing and future conditions.

a. *The peak hour factor for all intersections/approaches was used the default value. Was this discussed and agreed upon during the methodology agreement?*
b. *Cycle length/offsets and minimum initial (minimum green) did not correspond to Miami Dade County Signal Systems TOD sheets. Also please provide the Signal Timing sheets used as reference for the Synchro inputs within the appendix area.*
c. *It is not possible to verify the truck percentage used in the analyses due to the output sheets provided. It is important to account for this input in the Synchro analyses. Please provide both the methodology and process for how the truck percentage was chosen for the approaches or intersections and provide the appropriate HCM output from Synchro.*
d. *For the reference (yield) point, "beginning of green" is used for actuated- coordinated intersections. Was this verified with the Miami Dade County area engineer for these signals? Typically, the majority of signals in the County have a reference point of "beginning of yellow" for the main movements. Please check data and update the analyses with the correct input.*
e. *Some intersections between the existing conditions and future analyses get switched from actuated-coordinated operation to uncoordinated in the future. Please clarify the reason for this change.*
f. *For the future analyses, was the signal timing optimized for the "without mitigation" and the "with mitigation" scenarios? Please clarify when optimization was used and if there were any manual adjustments to the timing or other system parameters for the Synchro files.*

All changes requested above will be included in the updated intersection analyses. For the peak hour and the truck percentages, the factors are based on local traffic counts. The peak hour factors will be included in the updated intersection volume spreadsheets (Appendix I-K) and the development of truck factors will be included in a new appendix. Miami Dade County Signal System TOD sheets will also be included in a new appendix. For all other comments relating to signal timing, please refer to response to FDOT Comment No. 12.

MIAMI-DADE COUNTY TRANSIT, DATED AUGUST 26, 2016 (Revision No. 6):

Miami-Dade County has submitted a report titled "Transit Impact Report" for CDMP Applications the for ADM and the Graham Projects which outlined the forecast transit needs for the two Sites, along with estimated annual operating costs.

The applicant acknowledges receipt of the transit report and intends to work jointly with the County to address transit needs and requirements associated with the two Sites.

FLORIDA'S TURNPIKE DISTRICT, DATED AUGUST 26, 2016:

The County can consider the District's comments representative of important Turnpike input as well, with regard to the applicant's submittal. A couple of additional Turnpike facility specific comments are provided below:

Turnpike Comment No. 1: Turnpike projects on the Homestead Extension of the Florida's Turnpike (HEFT), south of SR 836 (inclusive of managed Express Lanes) are let for construction (Design-Build). The analysis should include these projects.

The proposed improvement tables will be updated to include the mentioned additional project (TIP ~~435543-1~~ TP4150514) and the analysis will likewise reflect the improved number of lanes (6 plus 4 express lanes). The applicant has prepared an updated review of the most recent Transportation Improvement Plans for respectively Broward and Miami-Dade Counties and will be updating Tables I-11 and I-12 accordingly.

Turnpike Comment No. 2: Turnpike has additional count/toll information available which is not included in the FDOT FTI. The availability of this information was shared with the applicant during the methodology meetings but was not requested by the applicant for the preparation of the analysis.

The applicant appreciates the Turnpike's offer to supply additional traffic count information and has reached out to request those counts so they can be reflected in an update of the June 22, 2016 report.

Turnpike Comment No. 3: HEFT, in the project vicinity, has sustained considerable growth rates (with the exception of recession years). The calculated annualized growth rate (which included recession years) from 2000 – 2015 is 3.5% north of SR 836 and 3.0% south of SR 836. The development of growth rates for this facility should be assessed independently of the other limited access facilities. Information from the Turnpike's Annual evaluation is provided below for information/reference.

North of SR 836

Weighted Average Growth Rate																	Trend		'00-'15 Average Growth
2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012		2013	2014	2015	2000	2015	
45,400	51,100	53,800	59,700	64,600	68,500	71,900	75,200	74,600	73,000	75,500	76,200	78,400		77,900	81,400	89,600	52,051	87,549	3.50%
2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2008 to 2009	2009 to 2010	2010 to 2011	2011 to 2012	2012 to 2013	2013 to 2014	2014 to 2015					
12.60%	5.30%	11.00%	8.20%	6.00%	5.00%	4.60%	-0.80%	-2.10%	3.40%	0.90%	2.90%	-0.60%	4.50%	10.10%					

South of SR 836

Weighted Average Growth Rate																	Trend		'00-'15 Average Growth
2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015		2000	2015	
48,700	53,300	55,600	60,300	70,300	77,400	81,100	82,200	76,900	72,600	74,300	76,200	78,300	80,400	83,700	90,500		56,598	88,627	3.00%

2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2008 to 2009	2009 to 2010	2010 to 2011	2011 to 2012	2012 to 2013	2013 to 2014	2014 to 2015
9.40%	4.30%	8.50%	16.60%	10.10%	4.80%	1.40%	-6.40%	-5.60%	2.30%	2.60%	2.80%	2.70%	4.10%	8.10%

Follow up Comment Dated Sept. 14, 2016: Please note, that the incorrect summary portion of the growth workbook was submitted with the Turnpike's original comment. The correct annualized growth south and north of SR 836 are 2.4 and 3.0%, respectively."

North of SR 836

Weighted Average Growth Rate																Trend	
2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2000	2015
48,700	53,300	55,600	60,300	70,300	77,400	81,100	82,200	76,900	72,600	74,300	76,200	78,300	80,400	83,700	90,500	56,598	88,627

'00-'15 Average Growth	Annual Average Growth (%) Based on Weighted Volumes														
	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2008 to 2009	2009 to 2010	2010 to 2011	2011 to 2012	2012 to 2013	2013 to 2014	2014 to 2015
3.0%	9.4%	4.3%	8.5%	16.6%	10.1%	4.8%	1.4%	-6.4%	-5.6%	2.3%	2.6%	2.8%	2.7%	4.1%	8.1%

South of SR 836

Weighted Average Growth Rate																Trend	
2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2000	2015
86,100	89,900	99,000	105,400	113,500	120,700	127,900	131,500	123,400	119,300	122,300	124,900	125,700	127,900	131,100	137,200	97,385	138,340

'00-'15 Average Growth	Annual Average Growth (%) Based on Weighted Volumes														
	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2008 to 2009	2009 to 2010	2010 to 2011	2011 to 2012	2012 to 2013	2013 to 2014	2014 to 2015
2.4%	4.4%	10.1%	6.5%	7.7%	6.3%	6.0%	2.8%	-6.2%	-3.3%	2.5%	2.1%	0.6%	1.8%	2.5%	4.7%

The growth rates provided with the Turnpike's comment have been reviewed and the analyses will be updated to reflect the referenced 3.0 and 2.4 percent historical growth rates for HEFT, as requested.

BROWARD COUNTY, DATED SEPTEMBER 1, 2016:

Broward County Comment No. 1: It is unclear how the 10.8-percent upward adjustment for light rail transit (LRT) resulted in the addition of 6,481 daily trips and 491 PM peak hour trips. These values do not agree with our calculations. Please provide a worksheet outlining the LRT adjustment calculations and please provide backup for any assumptions accepted for this adjustment.

There has been extensive efforts to ensure that a final trip generation was achieved which could be approved by both FDOT and Miami-Dade County, with correspondence and numerous meetings extending from September of 2015 through March of 2016. Every aspect, including the LRT, was scrutinized to a great extent and does not warrant further review. Also refer to response to FDOT Comment No. 15.

Broward County Comment No. 2: It is maintained in the study that the hotel component is an ancillary/complementary land use and was reflected in the trip generation estimates for ADM derived from count data collected at Mall of America (MOA). It was further stated in a reply to a previous comment about the hotel component that the ADM site is not near other Miami-Dade attractions such as the beaches or airport and therefore is not expected to generated trips other than visitors to ADM. In response to the ancillary/complementary land use comment, MOA has 506 rooms on-site to accommodate approximately 4,400,000 square feet (SF) of gross floor area (GFA), or about one room per 8,700 SF of GFA. ADM is proposed to have 2,000 rooms for 6,200,000 SF of GFA which equates to one room per 3,100 SF of GFA. Proportionally, ADM will have 2.8 times more hotel rooms per SF of GFA than MOA and accordingly, it is not reasonable to expect that all guests will be visiting the hotels as an ancillary use of ADM. With regard to the response that the location of ADM is not near other Miami-Dade attractions, it should be noted that there are at least four hotels comprising over 500 hotel rooms in the Miami Lakes Main Street area, located within two to three miles of the site,

also similarly remotely located from the airport and beaches. Therefore, it is not a reasonable assumption that the project's hotels will not generate trips other than ancillary to ADM. Furthermore, as the area develops with other planned and committed projects, the demand for hotel rooms will increase. For the above reasons, we continue to recommend that an adjustment to trip generation be made to account for hotel visits not specifically associated with ADM.

There has been extensive efforts to ensure that a final trip generation was achieved which could be approved by both FDOT and Miami-Dade County, with correspondence and numerous meetings extending from September of 2015 through March of 2016. Every aspect, including the land use and corresponding trip generation assumptions, was scrutinized to a great extent and does not warrant further review. Furthermore, we should point out that the premise of the comment that the 506 room hotel at MOA is adequate to meet demand at MOA is incorrect. MOA has identified a higher demand for hotel rooms and the 2006 approved expansion plans currently in progress include three (3) additional hotels adding 1,250 rooms for a total of 1,756 rooms. Further, the 2012 Cambridge Systematics survey at MOA reported that 19% of the MOA visitors arrived from nearby hotels/motels. This was all accounted for in the trip generation negotiations.

Broward County Comment No. 3: The analysis shows that Miramar Parkway west of I-75 operates at Level of Service (LOS) C and will continue to do so for future conditions. This was brought up in our previous comments and the response was that the analysis was based on 2014 traffic count data. 2015 traffic counts for the intersection of Miramar Parkway and Dykes Road/SW 160 Avenue (Attachment A) indicating that Miramar Parkway is currently operating overcapacity. Furthermore, Synchro analysis (Attachment B) shows that during the PM peak, the intersection of Miramar Parkway and Dykes Road operates at LOS F.

The analysis will be updated to reflect the furnished updated traffic count data for Miramar Parkway and the analyses will be revised accordingly.

Broward County Comment No. 4: During the review meeting held at SFRC on January 22, 2016, there was discussion of extending transit to this site and construction of park and ride facilities. Whist Miami-Dade Transit will be the primary service provider, staff would encourage the applicant to explore option for transit service north of the site with Broward County Transit. Transit riders are likely to employees working in retail, hotel and park components of the project. South Broward County has many residential neighborhoods which would be included in the future labor pool.

Comment and request noted. Additional efforts will be coordinated in regards to transit for the two sites and will be addressed.

MIAMI-DADE COUNTY DTPW, DATED SEPTEMBER 7, 2016:

County DTPW Comment No. 1: Executive Summary: Please explain the 220 [sic 22] various scenarios listed for the intersection analyses. It would appear that only 18 scenarios would be required, 9 alternatives for both AM and PM Peak Hours: 1-Existing, 2 & 3 - Future No-Build (2020 & 2040), 4 & 5- ADM Alternative Only (2020 & 2040), 6 & 7 - Graham Project Alternative Only (2020 & 2040), 8 & 9 – Total Combined Projects (2020 & 2040).

The above listed 18 scenarios do not take into account the fact that there were also the Year 2020 and Year 2040 Background with ADM and the Year 2020 and Year 2040 Background with Graham intersection analyses submitted as part of the June 22, 2016 report. This approach is no longer being pursued based on agreement coordinated with local agencies, so the total intersection analyses for the updated report will indeed be fewer than the listed 22 analyses.

County DTPW Comment No. 2: Section 1-Overview: What is the difference in the CDMP versus the Zoning analyses? From a traffic analysis perspective, the concern mainly exists with the worst-case scenarios. Please advise.

A more detailed description will be included in the Executive Summary to distinguish between the CDMP, the Zoning, and the Concurrency analyses. Reference will also be made in the document to the email that was provided to Mark Woerner on August 11, 2016 in response to a request for a detailed overview of the differences between the CDMP and the Zoning analyses. The referenced correspondence will be added to the Appendix.

County DTPW Comment No. 3: Figure I-3 through 6: Please zoom into the study area and identify the highlighted roadway segments with their street names.

Roadway names will be added to all figures and will be based on the roadway segments that are presented in the various roadway link LOS tables. For all the figures, one consistent roadway description will be chosen for each facility. Due to space limitations, it is not possible to provide all the possible roadway names associated with each facility. Coordination will be made to ensure that the depicted roadway name is consistent with at least one of the roadway names referenced in the various roadway link LOS tables (all of which are consistently named). Notably, the link tables have more space and thus allow the possibility of listing not only local roadway names but also state roadway numbers.

As far as zooming into the study areas, the figures were designed and thus sized to show all roadways links which are being analyzed in the tables. Furthermore, all study area links which meet the 5 percent significance test do for the most part extend to near the boundaries of the base maps used for Figures I-3 through I-6; acknowledging that the study areas for the 2040 on 2040 assignment has a broader range than say the 2020 on 2020 assignment. To accommodate the County's comment, we will make a definite effort to prepare zoomed in maps so that the information presented is more legible. This will include the addition of roadway names as requested in other comments. In lieu of revising the study area Figures I-3 through I-6 to included zoomed in areas of the larger maps, a table was created with the study area links summarized for each of the Scenarios analyzed based on comment requests for this information. The table is provided in newly created Appendix I-T.

County DTPW Comment No. 4: Section 6.2-Existing Roadway Link Directional PHPs: Please clarify and provide an example for the following statement:

"For the MDC counts, the PHPs were ratio'ed to the official PHPs identified by the County in its count reports and the directional distributions observed from the raw counts were then used to derive northbound/eastbound (NB/EB) and southbound/westbound (SB/WB) PHP directional volumes."

At the request of County staff, a detailed breakdown of the development of PHPs from raw traffic counts (and further to future year background volumes) were detailed in a document furnished to the County on July 18, 2016. The referenced description will be included in an appendix within the updated report for reference purposes for the various review agencies.

To clarify further, depending on whether the raw count had the AM or the PM volume as being the highest, the raw volume was set to represent the highest period and thus assigned the official PHP volume. For example if the highest period occurs during the AM period, then the analyzed AM total PHP volume equals the official PHP. For the same example, the PM PHP is calculated by multiplying the official PHP by the ratio of the raw PM to the raw AM total volumes resulting in a lower volume than the official PHP. For both the highest peak and the other peak, the directional distribution is obtained based on the raw volume splits. A sample calculation will be included in the updated report.

County DTPW Comment No. 5: Section 6.3-Existing Roadway Link Directional LOS: Please provide the data assumptions for the roadway segments used to determine the maximum service volume thresholds. Also, there were no FDOT tables included in Appendix I-C, only Intersection TMCs.

A table will be included in the updated report which will detail how each service volume was derived (e.g. existing. 2020, and 2040 roadway networks). This newly created table is included in the new Appendix I-S. ~~Specifically, where available the County's RER database for DOS trip capacities were used as an initial reference for the peak hour service volume (with the understanding that the County has not formally updated information in its database other than the DOS trips).~~ A representative FDOT 2012 LOS Handbook peak hour service volume was then assigned ~~ensuring that the service volume at least equaled or were lower than the County's capacities~~ along with applying any percentage adjustments as per the County LOS standards (referenced in Appendix I-E and new Appendix I-5). Next the corresponding peak hour peak directional service volume was selected to serve as the basis for the capacity volumes utilized. ~~As such, in some cases the County's capacities were applied to adjust FDOT service volumes so that the LOS D or LOS E capacity was set to equal that in the database.~~ FDOT facilities were developed following traditional FDOT requirements using their LOS Handbook directly.

County DTPW Comment No. 6: Table I-4: The PM LOS is missing for ID #10. Also, please show the intersection delays for all the LOS Summary tables throughout the report.

Noted. The updated table will include the LOS value for this cell along with requested intersection delay information.

County DTPW Comment No. 7: Table I-10: The Diverted Trip to Retail Use volumes which were calculated from the ITE Trip Generation Handbook Pass-by Trip volumes for Land Use Code 820 are only valid for the PM Peak Hour since the data was collected for a weekday during the PM Peak Period. No diverted trips should be calculated for the Daily or AM peak analysis. Furthermore, caution should be exercised when using the pass-by fitted curve equation in lieu of non-pass-by trip data as listed in Table F.9 from the ITE Handbook, which includes diverted trip percentages.

~~The trip generation tables will be updated to reflect that there are no diverted AM nor Daily trips, though in reality diverted trips occur throughout the day~~. Though we acknowledge the comment above, we still stand by the fact that diverted trips occur during all periods of the day and as such diverted trips <u>will not</u> be removed from the trip generation tables. Furthermore, the lengthy discussion included extensive review of the assumptions used for deriving the trip generation for the two Projects. As mentioned in response to other trip generation related comments, the negotiations included consideration for the fact that shuttle trips were not represented as an additional reduction in the trip generation and thus everyone finalized on the approved trip generation information as of March 2016.

County DTPW Comment No. 8: Table I-10, Note 2: This states that "Diverted Trips to Retail Use for the Year 2020 proposed development program is Limited to 35% of the External Retail Trips (calculated using the ITE Pass-by Formula) and is further limited to 10% of the Adjacent Street Traffic calculated using the closest adjacent FDOT Count Stations 2518 on Miami Gardens Drive and 7048 on NW 138 Street." The table shows the net external trips with the pass-by reductions. Please advise if the pass-by trips were reduced only for the existing roadway facilities. The traffic at the sites' driveways and new roadways must show 100% trips as these are all new.

Passer-by, also referred to as diverted trips, were exclusively applied to the roadway segments highlighted in green throughout the various roadway segment LOS analyses (e.g. where 10 trip generations information from Tables 9 and Table are being applied to derive Project trips for comparison to available LOS capacity). The specific segments which have diverted trips occur on portions of NW 102nd Ave, Miami Gardens Dr, NW 170th St, NW 97th St, and NW 178th St. These roadways near the site are indeed based on the 100% percent trips and the percent distribution is applied to the trip generation without reduction for diverted trips.

County DTPW Comment No. 9: Section 8.3-Background Growth: According to ITE Transportation Impact Analysis for Site Development, growth rates should not normally be employed for horizons beyond 4 to 5 years (i.e. through 2020) because of the variability in growth rates over time and the magnitude of error that can result from a relatively small error in the growth rate over a long period of time (such as using these to generate 2040 volumes).

Acknowledged. Since the beginning of the CDMP efforts, growth rates have been the premise for deriving future background volumes. It was recommended as part of the methodology efforts and was subsequently incorporated into both the December 2015 and the June 2016 CDMP reports submitted to the County. Furthermore, caps were set on the growth rates so as to make sure that growth would not continue to be elevated all the way through the year 2040 for those cases where high historical growth rates have been observed in recent years. As such, we recommend maintaining the approach with the capped growth rates (with the exception of the Florida's Turnpike which has provided separate growth rates that they wish to have applied based on their historical growth review).

County DTPW Comment No. 10: Table I-16: the first half is missing for ID # I-15.

The applicant acknowledges that in a number of cases the first half of tables containing two pages were missing (also see response to FDOT Comment No. 17). We apologize for the discrepancy.

County DTPW Comment No. 11: Figures I-10A through 12B: Please explain the major differences in the project distribution percentages between the Zoning and CDMP analyses. For example, the ADM Project Distribution on Figure I-11B is 23.41% for the north-south 4-lane segment near the Graham project. This same link however, is listing a 43.19% ADM Project Distribution in Figure I-12B. Otherwise, most of the percentages are similar to their counterparts as compared in the figures.

The 2040 CDMP and the 2040 Zoning analyses represent two different traffic assignments and thus analyses. For the 2040 CDMP analysis, the year 2040 SE data is assigned on the cost feasible network (a.k.a. 2040 network); whereas for the 2040 Zoning analysis, the year 2040 SE data is assigned on just three years of committed roadway improvements similar to the previously utilized "DRI" methodology (a.k.a. year 2020 network). As a result there are two different project percent distributions (Figures I-11A/B vs. Figures I-12A/B) as noted by the reviewer.

Furthermore, the two Project sites have different trip making characteristics. The ADM will be marketed as a major attraction whereas the Graham represents a combination of more traditional employment and residential land uses. Most of the larger differences in trip distributions between the two Sites occur in the nearby vicinity of their properties which makes sense. For the longer trips, in the majority of cases, the distribution is more similar.

County DTPW Comment No. 12: Section 10-Project Assignment: The diverted trips for the TMVs shown are not shown in detail in Appendix I-K. Please include separate figures to show these volumes.

The diverted trips only apply to select roadway segments, as indicated in response to DTPW Comment No. 8. None of the intersection analyses are impacted by the distinction between having either the with versus the without diverted trips reflected in the trip generation. All intersection project trips are based on diverted trips excluded from the trip generation and therefore a separate set of figures is not necessary nor are they needed to be shown specifically in the Appendix I-K spreadsheet summaries.

County DTPW Comment No. 13: Table IV-7: This table is numbered IV but should be sequentially numbered VI. Also, this is titled 'Zoning Short Term (Year 2040)' but should be Long Term. Also, please confirm that the signal cycle lengths used in the future analyses were the same as existing. Any deviation from these needs to be documented.

Acknowledged. Corrections will be made as indicated. The cycle length will be updated such that all future analyses reflect the existing cycle lengths.

County DTPW Comment No. 14: Mitigation Summary (all scenarios): Please ensure that the future LOS intersection analyses does not include improvements at the intersections, such as additional/increased turn bay storages, signal optimization, etc. A comparison of the Future No-Build and Build scenarios needs to be evident. A separate LOS analysis should be made for those intersections requiring mitigation. Also, were there any unsignalized intersections that were identified for signalization in the future?

The only future mitigation improvements which will be applied are to maximize the intersections to two left turns, three throughs, and one right turn. No additional mitigations will be applied. Also, the signal timings will no

longer be adjusted to serve as a means for mitigating intersection operations. Before and after mitigation LOS analyses were indeed included in the June 22, 2016 TIA and will be included in the updated report. Finally, there was no unsignalized intersections included in the analyses.

County DTPW Comment No. 15: Appendix I-K1: Some of the turning movement volumes do not appear to be adding up correctly. For example, assuming a 1% growth rate from existing to 2020, the background volumes for the AM WB through movement at NW 87th Avenue and Miami Gardens Drive should be 1,544; and then adding the ADM and Graham project trips should result in 1,637 instead of 1,621. Please clarify. Also, why are the peak directions different for the two projects during the same peak period?

The turning movement volumes will be reviewed to ensure that they add up correctly. The differences in the direction of the trips for the two Site's is due to the differences in the land uses and therefore the trip making characteristics. For the ADM Site's, the PM period has inbound as the highest direction (60%) and AM has outbound as the highest (52%). For Graham, PM has outbound highest (54% and 60%) and AM has inbound highest (59% for 2020 and 71% for 2040).

MIAMI-DADE COUNTY RER, DATED SEPTEMBER 7, 2016:

General Comments

County RER Comment No. 1: For each application, include a proportionate share analysis that identifies the applicant's fair share of the cost of the required transportation improvements.

Fair share will be provided in the updated report.

County RER Comment No. 2: Number all of the pages in the report, including tables and maps.

Page numbers will be provided on all pages of the report and the appendices.

County RER Comment No. 3: Some pages appear to be missing, i.e. pages 54, 69, 85, 90, 97, 114, 126, 155, and 156.

Please refer to response to FDOT Comment No. 6 regarding the missing of the first page for a number of the tables. The updated report will be reviewed thoroughly to ensure that no pages are missing.

County RER Comment No. 4: All tables, maps, and corresponding roadway analyses must show all the roadway segments impacted by 5% or more by the projects' impact.

All the tables and maps include at a minimum all roadway segments with 5% or more significance. In fact, the analyses extend beyond one link outside of the 5% study area to ensure that a thorough inclusion of roadway segments were included.

County RER Comment No. 5: All maps and tables need to be labelled to show the major roadways and corridors, and identify all the state roadways.

All maps will be updated to include, at a minimum, all names for all roadways which are included in the analyses. State road names will also be added where applicable. Please also refer to response to DTPW Comment No. 5 which describes the premise for how the naming will be included on the figures.

County RER Comment No. 6: List all roadway segments in an orderly fashion from north to south and west to east.

For logistical purposes, we are unfortunately not able to accommodate the request to reorganize link LOS tables so that all roadways are listed from north to south and from east to west. The tables provided in the report are based on extensive Excel files which have in excess of 40 different tabs with linked formulas and information and it simply would be nearly impossible to restructure everything to accommodate what would otherwise be a simple and logical request.

County RER Comment No. 7: The roadway links for the existing and year 2040 should correspond to the maps.

Please refer to other County comments relating to roadway links and their naming coordination between Tables and Figures.

County RER Comment No. 8: Only projects listed in the Cost-Feasible Plan of the County's 2040 Long Range Transportation Plan (LRTP) should be considered for future 2020 and 2040 analysis.

Acknowledged, Tables I-10 and I-11 have been updated to ensure that only Cost Feasible Plan projects are included. The analyses have been updated accordingly.

County RER Comment No. 9: Reference to "FDOT Comments" refers to FDOT's letter dated August 5, 2016.

Acknowledged.

County RER Comment No. 10: RER staff reserves the right to provide additional comments later and will continue to finalize review of the Revised Traffic Impact Analysis (TIA).

Acknowledged.

Page 1, Executive Summary

County RER Comment No. 11: Clarify if the 70,000 and 10,000 external trips (paragraph three) are daily or PM peak hour trips.

The trips will be clarified as being daily trips.

County RER Comment No. 12: Page 4, last paragraph, clarify locations in bullet point three and four, and for any other corresponding reference to these locations.

Roadway names will be reviewed and further clarification will be provided for the referenced bullets.

County RER Comment No. 13: Clarify the difference between the concurrency, CDMP, and zoning analyses performed.

Please refer to response to DTPW Comment No. 2.

CHAPTER I GENERAL INFORMATION

Page 16, Figure I-1 Project Location and Existing Roadways

County RER Comment No. 14: Show and label all major section line roadways, with the number of lanes, for the entire Study Area.

Please refer to earlier responses on this subject.

County RER Comment No. 15: Add the following missing interchanges on SR 826: NW 67 Avenue, NW 57 Avenue, and heading further east until the Golden Glades interchange.

The interchanges will be added to Figure I-1.

County RER Comment No. 16: Correct mislabeled "I-75" icon depicted on SR 924/Gratigny Parkway, and on all other applicable maps.

Correction will be made as noted.

Page 17, Figure 1-2 Preliminary Access Plan

County RER Comment No. 17: Site Plan does not show location of applicant's proposed park and ride facility for Miami-Dade Transit (MDT), please revise Site Plan to depict location of Park and Ride facility.

Figure I-2 does include the proposed park and ride facility but is shown is small print. To more clearly highlight the facility, an additional label will be added to the figure.

Page 19, Section 5 Study Area

County RER Comment No. 18: Provide a complete listing of the roadway links depicted in Figures I-3 through I-5.

A listing will be included in the updated report, as requested.

County RER Comment No. 19: For Figure I-3, I-4 and I-5 label all major section line roadways and other roadway facilities that are impacted 5% or more by the projects to define the study area.

Please refer to earlier responses on this subject.

County RER Comment No. 20: The 5% analysis to determine the study area boundaries for the existing, future 2020 and 2040 should include all the major section line roadways within the study area.

Figures I-3, I-4, and I-5 serves to illustrate where the 5% significance test has been met. Also refer to response to RER Comment No. 19.

Page 23, Figure 1-6 FDOT and County Count Station Map

County RER Comment No. 21: Label the corresponding roadways for the traffic count stations depicted.

All figures will be updated to include more detailed roadway information, as mention in response to other County comments. With the wealth of information shown on the traffic count station map, we will do our best to fit roadway names in as best as we can with the ultimate goal of having all roadway segments being analyzed having at least one roadway name referenced (e.g. local name, state roadway number, etc.).

County RER Comment No. 22: List all the traffic counts stations, not just ones impacted by the 5% of the projects' trips.

We have included ALL traffic count locations which have been referenced in the analyses. As such, traffic count stations are listed beyond the 5% significant study area roadway link locations.

Page 24, Section 6.2 Existing Roadway Link Directional and Section 6.3 Existing Roadway Link Directional LOS

County RER Comment No. 23: List which peak season count factors were used.

In the June 22, 2016 report, the 2014 peak season factors were applied to all traffic counts (e.g. 2014 and 2015 counts) since this was the latest information available at the time of these tables being prepared. For the updated report, there will be synopsis reports outside of the 2014 time frame (both earlier and later). We will have access to 2014 and 2015 peak season factors which will be applied based on the closest year the counts were taken. The report text will be updated to reflect the methodology applied for using peak season factors.

County RER Comment No. 24: Correct reference to FDOT's Generalized Table to Appendix I-E (not I-C).

Correction will be made.

County RER Comment No. 25: Please consider using FDOT's synopsis reports to obtain the actual peak hour, peak direction volumes, when available.

Synopsis reports have been requested for all traffic counts which did not have synopsis reports on FDOT Traffic Online website. The counts and PHPs will be updated based on the more detailed traffic counts.

County RER Comment No. 26: Utilize the County's 3-day traffic counts.

The County's three day traffic counts will be averaged and used to update PHPs for all MDC count station locations.

County RER Comment No. 27: Provide detailed explanation on how the directional peak hour period (PHP) volumes for the County stations were derived.

Please refer to response to DTPW Comment No. 4.

Pages 25-27, Table I-1 Year 2015 Area Roadway Segment Existing AM and PM PHP Summary

County RER Comment No. 28: Provide copies and identify source of the 15-minute FDOT/MDC/Broward County counts.

Copies were provided in Appendix I-B. The updated report will include refinements to Appendix I-B to reflect the updated synopsis reports received for this report. One traffic count report copy is provided per count location and matches with the information presented in the various tables that reference count data, including historical, PHP, and existing information.

County RER Comment No. 29: Revise the table, corresponding maps and list all the roadway segments according to the identified study area, for example:

a. NW 107 Avenue needs to be depicted from Okeechobee Road to NW 170 Street;

   The roadway segment will be ~~added~~ updated as requested. Note, the analyses actually include the segments from NW 170th St to NW 138th St and from NW 138th St to NW 122nd St. The later segment was reduced to indicate from NW 138th St to Okeechobee Rd to comply with the County's request.

b. SR 826/Palmetto Expressway needs to be depicted from SR 836/Dolphin Expressway to NW 27 Avenue;

   The analyzed roadway segments for this corridor already extend to at least one link beyond the 5% significance test. No additional roadway segments are warranted.

c. Extend the analysis for the HEFT to the Mainline Turnpike;

   The analyses already include referenced HEFT segments extending all the way to Mainline Turnpike. No changes are necessary since already included.

d. Interstate I-75 ends at the Palmetto Expressway/SR 826, delete the roadway segment from NW 57 Avenue to LeJune as it is part of SR 924/Gratigny Parkway;

   ~~The requested roadway segment will be deleted from the analyzed tables.~~ In lieu of deleting the requested roadway segment, the three segments extending from SR 826 to NW 32nd Ave where separated from I-75 and labeled as SR 924/Gratigny Pkwy.

e. Miami Gardens Drive needs to be extended to NW 27 Avenue;

   The analyzed roadway segments for this corridor already extend to at least one link beyond the 5% significance test. No additional roadway segments are warranted.

f. NW 138 Street ends at Okeechobee and does not continue to the HEFT;

   The segment on NW 138th St between NW 138th St and HEFT will be removed from the existing, all 2020, and the 2040 Zoning tables. For the 2040 CDMP analyses, SR 924 will be extended to connect with HEFT per LRTP Priority II, Project No. 30.

g. NW 87 Avenue needs to be extended from NW 154 Street to Okeechobee Road.

   The analyzed roadway segments for this corridor for the June 22, 2016 submittal extend to at least one link beyond the 5% significance test. A preliminary review of the revised project distribution indicates that the addition of the requested roadway segment may be warranted. We will update the tables accordingly.

h. NW 122 Street needs to be extended to LeJune Road;

   The analyzed roadway segments for this corridor already extend to at least one link beyond the 5% significance test. No additional roadway segments are warranted.

i. SR 826/Palmetto Expressway needs to be extended south to SR 836/Dolphin Expressway.

The analyzed roadway segments for this corridor already extend to at least one link beyond the 5% significance test. No additional roadway segments are warranted.

Pages 28-29, Table I-2 Existing (Year 2015) Study Area Roadway Segment LOS Analysis

County RER Comment No. 30: Identify the FDOT and County traffic count stations for the roadway segments.

Count Station IDs will be added to ALL roadway link tables.

County RER Comment No. 31: Provide information used to determine the Peak Hour Peak Direction Service Volumes thresholds.

Please refer to response to DTPW Comment No. 5.

County RER Comment No. 32: Adopted LOS values need to follow the Level of Service Standards in the Transportation Element of the CDMP.

The Transportation Element will be reviewed to ensure that all LOS standards follow the County's adopted criteria.

Page 38, Table I-9 Trip Generation Summary for American Dream Miami

County RER Comment No. 33: Document the calculation used to arrive at the 6,481 Daily trips and 491 PM Peak Hour Trips based on the 10.8% LRT adjustment. RER concurs with FDOT Comment No. 15 which also questions this.

Please refer to response to FDOT Comment No. 15.

County RER Comment No. 34: Clarify the vehicle occupancy value used to calculate the LRT adjustment.

Please refer to response to FDOT Comment No. 15 which also addresses the vehicle occupancy rates.

County RER Comment No. 35: The AM/PM internal capture, although it is 0, is labeled incorrectly for each of these corresponding tables.

Not clear what the reviewer is referring to. Will add a note behind the 0.0% to indicate that it is "of the total trip generation" similar to the LRT adjustment and the diverted trips which have note that it is "of the net external trips."

Page 41, Table 1-11 Future Year 2020 Roadway Improvements

County RER Comment No. 36: Remove NW 97 Avenue from NW 154 Street to NW 170 Street from the Year 2020 Commited Improvements list as that roadway already exists.

Project will be removed from Table I-11.

Page 41, Table 1-12 Future Year 2040 Roadway Improvements

County RER Comment No. 37: Clarify that NW 107 Avenue from NW 138 Street to NW 170 Street and NW 102 Avenue from NW 170 Street to NW 178 Street are not part of the Cost Feasible Plan.

The two projects will be listed separate from the Cost Feasible Plan projects so as to clearly distinguish that they are not 2040 LRTP CF projects.

County RER Comment No. 38: Remove the following from list and corresponding analysis:

a. Okeechobee Road from NW 154 Street to HEFT, as the Priority IV project is for grade-intersections from Krome Avenue to SR 826/Palmetto Expressway. RER concurs with FDOT's Comment No. 18 that the SERPM model is a tool and should not be utilized as a source.

Okeechobee Rd will be removed from Table I-12 and will no longer be shown as a Cost Feasible project. Acknowledge request to remove/redesignate the three projects indicated as SERPM model source (reference FDOT Comment No. 17 in regards to I-75 from I-595 to Pines Blvd being a Design Build TIP project).

b. NW 138 Street to SR 924 (a state road only east of I-75), and correct listing of the project as the boundaries are from the HEFT to SR 826.

NW 138th St improvements will be updated to show Florida's Turnpike to SR 826 (e.g. HEFT to SR 826). In that respect, for 2040 the roadway link LOS segments description will be changed to show from Florida's Turnpike to SR 826; whereas the existing, all 2020, and the 2040 Zoning roadway link segments will remain from US 27/Okeechobee Rd to Hialeah Gardens Blvd as previously analyzed. Furthermore, the existing NW 138th St roadway link segment from Florida's Turnpike to US 27/Okeechobee Rd will be removed from the link tables per RER Comment No. 29-f.

c. HEFT – correct reference from SW 8 Street to SR 836, as that will be widened to 10 lanes, not "10+4" lanes.

A review of existing Google maps shows the referenced segment as existing 10 lanes. To comply with the above request, the existing ~~and year 2020~~ number of lanes will be assumed as 8 lanes with widening to 10 lanes by 2020 ~~2040~~ ~~(CDMP analyses only as it is a Cost Feasible Plan project outside of the TIP)~~. Please also refer to Turnpike Comment No. 1 which indicates that this segment has already been let for construction as a Design Build and will be completed by 2019.

d. SR 826/Palmetto Expressway – reference should be corrected to I-75, from NW 170 Street to SR 826.

Table I-11 (Year 2020 Committed Improvements) will be updated to separate TIP Project 732687 into the following:

- **I-75 from NW 170th St to SR 826**
- **SR 826 from I-75 to Flagler St**

e. SR 826/Palmetto Expressway – correct the future number of lanes and corresponding analysis from "10+4" to 10 lanes (will be widened from 8 to 10 lanes).

f. Correct other two references to "12+4" lanes on SR 826, as West Flagler Street to I-75 and I-75 north to Dade/Broward County line will be widened with express lanes to a total of 8 to 10 lanes; SR 826 from I-75 to NW 103 Street will be widened with express lanes to a total of 8 to 10 lanes; and SR 826 from NW 103 Street to Flagler street will be widened with express lanes to a total of 10 to 12 lanes.

Responses for e) and f): We have reviewed FDOT's website http://palmettoexpresslanes.com/ to clarify the number of lanes being implemented for SR 826. Based on FDOT's information, we will reanalyze SR 826 by 2020 as:

- **I-75 to NW 103rd St - 6 general use lanes plus 4 express lanes (total 10 lanes)**
- **NW 103rd St to NW 36th St - 8 general use lanes plus 4 express lanes (total 12 lanes)**
- **NW 36th St to Flagler St - 10 general use lanes plus 2 express lanes (total 12 lanes)**

TIP Project No. 4326871 is scheduled to be completed by 2017. Furthermore, based on the County's comment above, the existing SR 826 laneage will be analyzed as 8 lanes or 10 lanes depending on the segment reviewed. SR 826 north of I-75 is not analyzed in the report tables but since it is part of Project

No. 4326871 will be included in the improvement table as 6 general use lanes plus 2 express lanes (total 8 lanes) per the FDOT website.

g. RER concurs with FDOT Comment No. 33 regarding the listing of the "10+4" and "12+4" lanes listed for the 2040 CDMP analyses.

Please refer to response to FDOT Comment No. 33 which addresses the differences between the 2040 CDMP and the 2040 Zoning analyses and why there were differences in the number of lanes between the two Scenarios, as per the roadway improvement lists reflected in the June 22, 2016 report.

Page 45 Section 8.3 Background Growth

County RER Comment No. 39: RER concurs with FDOT's Comment No. 20 questioning the rationale for the cap placed on growth rate. Florida's Turnpike Authority has indicated that their facilities sustained considerable growth rates, and due to this they request that independent growth rates be used for their facilities, separate from the rates used for other limited access facilities.

Please refer to FDOT Comment No. 20.

County RER Comment No. 40: RER Staff emailed on January 28, 2016 a map, table and corresponding traffic reports for approved plats within the vicinity of the ADM and Graham projects. As there is no reference to usage of said information, please revise for inclusion as background growth.

Acknowledged. The vested trips were included in the model assignments but were not considered in the Concurrency analyses. The updated report will include a separate column for the provided approved platted trips so that they can be included in the total DOS plus platted vested trips. Coordination was made with RER staff during the updating of the vested trips information included in the updated CDMP TIA report. As a result, the September 2016 FDOT and MDC vested trip databases were used in place of the April 2016 version. All projects related to County unincorporated areas were addressed with the County with regards to their more recent September 2016 databases. In addition, requests were made from several municipalities to obtain traffic impact analysis studies related to the 18 platted projects referenced in Appendix I-S. Based on information received a summary of the available vested trip information beyond the County's database DOS trips are included in Appendix I-S. The future year growth rates for the Zoning and the CDMP analyses weere ~~will be~~ checked against the vested trips to ~~ensure that at a minimum the~~ review the differences between the Year Concurrency and the Year CDMP/Zoning growth rates~~ account for both sets of vested trips~~. Based on the review, it was established that in some cases the forecasted 2015 plus vested trips exceed the historical growth projections. Given that the 2015 plus vested trips is a layering of trips and does not take into account redistribution of trips to paths that are less congested, it was determined that the historical growth projections were appropriate for use for background traffic associated with the CDMP and the Zoning analyses. A separate set of PM Concurrency link LOS analyses continues to remain in the updated CDMP TIA based on the 2015 plus vested trips layered approach (e.g. Tables II-1, III-1, and IV-1 for the ADM, the Graham, and the Combined analyses).

Pages 46-47, Table 1-13 Year 2020 and Year 2040 Roadway Background Future Growth Rate Summary

County RER Comment No. 41: Revise to provide analysis on the PM peak hour average of the County's traffic counts for the three-day period which provide a more comprehensive average, rather than the first day of the successive three-day count.

See response to earlier RER Comment on this subject (e.g. RER Comment No. 26).

County RER Comment No. 42: For the background analysis for both ADM and Graham, revise to omit the background traffic of the other application.

Please see lengthy reply to FDOT Comment No. 31 which refers to the same request.

Page 49, Section 8.5 Background Roadway Link Directional LOS

County RER Comment No. 43: Please provide information as to how the service volume values were converted into directional LOS values

Please refer to response to DTPW Comment No. 5.

Page 50, Table I-15 Year 2020 and Year 2040 Roadway Segment Future Background AM and PM PHP Summary

County RER Comment No. 44: Revise to provide a separate column for FDOT and County vested development orders (DOS) trips, instead of including them as part of the overall background.

The FDOT and County vested trips will be separated, as requested.

Page 66, Section 10 Project Assignment

County RER Comment No. 45: RER concurs with FDOT's Comment No. 28 questioning the 0.0% trip assignment to/from the Graham project within the roadway link of NW 170 Street from NW 102 Avenue/NW 107 Avenue to NW 97 Avenue.

Please refer to response to FDOT Comment No. 28.

County RER Comment No. 46: RER concurs with FDOT's Comment No. 29 questioning why no trips were assigned for the roadway link of NW 170 Street from NW 82 Avenue to NW 78 Avenue.

Please refer to response to FDOT Comment No. 29.

Page 66, Section 9 Project Trip Distribution

County RER Comment No. 47: RER concurs with FDOT's Comment No. 23 regarding clarification of the socio-economic data and requesting inclusion of the model volume plots.

Please refer to response to FDOT Comment No. 23.

CHAPTER II ADM FUTURE TRAFFIC IMPACTS

County RER Comment No. 48: RER concurs with FDOT's extensive Comment No. 31 that backlogged facilities should only include traffic from approved development—it should not include traffic generated by either the ADM/Graham projects.

Again, please refer to lengthy response to FDOT Comment No. 31.

Page 72, Section 1.0 Year 2020 PM Concurrency Analysis

County RER Comment No. 49: Table I-13 reflects background growth rate summary and does not show the background PHP values with the DOS trips (vested trips) as shown in Table I-15.

Table I-13 is simply shown for the purposes of deriving future percentage growth based on historical daily counts. Table I-15 then takes the derived growth rates and applies them to existing 2015 PHPs to obtain future year 2020 CDMP/Zoning, year 2040 CDMP, and year 2040 Zoning peak hour peak direction forecasts. Table I-15 also compares the forecasted growth projected future volumes to the vested trips included with the Concurrency forecasts. A verification was made to ensure that at a minimum the growth-derived volumes exceeded the vested trip forecasts. As such, the vested trips, which are in terms of peak hour two-way trips, was not applicable to the growth forecast information presented in Table I-13.

Page 73, Table II-1 Concurrency Short Term (Year 2020) Study Area Roadway Segment LOS Analysis-ADM PM Impacts

County RER Comment No. 50: Provide a separate column to show the Traffic Count Station used for each corresponding roadway segment.

Please refer to earlier response to similar request (RER Comment No. 30).

County RER Comment No. 51: Provide information used to determine the Peak Hour Peak Direction Service Volumes thresholds.

Please refer to response to DTPW Comment No. 5.

County RER Comment No. 52: The values in the "Adopted LOS" column need to be consistent with the adopted CDMP Level of Service Standards in the Transportation Element.

Please refer to response to RER Comment No. 32.

Page 91, Section 6 Impact Fee Assessment

County RER Comment No. 53: The response to Question 10 of the DRI analysis indicates that road impact fees are expected to be paid in the amount of $110 million. Appendix II-A ADM Preliminary Impact Fee Analysis lists an impact fee of $58,752,501 for ADM and an impact fee of $7,439,278 for Graham for a total of $66,191,779. Revise to resolve differences between the two figures.

The applicant will review the two earlier submittals and differences between the two will be resolved. The updated CDMP TIA report appendices on traffic impact fees will be refined, as applicable. Based on coordination with the applicant, the information presented in Appendices II-A and III-A represents the latest available transportation impact fee calculations for the two Sites. The estimates take into account the March 2016 approved trip generation information and therefore includes more refined impact fees than the December 2015 $110 Million estimate submitted as part of response to Question 10 of the DRI (e.g. Zoning) analyses. The transportation impact fee information included in the June 22, 2016 CDMP TIA will be maintained in the updated version of the report.

Page 101, Section 1.0 Year 2020 PM Concurrency Analysis

County RER Comment No. 54: Table I-13 reflects background growth rate summary and does not show the background PHP values with the DOS trips (vested trips) as shown in Table I-15

Please refer to RER Comment No. 49.

Page 102, Table III-1 Concurrency Short Term (Year 2020) Study Area Roadway Segment LOS Analysis-Graham PM Impacts

County RER Comment No. 55: Provide a separate column to show the Traffic Count Station used for each corresponding roadway segment

Please refer to earlier response to similar request (RER Comment No. 30).

County RER Comment No. 56: Provide information used to determine the Peak Hour Peak Direction Service Volumes thresholds.

Please refer to response to DTPW Comment No. 5.

County RER Comment No. 57: The values in the "Adopted LOS" column need to be consistent with the adopted CDMP Level of Service Standards in the Transportation Element.

Please refer to response to RER Comment No. 32.

CHAPTER IV COMBINED FUTURE TRAFFIC IMPACTS

County RER Comment No. 58: Relabel Tables VI-2B, VI-3A, VI-5A, VI-5B, VI-6A, VI-6B to IV-2B, IV-3A, IV-5A, IV-5B, IV-6A, and IV-6B to be consistent with the rest of the tables in Chapter IV and listed in the table of contents.

Will update as noted.

Page 131, Table IV-1 Concurrency Short Term (Year 2020) Study Area Roadway Segment LOS Analysis – Combined ADM/Graham PM Impacts

County RER Comment No. 59: Please clarify how the information provided in this table differ from the information provided in Chapters II and III, Tables II-1 and III-1 Concurrency Short Term (Year 2020).

The information shown in the three Scenarios and their Concurrency tables are essentially the same. All three tables have the same number of concurrency "pure" background trips (e.g. include vested trips as opposed to growth-derived trips) and the same number of total overall trips. The only differences between the tables were whether or not each Scenario considered the other Site's Project trip as additional background trips (e.g. Chapters II and III) or included the trips as "Project Trips" in the case of the Combined Scenario. The updated approach for the revised report will no longer include the other Project trips as background trips, as discussed in response to various comments from review agencies.

Pages 149 and 157, Section 9.0 Mitigation Summary

County RER Comment No. 60: Correct references in the first and second paragraph to the ADM project mentioned twice and include reference to the Graham project.

Correction will be made.

County RER Comment No. 61: First paragraph, Applicant states they are working with various agencies on a "study area roadway improvement plan to include…. with development timelines." Clarify which agencies they are working with, what formalized agreements have been entered, and provide development timelines.

Information will be included in the updated report, as requested.

County RER Comment No. 62: The applicant states the previously mentioned roadway improvement plan will "accelerate several cost feasible" priorities from the County's Adopted 2040 Long Range Transportation Plan (LRTP) into an "earlier timeline." However, Project No. 2 (the new interchange at HEFT and NW 170 Street) is not part of the Cost Feasible Plan, but is instead listed as a private improvement. Revise to include the appropriate reference to the non-cost feasible plan and to clarify which LRTP Priority the improvements fall under, or if they are not included in the 2040 LRTP.

Clarification will be provided, as requested.

County RER Comment No. 63: All the list of improvements with the exception of the NW 102 Avenue and NW 107 Avenue projects, were assumed to be in place by 2020. Please refer to previous comment and advise feasibility and method by which applicant proposes to advance and pay for the LRTP priorities. As noted, one project is not part of the 2040 LRTP Cost Feasible Plan, and the project on NW 170 Street from the HEFT to NW 97 Avenue is a Priority III (2026-2030).

Clarification will be provided, as requested.

County RER Comment No. 64: Page 98 in Chapter II of the ADM Mitigation Summary Section, projects 4 and 5 in the numbered 1 through 9 list of improvements refer to the "ADM Project Access Road", while on Page 127, Chapter III in the Graham Mitigation Summary Section, lists as project 13 and 14 the "Graham Project Access Road." Page 149 in Chapter IV of the Combined Future Traffic Impacts lists the previously mentioned projects 4, 5, 13, and 14 as the "Graham Project Access Road" with the improvements numbered 1 though 9. Please resolve those differences.

Differences will be resolved in the updated report.

County RER Comment No. 65: Please clarify the two additional project improvements listed under "Year 2040". Also, the improvements do not show the backlogged facilities also needing roadway improvements in order to meet acceptable LOS operating conditions.

As indicated in other responses, the Executive Summary along with the individual Chapter Mitigation Summaries, will be updated to include not only Project-related mitigation results but also backlogged needs and roadway improvement assumed to be in place for each Scenario.

County RER Comment No. 66: Re-evaluate reference to backlogged facilities, in reference to RER previous comments under "Chapter II ADM Future Traffic Impacts."

Please refer to RER Comment No. 48.

County RER Comment No. 67: The last sentence on Page 157 states that "alternative travel modes" will be "addressed separate of this Report." As the application is currently undergoing review, that analysis needs to be provided now.

Understood. The updated report will provide information pertaining to alternative travel modes and will specifically address the availability of shuttle buses to and from the Sites for nearby hotels, airports, etc.

CITY OF MIRAMAR, DATED SEPTEMBER 12, 2016:

City of Miramar staff has reviewed the applicant's responses to the Cities comments submitted on February 2, 2016. New staff comments are shown in italics below.

Miramar Comment No. 1: Direct transit service should be provided from the American Dream Miami Mall and Graham industrial/retail development to the park an dride lot at Miramar Regional park and the Miramar Town Center Park and Ride.
The applicant stated that detailed transit routes will be discussed at a later date. Transit routes and connections into Miramar need to be discussed during the review of the CDMP application to identify options to relieve roadway congestion. Discussing this issue during the CDMP process will also help county and city officials plan for additional multi-modal options to serve employees and visitors.

Further detail regarding transit opportunities will be addressed in the updated report including planned shuttle services operated by ADM.

Miramar Comment No. 2: At a minimum, the analysis should evaluate traffic impacts to Miramar Parkway, Pembroke Road, Red Road/NW 57th Avenue and Flamingo Road/NW 67th Avenue. A level of service analysis at project buildout should be provided for all of these roadways.
The applicant referred to their response to Broward County Comment No. 11. Broward County Comment No. 11 only refers to Flamingo Road. There are several other roads listed in our comment. The applicant did not respond to impacts on these roads.

The applicant's intend was to state that the comment which was included for Flamingo Road applied to all other roadways listed. With the understanding that the City continues to see a relevance for these facilities to be included in the analyses, we have taken another look at the project percent distributions for the ADM and the Graham Sites relative to the respective roadway corridors. In the spirit of accommodating the City's concerns we will add NW 57th Ave and NW 67th Ave corridors to the analyses, though there is less than 1 percent of project traffic assigned to the roadway segments north and south of Miami Gardens Rd where the traffic is the heaviest. NW 57th Ave north and south of the HEFT interchange we will also review any impacts since this facility has near 3 percent project contribution. Miramar Pkwy was already included in the June 22, 2016 analyses. For Miramar,

it included up to 4 percent significance with a six lane capacity. Since fewer trips will be associated with the Pembroke facility which is also a six lane facility, we do not see the need to analyze this facility.

Miramar Comment No. 3: The Miramar Parkway buildout year volumes shown in Tables 9 and 10 of the Transportation Impact Analysis are lower than projections prepared by the Broward Metropolitan Planning Organization. The developer's traffic consultant should meet with the City of Miramar, Broward County, and Broward Metropolitan Planning Organization to discuss the impacts to City roadways and potential mitigation. The City is in the process of updating its Capital Improvement Program to include the extension of Miramar Parkway from its current terminus at SW 192 Terrace to Pembroke Road at SW 196 Avenue . The extension of Miramar Parkway to Pembroke Road will help alleviate the current traffic problem at Miramar Parkway/1-75 Interchange, improve the Level of Service at this intersection and provide an alternate north-south route via US 27.
The applicant states that this improvement is included in the Year 2020 Cost Feasible Plan. The extension of Miramar Parkway to US 27 is currently included in the 2040 Long Range Transportation Plan for funding between 2031 and 2040. This improvement should be expedited and constructed prior to the American Dream Miami Mall and Graham industrial/retail developments.

The applicant will review the Broward adopted LRTP and most recent TIP and depending on the funding commitment will add this as an improvement to Table I-11 (Year 2020 Committed Improvements) or Table I-12 (Year 2040 Cost Feasible Plan Improvements). We can only assume the project is funded by the year 2020 if it is actually included in the Broward Transportation Improvement Plan, even if efforts are ongoing to expedite the project to be completed earlier. We have to proceed with the information which is available at this time.

TOWN OF MIAMI LAKES, DATED SEPTEMBER 13, 2016:

Miami Lakes Comment No.1: Though according to the traffic consultant, the trips from each of the two projects combined for the determination of significant trips on each link is included in the traffic study, at the very least this is not reflected on the maps (I-10A, I-10B, I-11A, I-11B, I-12A and I-12B). To be clear, determination of the 5 percent significance threshold should be included <u>as if the two applications were one project</u> and NOT with one project included as "background" traffic of the other.

The traffic analyses have been prepared so that each Project's trips are shown separate from the other Project's trips even when the trips are added together to achieve total overall trips. This allows the reviewer to be able to see that the individual project trips do not vary regardless of which Scenario is being reviewed. We do not see the need to add a combined Project distribution as the Projects <u>will not</u> be assessed as a Combined Project for mitigation purposes. In order words, a Combined percentage would not be the premise to identify whether the 5 percent threshold has been met. Chapter IV will be maintained in the updated report for informational purposes only.

Miami Lakes Comment No. 2: Please re-examine the trip distribution analysis to determine whether NW 67th Avenue should be included. The maps appear to show ZERO trips added to NW 67th Avenue, which seems unrealistic considering there is not another north-south surface street to traverses all through the area covered by the map for two miles to its west (to NW 87th Avenue).

NW 67th Avenue will be added to the analyses, as requested. There is less than one percent project trips on the segments in the surrounding area but it is clear that this is an important facility to the Town. With the facility having six lanes of capacity north and south of the Miami Gardens Drive the project trips to capacity ratio will be well below the 5 percent significance test.

Miami Lakes Comment No. 3: As expressed before, the required traffic methodology for both Comprehensive Plan amendments and for concurrency determination are inadequate (as proven by existing traffic conditions despite the existence of the concurrency system for decades), and help to create a situation where driving is the only viable option. At the same time, if a road is already failing, then according to the consultant, there is no mitigation requirement to the applicant, regardless of how many additional trips are being added to a failing segment. Given the size and significance of each of these projects, and certainly their significance when considered together, the County should consider a plan for true multi-modal mobility in this area, and charge the applicant for needed multi-modal improvements based on the number of daily trips generated. This would give the County the policy flexibility to provide viable alternatives to automobile travel, rather than undermining walking, transit and bicycling as possibilities in the (hopeless, by all available evidence) pursuit of free flowing traffic.

Comment acknowledged. The County has prepared a proposal for the transit impacts associated with the two Sites. The Transit Impact Report information will be reviewed and addressed as part of Miami-Dade County's request to elaborate further on transit proposed for the Sites as part of the updated report.

Miami Lakes Comment No. 4: Much of the discussion at Friday's meeting centered around the possibility of bringing new transit infrastructure directly into the development(s). Are plans/designs for any road or other right-of-way improvements (i.e. 170th Street, 186th Street, etc.) being developed in a way that will accommodate this possibility?

Just to clarify, there was no stated commitment regarding adding transit "infrastructure" in the form of light rail transit or similar exclusive transit corridor operations to the two Sites at this time. There was discussions about the potential for future consideration of transit infrastructure similar to what is in place at Mall of America where LRT has been in place for some time. Since there are no planned or programmed alignments to work from at this time, further details or considerations of right-of-ways are premature at this stage. Following the original response to comments, coordination was made with Town of Miami Lakes staff to review the need to include the extension of Miramar Pkwy from its existing termini to Pembrooke. The Town provided copies of its Capital Improvement Plan which shows that partial funding has been committed through 2021. Since the complete funding has not been established, the decision was made not to include the project as a cost feasible project through communication with the Town of Miami Lakes staff.

APPENDIX I-B:
Roadway Link Counts

APPENDIX I-B1:
FDOT Traffic Counts

COUNTY: 86
STATION: 0087
DESCRIPTION: SR 820 / PINES BLVD - 200' E OF SW 172 AVE
START DATE: 01/27/2015
START TIME: 0000

	DIRECTION: E					DIRECTION: W					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	36	24	28	22	110	40	31	30	18	119	229
0100	23	10	9	11	53	19	11	10	10	50	103
0200	4	9	7	11	31	11	5	5	7	28	59
0300	7	6	12	14	39	7	12	15	11	45	84
0400	18	18	40	47	123	4	10	18	35	67	190
0500	50	69	93	136	348	30	38	49	69	186	534
0600	176	284	394	540	1394	84	134	235	368	821	2215
0700	533	529	459	497	2018	399	331	374	403	1507	3525
0800	484	485	428	370	1767	382	385	356	349	1472	3239
0900	376	345	308	328	1357	270	279	277	235	1061	2418
1000	345	328	313	277	1263	296	255	288	279	1118	2381
1100	341	299	304	316	1260	262	298	273	286	1119	2379
1200	350	364	308	380	1402	288	268	304	377	1237	2639
1300	307	315	325	297	1244	269	363	346	391	1369	2613
1400	385	370	383	428	1566	386	408	416	400	1610	3176
1500	453	471	387	365	1676	406	412	375	415	1608	3284
1600	386	363	359	390	1498	421	381	486	413	1701	3199
1700	402	427	367	443	1639	421	503	437	467	1828	3467
1800	395	370	330	296	1391	505	494	446	482	1927	3318
1900	310	315	292	253	1170	422	389	319	326	1456	2626
2000	233	247	209	204	893	339	276	279	230	1124	2017
2100	166	158	163	126	613	193	236	195	190	814	1427
2200	108	111	88	79	386	163	143	129	107	542	928
2300	54	50	49	54	207	96	79	72	61	308	515
24-HOUR TOTALS:					23448					23117	46565

PEAK VOLUME INFORMATION

	DIRECTION: E		DIRECTION: W		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	645	2061	730	1544	645	3533
P.M.	1445	1739	1800	1927	1715	3544
DAILY	645	2061	1800	1927	1715	3544

TRUCK PERCENTAGE 3.94 3.55 3.75

CLASSIFICATION SUMMARY DATABASE

DIR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TOTTRK	TOTVOL
E	59	19568	2848	163	474	86	0	138	36	7	12	0	8	0	49	924	23448
W	84	18756	3428	130	364	72	3	175	56	10	6	1	4	0	28	821	23117

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860088CL-20160224.syn

County: 86
Station: 0088
Description: SR 820/PINES BLVD - W OF SR 93/I-75
Start Date: 02/24/2016
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	94	69	37	32	232	84	75	48	38	245	477
0100	38	25	14	22	99	40	36	23	22	121	220
0200	13	14	17	11	55	19	17	20	16	72	127
0300	24	13	10	23	70	14	21	21	25	81	151
0400	20	30	39	29	118	12	30	48	41	131	249
0500	70	98	126	173	467	33	59	92	121	305	772
0600	247	332	581	698	1858	118	157	307	341	923	2781
0700	769	727	700	675	2871	353	337	457	418	1565	4436
0800	715	680	664	537	2596	419	396	402	441	1658	4254
0900	470	486	457	470	1883	318	382	363	335	1398	3281
1000	431	461	500	404	1796	379	364	329	384	1456	3252
1100	434	446	452	447	1779	407	402	429	466	1704	3483
1200	506	459	474	451	1890	476	531	516	452	1975	3865
1300	483	547	499	456	1985	508	523	482	544	2057	4042
1400	510	528	524	508	2070	519	495	544	607	2165	4235
1500	592	556	497	490	2135	525	548	595	615	2283	4418
1600	525	453	556	477	2011	550	614	571	720	2455	4466
1700	518	506	464	504	1992	659	474	417	497	2047	4039
1800	499	465	426	408	1798	528	617	540	531	2216	4014
1900	402	393	370	361	1526	476	456	453	408	1793	3319
2000	286	260	251	201	998	406	390	344	348	1488	2486
2100	217	222	209	195	843	357	280	261	249	1147	1990
2200	186	137	117	112	552	202	219	180	150	751	1303
2300	121	95	83	54	353	145	122	109	92	468	821
24-Hour Totals:					31977					30504	62481

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	645	2894	730	1690	730	4460
P.M.	1430	2180	1615	2564	1615	4568
Daily	645	2894	1615	2564	1615	4568
Truck Percentage		3.60		5.08		4.32

Classification Summary Database

COUNTY: 86
STATION: 0494
DESCRIPTION: OLD FLAMINGO RD AT DADE/BROWARD CO LINE,67 AVE
START DATE: 04/07/2015
START TIME: 0000

	DIRECTION: N					DIRECTION: S					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	33	43	22	35	133	23	43	32	30	128	261
0100	28	17	14	18	77	25	38	27	18	108	185
0200	9	9	8	6	32	5	7	14	8	34	66
0300	8	15	8	18	49	9	9	28	5	51	100
0400	17	14	18	28	77	8	29	19	8	64	141
0500	25	36	56	65	182	5	28	38	59	130	312
0600	88	155	228	238	709	69	108	115	188	480	1189
0700	298	338	397	384	1417	179	299	368	338	1184	2601
0800	378	399	389	318	1484	358	307	284	258	1207	2691
0900	265	258	228	169	920	215	226	188	176	805	1725
1000	188	182	173	183	726	163	163	172	185	683	1409
1100	173	193	183	182	731	178	168	167	174	687	1418
1200	172	168	165	157	662	178	169	189	198	734	1396
1300	184	191	180	205	760	185	198	189	189	761	1521
1400	202	220	233	211	866	219	228	235	238	920	1786
1500	223	232	268	256	979	258	228	238	227	951	1930
1600	249	258	225	258	990	254	248	299	299	1100	2090
1700	268	298	287	254	1107	318	337	386	406	1447	2554
1800	258	249	259	258	1024	375	361	293	242	1271	2295
1900	215	236	173	186	810	228	235	226	217	906	1716
2000	147	133	133	123	536	203	203	223	233	862	1398
2100	102	118	105	88	413	193	182	175	172	722	1135
2200	75	78	68	57	278	95	82	65	65	307	585
2300	58	38	38	29	163	75	64	55	40	234	397
24-HOUR TOTALS:					15125					15776	30901

PEAK VOLUME INFORMATION

	DIRECTION: N		DIRECTION: S		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	730	1558	730	1371	730	2929
P.M.	1645	1111	1730	1528	1715	2601
DAILY	730	1558	1730	1528	730	2929

GENERATED BY SPS 5.0.48P

COUNTY: 86
STATION: 2001
DESCRIPTION: SR 93 / I 75 - S OF SR 820/HOLLYWOOD BLVD
START DATE: 02/25/2015
START TIME: 0000

	DIRECTION: N					DIRECTION: S					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	200	176	144	143	663	298	171	125	124	718	1381
0100	90	93	94	80	357	99	98	71	76	344	701
0200	61	69	86	64	280	58	70	63	59	250	530
0300	63	67	82	96	308	62	68	75	88	293	601
0400	97	123	153	196	569	101	126	150	165	542	1111
0500	188	207	382	462	1239	229	383	503	607	1722	2961
0600	511	781	1045	1187	3524	800	1161	1471	1718	5150	8674
0700	1350	1489	1666	1544	6049	1984	1713	1740	1573	7010	13059
0800	1439	1402	1487	1344	5672	1546	1639	1440	1423	6048	11720
0900	1109	1040	1020	934	4103	1327	1375	1276	1136	5114	9217
1000	937	891	838	885	3551	1021	1044	1080	889	4034	7585
1100	856	865	874	914	3509	861	918	884	891	3554	7063
1200	902	954	1007	878	3741	841	893	835	800	3369	7110
1300	962	1015	1055	1009	4041	816	1007	922	839	3584	7625
1400	1083	1148	1239	1217	4687	920	896	923	1009	3748	8435
1500	1236	1303	1369	1522	5430	947	1063	1062	1123	4195	9625
1600	1550	1690	1833	1913	6986	1155	1120	1241	1215	4731	11717
1700	2023	1911	2025	1860	7819	1255	1455	1377	1248	5335	13154
1800	1813	1880	1856	1368	6917	1208	1217	1097	1106	4628	11545
1900	1204	1223	1090	1351	4868	1011	1021	869	755	3656	8524
2000	1194	971	848	732	3745	719	708	665	606	2698	6443
2100	740	654	617	572	2583	587	670	609	547	2413	4996
2200	544	520	442	414	1920	521	476	429	365	1791	3711
2300	376	345	293	264	1278	345	288	251	205	1089	2367
24-HOUR TOTALS:					83839					76016	159855

PEAK VOLUME INFORMATION

	DIRECTION: N		DIRECTION: S		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	715	6138	645	7155	700	13059
P.M.	1645	7872	1700	5335	1645	13174
DAILY	1645	7872	645	7155	1645	13174

TRUCK PERCENTAGE 6.74 14.53 10.44

CLASSIFICATION SUMMARY DATABASE

DIR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TOTTRK	TOTVOL
N	90	68143	9954	530	1405	396	358	878	1979	54	28	15	5	0	4	5648	83839
S	2242	55595	6365	408	1074	767	760	3757	3064	876	27	5	304	0	772	11042	76016

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862002-20160112.syn

County: 86
Station: 2002
Description: SR 93 / I 75 - S OF SR 822/SHERIDAN ST
Start Date: 01/12/2016
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	175	173	178	134	660	198	177	144	148	667	1327
0100	99	88	105	114	406	130	94	98	72	394	800
0200	145	125	130	139	539	82	101	88	96	367	906
0300	129	128	154	160	571	99	110	119	125	453	1024
0400	151	162	201	213	727	115	153	176	187	631	1358
0500	223	317	364	469	1373	244	329	519	651	1743	3116
0600	633	886	1129	1363	4011	867	1146	1518	1751	5282	9293
0700	1380	1429	1641	1625	6075	1913	2052	2069	2077	8111	14186
0800	1430	1256	962	854	4502	2033	1950	1701	1574	7258	11760
0900	733	972	1016	949	3670	1546	1458	1308	1211	5523	9193
1000	948	950	1044	960	3902	1104	1070	1055	1035	4264	8166
1100	885	883	971	931	3670	973	987	988	1001	3949	7619
1200	892	938	1049	979	3858	974	1103	1037	966	4080	7938
1300	988	939	1073	1099	4099	1004	1010	1077	1082	4173	8272
1400	1093	1217	1197	1310	4817	1085	1067	1087	1102	4341	9158
1500	1348	1309	1424	1457	5538	1165	1228	1326	1330	5049	10587
1600	1393	1484	1521	1587	5985	1285	1383	1400	1476	5544	11529
1700	1782	1870	1774	1694	7120	1546	1802	1602	1605	6555	13675
1800	1718	1789	1540	1445	6492	1328	1347	1235	1008	4918	11410
1900	1330	1292	1073	1023	4718	941	877	774	802	3394	8112
2000	814	838	699	720	3071	742	709	649	584	2684	5755
2100	678	593	602	534	2407	599	623	591	560	2373	4780
2200	498	544	469	399	1910	526	660	535	341	2062	3972
2300	357	331	298	267	1253	337	305	256	235	1133	2386
24-Hour Totals:					81374					84948	166322

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	715	6125	715	8231	715	14356
P.M.	1700	7120	1700	6555	1700	13675
Daily	1700	7120	715	8231	715	14356

862003-20160112.syn

County: 86
Station: 2003
Description: SR 93 / I 75 - S OF SR 818/GRIFFIN RD
Start Date: 01/12/2016
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	272	178	166	154	770	192	224	181	140	737	1507
0100	161	137	131	93	522	152	127	112	102	493	1015
0200	99	68	75	97	339	68	92	84	102	346	685
0300	104	118	139	136	497	100	100	94	106	400	897
0400	168	230	268	290	956	118	148	197	237	700	1656
0500	356	462	664	755	2237	278	411	527	690	1906	4143
0600	936	1229	1235	1336	4736	913	1295	1615	1951	5774	10510
0700	1342	1574	1579	1569	6064	1899	1981	1735	1635	7250	13314
0800	1516	1482	1560	1498	6056	1591	1670	1801	1536	6598	12654
0900	1084	1064	1239	1304	4691	1492	1496	1676	1569	6233	10924
1000	1192	1157	1250	1130	4729	1200	1193	1128	1009	4530	9259
1100	1112	980	998	1038	4128	991	766	867	899	3523	7651
1200	1137	1054	1083	1032	4306	987	911	972	972	3842	8148
1300	888	943	738	904	3473	1056	1023	964	987	4030	7503
1400	948	980	868	884	3680	1022	1032	1043	1078	4175	7855
1500	892	918	976	868	3654	1101	1079	1033	1094	4307	7961
1600	1057	1184	1287	1422	4950	1113	1137	1164	1181	4595	9545
1700	1330	1200	1268	1245	5043	1077	1212	1160	1030	4479	9522
1800	1257	1508	1339	1385	5489	1227	1239	1192	1174	4832	10321
1900	1319	1207	1136	883	4545	1034	1025	925	911	3895	8440
2000	894	912	904	765	3475	917	865	864	788	3434	6909
2100	722	737	757	674	2890	671	634	706	648	2659	5549
2200	597	575	493	410	2075	569	601	481	400	2051	4126
2300	350	348	437	376	1511	396	328	277	246	1247	2758
24-Hour Totals:					80816					82036	162852

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	715	6238	645	7566	645	13397
P.M.	1800	5489	1800	4832	1800	10321
Daily	715	6238	645	7566	645	13397

862004-20160112.syn

County: 86
Station: 2004
Description: SR 93 / I 75 - N OF SR 818/GRIFFIN RD
Start Date: 01/12/2016
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	158	121	95	95	469	393	374	273	271	1311	1780
0100	89	90	75	59	313	197	164	161	171	693	1006
0200	70	38	43	56	207	145	134	130	108	517	724
0300	69	67	82	82	300	103	99	74	83	359	659
0400	86	143	157	171	557	88	81	100	97	366	923
0500	217	278	379	473	1347	114	101	109	134	458	1805
0600	582	846	1106	1414	3948	114	174	235	227	750	4698
0700	1533	1810	1973	1879	7195	218	585	628	815	2246	9441
0800	1862	1694	1753	1593	6902	851	889	969	962	3671	10573
0900	1239	1186	1096	1016	4537	1017	985	1189	1291	4482	9019
1000	917	907	945	908	3677	1262	1346	1201	1337	5146	8823
1100	882	898	874	893	3547	1284	1230	1340	1306	5160	8707
1200	913	936	942	942	3733	1347	1351	1369	1448	5515	9248
1300	896	861	1050	1016	3823	1447	1445	1380	1398	5670	9493
1400	960	1031	1124	1114	4229	1353	1422	1389	1319	5483	9712
1500	1136	1304	1254	1355	5049	1384	1411	1402	1437	5634	10683
1600	1348	1516	1578	1552	5994	1447	1341	1432	1434	5654	11648
1700	1716	1669	1669	1655	6709	1388	1466	1484	1390	5728	12437
1800	1414	1519	1443	1222	5598	1520	1450	1473	1371	5814	11412
1900	1258	1160	983	867	4268	1410	1344	1397	1182	5333	9601
2000	797	705	643	566	2711	1006	860	814	712	3392	6103
2100	522	512	501	471	2006	670	625	641	605	2541	4547
2200	414	413	335	336	1498	527	487	466	392	1872	3370
2300	289	251	194	192	926	356	351	264	247	1218	2144
24-Hour Totals:					79543					79013	158556

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	715	7524	845	4153	745	10712
P.M.	1700	6709	1715	5860	1700	12437
Daily	715	7524	1715	5860	1700	12437

862005-20160119.syn

County: 86
Station: 2005
Description: SR 93 / I 75 - N OF ARVIDA PARKWAY
Start Date: 01/19/2016
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	213	184	163	149	709	241	205	153	155	754	1463
0100	112	91	86	92	381	111	100	99	86	396	777
0200	94	83	64	92	333	67	58	56	59	240	573
0300	85	99	107	98	389	53	51	59	60	223	612
0400	112	151	161	141	565	65	72	76	132	345	910
0500	188	262	379	446	1275	137	215	267	366	985	2260
0600	537	744	1067	1265	3613	404	629	845	1381	3259	6872
0700	1498	1749	1764	1640	6651	1436	1496	1638	1681	6251	12902
0800	1625	1599	1547	1481	6252	1615	1632	1667	1198	6112	12364
0900	1138	1176	1122	1016	4452	1266	1212	1137	1114	4729	9181
1000	941	994	1053	1028	4016	1060	1042	1101	1075	4278	8294
1100	976	1061	1071	1027	4135	1053	1094	1097	1097	4341	8476
1200	1030	1177	1118	1084	4409	1052	1199	1073	1250	4574	8983
1300	984	1199	1145	1096	4424	1124	1346	1142	1167	4779	9203
1400	1160	1271	1331	1320	5082	1239	1153	1254	1217	4863	9945
1500	1319	1388	1484	1437	5628	1247	1306	1497	1544	5594	11222
1600	1542	1610	1733	1704	6589	1570	1597	1516	1698	6381	12970
1700	1824	1806	1702	1718	7050	1547	1750	1675	1630	6602	13652
1800	1493	1433	1139	997	5062	1628	1551	1577	1516	6272	11334
1900	1252	1262	1201	909	4624	1356	1260	1102	905	4623	9247
2000	755	786	722	664	2927	830	651	591	585	2657	5584
2100	671	623	556	541	2391	549	545	600	582	2276	4667
2200	563	500	491	442	1996	456	780	635	390	2261	4257
2300	452	416	348	317	1533	256	260	244	172	932	2465
24-Hour Totals:					84486					83727	168213

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	715	6778	745	6595	715	13208
P.M.	1630	7067	1715	6683	1645	13706
Daily	1630	7067	1715	6683	1645	13706

COUNTY: 86
STATION: 5216
DESCRIPTION: SR 823/FLAMINGO RD (RED RD) EXT N DADE/BROWARD CL
START DATE: 04/07/2015
START TIME: 0000

	DIRECTION: N					DIRECTION: S					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	102	103	68	78	351	71	79	72	57	279	630
0100	65	56	44	36	201	53	54	31	29	167	368
0200	42	35	30	43	150	37	29	35	36	137	287
0300	33	46	44	48	171	31	22	34	38	125	296
0400	58	64	63	91	276	38	58	37	76	209	485
0500	119	155	176	247	697	86	138	161	216	601	1298
0600	306	423	438	494	1661	282	349	420	481	1532	3193
0700	488	447	392	382	1709	494	445	351	275	1565	3274
0800	376	325	407	349	1457	353	295	270	369	1287	2744
0900	389	363	294	311	1357	310	309	301	291	1211	2568
1000	293	295	281	278	1147	331	253	306	299	1189	2336
1100	330	347	309	360	1346	331	331	351	345	1358	2704
1200	343	374	354	340	1411	342	347	341	376	1406	2817
1300	389	390	394	352	1525	344	367	358	409	1478	3003
1400	356	388	367	382	1493	384	400	402	414	1600	3093
1500	407	441	421	419	1688	416	435	403	419	1673	3361
1600	470	458	476	494	1898	452	449	411	438	1750	3648
1700	455	467	433	407	1762	512	412	369	354	1647	3409
1800	464	417	419	395	1695	335	382	363	347	1427	3122
1900	415	380	316	330	1441	330	340	313	356	1339	2780
2000	327	302	262	268	1159	300	313	259	282	1154	2313
2100	325	268	207	227	1027	290	270	263	219	1042	2069
2200	199	166	159	171	695	230	185	165	119	699	1394
2300	151	134	105	107	497	148	134	114	105	501	998
24-HOUR TOTALS:					26814					25376	52190

PEAK VOLUME INFORMATION

	DIRECTION: N		DIRECTION: S		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	645	1821	645	1771	645	3592
P.M.	1600	1898	1615	1810	1615	3693
DAILY	1600	1898	630	1840	630	3707

TRUCK PERCENTAGE 3.36 3.95 3.65

CLASSIFICATION SUMMARY DATABASE

DIR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TOTTRK	TOTVOL
N	175	23752	1978	80	356	319	61	53	32	1	0	0	0	0	7	902	26814
S	206	21478	2678	127	476	224	34	94	43	1	1	1	1	0	12	1002	25376

GENERATED BY SPS 5.0.48P

867326-20100614.syn

County: 86
Station: 7326
Description: MIRAMAR PKWY, W OF FLAMINGO RD
Start Date: 06/14/2010
Start Time: 1230

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	93	68	58	24	243	82	80	77	62	301	544
0100	35	31	22	30	118	41	33	44	42	160	278
0200	29	18	18	12	77	25	20	28	23	96	173
0300	14	23	29	25	91	17	26	36	29	108	199
0400	15	29	36	28	108	29	36	35	36	136	244
0500	43	56	78	76	253	41	69	89	99	298	551
0600	157	179	236	348	920	103	142	236	223	704	1624
0700	336	384	457	513	1690	263	350	459	500	1572	3262
0800	501	463	499	472	1935	455	421	476	404	1756	3691
0900	365	351	336	340	1392	336	272	340	268	1216	2608
1000	310	278	286	299	1173	309	286	270	326	1191	2364
1100	274	275	297	307	1153	253	317	323	304	1197	2350
1200	309	350	380	343	1382	423	349	360	315	1447	2829
1300	354	329	330	299	1312	472	434	432	409	1747	3059
1400	297	311	301	274	1183	347	391	367	385	1490	2673
1500	328	318	309	319	1274	332	390	394	409	1525	2799
1600	350	349	427	391	1517	371	426	509	456	1762	3279
1700	486	496	470	485	1937	521	470	472	578	2041	3978
1800	437	402	418	399	1656	464	526	483	408	1881	3537
1900	330	351	310	275	1266	599	488	516	476	2079	3345
2000	336	236	254	213	1039	355	291	279	261	1186	2225
2100	244	178	184	195	801	215	234	208	224	881	1682
2200	212	163	143	113	631	201	183	168	126	678	1309
2300	131	99	95	89	414	159	120	92	87	458	872
24-Hour Totals:					23565					25910	49475

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	0745	1976	0745	1852	0745	3828
P.M.	1700	1937	1900	2079	1700	3978
Daily	0745	1976	1900	2079	1700	3978

COUNTY: 86
STATION: 9688
DESCRIPTION: MIRAMAR PKWY, W OF SW 160 AVE
START DATE: 11/05/2015
START TIME: 0000

	DIRECTION: E					DIRECTION: W					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	44	46	40	30	160	89	88	76	58	311	471
0100	26	27	23	11	87	59	41	41	25	166	253
0200	12	13	13	14	52	44	17	20	22	103	155
0300	17	20	16	14	67	24	19	17	41	101	168
0400	20	24	38	39	121	28	19	16	50	113	234
0500	49	61	146	157	413	34	38	48	71	191	604
0600	243	309	523	424	1499	66	104	203	265	638	2137
0700	421	430	446	396	1693	213	340	311	309	1173	2866
0800	394	313	376	355	1438	277	270	249	222	1018	2456
0900	353	372	364	344	1433	259	234	246	201	940	2373
1000	328	304	305	279	1216	201	242	220	242	905	2121
1100	268	289	275	309	1141	203	201	248	255	907	2048
1200	263	270	297	286	1116	244	312	282	319	1157	2273
1300	266	290	242	282	1080	301	328	353	357	1339	2419
1400	393	418	377	358	1546	410	477	374	393	1654	3200
1500	343	343	331	333	1350	397	392	390	421	1600	2950
1600	331	331	358	301	1321	436	420	465	457	1778	3099
1700	337	295	375	378	1385	480	484	518	496	1978	3363
1800	376	357	322	313	1368	541	415	458	454	1868	3236
1900	333	291	288	245	1157	470	460	395	398	1723	2880
2000	321	228	198	199	946	371	334	337	309	1351	2297
2100	196	171	168	156	691	291	260	289	241	1081	1772
2200	136	114	112	131	493	237	251	207	170	865	1358
2300	126	95	108	74	403	218	156	159	149	682	1085
24-HOUR TOTALS:					22176					23642	45818

PEAK VOLUME INFORMATION

	DIRECTION: E		DIRECTION: W		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	645	1721	715	1237	715	2903
P.M.	1400	1546	1715	2039	1715	3463
DAILY	630	1798	1715	2039	1715	3463

GENERATED BY SPS 5.0.49P

COUNTY: 87
STATION: 0109
DESCRIPTION: SR 25/US-27/OKEECHOBEE RD, 1000' NW NW 103 ST
START DATE: 03/18/2014
START TIME: 0000

	DIRECTION: E					DIRECTION: W					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	43	34	40	38	155	42	54	42	19	157	312
0100	35	10	26	26	97	27	30	33	19	109	206
0200	34	18	20	15	87	18	20	31	30	99	186
0300	18	29	32	44	123	36	49	83	89	257	380
0400	50	68	54	64	236	55	89	140	155	439	675
0500	85	91	116	141	433	145	217	300	387	1049	1482
0600	215	245	260	319	1039	264	339	469	494	1566	2605
0700	367	370	385	412	1534	442	369	433	430	1674	3208
0800	287	365	387	433	1472	360	346	374	397	1477	2949
0900	405	392	401	374	1572	364	358	354	337	1413	2985
1000	357	380	309	299	1345	283	304	324	343	1254	2599
1100	276	318	327	338	1259	311	300	326	341	1278	2537
1200	386	315	365	327	1393	324	331	318	351	1324	2717
1300	323	330	351	290	1294	361	353	402	383	1499	2793
1400	376	342	401	316	1435	337	343	347	364	1391	2826
1500	340	326	508	429	1603	342	359	357	342	1400	3003
1600	442	367	418	441	1668	368	382	419	384	1553	3221
1700	467	434	476	371	1748	419	479	438	433	1769	3517
1800	371	325	248	256	1200	358	428	327	332	1445	2645
1900	280	212	218	168	878	328	227	184	191	930	1808
2000	187	151	147	122	607	175	172	166	142	655	1262
2100	130	94	113	110	447	119	126	132	103	480	927
2200	133	76	108	67	384	86	98	93	74	351	735
2300	80	50	62	45	237	73	58	52	44	227	464
24-HOUR TOTALS:					22246					23796	46042

PEAK VOLUME INFORMATION

	DIRECTION: E		DIRECTION: W		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	845	1631	645	1738	700	3208
P.M.	1645	1818	1700	1769	1645	3538
DAILY	1645	1818	630	1774	1645	3538

TRUCK PERCENTAGE 16.67 15.74 16.19

CLASSIFICATION SUMMARY DATABASE

DIR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TOTTRK	TOTVOL
E	417	14651	3275	498	912	664	249	292	875	171	1	1	45	0	195	3708	22246
W	351	16053	3464	458	832	878	144	263	995	133	0	1	41	0	183	3745	23796

GENERATED BY SPS 5.0.45P

COUNTY: 87
STATION: 0200
DESCRIPTION: SR 25/US-27/OKEECHOBEE RD, 700' SE OF HIALEAH DR
START DATE: 03/25/2014
START TIME: 0000

	DIRECTION: E					DIRECTION: W					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	152	142	111	75	480	80	70	62	53	265	745
0100	75	56	58	58	247	42	46	46	40	174	421
0200	56	50	48	46	200	28	26	40	27	121	321
0300	37	42	42	44	165	22	51	60	64	197	362
0400	47	63	78	85	273	54	76	103	127	360	633
0500	103	118	161	178	560	119	177	229	272	797	1357
0600	187	261	338	329	1115	278	422	590	593	1883	2998
0700	269	406	448	433	1556	539	719	610	601	2469	4025
0800	428	444	453	462	1787	589	576	633	529	2327	4114
0900	370	397	344	367	1478	505	476	462	408	1851	3329
1000	396	347	350	374	1467	418	375	462	395	1650	3117
1100	401	397	415	402	1615	415	402	417	374	1608	3223
1200	395	406	411	363	1575	386	466	438	466	1756	3331
1300	441	461	422	401	1725	405	449	377	479	1710	3435
1400	471	431	470	497	1869	407	421	441	438	1707	3576
1500	485	460	447	492	1884	477	437	449	469	1832	3716
1600	601	543	559	624	2327	412	494	455	581	1942	4269
1700	592	665	675	568	2500	518	561	617	513	2209	4709
1800	603	581	534	532	2250	523	579	453	432	1987	4237
1900	512	483	414	375	1784	442	363	336	304	1445	3229
2000	391	364	286	290	1331	324	266	304	275	1169	2500
2100	253	277	297	262	1089	214	300	271	224	1009	2098
2200	260	272	227	204	963	209	225	193	159	786	1749
2300	274	225	182	165	846	159	143	125	97	524	1370
24-HOUR TOTALS:					31086					31778	62864

PEAK VOLUME INFORMATION

	DIRECTION: E		DIRECTION: W		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	800	1787	715	2519	715	4234
P.M.	1645	2556	1645	2277	1645	4833
DAILY	1645	2556	715	2519	1645	4833

TRUCK PERCENTAGE 7.58 6.81 7.19

CLASSIFICATION SUMMARY DATABASE

DIR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TOTTRK	TOTVOL
E	168	23355	5207	227	961	340	88	101	603	34	0	0	2	0	0	2356	31086
W	58	24757	4800	192	699	354	62	149	666	41	0	0	0	0	0	2163	31778

GENERATED BY SPS 5.0.45P

COUNTY: 87
STATION: 0528
DESCRIPTION: SR 25/US-27/OKEECHOBEE RD, 200' SE SR 826
START DATE: 04/22/2014
START TIME: 0000

	DIRECTION: E					DIRECTION: W					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	77	72	49	53	251	101	93	82	94	370	621
0100	54	41	34	27	156	48	47	55	39	189	345
0200	25	24	38	25	112	36	44	36	38	154	266
0300	40	58	73	52	223	46	49	59	45	199	422
0400	53	75	96	107	331	46	60	95	109	310	641
0500	134	163	206	242	745	135	190	272	284	881	1626
0600	325	439	558	573	1895	321	370	460	443	1594	3489
0700	595	592	524	517	2228	434	422	380	408	1644	3872
0800	577	527	486	498	2088	400	409	388	420	1617	3705
0900	466	504	464	465	1899	394	369	395	329	1487	3386
1000	445	433	438	417	1733	383	374	382	372	1511	3244
1100	389	415	422	445	1671	373	438	440	465	1716	3387
1200	432	455	441	440	1768	420	478	471	428	1797	3565
1300	408	410	415	457	1690	483	459	484	556	1982	3672
1400	478	468	477	481	1904	550	485	473	446	1954	3858
1500	516	524	544	540	2124	510	456	420	457	1843	3967
1600	533	469	557	538	2097	525	525	486	487	2023	4120
1700	523	578	585	503	2189	512	505	495	455	1967	4156
1800	557	485	444	446	1932	493	470	524	477	1964	3896
1900	417	371	342	341	1471	432	373	355	386	1546	3017
2000	323	303	304	246	1176	323	321	355	273	1272	2448
2100	262	254	267	223	1006	285	250	250	238	1023	2029
2200	221	207	181	175	784	273	236	212	167	888	1672
2300	162	100	129	92	483	185	174	126	119	604	1087
24-HOUR TOTALS:					31956					30535	62491

PEAK VOLUME INFORMATION

	DIRECTION: E		DIRECTION: W		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	645	2284	645	1679	645	3963
P.M.	1645	2224	1330	2075	1645	4223
DAILY	630	2318	1330	2075	1645	4223

TRUCK PERCENTAGE 10.35 13.71 11.99

CLASSIFICATION SUMMARY DATABASE

DIR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TOTTRK	TOTVOL
E	294	24093	4086	372	871	647	252	265	709	156	1	0	35	0	175	3308	31956
W	199	22521	3125	793	1164	606	125	256	797	421	1	0	24	0	503	4187	30535

GENERATED BY SPS 5.0.45P

COUNTY: 87
STATION: 0553
DESCRIPTION: SR 826/PALMETTO EXPWY, 600' N OKEECHOBEE RD
START DATE: 06/24/2014
START TIME: 0000

	DIRECTION: N					DIRECTION: S					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	393	260	249	209	1111	383	460	454	310	1607	2718
0100	194	141	127	109	571	334	236	200	177	947	1518
0200	127	121	144	115	507	178	165	162	126	631	1138
0300	126	113	146	139	524	131	153	116	157	557	1081
0400	165	203	265	263	896	142	217	312	289	960	1856
0500	378	464	661	779	2282	350	428	612	782	2172	4454
0600	1033	1469	1564	1520	5586	917	1212	1662	1694	5485	11071
0700	1663	1512	1601	1629	6405	1765	2030	2215	2281	8291	14696
0800	1762	1740	1604	1614	6720	1989	2214	2415	2341	8959	15679
0900	1528	1556	1586	1542	6212	2248	2413	2458	2367	9486	15698
1000	1514	1545	1614	1563	6236	2064	2058	2050	1813	7985	14221
1100	1507	1561	1546	1510	6124	1607	1576	1777	1574	6534	12658
1200	1596	1689	1686	1671	6642	1768	1566	1698	1560	6592	13234
1300	1746	1724	1728	1851	7049	1677	1809	1730	1764	6980	14029
1400	1839	1835	1867	1890	7431	1615	1847	1705	1665	6832	14263
1500	2016	2013	2095	2318	8442	1747	1751	1804	1845	7147	15589
1600	2339	2338	2497	2552	9726	1650	1558	1832	1848	6888	16614
1700	2547	2512	2393	2443	9895	1761	1745	1788	1679	6973	16868
1800	2459	2212	2293	1786	8750	1631	1685	1472	1309	6097	14847
1900	1630	1569	1426	1441	6066	1391	1237	1637	1288	5553	11619
2000	1327	1317	1384	1216	5244	1197	1228	1265	1143	4833	10077
2100	1199	1174	1014	1195	4582	1061	1052	1054	966	4133	8715
2200	920	853	881	728	3382	938	841	856	802	3437	6819
2300	616	469	383	533	2001	728	687	681	531	2627	4628
24-HOUR TOTALS:					122384					121706	244090

PEAK VOLUME INFORMATION

	DIRECTION: N		DIRECTION: S		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	745	6735	845	9460	845	15744
P.M.	1630	10108	1630	7186	1630	17294
DAILY	1630	10108	900	9486	1630	17294

GENERATED BY SPS 5.0.45P

COUNTY: 87
STATION: 0574
DESCRIPTION: SR 826/PALMETTO EXPWY, 1000' N NW 103 ST
START DATE: 06/24/2014
START TIME: 0000

	DIRECTION: N					DIRECTION: S					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	338	234	210	148	930	370	469	456	297	1592	2522
0100	161	109	94	75	439	324	239	200	182	945	1384
0200	108	100	119	97	424	167	159	164	121	611	1035
0300	110	100	133	122	465	129	149	100	146	524	989
0400	150	189	268	263	870	126	198	275	256	855	1725
0500	360	462	642	767	2231	325	395	515	640	1875	4106
0600	1017	1130	1262	1374	4783	790	1005	1410	1386	4591	9374
0700	1548	1387	1499	1470	5904	1637	1807	1806	1820	7070	12974
0800	1464	1421	1477	1456	5818	1557	1576	1840	1946	6919	12737
0900	1339	1399	1436	1373	5547	1965	2185	2336	2207	8693	14240
1000	1360	1201	1287	1303	5151	2018	2093	2014	1842	7967	13118
1100	1349	1332	1204	1350	5235	1540	1465	1706	1563	6274	11509
1200	1345	1308	1420	1417	5490	1738	1481	1592	1408	6219	11709
1300	1446	1503	1563	1509	6021	1622	1730	1610	1617	6579	12600
1400	1495	1512	1519	1621	6147	1526	1678	1580	1542	6326	12473
1500	1686	1480	1851	1756	6773	1626	1590	1725	1818	6759	13532
1600	1768	1712	1737	1755	6972	1566	1505	1743	1838	6652	13624
1700	1811	1882	1885	1707	7285	1682	1759	1836	1762	7039	14324
1800	1762	1651	1621	1535	6569	1707	1737	1439	1351	6234	12803
1900	1589	1594	1438	1480	6101	1574	1406	1203	1235	5418	11519
2000	1426	1331	1212	1196	5165	1281	1184	1257	1245	4967	10132
2100	1026	1146	1053	829	4054	1123	969	996	924	4012	8066
2200	873	770	622	471	2736	855	799	807	781	3242	5978
2300	479	425	303	468	1675	676	664	669	520	2529	4204
24-HOUR TOTALS:					102785					113892	216677

PEAK VOLUME INFORMATION

	DIRECTION: N		DIRECTION: S		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	700	5904	845	8432	845	14062
P.M.	1645	7333	1645	7115	1645	14448
DAILY	1645	7333	915	8746	1645	14448

GENERATED BY SPS 5.0.45P

COUNTY: 87
STATION: 0575
DESCRIPTION: SR 826/PALMETTO EXPWY, 1200' N NW 122 ST
START DATE: 06/17/2014
START TIME: 0000

	DIRECTION: N					DIRECTION: S					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	421	324	279	144	1168	376	599	394	282	1651	2819
0100	171	103	132	62	468	220	160	170	153	703	1171
0200	76	106	98	94	374	95	128	108	98	429	803
0300	100	88	137	127	452	79	75	100	139	393	845
0400	170	151	228	204	753	122	109	92	181	504	1257
0500	338	452	681	706	2177	195	227	232	434	1088	3265
0600	1266	1382	1505	1456	5609	484	562	855	1007	2908	8517
0700	1725	1865	1770	1742	7102	1167	1436	1483	1491	5577	12679
0800	1684	1695	1808	1738	6925	1379	1447	1587	1543	5956	12881
0900	1606	1364	1241	1273	5484	1726	2019	1993	2216	7954	13438
1000	1236	1123	1319	1259	4937	2079	1829	1749	1764	7421	12358
1100	1421	1535	1297	1409	5662	1750	1624	1518	1413	6305	11967
1200	1299	1290	1459	1334	5382	1494	1381	1404	1473	5752	11134
1300	1334	1341	1303	1356	5334	1393	1570	1562	1538	6063	11397
1400	1257	1338	1254	1255	5104	1452	1666	1605	1588	6311	11415
1500	1234	1412	1352	1590	5588	1707	1554	1846	1943	7050	12638
1600	1575	1667	1729	1867	6838	1639	1564	1571	1876	6650	13488
1700	1829	1976	2209	1931	7945	1905	1933	2084	2113	8035	15980
1800	2085	1820	1578	1434	6917	2203	1857	1735	1601	7396	14313
1900	1560	1329	1144	1058	5091	1555	1416	1382	1234	5587	10678
2000	1037	913	930	839	3719	1282	1242	1155	1124	4803	8522
2100	1022	811	839	674	3346	1094	1014	974	930	4012	7358
2200	705	499	693	585	2482	801	842	850	832	3325	5807
2300	525	512	441	363	1841	755	676	620	485	2536	4377
24-HOUR TOTALS:					100698					108409	209107

PEAK VOLUME INFORMATION

	DIRECTION: N		DIRECTION: S		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	700	7102	845	7281	830	13391
P.M.	1715	8201	1715	8333	1715	16534
DAILY	1715	8201	1715	8333	1715	16534

GENERATED BY SPS 5.0.45P

COUNTY: 87
STATION: 0585
DESCRIPTION: US 27/OKEECHOBEE RD. 1000' SE KROME AVE.
START DATE: 01/28/2014
START TIME: 0000

	DIRECTION: N					DIRECTION: S					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	15	19	12	10	56	11	15	14	8	48	104
0100	3	3	6	14	26	11	6	7	6	30	56
0200	15	11	12	9	47	6	7	7	7	27	74
0300	10	19	23	18	70	9	11	8	11	39	109
0400	18	18	33	25	94	7	21	12	29	69	163
0500	39	60	48	35	182	26	33	51	82	192	374
0600	69	56	67	65	257	84	138	178	196	596	853
0700	66	66	66	66	264	275	298	400	394	1367	1631
0800	59	61	77	76	273	396	368	310	281	1355	1628
0900	73	61	67	62	263	237	166	138	105	646	909
1000	66	71	81	82	300	106	92	104	109	411	711
1100	78	74	61	71	284	93	79	94	89	355	639
1200	81	83	88	73	325	101	81	66	76	324	649
1300	59	69	100	75	303	82	84	77	84	327	630
1400	109	88	114	96	407	55	79	70	100	304	711
1500	95	116	137	164	512	92	91	106	75	364	876
1600	164	190	219	243	816	78	82	95	97	352	1168
1700	283	285	323	317	1208	111	88	86	92	377	1585
1800	310	264	258	175	1007	99	73	77	64	313	1320
1900	121	105	89	78	393	63	55	42	48	208	601
2000	66	50	48	52	216	25	35	24	22	106	322
2100	45	51	40	33	169	18	31	34	28	111	280
2200	32	32	23	27	114	20	37	15	15	87	201
2300	33	26	17	12	88	24	18	15	22	79	167
24-HOUR TOTALS:					7674					8087	15761

PEAK VOLUME INFORMATION

	DIRECTION: N		DIRECTION: S		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	815	287	730	1558	730	1810
P.M.	1715	1235	1630	391	1715	1600
DAILY	1715	1235	730	1558	730	1810

TRUCK PERCENTAGE 19.43 15.56 17.44

CLASSIFICATION SUMMARY DATABASE

DIR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TOTTRK	TOTVOL
N	80	5024	1052	58	247	309	77	141	610	32	6	6	5	0	27	1491	7674
S	116	5646	1047	79	273	240	36	130	466	24	3	2	5	0	20	1258	8087

GENERATED BY SPS 5.0.45P

COUNTY: 87
STATION: 1190
DESCRIPTION: SR 823/RED RD, 200' S NW 173 DR
START DATE: 05/19/2015
START TIME: 0000

	DIRECTION: N					DIRECTION: S					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	80	116	82	69	347	63	76	46	40	225	572
0100	67	47	46	35	195	48	36	27	22	133	328
0200	35	32	24	24	115	27	27	27	22	103	218
0300	17	28	30	33	108	23	24	47	32	126	234
0400	43	26	36	49	154	40	47	87	102	276	430
0500	47	64	102	134	347	87	142	217	240	686	1033
0600	129	170	262	270	831	322	456	498	598	1874	2705
0700	301	349	310	368	1328	524	522	498	535	2079	3407
0800	349	378	385	395	1507	486	441	493	500	1920	3427
0900	346	301	352	300	1299	416	405	400	415	1636	2935
1000	336	331	338	363	1368	374	363	418	380	1535	2903
1100	345	371	373	387	1476	334	389	369	386	1478	2954
1200	414	408	409	402	1633	390	366	371	399	1526	3159
1300	385	424	423	421	1653	383	427	367	401	1578	3231
1400	381	407	438	445	1671	425	422	387	343	1577	3248
1500	439	453	533	540	1965	344	367	349	291	1351	3316
1600	566	562	498	530	2156	305	356	333	315	1309	3465
1700	530	531	507	569	2137	365	329	267	320	1281	3418
1800	550	557	542	550	2199	289	327	273	279	1168	3367
1900	571	513	534	433	2051	280	253	305	266	1104	3155
2000	393	418	423	354	1588	297	282	252	260	1091	2679
2100	360	354	338	273	1325	247	244	239	226	956	2281
2200	269	265	242	200	976	192	228	188	123	731	1707
2300	198	165	136	114	613	157	104	92	94	447	1060
24-HOUR TOTALS:					29042					26190	55232

PEAK VOLUME INFORMATION

	DIRECTION: N		DIRECTION: S		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	800	1507	645	2142	745	3435
P.M.	1745	2218	1345	1635	1530	3502
DAILY	1815	2220	630	2142	1530	3502

GENERATED BY SPS 5.0.48P

COUNTY: 87
STATION: 1233
DESCRIPTION: SR 860/MIAMI GARDENS DR, 200' E RED RD/NW 57 AV
START DATE: 05/06/2014
START TIME: 0000

	DIRECTION: E					DIRECTION: W					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	70	51	40	35	196	37	46	40	19	142	338
0100	40	28	26	21	115	29	24	22	9	84	199
0200	22	11	12	18	63	17	17	12	15	61	124
0300	14	5	18	21	58	13	8	20	11	52	110
0400	17	8	19	15	59	7	20	20	22	69	128
0500	21	20	30	44	115	27	41	49	74	191	306
0600	62	113	157	182	514	64	112	138	234	548	1062
0700	269	281	276	329	1155	225	178	200	214	817	1972
0800	251	273	247	228	999	231	236	251	250	968	1967
0900	222	223	218	204	867	233	219	227	248	927	1794
1000	204	211	234	206	855	232	228	244	252	956	1811
1100	225	217	234	218	894	234	221	232	258	945	1839
1200	208	219	250	259	936	240	246	224	233	943	1879
1300	264	274	233	255	1026	259	270	256	262	1047	2073
1400	238	249	229	245	961	243	276	301	281	1101	2062
1500	266	281	239	252	1038	248	255	264	318	1085	2123
1600	275	280	306	281	1142	287	320	331	298	1236	2378
1700	306	302	303	259	1170	339	306	376	346	1367	2537
1800	245	229	270	234	978	304	301	290	301	1196	2174
1900	237	203	196	201	837	283	259	233	254	1029	1866
2000	208	182	218	210	818	236	223	226	226	911	1729
2100	208	168	151	120	647	175	182	182	186	725	1372
2200	125	141	117	144	527	166	132	131	119	548	1075
2300	141	127	122	103	493	106	91	82	82	361	854
24-HOUR TOTALS:					16463					17309	33772

PEAK VOLUME INFORMATION

	DIRECTION: E		DIRECTION: W		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	700	1155	815	970	745	2032
P.M.	1630	1195	1700	1367	1700	2537
DAILY	1630	1195	1700	1367	1700	2537

TRUCK PERCENTAGE 4.00 4.39 4.20

CLASSIFICATION SUMMARY DATABASE

DIR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TOTTRK	TOTVOL
E	81	13785	1884	163	253	80	55	51	24	31	0	0	1	0	55	658	16463
W	51	14148	2206	123	343	46	30	42	27	145	0	0	4	0	144	760	17309

GENERATED BY SPS 5.0.45P

COUNTY: 87
STATION: 2500
DESCRIPTION: SR 93/I-75, 1000' W PALMETTO EXPWY/SR 826
START DATE: 05/13/2014
START TIME: 0000

	DIRECTION: E					DIRECTION: W					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	151	145	98	90	484	145	137	136	105	523	1007
0100	89	80	73	52	294	100	105	89	70	364	658
0200	61	55	50	62	228	76	66	71	80	293	521
0300	50	74	99	97	320	77	88	119	89	373	693
0400	91	131	162	214	598	96	111	131	175	513	1111
0500	242	379	506	614	1741	209	251	348	357	1165	2906
0600	725	1121	1417	1555	4818	429	527	722	699	2377	7195
0700	1605	1804	1692	1641	6742	780	888	996	1011	3675	10417
0800	1606	1480	1449	1480	6015	874	890	852	850	3466	9481
0900	1487	1340	1296	1148	5271	713	736	658	637	2744	8015
1000	1075	1027	951	858	3911	646	609	671	615	2541	6452
1100	851	863	851	777	3342	643	716	707	737	2803	6145
1200	816	791	756	739	3102	777	767	759	743	3046	6148
1300	815	800	845	836	3296	800	852	900	857	3409	6705
1400	847	826	866	867	3406	876	982	1049	1066	3973	7379
1500	821	870	912	824	3427	1084	1253	1340	1358	5035	8462
1600	858	880	908	857	3503	1393	1489	1485	1537	5904	9407
1700	950	1053	965	874	3842	1662	1811	1740	1676	6889	10731
1800	828	867	839	740	3274	1497	1325	1333	1354	5509	8783
1900	564	603	491	496	2154	1248	1247	1201	1142	4838	6992
2000	680	603	471	487	2241	1037	848	840	900	3625	5866
2100	456	451	442	402	1751	874	867	805	737	3283	5034
2200	380	364	312	263	1319	716	735	561	548	2560	3879
2300	237	213	210	152	812	535	447	396	373	1751	2563
24-HOUR TOTALS:					65891					70659	136550

PEAK VOLUME INFORMATION

	DIRECTION: E		DIRECTION: W		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	715	6743	730	3771	715	10512
P.M.	1700	3842	1700	6889	1700	10731
DAILY	715	6743	1700	6889	1700	10731

GENERATED BY SPS 5.0.45P

COUNTY: 87
STATION: 2501
DESCRIPTION: SR 93/I-75, 200' S MIAMI GARDENS DR/SR 860
START DATE: 05/13/2014
START TIME: 0000

	DIRECTION: N					DIRECTION: S					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	199	172	139	101	611	131	123	91	90	435	1046
0100	111	88	78	80	357	73	83	64	39	259	616
0200	76	58	64	66	264	58	46	48	54	206	470
0300	81	83	81	92	337	47	74	88	99	308	645
0400	102	115	132	129	478	81	115	151	170	517	995
0500	139	189	248	268	844	234	351	488	570	1643	2487
0600	327	433	520	528	1808	642	1043	1328	1476	4489	6297
0700	700	754	885	960	3299	1655	1737	1781	1716	6889	10188
0800	797	802	770	651	3020	1621	1632	1601	1381	6235	9255
0900	559	622	666	530	2377	1157	1143	1108	1017	4425	6802
1000	591	546	563	593	2293	1139	1115	1050	953	4257	6550
1100	578	614	649	701	2542	973	955	940	903	3771	6313
1200	758	758	811	791	3118	930	876	878	840	3524	6642
1300	794	932	921	851	3498	875	912	925	920	3632	7130
1400	946	948	1011	1085	3990	877	885	897	845	3504	7494
1500	1185	1299	1385	1390	5259	794	895	887	809	3385	8644
1600	1422	1522	1504	1578	6026	877	927	874	953	3631	9657
1700	1824	1893	1854	1830	7401	963	1046	987	936	3932	11333
1800	1671	1409	1391	1256	5727	853	825	777	683	3138	8865
1900	1064	1112	963	874	4013	468	482	436	435	1821	5834
2000	842	723	754	591	2910	706	544	424	425	2099	5009
2100	505	472	571	529	2077	423	420	412	377	1632	3709
2200	517	499	377	375	1768	365	370	299	261	1295	3063
2300	341	316	253	194	1104	252	214	182	130	778	1882
24-HOUR TOTALS:					65121					65805	130926

PEAK VOLUME INFORMATION

	DIRECTION: N		DIRECTION: S		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	730	3444	700	6889	715	10251
P.M.	1700	7401	1645	3949	1700	11333
DAILY	1700	7401	700	6889	1700	11333

GENERATED BY SPS 5.0.45P

COUNTY: 87
STATION: 2503
DESCRIPTION: SR 93/I-75, 200' N FLA TPK/HEFT/SR 821
START DATE: 05/13/2014
START TIME: 0000

	DIRECTION: N					DIRECTION: S					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	245	203	178	146	772	201	146	141	108	596	1368
0100	123	118	91	89	421	99	91	82	56	328	749
0200	84	87	73	76	320	65	66	61	62	254	574
0300	85	119	106	120	430	71	101	118	117	407	837
0400	136	144	194	186	660	107	146	196	195	644	1304
0500	201	309	422	475	1407	298	434	606	705	2043	3450
0600	627	808	1045	1088	3568	896	1357	1731	1880	5864	9432
0700	1193	1455	1567	1476	5691	2238	2339	2435	2393	9405	15096
0800	1496	1463	1496	1254	5709	2225	2108	1967	1750	8050	13759
0900	1087	1037	1006	952	4082	1568	1563	1468	1295	5894	9976
1000	890	900	907	797	3494	1287	1207	1128	1020	4642	8136
1100	839	870	868	850	3427	1033	1013	939	942	3927	7354
1200	938	940	977	913	3768	989	937	951	900	3777	7545
1300	959	1054	1088	989	4090	988	1048	1002	892	3930	8020
1400	1040	1144	1205	1182	4571	1006	1076	1106	1000	4188	8759
1500	1243	1471	1526	1612	5852	1041	1139	1164	1115	4459	10311
1600	1582	1846	1819	1980	7227	1242	1101	1284	1436	5063	12290
1700	2155	2267	2131	2141	8694	1494	1438	1401	1329	5662	14356
1800	2145	1970	1807	1682	7604	1198	1197	1055	1049	4499	12103
1900	1420	1460	1330	1099	5309	932	882	728	733	3275	8584
2000	1026	823	875	811	3535	696	681	596	594	2567	6102
2100	713	721	704	676	2814	595	614	561	506	2276	5090
2200	650	600	514	441	2205	485	457	347	400	1689	3894
2300	390	355	279	258	1282	406	271	237	187	1101	2383
24-HOUR TOTALS:					86932					84540	171472

PEAK VOLUME INFORMATION

	DIRECTION: N		DIRECTION: S		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	730	6002	700	9405	715	15386
P.M.	1700	8694	1645	5769	1700	14356
DAILY	1700	8694	700	9405	715	15386

GENERATED BY SPS 5.0.45P

COUNTY: 87
STATION: 2510
DESCRIPTION: SR 924/GRATIGNY PKWY, 200' W SR 9/NW 27 AV
START DATE: 07/08/2014
START TIME: 0000

	DIRECTION: E					DIRECTION: W					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	64	42	51	42	199	39	35	47	34	155	354
0100	23	28	26	23	100	20	30	17	17	84	184
0200	21	17	24	20	82	22	35	11	24	92	174
0300	39	20	29	22	110	10	18	20	29	77	187
0400	23	36	42	53	154	32	27	43	56	158	312
0500	41	58	84	113	296	41	60	81	96	278	574
0600	167	261	348	357	1133	88	159	197	210	654	1787
0700	449	577	566	593	2185	187	270	327	375	1159	3344
0800	600	495	512	464	2071	307	326	311	323	1267	3338
0900	521	499	441	374	1835	265	288	253	249	1055	2890
1000	374	333	318	312	1337	266	249	218	238	971	2308
1100	240	312	357	326	1235	243	256	277	299	1075	2310
1200	321	389	306	288	1304	254	284	278	275	1091	2395
1300	290	292	284	327	1193	229	230	280	256	995	2188
1400	287	316	312	339	1254	306	338	296	340	1280	2534
1500	307	350	353	359	1369	343	355	383	362	1443	2812
1600	333	314	403	339	1389	413	409	510	483	1815	3204
1700	401	403	443	391	1638	527	549	524	508	2108	3746
1800	356	380	335	319	1390	425	417	405	347	1594	2984
1900	282	280	242	201	1005	274	279	241	178	972	1977
2000	181	172	208	165	726	176	145	164	156	641	1367
2100	180	138	109	102	529	136	147	114	108	505	1034
2200	130	109	120	93	452	100	88	87	80	355	807
2300	84	98	67	71	320	83	50	49	41	223	543
24-HOUR TOTALS:					23306					20047	43353

PEAK VOLUME INFORMATION

	DIRECTION: E		DIRECTION: W		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	715	2336	730	1335	715	3615
P.M.	1700	1638	1700	2108	1700	3746
DAILY	715	2336	1700	2108	1700	3746

GENERATED BY SPS 5.0.45P

COUNTY: 87
STATION: 2511
DESCRIPTION: SR 924/GRATIGNY PKWY, 200' E NW 67 AV
START DATE: 05/13/2014
START TIME: 0000

	DIRECTION: E					DIRECTION: W					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	99	77	67	57	300	49	42	29	32	152	452
0100	52	37	38	40	167	31	26	30	25	112	279
0200	11	23	19	27	80	16	16	33	19	84	164
0300	13	17	19	19	68	22	28	22	27	99	167
0400	28	21	21	33	103	29	37	41	56	163	266
0500	38	49	64	90	241	67	64	128	102	361	602
0600	111	224	277	436	1048	118	224	313	347	1002	2050
0700	444	650	758	806	2658	389	395	477	498	1759	4417
0800	877	905	964	972	3718	512	520	476	448	1956	5674
0900	840	758	719	703	3020	353	368	355	328	1404	4424
1000	614	568	531	474	2187	272	300	335	305	1212	3399
1100	403	431	388	428	1650	311	324	373	407	1415	3065
1200	350	360	373	302	1385	369	395	401	373	1538	2923
1300	353	329	373	354	1409	404	415	403	416	1638	3047
1400	315	359	380	394	1448	428	504	458	523	1913	3361
1500	372	352	372	362	1458	511	590	626	695	2422	3880
1600	365	395	379	431	1570	703	735	774	898	3110	4680
1700	400	455	450	416	1721	956	973	881	920	3730	5451
1800	458	453	470	378	1759	902	714	629	536	2781	4540
1900	329	326	341	268	1264	445	460	337	300	1542	2806
2000	243	211	210	183	847	292	291	247	241	1071	1918
2100	201	197	169	156	723	242	220	175	164	801	1524
2200	145	144	125	119	533	147	136	154	104	541	1074
2300	104	102	94	81	381	86	75	51	48	260	641
24-HOUR TOTALS:					29738					31066	60804

PEAK VOLUME INFORMATION

	DIRECTION: E		DIRECTION: W		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	800	3718	730	2007	800	5674
P.M.	1745	1797	1700	3730	1715	5455
DAILY	800	3718	1700	3730	800	5674
TRUCK PERCENTAGE	10.27		9.81		10.04	

CLASSIFICATION SUMMARY DATABASE

DIR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TOTTRK	TOTVOL
E	313	21634	4612	472	1064	511	112	268	522	66	22	3	13	0	126	3053	29738
W	208	23295	4374	445	935	516	61	355	633	60	24	3	17	0	140	3049	31066

GENERATED BY SPS 5.0.45P

COUNTY: 87
STATION: 2512
DESCRIPTION: SR 924/GRATIGNY PKWY, 1000' W SR 953/LEJEUNE RD
START DATE: 05/13/2014
START TIME: 0000

	DIRECTION: E					DIRECTION: W					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	52	43	27	30	152	28	28	23	25	104	256
0100	26	24	15	15	80	26	28	16	20	90	170
0200	20	19	19	11	69	11	11	18	16	56	125
0300	16	17	18	26	77	20	17	22	15	74	151
0400	26	28	28	43	125	17	24	37	44	122	247
0500	63	47	88	81	279	43	48	101	91	283	562
0600	123	258	294	380	1055	100	164	258	255	777	1832
0700	418	496	555	584	2053	270	282	354	370	1276	3329
0800	467	495	445	467	1874	389	430	360	350	1529	3403
0900	401	358	351	297	1407	273	301	278	278	1130	2537
1000	270	257	247	265	1039	220	259	272	239	990	2029
1100	243	255	309	278	1085	247	277	313	331	1168	2253
1200	272	274	298	281	1125	298	294	310	320	1222	2347
1300	284	291	291	334	1200	309	336	345	330	1320	2520
1400	302	358	323	364	1347	334	371	375	418	1498	2845
1500	365	402	435	420	1622	423	431	502	533	1889	3511
1600	434	474	479	525	1912	518	595	638	693	2444	4356
1700	651	654	619	577	2501	729	763	719	819	3030	5531
1800	537	475	444	355	1811	714	588	527	409	2238	4049
1900	302	271	247	203	1023	351	360	279	258	1248	2271
2000	206	159	145	159	669	218	194	207	193	812	1481
2100	159	131	103	108	501	198	171	130	131	630	1131
2200	99	83	77	63	322	123	110	131	101	465	787
2300	60	55	33	47	195	66	65	31	38	200	395
24-HOUR TOTALS:					23523					24595	48118

PEAK VOLUME INFORMATION

	DIRECTION: E		DIRECTION: W		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	715	2102	745	1549	730	3644
P.M.	1700	2501	1700	3030	1700	5531
DAILY	1700	2501	1700	3030	1700	5531

TRUCK PERCENTAGE 10.09 10.24 10.17

CLASSIFICATION SUMMARY DATABASE

DIR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TOTTRK	TOTVOL
E	196	17420	3482	370	828	369	68	235	444	37	18	2	3	0	51	2374	23523
W	201	18416	3383	387	889	418	61	263	438	31	24	2	5	0	77	2518	24595

GENERATED BY SPS 5.0.45P

COUNTY: 87
STATION: 2514
DESCRIPTION: SR 823/NW 57 AV, 550' N SR 860/NW 183 ST
START DATE: 05/12/2015
START TIME: 0000

	DIRECTION: N					DIRECTION: S					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	88	91	51	49	279	81	51	61	34	227	506
0100	67	52	38	40	197	39	41	26	27	133	330
0200	35	33	29	25	122	18	20	23	27	88	210
0300	24	26	30	25	105	18	24	25	33	100	205
0400	30	23	33	41	127	30	41	57	77	205	332
0500	38	51	90	102	281	93	130	203	224	650	931
0600	115	178	232	285	810	271	421	518	572	1782	2592
0700	300	355	407	380	1442	601	593	621	563	2378	3820
0800	352	317	327	275	1271	491	506	553	501	2051	3322
0900	281	234	241	284	1040	401	393	416	392	1602	2642
1000	232	228	238	275	973	344	349	341	278	1312	2285
1100	236	304	278	277	1095	309	311	340	318	1278	2373
1200	312	304	333	303	1252	313	302	278	316	1209	2461
1300	318	351	324	365	1358	305	301	341	372	1319	2677
1400	368	381	406	394	1549	431	378	347	320	1476	3025
1500	390	397	431	423	1641	325	343	341	330	1339	2980
1600	405	454	482	470	1811	332	303	347	343	1325	3136
1700	539	560	559	527	2185	390	390	400	384	1564	3749
1800	575	545	544	536	2200	351	385	370	340	1446	3646
1900	492	453	435	420	1800	354	311	313	261	1239	3039
2000	345	372	350	334	1401	293	265	265	244	1067	2468
2100	339	348	328	282	1297	230	256	234	216	936	2233
2200	296	249	228	179	952	225	177	139	131	672	1624
2300	169	152	148	110	579	122	127	112	82	443	1022
24-HOUR TOTALS:					25767					25841	51608

PEAK VOLUME INFORMATION

	DIRECTION: N		DIRECTION: S		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	715	1494	645	2387	700	3820
P.M.	1715	2221	1700	1564	1700	3749
DAILY	1715	2221	645	2387	700	3820

GENERATED BY SPS 5.0.48P

COUNTY: 87
STATION: 2515
DESCRIPTION: SR 823/NW 57 AV, 200' S MIAMI-DADE/BROWARD CO LINE
START DATE: 08/18/2015
START TIME: 0000

	DIRECTION: N					DIRECTION: S					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	72	42	37	41	192	86	67	67	64	284	476
0100	31	32	24	10	97	61	42	67	43	213	310
0200	33	29	30	16	108	26	20	32	21	99	207
0300	26	30	36	17	109	32	33	37	28	130	239
0400	14	10	36	35	95	19	21	25	46	111	206
0500	35	75	106	167	383	69	96	105	147	417	800
0600	150	202	287	302	941	176	235	294	307	1012	1953
0700	307	391	500	503	1701	488	504	489	523	2004	3705
0800	397	466	487	364	1714	468	448	463	443	1822	3536
0900	317	266	240	208	1031	385	278	339	261	1263	2294
1000	234	249	264	279	1026	268	241	255	276	1040	2066
1100	200	233	205	207	845	268	265	261	267	1061	1906
1200	224	284	281	276	1065	272	310	298	296	1176	2241
1300	243	257	274	326	1100	272	279	276	268	1095	2195
1400	271	268	316	261	1116	301	331	293	254	1179	2295
1500	298	279	308	323	1208	293	331	346	324	1294	2502
1600	363	310	366	400	1439	411	431	384	393	1619	3058
1700	401	430	467	460	1758	418	496	472	450	1836	3594
1800	469	455	428	318	1670	398	455	385	364	1602	3272
1900	295	293	264	242	1094	295	303	280	284	1162	2256
2000	247	231	246	261	985	254	269	237	260	1020	2005
2100	203	192	169	168	732	231	210	197	189	827	1559
2200	124	180	151	117	572	222	124	183	148	677	1249
2300	118	85	83	77	363	129	73	143	101	446	809
24-HOUR TOTALS:					21344					23389	44733

PEAK VOLUME INFORMATION

	DIRECTION: N		DIRECTION: S		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	730	1866	700	2004	730	3794
P.M.	1730	1851	1700	1836	1715	3642
DAILY	730	1866	700	2004	730	3794
TRUCK PERCENTAGE	4.20		6.93		5.63	

CLASSIFICATION SUMMARY DATABASE

DIR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TOTTRK	TOTVOL
N	63	17732	2565	105	343	101	74	94	83	76	1	0	19	0	88	896	21344
S	126	18873	2677	174	339	153	47	620	194	77	0	0	18	0	91	1622	23389

GENERATED BY SPS 5.0.45P

COUNTY: 87
STATION: 2516
DESCRIPTION: SR 860/MIAMI GARDENS DR, 200' W SR 823/RED RD
START DATE: 07/08/2014
START TIME: 0000

	DIRECTION: E					DIRECTION: W					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	74	63	36	34	207	63	60	36	38	197	404
0100	32	31	16	11	90	27	33	24	17	101	191
0200	15	16	15	18	64	13	14	19	11	57	121
0300	12	9	5	10	36	10	10	9	5	34	70
0400	12	9	22	19	62	7	5	18	14	44	106
0500	23	25	50	95	193	20	20	35	53	128	321
0600	73	103	122	151	449	50	68	91	130	339	788
0700	186	235	264	241	926	114	131	157	168	570	1496
0800	246	274	246	283	1049	206	186	221	241	854	1903
0900	268	234	229	222	953	246	213	242	249	950	1903
1000	239	255	239	243	976	245	254	242	245	986	1962
1100	258	258	279	295	1090	256	262	258	282	1058	2148
1200	290	266	267	268	1091	264	244	305	269	1082	2173
1300	286	250	285	255	1076	281	263	250	283	1077	2153
1400	261	267	283	244	1055	265	273	257	269	1064	2119
1500	246	266	244	249	1005	249	263	282	284	1078	2083
1600	270	250	269	277	1066	260	297	320	333	1210	2276
1700	283	288	268	311	1150	314	372	346	353	1385	2535
1800	301	277	311	314	1203	347	351	319	335	1352	2555
1900	258	254	266	239	1017	281	277	231	249	1038	2055
2000	238	238	205	201	882	257	275	215	211	958	1840
2100	207	200	205	192	804	180	232	176	163	751	1555
2200	158	142	128	103	531	139	168	136	116	559	1090
2300	103	92	73	74	342	96	87	72	75	330	672
24-HOUR TOTALS:					17317					17202	34519

PEAK VOLUME INFORMATION

	DIRECTION: E		DIRECTION: W		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	815	1071	845	942	815	1965
P.M.	1800	1203	1715	1418	1715	2586
DAILY	1800	1203	1715	1418	1715	2586

GENERATED BY SPS 5.0.45P

COUNTY: 87
STATION: 2517
DESCRIPTION: SR 860/MIAMI GARDENS DR, 200' W NW 67 AV
START DATE: 07/08/2014
START TIME: 0000

	DIRECTION: E					DIRECTION: W					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	77	60	53	37	227	86	79	66	51	282	509
0100	36	37	30	22	125	45	41	31	29	146	271
0200	13	14	20	15	62	19	24	18	24	85	147
0300	18	12	12	12	54	18	10	12	15	55	109
0400	15	15	41	33	104	10	13	20	26	69	173
0500	49	59	71	103	282	24	23	44	60	151	433
0600	100	168	200	229	697	59	84	107	127	377	1074
0700	267	305	353	320	1245	152	175	191	211	729	1974
0800	361	358	345	318	1382	253	238	276	251	1018	2400
0900	288	299	299	277	1163	259	235	217	208	919	2082
1000	283	283	296	259	1121	223	233	202	237	895	2016
1100	269	280	274	291	1114	236	255	249	278	1018	2132
1200	288	267	216	298	1069	244	260	276	302	1082	2151
1300	294	306	295	307	1202	275	313	265	265	1118	2320
1400	270	254	288	281	1093	261	313	281	272	1127	2220
1500	275	271	238	283	1067	254	307	310	366	1237	2304
1600	294	295	283	324	1196	328	368	359	390	1445	2641
1700	331	348	342	411	1432	408	426	416	428	1678	3110
1800	417	327	321	356	1421	411	417	448	372	1648	3069
1900	377	339	337	260	1313	383	372	373	307	1435	2748
2000	248	246	240	231	965	338	302	295	265	1200	2165
2100	218	248	241	233	940	275	305	257	272	1109	2049
2200	198	170	140	125	633	235	225	195	153	808	1441
2300	130	126	101	78	435	129	141	114	109	493	928
24-HOUR TOTALS:					20342					20124	40466

PEAK VOLUME INFORMATION

	DIRECTION: E		DIRECTION: W		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	730	1392	815	1024	800	2400
P.M.	1715	1518	1745	1704	1715	3199
DAILY	1715	1518	1745	1704	1715	3199

GENERATED BY SPS 5.0.45P

COUNTY: 87
STATION: 2518
DESCRIPTION: SR 860/MIAMI GARDENS DR, 800' W OF NW 87 AV
START DATE: 06/17/2014
START TIME: 0000

	DIRECTION: E					DIRECTION: W					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	83	83	62	54	282	40	39	28	32	139	421
0100	45	33	31	25	134	29	10	17	13	69	203
0200	22	20	16	17	75	7	13	14	13	47	122
0300	11	15	19	17	62	16	13	24	16	69	131
0400	11	11	15	22	59	20	32	36	57	145	204
0500	24	26	30	45	125	44	71	128	154	397	522
0600	44	54	72	99	269	162	239	406	435	1242	1511
0700	94	104	147	183	528	458	584	691	654	2387	2915
0800	204	189	207	244	844	571	535	563	519	2188	3032
0900	195	187	185	202	769	406	348	338	303	1395	2164
1000	206	186	156	190	738	255	271	258	252	1036	1774
1100	192	186	193	224	795	212	219	215	222	868	1663
1200	221	209	255	240	925	203	204	209	203	819	1744
1300	208	215	250	191	864	245	211	252	213	921	1785
1400	224	264	261	321	1070	217	228	226	219	890	1960
1500	269	302	340	365	1276	226	228	229	221	904	2180
1600	428	450	429	503	1810	195	220	228	224	867	2677
1700	600	639	631	678	2548	241	279	252	260	1032	3580
1800	630	640	544	481	2295	297	263	243	260	1063	3358
1900	468	427	373	350	1618	246	252	219	252	969	2587
2000	342	336	309	285	1272	213	185	207	186	791	2063
2100	291	286	322	270	1169	151	153	135	126	565	1734
2200	236	261	244	161	902	90	92	61	68	311	1213
2300	157	158	108	129	552	45	58	59	141	303	855
24-HOUR TOTALS:					20981					19417	40398

PEAK VOLUME INFORMATION

	DIRECTION: E		DIRECTION: W		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	800	844	715	2500	730	3174
P.M.	1730	2579	1715	1088	1715	3666
DAILY	1730	2579	715	2500	1715	3666

TRUCK PERCENTAGE 2.35 2.33 2.34

CLASSIFICATION SUMMARY DATABASE

DIR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TOTTRK	TOTVOL
E	77	17526	2885	31	371	25	3	34	29	0	0	0	0	0	0	493	20981
W	56	16452	2456	32	315	27	0	41	38	0	0	0	0	0	0	453	19417

GENERATED BY SPS 5.0.45P

COUNTY: 87
STATION: 2536
DESCRIPTION: SR 25/US-27/OKEECHOBEE RD, 1000' NB RAMP TO HEFT
START DATE: 05/06/2014
START TIME: 0000

	DIRECTION: E					DIRECTION: W					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	23	28	32	33	116	34	30	20	25	109	225
0100	29	26	38	23	116	18	19	30	25	92	208
0200	28	48	32	34	142	17	25	26	29	97	239
0300	50	71	56	55	232	35	53	40	64	192	424
0400	37	64	105	111	317	72	79	82	102	335	652
0500	114	176	211	267	768	118	108	107	142	475	1243
0600	265	326	383	261	1235	164	177	181	242	764	1999
0700	315	296	289	287	1187	219	222	242	206	889	2076
0800	288	295	255	259	1097	228	242	197	205	872	1969
0900	230	234	215	230	909	175	134	171	138	618	1527
1000	203	206	229	219	857	141	160	132	159	592	1449
1100	193	218	184	254	849	162	145	162	145	614	1463
1200	239	233	221	236	929	145	152	174	155	626	1555
1300	240	219	267	224	950	156	169	146	201	672	1622
1400	235	187	228	205	855	186	197	173	210	766	1621
1500	227	228	205	190	850	245	250	247	284	1026	1876
1600	216	199	219	212	846	298	287	383	353	1321	2167
1700	230	189	189	165	773	342	372	318	253	1285	2058
1800	180	161	144	147	632	253	276	258	228	1015	1647
1900	152	134	103	91	480	227	164	142	118	651	1131
2000	80	70	79	74	303	101	98	73	90	362	665
2100	79	74	74	73	300	83	88	96	93	360	660
2200	78	48	51	34	211	66	58	59	50	233	444
2300	59	54	45	49	207	64	31	48	36	179	386
24-HOUR TOTALS:					15161					14145	29306

PEAK VOLUME INFORMATION

	DIRECTION: E		DIRECTION: W		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	700	1187	645	925	645	2086
P.M.	1245	962	1630	1450	1630	2300
DAILY	615	1285	1630	1450	1630	2300

TRUCK PERCENTAGE 21.86 22.30 22.07

CLASSIFICATION SUMMARY DATABASE

DIR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TOTTRK	TOTVOL
E	45	9474	2245	373	1169	424	264	547	403	79	19	0	36	0	83	3314	15161
W	129	8745	1999	416	945	359	107	295	858	66	68	23	18	0	117	3155	14145

GENERATED BY SPS 5.0.45P

COUNTY: 87
STATION: 5252
DESCRIPTION: SR 25/US-27/OKEECHOBEE RD, 200' SE W 12 AV(HIALEAH
START DATE: 04/01/2014
START TIME: 0000

	DIRECTION: N					DIRECTION: S					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	101	83	80	62	326	118	129	80	77	404	730
0100	59	56	28	18	161	68	47	58	39	212	373
0200	35	29	30	32	126	28	58	38	44	168	294
0300	43	46	64	58	211	46	49	47	55	197	408
0400	67	97	108	99	371	50	77	105	96	328	699
0500	175	192	302	314	983	108	143	236	227	714	1697
0600	380	577	623	691	2271	270	348	492	486	1596	3867
0700	856	834	764	818	3272	457	490	523	582	2052	5324
0800	721	772	772	682	2947	552	544	534	521	2151	5098
0900	634	674	550	551	2409	489	378	462	460	1789	4198
1000	512	547	535	516	2110	447	397	495	472	1811	3921
1100	518	515	499	525	2057	433	459	519	479	1890	3947
1200	493	513	520	535	2061	507	451	492	446	1896	3957
1300	533	552	569	569	2223	459	466	462	463	1850	4073
1400	566	565	573	615	2319	582	607	570	580	2339	4658
1500	578	571	581	609	2339	522	601	545	623	2291	4630
1600	571	637	538	636	2382	665	662	658	696	2681	5063
1700	721	715	701	663	2800	593	745	659	684	2681	5481
1800	644	586	610	553	2393	565	618	608	510	2301	4694
1900	511	565	424	437	1937	535	447	406	385	1773	3710
2000	389	399	348	358	1494	422	340	335	328	1425	2919
2100	351	325	364	310	1350	279	328	299	278	1184	2534
2200	312	287	280	184	1063	271	296	249	215	1031	2094
2300	225	164	138	111	638	248	199	182	157	786	1424
24-HOUR TOTALS:					40243					35550	75793

PEAK VOLUME INFORMATION

	DIRECTION: N		DIRECTION: S		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	700	3272	745	2212	700	5324
P.M.	1700	2800	1645	2693	1700	5481
DAILY	700	3272	1645	2693	1700	5481

GENERATED BY SPS 5.0.45P

COUNTY: 87
STATION: 7036
DESCRIPTION: NW 67TH AVE N OF NW 174TH LN
START DATE: 01/20/2015
START TIME: 0000

	DIRECTION: N					DIRECTION: S					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	50	49	41	36	176	58	58	51	45	212	388
0100	33	39	21	22	115	29	36	27	25	117	232
0200	15	18	17	19	69	15	17	16	13	61	130
0300	14	14	16	20	64	14	15	15	16	60	124
0400	25	20	28	46	119	15	24	22	29	90	209
0500	45	71	100	112	328	42	55	70	83	250	578
0600	142	245	270	346	1003	121	196	216	243	776	1779
0700	331	321	304	311	1267	285	267	283	294	1129	2396
0800	259	273	299	264	1095	293	297	287	258	1135	2230
0900	247	288	270	258	1063	252	233	234	235	954	2017
1000	271	257	242	255	1025	238	237	209	229	913	1938
1100	258	260	223	265	1006	228	243	239	247	957	1963
1200	270	251	248	285	1054	246	264	309	276	1095	2149
1300	254	271	274	238	1037	291	275	303	277	1146	2183
1400	279	240	313	285	1117	273	285	292	329	1179	2296
1500	299	306	297	334	1236	317	368	332	337	1354	2590
1600	293	311	311	328	1243	319	365	334	355	1373	2616
1700	333	343	362	345	1383	368	433	370	409	1580	2963
1800	316	339	332	332	1319	374	416	350	375	1515	2834
1900	304	290	282	262	1138	342	339	349	314	1344	2482
2000	287	245	222	221	975	299	281	262	244	1086	2061
2100	222	211	204	173	810	241	259	231	185	916	1726
2200	164	134	131	89	518	184	169	171	143	667	1185
2300	94	80	77	74	325	111	100	92	78	381	706
24-HOUR TOTALS:					19485					20290	39775

PEAK VOLUME INFORMATION

	DIRECTION: N		DIRECTION: S		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	645	1302	745	1171	700	2396
P.M.	1700	1383	1715	1586	1700	2963
DAILY	1700	1383	1715	1586	1700	2963

TRUCK PERCENTAGE 2.54 5.14 3.86

CLASSIFICATION SUMMARY DATABASE

DIR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TOTTRK	TOTVOL
N	35	15527	3429	76	356	15	0	18	14	9	2	1	3	0	0	494	19485
S	85	15911	3251	107	409	409	0	21	49	41	1	0	6	0	0	1043	20290

GENERATED BY SPS 5.0.45P

County: 87
Station: 7037
Description: NW 154TH STREET E OF NW 82ND AVE
Start Date: 01/20/2015
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	24	23	13	13	73	55	31	20	20	126	199
0100	6	6	13	9	34	12	12	12	15	51	85
0200	3	8	0	6	17	12	4	8	3	27	44
0300	3	5	17	14	39	7	4	8	6	25	64
0400	10	13	15	21	59	8	3	4	8	23	82
0500	31	54	64	70	219	4	13	16	27	60	279
0600	97	152	228	246	723	34	55	85	169	343	1066
0700	209	149	125	191	674	216	142	155	165	678	1352
0800	193	135	173	217	718	173	159	166	146	644	1362
0900	207	253	219	223	902	146	166	131	114	557	1459
1000	196	163	182	189	730	131	116	116	125	488	1218
1100	156	183	174	183	696	143	169	142	138	592	1288
1200	180	172	183	188	723	135	160	164	174	633	1356
1300	201	165	202	200	768	166	184	200	205	755	1523
1400	197	241	260	222	920	204	218	217	226	865	1785
1500	204	221	229	213	867	307	257	227	222	1013	1880
1600	195	196	189	193	773	245	237	244	264	990	1763
1700	228	278	230	215	951	285	281	281	285	1132	2083
1800	252	236	218	241	947	299	307	254	275	1135	2082
1900	183	183	175	143	684	249	234	221	221	925	1609
2000	163	159	106	104	532	205	186	188	146	725	1257
2100	92	95	89	81	357	146	136	137	104	523	880
2200	73	56	63	43	235	110	87	92	61	350	585
2300	52	30	24	22	128	58	58	56	33	205	333
24-Hour Totals:					12769					12865	25634

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	0845	896	0700	678	0845	1485
P.M.	1715	975	1730	1172	1715	2121
Daily	1715	975	1730	1172	1715	2121

Truck Percentage 2.63 3.60 3.12

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
E	25	10240	2168	60	237	18	5	15	0	1	0	0	0	0	0	336	12769
W	17	9636	2749	54	364	17	2	23	2	0	0	0	1	0	0	463	12865

Generated by SPS 5.0.45

COUNTY: 87
STATION: 7041
DESCRIPTION: W 68TH ST/NW 122ND ST 200 FT EAST OF W 26TH DRIVE
START DATE: 10/22/2014
START TIME: 0000

	DIRECTION: E					DIRECTION: W					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	47	35	28	19	129	40	33	25	22	120	249
0100	20	16	19	22	77	27	15	14	13	69	146
0200	13	18	12	11	54	12	15	8	14	49	103
0300	15	15	13	12	55	19	18	17	18	72	127
0400	17	13	29	19	78	15	21	29	33	98	176
0500	34	46	53	53	186	41	49	73	83	246	432
0600	75	75	93	91	334	72	98	162	195	527	861
0700	91	103	126	115	435	171	168	162	170	671	1106
0800	120	113	105	91	429	154	176	174	160	664	1093
0900	92	88	94	87	361	135	145	143	124	547	908
1000	95	81	73	93	342	144	112	133	133	522	864
1100	79	86	93	207	465	159	166	143	116	584	1049
1200	183	182	187	184	736	128	102	122	109	461	1197
1300	189	201	192	202	784	133	139	123	141	536	1320
1400	249	240	273	275	1037	147	148	137	118	550	1587
1500	211	187	213	243	854	112	124	150	182	568	1422
1600	165	111	106	108	490	154	146	135	175	610	1100
1700	111	101	103	101	416	159	148	164	148	619	1035
1800	87	93	93	91	364	152	127	142	127	548	912
1900	120	98	89	99	406	144	141	125	122	532	938
2000	91	86	83	78	338	124	101	112	97	434	772
2100	79	75	68	69	291	111	86	93	80	370	661
2200	74	77	64	65	280	86	86	76	60	308	588
2300	46	43	35	31	155	59	71	69	46	245	400
24-HOUR TOTALS:					9096					9950	19046

PEAK VOLUME INFORMATION

	DIRECTION: E		DIRECTION: W		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	730	474	645	696	730	1136
P.M.	1400	1037	1645	646	1400	1587
DAILY	1400	1037	630	696	1400	1587
TRUCK PERCENTAGE	35.68		8.95		21.72	

CLASSIFICATION SUMMARY DATABASE

DIR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TOTTRK	TOTVOL
E	375	4844	632	37	141	201	23	752	98	395	0	0	79	1519	0	3245	9096
W	85	7091	1077	52	208	75	48	50	113	297	0	0	48	0	806	891	9950

GENERATED BY SPS 5.0.45P

County: 87
Station: 7048
Description: NW 138TH ST 0.5 MILE WEST OF 36TH AVE/97TH AVE
Start Date: 10/22/2014
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	26	19	25	18	88	7	13	8	8	36	124
0100	15	10	14	13	52	7	8	7	6	28	80
0200	18	11	7	5	41	4	12	8	13	37	78
0300	12	21	13	7	53	14	20	17	27	78	131
0400	23	22	13	15	73	29	35	51	69	184	257
0500	22	24	43	44	133	66	86	101	142	395	528
0600	70	85	88	146	389	84	146	174	209	613	1002
0700	109	120	158	161	548	222	267	240	254	983	1531
0800	170	176	181	159	686	251	240	259	282	1032	1718
0900	142	137	116	136	531	237	169	147	148	701	1232
1000	134	124	120	109	487	155	105	117	117	494	981
1100	107	137	113	119	476	135	136	127	129	527	1003
1200	154	139	138	121	552	116	143	128	129	516	1068
1300	142	120	127	125	514	127	118	139	129	513	1027
1400	149	135	148	136	568	138	140	145	155	578	1146
1500	160	164	171	161	656	149	149	209	203	710	1366
1600	189	200	229	231	849	175	175	191	194	735	1584
1700	290	217	247	201	955	171	230	163	156	720	1675
1800	195	220	185	156	756	162	183	129	151	625	1381
1900	135	147	102	77	461	114	113	94	82	403	864
2000	81	77	63	57	278	78	81	48	49	256	534
2100	78	69	36	46	229	63	39	43	36	181	410
2200	56	36	55	27	174	31	28	31	36	126	300
2300	44	25	25	26	120	25	18	15	13	71	191
24-Hour Totals:					9669					10542	20211

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	745	688	800	1032	800	1718
P.M.	1645	985	1630	786	1630	1753
Daily	1645	985	800	1032	1630	1753

Truck Percentage 22.36 20.86 21.58

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
E	40	5893	1529	100	1011	292	235	170	334	9	3	5	3	0	45	2162	9669
W	305	5691	2314	175	854	549	86	169	337	23	0	3	3	0	33	2199	10542

Generated by SPS 5.0.45P

COUNTY: 87
STATION: 7065
DESCRIPTION: NW 116TH WAY, 300 FT NE OF 106TH TER/102ND RD
START DATE: 10/14/2014
START TIME: 0000

	DIRECTION: N					DIRECTION: S					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	26	34	16	30	106	28	11	15	19	73	179
0100	24	15	15	20	74	13	10	6	12	41	115
0200	11	10	20	15	56	9	7	12	11	39	95
0300	14	16	15	22	67	23	16	16	30	85	152
0400	32	37	24	36	129	29	33	45	62	169	298
0500	51	43	48	92	234	42	62	97	133	334	568
0600	89	88	108	162	447	94	129	160	197	580	1027
0700	156	155	183	211	705	186	204	212	210	812	1517
0800	160	187	153	169	669	146	289	307	290	1032	1701
0900	172	187	175	167	701	258	217	176	196	847	1548
1000	171	166	146	150	633	155	156	154	145	610	1243
1100	153	173	205	177	708	133	150	159	190	632	1340
1200	187	177	201	153	718	175	187	181	184	727	1445
1300	205	179	182	178	744	200	178	191	211	780	1524
1400	188	186	201	173	748	216	177	147	173	713	1461
1500	199	175	200	215	789	163	172	186	159	680	1469
1600	228	230	369	260	1087	143	214	231	227	815	1902
1700	363	280	313	276	1232	254	237	247	218	956	2188
1800	283	254	213	174	924	213	183	158	144	698	1622
1900	192	117	144	104	557	137	104	93	92	426	983
2000	101	100	100	80	381	93	86	66	79	324	705
2100	107	94	72	61	334	44	55	44	58	201	535
2200	54	59	47	49	209	48	63	37	33	181	390
2300	54	43	46	36	179	30	17	32	27	106	285
24-HOUR TOTALS:					12431					11861	24292

PEAK VOLUME INFORMATION

	DIRECTION: N		DIRECTION: S		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	730	741	815	1144	815	1825
P.M.	1630	1272	1645	965	1630	2221
DAILY	1630	1272	815	1144	1630	2221

TRUCK PERCENTAGE 15.45 16.31 15.87

CLASSIFICATION SUMMARY DATABASE

DIR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TOTTRK	TOTVOL
N	51	8740	1719	210	293	389	66	358	558	30	2	1	4	10	0	1921	12431
S	89	8375	1462	156	390	469	41	283	534	26	2	1	5	28	0	1935	11861

GENERATED BY SPS 5.0.45P

COUNTY: 87
STATION: 7076
DESCRIPTION: NW 122 ST- 300 FET EAST OF NW 92 AVE
START DATE: 10/28/2014
START TIME: 0000

	DIRECTION: E					DIRECTION: W					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	26	21	21	20	88	19	20	18	15	72	160
0100	15	16	10	7	48	15	10	12	4	41	89
0200	6	7	13	4	30	7	4	8	6	25	55
0300	6	6	6	5	23	24	10	14	13	61	84
0400	6	15	11	10	42	13	15	26	21	75	117
0500	12	15	38	48	113	37	50	69	83	239	352
0600	69	84	144	170	467	64	105	176	223	568	1035
0700	208	211	179	197	795	197	208	220	194	819	1614
0800	218	247	235	221	921	224	229	187	180	820	1741
0900	223	205	198	152	778	143	159	136	138	576	1354
1000	177	136	150	135	598	135	131	122	141	529	1127
1100	152	156	153	145	606	119	164	142	152	577	1183
1200	154	137	151	164	606	149	147	159	148	603	1209
1300	146	159	148	178	631	180	175	166	160	681	1312
1400	182	169	231	189	771	207	207	203	213	830	1601
1500	228	202	212	224	866	197	209	210	234	850	1716
1600	231	230	233	234	928	235	221	200	212	868	1796
1700	277	236	222	250	985	252	228	205	197	882	1867
1800	221	232	225	233	911	241	200	193	183	817	1728
1900	210	186	211	164	771	196	169	163	148	676	1447
2000	140	125	93	104	462	141	139	115	105	500	962
2100	111	132	130	98	471	111	99	104	81	395	866
2200	73	70	86	48	277	92	66	57	56	271	548
2300	66	47	45	37	195	45	48	41	35	169	364
24-HOUR TOTALS:					12383					11944	24327

PEAK VOLUME INFORMATION

	DIRECTION: E		DIRECTION: W		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	815	926	730	867	800	1741
P.M.	1700	985	1530	900	1630	1872
DAILY	1700	985	1530	900	1630	1872

TRUCK PERCENTAGE 5.69 7.78 6.71

CLASSIFICATION SUMMARY DATABASE

DIR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TOTTRK	TOTVOL
E	50	10311	1282	85	527	40	9	16	26	0	0	1	0	0	36	704	12383
W	86	9493	1403	77	720	69	11	18	29	3	0	1	1	0	33	929	11944

GENERATED BY SPS 5.0.45P

County: 87
Station: 8112
Description: NW 87TH AVE, 200' SOUTH OF NW 168 TER
Start Date: 04/24/2013
Start Time: 2345

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	1	0	2	1	4	2	1	2	1	6	10
0100	0	0	0	1	1	1	0	1	1	3	4
0200	0	1	1	0	2	0	2	0	0	2	4
0300	1	1	0	0	2	0	0	2	0	2	4
0400	1	2	3	3	9	0	0	1	0	1	10
0500	6	7	9	17	39	0	3	3	2	8	47
0600	32	30	52	48	162	12	10	8	15	45	207
0700	55	43	50	46	194	20	30	12	14	76	270
0800	28	23	20	24	95	24	16	10	17	67	162
0900	8	10	10	6	34	8	11	12	5	36	70
1000	6	7	5	7	25	10	20	14	14	58	83
1100	8	7	8	7	30	16	16	16	18	66	96
1200	8	6	16	6	36	20	21	12	10	63	99
1300	0	13	11	10	34	13	14	18	35	80	114
1400	8	7	8	12	35	20	30	34	24	108	143
1500	9	9	10	14	42	27	24	26	21	98	140
1600	8	9	5	6	28	26	24	15	12	77	105
1700	8	20	17	21	66	6	20	18	28	72	138
1800	16	16	18	12	62	62	73	58	27	220	282
1900	20	21	39	73	153	24	34	21	12	91	244
2000	68	20	19	22	129	6	9	8	2	25	154
2100	12	24	54	7	97	10	8	4	2	24	121
2200	1	1	1	1	4	4	4	1	1	10	14
2300	0	3	0	2	5	1	0	1	2	4	9
24-Hour Totals:					1288					1242	2530

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	645	196	715	80	645	273
P.M.	1715	74	1745	221	1745	292
Daily	1915	201	1745	221	1745	292

Generated by SPS 5.0.44P

County: 87
Station: 8176
Description: NW 87TH AVE, 200' SOUTH OF NW 186TH STREET
Start Date: 07/21/2015
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	57	59	48	38	202	67	62	53	64	246	448
0100	37	29	12	24	102	59	50	42	37	188	290
0200	21	12	11	14	58	36	55	56	49	196	254
0300	11	25	13	7	56	36	34	21	21	112	168
0400	2	16	22	37	77	14	12	23	15	64	141
0500	31	38	65	69	203	24	16	28	13	81	284
0600	95	128	186	185	594	60	64	67	126	317	911
0700	262	264	333	391	1250	129	129	214	303	775	2025
0800	309	394	311	381	1395	322	322	327	336	1307	2702
0900	385	302	290	276	1253	311	398	383	380	1472	2725
1000	266	268	280	281	1095	392	376	374	295	1437	2532
1100	276	275	273	276	1100	284	292	273	291	1140	2240
1200	270	387	371	292	1320	296	319	297	396	1308	2628
1300	286	279	284	277	1126	395	405	391	383	1574	2700
1400	266	297	376	351	1290	404	389	388	310	1491	2781
1500	269	275	266	277	1087	391	396	407	525	1719	2806
1600	397	294	368	365	1424	526	527	423	447	1923	3347
1700	274	303	390	392	1359	351	351	346	370	1418	2777
1800	403	396	385	271	1455	471	375	338	332	1516	2971
1900	283	263	261	383	1190	332	342	242	240	1156	2346
2000	273	267	162	181	883	229	225	205	215	874	1757
2100	157	157	163	160	637	209	230	195	185	819	1456
2200	162	89	82	75	408	189	175	158	150	672	1080
2300	69	65	57	48	239	74	83	71	73	301	540
24-Hour Totals:					19803					22106	41909

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	815	1471	845	1428	845	2786
P.M.	1730	1581	1545	2001	1600	3347
Daily	1730	1581	1545	2001	1600	3347

Generated by SPS 5.0.45P

County: 87
Station: 8193
Description: NW 122ND ST, 200' WEST OF NW 90TH AVENUE
Start Date: 04/24/2013
Start Time: 2345

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	24	14	20	14	72	14	16	12	10	52	124
0100	6	12	10	10	38	6	6	10	7	29	67
0200	3	5	9	4	21	8	3	6	6	23	44
0300	3	7	2	8	20	4	10	8	8	30	50
0400	8	19	15	14	56	22	25	23	21	91	147
0500	14	35	46	53	148	42	56	58	62	218	366
0600	64	102	160	208	534	82	137	182	182	583	1117
0700	198	205	219	273	895	156	196	244	220	816	1711
0800	278	196	230	182	886	186	168	170	153	677	1563
0900	138	140	132	147	557	128	114	102	110	454	1011
1000	130	150	122	121	523	118	109	109	114	450	973
1100	126	126	143	132	527	108	112	119	166	505	1032
1200	160	102	132	138	532	144	110	152	136	542	1074
1300	130	124	172	212	638	149	168	186	194	697	1335
1400	230	242	179	166	817	184	164	147	166	661	1478
1500	180	185	157	192	714	182	150	155	168	655	1369
1600	184	192	224	212	812	174	184	201	206	765	1577
1700	181	220	201	210	812	214	198	181	169	762	1574
1800	196	184	148	144	672	168	180	172	144	664	1336
1900	169	144	138	131	582	140	134	106	103	483	1065
2000	130	133	120	123	506	124	102	81	86	393	899
2100	124	112	106	74	416	79	82	65	80	306	722
2200	76	81	56	76	289	50	42	42	44	178	467
2300	44	40	44	32	160	34	28	22	18	102	262
24-Hour Totals:					11227					10136	21363

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	745	977	715	846	715	1821
P.M.	1345	863	1630	819	1630	1656
Daily	745	977	715	846	715	1821

Generated by SPS 5.0.44P

County: 87
Station: 8243
Description: W 68 ST/W 36 AVE, 200' SOUTH OF NW 130TH STREET
Start Date: 04/25/2013
Start Time: 2345

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	13	7	4	0	24	14	7	6	10	37	61
0100	3	4	2	1	10	1	8	6	1	16	26
0200	2	4	1	1	8	5	4	3	0	12	20
0300	4	2	1	0	7	7	3	2	0	12	19
0400	4	6	8	10	28	2	0	5	5	12	40
0500	19	16	26	24	85	4	14	15	14	47	132
0600	39	52	68	66	225	36	28	52	48	164	389
0700	90	110	108	122	430	49	68	58	68	243	673
0800	106	66	78	58	308	48	54	52	52	206	514
0900	45	49	62	36	192	29	50	40	36	155	347
1000	44	48	40	46	178	28	46	45	34	153	331
1100	39	35	52	34	160	46	35	30	48	159	319
1200	50	44	40	61	195	48	45	50	46	189	384
1300	60	46	73	72	251	48	56	49	40	193	444
1400	48	50	48	88	234	40	42	58	67	207	441
1500	106	64	68	60	298	60	48	74	69	251	549
1600	82	92	74	96	344	62	80	68	60	270	614
1700	100	112	134	100	446	97	100	109	102	408	854
1800	82	92	87	76	337	96	90	84	78	348	685
1900	69	52	67	56	244	74	72	50	69	265	509
2000	68	40	48	56	212	62	50	50	52	214	426
2100	37	52	44	40	173	61	52	55	38	206	379
2200	41	22	26	26	115	45	46	36	16	143	258
2300	14	16	14	10	54	21	25	21	16	83	137
24-Hour Totals:					4558					3993	8551

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	715	446	700	243	715	688
P.M.	1700	446	1700	408	1700	854
Daily	715	446	1700	408	1700	854

Generated by SPS 5.0.44P

County: 87
Station: 8620
Description: HIALEAH GRDS BLVD, 200 FT N OF W 72ND ST, HIALEAH
Start Date: 04/12/2016
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	47	23	31	24	125	39	25	26	16	106	231
0100	19	23	14	17	73	21	16	17	18	72	145
0200	16	10	19	21	66	13	13	19	9	54	120
0300	23	12	31	21	87	16	16	26	44	102	189
0400	20	42	48	45	155	27	45	40	52	164	319
0500	75	64	98	102	339	47	81	117	108	353	692
0600	124	175	177	231	707	136	219	282	332	969	1676
0700	228	239	201	175	843	363	292	299	259	1213	2056
0800	217	197	218	184	816	284	216	309	207	1016	1832
0900	164	220	201	207	792	44	177	280	250	751	1543
1000	240	201	210	236	887	212	197	219	236	864	1751
1100	220	236	219	222	897	219	228	215	258	920	1817
1200	258	263	236	245	1002	249	241	246	288	1024	2026
1300	236	269	235	235	975	190	250	261	251	952	1927
1400	231	249	300	315	1095	288	273	254	261	1076	2171
1500	295	287	301	296	1179	265	260	289	271	1085	2264
1600	292	320	343	292	1247	300	279	242	271	1092	2339
1700	316	300	231	318	1165	259	242	270	221	992	2157
1800	322	275	313	291	1201	236	232	198	202	868	2069
1900	249	241	234	201	925	200	199	180	177	756	1681
2000	174	200	182	163	719	152	144	158	142	596	1315
2100	135	134	130	123	522	143	125	101	94	463	985
2200	128	104	102	93	427	100	94	105	56	355	782
2300	72	47	55	44	218	55	60	40	35	190	408
24-Hour Totals:					16462					16033	32495

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	645	899	645	1286	645	2185
P.M.	1615	1271	1530	1139	1530	2348
Daily	1615	1271	645	1286	1530	2348

Generated by SPS 5.0.49P

APPENDIX I-B2:
County Traffic Counts

PUBLIC WORKS AND WASTE MANAGEMENT DEPARTMENT
TRAFFIC ENGINEERING DIVISION

DATE: 12/15/15 LOCATION: MIAMI LAKES DRIVE WEST

STATION: 9256 W/O RED RD/NW 57 AVE TO NW 67 AVE

EASTBOUND						WESTBOUND						TWO-WAY
TIME	1ST	2ND	3RD	4TH	TOTAL HR	TIME	1ST	2ND	3RD	4TH	TOTAL HR	TOTAL
12 AM	22	19	9	7	57	12 AM	12	21	20	23	76	133
01 AM	7	12	10	3	32	01 AM	15	9	11	8	43	75
02 AM	2	5	5	7	19	02 AM	5	7	5	6	23	42
03 AM	2	6	5	5	18	03 AM	3	4	2	2	11	29
04 AM	4	4	5	8	21	04 AM	3	6	2	3	14	35
05 AM	10	18	9	21	58	05 AM	9	7	15	15	46	104
06 AM	41	53	78	127	299	06 AM	37	38	49	75	199	498
07 AM	176	182	190	216	764	07 AM	111	105	125	145	486	1250
08 AM	202	210	209	197	818	08 AM	172	171	155	151	649	1467
09 AM	183	166	145	116	610	09 AM	152	145	124	102	523	1133
10 AM	94	96	90	101	381	10 AM	111	111	112	125	459	840
11 AM	103	105	107	102	417	11 AM	110	114	112	114	450	867
12 PM	116	132	135	118	501	12 PM	134	143	167	137	581	1082
01 PM	129	152	98	114	493	01 PM	136	154	148	157	595	1088
02 PM	107	125	127	138	497	02 PM	142	131	145	163	581	1078
03 PM	110	128	117	176	531	03 PM	162	161	163	173	659	1190
04 PM	151	190	178	156	675	04 PM	150	145	149	150	594	1269
05 PM	143	206	204	192	745	05 PM	155	125	142	148	570	1315
06 PM	163	163	128	137	591	06 PM	175	164	170	151	660	1251
07 PM	122	136	97	75	430	07 PM	124	159	156	123	562	992
08 PM	72	70	62	53	257	08 PM	125	94	95	83	397	654
09 PM	39	44	40	46	169	09 PM	73	71	67	58	269	438
10 PM	37	31	31	25	124	10 PM	50	34	48	35	167	291
11 PM	20	28	17	17	82	11 PM	29	31	19	15	94	176
TOTAL:					**8589**						**8708**	**17297**

PHP: 1337 **PHF:** 0.974 **D FACTOR:** 0.558

AADT: 17030 **K FACTOR:** 0.082

PUBLIC WORKS AND WASTE MANAGEMENT DEPARTMENT
TRAFFIC ENGINEERING DIVISION

DATE: 12/16/15 LOCATION: MIAMI LAKES DRIVE WEST

STATION: 9256 W/O RED RD/NW 57 AVE TO NW 67 AVE

EASTBOUND						WESTBOUND						TWO-WAY
TIME	1ST	2ND	3RD	4TH	TOTAL HR	TIME	1ST	2ND	3RD	4TH	TOTAL HR	TOTAL
12 AM	20	17	10	15	62	12 AM	16	18	24	13	71	133
01 AM	7	4	3	2	16	01 AM	9	13	6	4	32	48
02 AM	6	7	3	1	17	02 AM	5	6	6	1	18	35
03 AM	6	6	6	4	22	03 AM	6	4	0	2	12	34
04 AM	6	4	2	6	18	04 AM	5	7	1	7	20	38
05 AM	8	14	18	21	61	05 AM	10	9	10	16	45	106
06 AM	39	52	67	115	273	06 AM	38	38	62	87	225	498
07 AM	192	206	182	205	785	07 AM	116	122	132	129	499	1284
08 AM	207	192	204	208	811	08 AM	156	153	156	174	639	1450
09 AM	165	155	148	126	594	09 AM	150	152	96	118	516	1110
10 AM	106	134	112	99	451	10 AM	118	113	98	99	428	879
11 AM	88	105	133	97	423	11 AM	109	136	105	112	462	885
12 PM	120	121	109	126	476	12 PM	144	159	159	146	608	1084
01 PM	130	141	127	115	513	01 PM	173	166	177	144	660	1173
02 PM	125	142	113	142	522	02 PM	150	137	136	146	569	1091
03 PM	134	131	146	159	570	03 PM	146	138	143	176	603	1173
04 PM	151	216	164	171	702	04 PM	142	139	159	128	568	1270
05 PM	152	217	178	208	755	05 PM	158	147	139	157	601	1356
06 PM	179	178	201	158	716	06 PM	171	171	157	173	672	1388
07 PM	112	123	109	89	433	07 PM	148	149	119	121	537	970
08 PM	77	76	64	60	277	08 PM	119	91	91	93	394	671
09 PM	54	41	55	50	200	09 PM	77	77	58	65	277	477
10 PM	35	40	33	26	134	10 PM	59	54	41	40	194	328
11 PM	23	24	25	14	86	11 PM	37	33	21	24	115	201
TOTAL:					**8917**						**8765**	**17682**

PHP: 1372 **PHF:** 0.975 **D FACTOR:** 0.559

AADT: 17680 **K FACTOR:** 0.08

PUBLIC WORKS AND WASTE MANAGEMENT DEPARTMENT
TRAFFIC ENGINEERING DIVISION

DATE: 12/17/15 LOCATION: MIAMI LAKES DRIVE WEST

STATION: 9256 W/O RED RD/NW 57 AVE TO NW 67 AVE

EASTBOUND						WESTBOUND						TWO-WAY
TIME	1ST	2ND	3RD	4TH	TOTAL HR	TIME	1ST	2ND	3RD	4TH	TOTAL HR	TOTAL
12 AM	21	23	13	14	71	12 AM	18	23	33	18	92	163
01 AM	12	8	3	3	26	01 AM	12	9	12	8	41	67
02 AM	6	1	8	4	19	02 AM	5	5	9	5	24	43
03 AM	2	6	6	4	18	03 AM	8	3	4	5	20	38
04 AM	4	4	4	4	16	04 AM	2	7	6	6	21	37
05 AM	14	10	14	20	58	05 AM	13	5	9	14	41	99
06 AM	42	45	85	118	290	06 AM	34	36	51	86	207	497
07 AM	169	204	185	209	767	07 AM	114	125	122	138	499	1266
08 AM	204	189	215	159	767	08 AM	159	178	141	171	649	1416
09 AM	173	158	131	125	587	09 AM	123	132	128	100	483	1070
10 AM	106	107	110	99	422	10 AM	122	118	104	114	458	880
11 AM	110	113	127	110	460	11 AM	102	101	116	134	453	913
12 PM	133	132	132	121	518	12 PM	139	146	169	156	610	1128
01 PM	103	156	130	109	498	01 PM	151	149	150	165	615	1113
02 PM	113	124	107	153	497	02 PM	132	135	143	163	573	1070
03 PM	130	134	158	156	578	03 PM	165	161	167	168	661	1239
04 PM	146	198	171	180	695	04 PM	168	144	153	165	630	1325
05 PM	173	228	189	175	765	05 PM	167	151	136	177	631	1396
06 PM	161	155	146	165	627	06 PM	117	144	156	140	557	1184
07 PM	141	168	108	84	501	07 PM	144	140	138	118	540	1041
08 PM	67	62	64	65	258	08 PM	103	83	86	90	362	620
09 PM	38	47	47	54	186	09 PM	74	57	71	59	261	447
10 PM	38	39	41	30	148	10 PM	75	56	43	38	212	360
11 PM	32	29	22	21	104	11 PM	32	36	23	29	120	224
TOTAL:					**8876**						**8760**	**17636**

PHP: 1353 **PHF:** 0.892 **D FACTOR:** 0.542

AADT: 17547 **K FACTOR:** 0.078

PUBLIC WORKS AND WASTE MANAGEMENT DEPARTMENT
TRAFFIC ENGINEERING DIVISION

SUMMARY FOR STATION NUMBER: 9256

	PHP	AADT	K	D	PHF
12/15/15	1337	17030	0.082	0.558	0.974
12/16/15	1372	17680	0.08	0.559	0.975
12/17/15	1353	17547	0.078	0.542	0.892
AVG	1354	17419	0.08	0.553	0.947

PUBLIC WORKS AND WASTE MANAGEMENT DEPARTMENT
TRAFFIC ENGINEERING DIVISION

DATE: 03/03/15 LOCATION: NW 154 ST

STATION: 9258 E/O SR 826 FROM NW 67 AVE TO SR 826

EASTBOUND						WESTBOUND						TWO-WAY
TIME	1ST	2ND	3RD	4TH	TOTAL HR	TIME	1ST	2ND	3RD	4TH	TOTAL HR	TOTAL
12 AM	5	11	11	6	33	12 AM	19	18	12	9	58	91
01 AM	7	10	2	1	20	01 AM	6	5	3	4	18	38
02 AM	4	2	3	6	15	02 AM	4	2	4	4	14	29
03 AM	2	8	3	11	24	03 AM	3	4	1	3	11	35
04 AM	5	3	3	8	19	04 AM	2	6	12	7	27	46
05 AM	12	22	26	38	98	05 AM	9	13	18	22	62	160
06 AM	42	73	112	133	360	06 AM	38	44	66	106	254	614
07 AM	132	160	218	204	714	07 AM	136	108	143	134	521	1235
08 AM	228	216	189	220	853	08 AM	142	151	126	144	563	1416
09 AM	174	161	159	132	626	09 AM	127	118	110	111	466	1092
10 AM	146	134	134	141	555	10 AM	108	100	104	114	426	981
11 AM	133	131	126	158	548	11 AM	116	112	109	146	483	1031
12 PM	144	148	158	169	619	12 PM	159	144	170	144	617	1236
01 PM	204	174	179	152	709	01 PM	144	165	164	138	611	1320
02 PM	154	135	188	172	649	02 PM	145	154	171	119	589	1238
03 PM	159	146	177	162	644	03 PM	154	150	174	183	661	1305
04 PM	168	172	146	170	656	04 PM	179	166	174	168	687	1343
05 PM	150	224	190	194	758	05 PM	216	164	170	172	722	1480
06 PM	159	138	162	111	570	06 PM	164	120	152	159	595	1165
07 PM	141	139	111	116	507	07 PM	156	123	117	134	530	1037
08 PM	98	112	99	63	372	08 PM	124	98	109	91	422	794
09 PM	71	67	78	40	256	09 PM	120	90	73	64	347	603
10 PM	68	40	45	34	187	10 PM	46	61	31	32	170	357
11 PM	35	25	18	10	88	11 PM	31	28	22	16	97	185
TOTAL:					**9880**						**8951**	**18831**

PHP: 1389 **PHF:** 0.846 **D FACTOR:** 0.512

AADT: 18540 **K FACTOR:** 0.076

PUBLIC WORKS AND WASTE MANAGEMENT DEPARTMENT
TRAFFIC ENGINEERING DIVISION

DATE: 03/04/15 LOCATION: NW 154 ST

STATION: 9258 E/O SR 826 FROM NW 67 AVE TO SR 826

EASTBOUND						WESTBOUND						TWO-WAY
TIME	1ST	2ND	3RD	4TH	TOTAL HR	TIME	1ST	2ND	3RD	4TH	TOTAL HR	TOTAL
12 AM	19	18	9	13	59	12 AM	20	24	9	10	63	122
01 AM	2	4	6	2	14	01 AM	10	5	6	2	23	37
02 AM	2	3	4	6	15	02 AM	2	7	2	2	13	28
03 AM	4	5	3	6	18	03 AM	2	4	4	1	11	29
04 AM	5	6	7	10	28	04 AM	2	2	8	6	18	46
05 AM	7	20	28	44	99	05 AM	7	12	22	19	60	159
06 AM	53	75	101	124	353	06 AM	34	49	63	106	252	605
07 AM	129	184	183	216	712	07 AM	126	114	121	152	513	1225
08 AM	226	234	216	184	860	08 AM	161	146	146	138	591	1451
09 AM	184	162	155	138	639	09 AM	122	133	106	100	461	1100
10 AM	144	134	134	108	520	10 AM	106	108	106	116	436	956
11 AM	122	138	148	134	542	11 AM	119	120	122	126	487	1029
12 PM	158	166	158	162	644	12 PM	167	174	152	176	669	1313
01 PM	173	203	178	160	714	01 PM	154	188	141	146	629	1343
02 PM	158	188	181	176	703	02 PM	165	142	160	172	639	1342
03 PM	172	162	160	151	645	03 PM	152	151	176	159	638	1283
04 PM	148	156	148	144	596	04 PM	185	158	176	174	693	1289
05 PM	194	179	195	191	759	05 PM	222	170	188	150	730	1489
06 PM	174	155	177	182	688	06 PM	162	168	124	174	628	1316
07 PM	149	126	138	101	514	07 PM	120	143	144	104	511	1025
08 PM	127	119	116	71	433	08 PM	137	130	119	104	490	923
09 PM	97	74	58	54	283	09 PM	89	80	74	96	339	622
10 PM	54	43	46	36	179	10 PM	60	42	42	35	179	358
11 PM	36	31	20	20	107	11 PM	36	35	23	22	116	223
TOTAL:					**10124**						**9189**	**19313**

PHP: 1374 **PHF:** 0.973 **D FACTOR:** 0.51

AADT: 18921 **K FACTOR:** 0.075

PUBLIC WORKS AND WASTE MANAGEMENT DEPARTMENT
TRAFFIC ENGINEERING DIVISION

DATE: 03/05/15 LOCATION: NW 154 ST

STATION: 9258 E/O SR 826 FROM NW 67 AVE TO SR 826

EASTBOUND						WESTBOUND						TWO-WAY
TIME	1ST	2ND	3RD	4TH	TOTAL HR	TIME	1ST	2ND	3RD	4TH	TOTAL HR	TOTAL
12 AM	24	14	9	12	59	12 AM	20	20	17	18	75	134
01 AM	3	5	6	5	19	01 AM	9	8	2	5	24	43
02 AM	10	7	3	6	26	02 AM	7	1	5	7	20	46
03 AM	2	2	5	6	15	03 AM	4	3	3	4	14	29
04 AM	8	4	6	14	32	04 AM	3	1	6	10	20	52
05 AM	13	16	25	31	85	05 AM	9	11	13	22	55	140
06 AM	47	64	94	144	349	06 AM	30	45	70	88	233	582
07 AM	136	187	213	226	762	07 AM	134	137	132	144	547	1309
08 AM	220	224	212	182	838	08 AM	153	137	149	137	576	1414
09 AM	183	140	140	122	585	09 AM	110	104	123	108	445	1030
10 AM	126	114	124	132	496	10 AM	107	114	104	121	446	942
11 AM	130	138	125	150	543	11 AM	122	121	113	164	520	1063
12 PM	150	170	152	156	628	12 PM	157	148	162	164	631	1259
01 PM	207	225	229	171	832	01 PM	164	178	168	160	670	1502
02 PM	166	156	168	180	670	02 PM	170	168	167	158	663	1333
03 PM	191	160	166	167	684	03 PM	156	150	196	176	678	1362
04 PM	161	200	154	180	695	04 PM	155	194	199	194	742	1437
05 PM	204	206	189	196	795	05 PM	228	162	176	169	735	1530
06 PM	181	176	200	182	739	06 PM	139	177	176	166	658	1397
07 PM	160	148	141	144	593	07 PM	152	158	123	155	588	1181
08 PM	90	100	91	88	369	08 PM	111	130	128	96	465	834
09 PM	71	76	74	74	295	09 PM	81	92	104	64	341	636
10 PM	70	64	46	44	224	10 PM	57	48	49	45	199	423
11 PM	55	44	19	27	145	11 PM	39	28	22	20	109	254
TOTAL:					**10478**						**9454**	**19932**

PHP: 1446 **PHF:** 0.965 **D FACTOR:** 0.52

AADT: 19431 **K FACTOR:** 0.074

PUBLIC WORKS AND WASTE MANAGEMENT DEPARTMENT
TRAFFIC ENGINEERING DIVISION

SUMMARY FOR STATION NUMBER: 9258

	PHP	AADT	K	D	PHF
03/03/15	1389	18540	0.076	0.512	0.846
03/04/15	1374	18921	0.075	0.51	0.973
03/05/15	1446	19431	0.074	0.52	0.965
AVG	1403	18964	0.075	0.514	0.928

PUBLIC WORKS AND WASTE MANAGEMENT DEPARTMENT
TRAFFIC ENGINEERING DIVISION

DATE: 11/03/15 LOCATION: NW 138 ST

STATION: 9534 S/W OF OKEECHOBEE RD TO NW 107 AVE

EASTBOUND						WESTBOUND						TWO-WAY
TIME	1ST	2ND	3RD	4TH	TOTAL HR	TIME	1ST	2ND	3RD	4TH	TOTAL HR	TOTAL
12 AM	17	17	19	16	69	12 AM	17	7	5	3	32	101
01 AM	12	9	2	9	32	01 AM	8	4	3	6	21	53
02 AM	6	10	9	9	34	02 AM	5	8	11	15	39	73
03 AM	2	19	12	7	40	03 AM	9	13	16	23	61	101
04 AM	13	20	38	25	96	04 AM	33	23	30	54	140	236
05 AM	30	34	29	37	130	05 AM	59	40	62	72	233	363
06 AM	46	44	36	47	173	06 AM	117	89	92	126	424	597
07 AM	58	52	49	46	205	07 AM	140	151	126	176	593	798
08 AM	48	45	35	59	187	08 AM	201	148	117	135	601	788
09 AM	75	73	69	96	313	09 AM	141	121	97	81	440	753
10 AM	96	75	80	89	340	10 AM	95	80	49	51	275	615
11 AM	69	82	86	86	323	11 AM	65	61	44	50	220	543
12 PM	90	107	86	66	349	12 PM	54	50	61	66	231	580
01 PM	69	91	69	70	299	01 PM	66	83	76	79	304	603
02 PM	85	79	69	114	347	02 PM	70	73	97	62	302	649
03 PM	75	71	94	86	326	03 PM	56	79	76	74	285	611
04 PM	68	56	43	41	208	04 PM	89	54	62	45	250	458
05 PM	48	39	32	65	184	05 PM	49	52	38	51	190	374
06 PM	56	91	84	81	312	06 PM	42	51	42	46	181	493
07 PM	75	71	50	45	241	07 PM	41	27	19	21	108	349
08 PM	17	41	15	19	92	08 PM	27	14	9	14	64	156
09 PM	19	24	23	14	80	09 PM	20	14	12	4	50	130
10 PM	11	11	22	41	85	10 PM	9	14	10	11	44	129
11 PM	21	26	22	16	85	11 PM	20	12	7	19	58	143
TOTAL:					**4550**						**5146**	**9696**

PHP: 805 **PHF:** 0.842 **D FACTOR:** 0.743

AADT: 9841 **K FACTOR:** 0.08

PUBLIC WORKS AND WASTE MANAGEMENT DEPARTMENT
TRAFFIC ENGINEERING DIVISION

DATE: 11/04/15 LOCATION: NW 138 ST

STATION: 9534 S/W OF OKEECHOBEE RD TO NW 107 AVE

EASTBOUND						WESTBOUND						TWO-WAY
TIME	1ST	2ND	3RD	4TH	TOTAL HR	TIME	1ST	2ND	3RD	4TH	TOTAL HR	TOTAL
12 AM	9	25	4	18	56	12 AM	12	6	7	5	30	86
01 AM	6	6	4	9	25	01 AM	4	6	6	7	23	48
02 AM	8	9	10	15	42	02 AM	8	5	11	11	35	77
03 AM	8	9	8	12	37	03 AM	9	9	18	14	50	87
04 AM	14	22	23	26	85	04 AM	27	31	32	41	131	216
05 AM	16	39	19	39	113	05 AM	54	33	39	61	187	300
06 AM	26	37	40	43	146	06 AM	130	79	110	118	437	583
07 AM	44	53	35	55	187	07 AM	144	114	145	160	563	750
08 AM	53	46	49	69	217	08 AM	171	135	148	138	592	809
09 AM	72	60	51	80	263	09 AM	139	120	92	97	448	711
10 AM	73	61	69	47	250	10 AM	73	83	35	75	266	516
11 AM	29	46	69	65	209	11 AM	60	52	75	65	252	461
12 PM	83	81	35	82	281	12 PM	78	58	67	91	294	575
01 PM	85	72	75	84	316	01 PM	70	63	80	83	296	612
02 PM	76	63	61	55	255	02 PM	63	80	54	71	268	523
03 PM	56	42	40	79	217	03 PM	49	91	73	72	285	502
04 PM	112	136	127	111	486	04 PM	77	76	65	54	272	758
05 PM	91	84	110	167	452	05 PM	48	38	39	41	166	618
06 PM	100	122	66	99	387	06 PM	36	38	40	50	164	551
07 PM	62	47	55	51	215	07 PM	35	43	38	28	144	359
08 PM	26	36	18	16	96	08 PM	24	22	11	16	73	169
09 PM	21	28	52	28	129	09 PM	11	18	16	18	63	192
10 PM	15	20	25	45	105	10 PM	15	10	16	15	56	161
11 PM	26	26	35	19	106	11 PM	11	18	16	11	56	162
TOTAL:					**4675**						**5151**	**9826**

PHP: 787 **PHF:** 0.865 **D FACTOR:** 0.732

AADT: 9924 **K FACTOR:** 0.08

PUBLIC WORKS AND WASTE MANAGEMENT DEPARTMENT
TRAFFIC ENGINEERING DIVISION

DATE: 11/05/15 LOCATION: NW 138 ST

STATION: 9534 S/W OF OKEECHOBEE RD TO NW 107 AVE

EASTBOUND						WESTBOUND						TWO-WAY
TIME	1ST	2ND	3RD	4TH	TOTAL HR	TIME	1ST	2ND	3RD	4TH	TOTAL HR	TOTAL
12 AM	9	15	14	21	59	12 AM	16	7	8	5	36	95
01 AM	8	9	4	8	29	01 AM	6	3	6	4	19	48
02 AM	11	10	5	11	37	02 AM	9	5	8	12	34	71
03 AM	6	4	10	8	28	03 AM	9	16	18	18	61	89
04 AM	26	18	16	25	85	04 AM	35	14	39	41	129	214
05 AM	20	34	37	44	135	05 AM	57	36	44	61	198	333
06 AM	36	9	0	0	45	06 AM	149	158	141	191	639	684
07 AM	3	0	3	2	8	07 AM	216	209	222	212	859	867
08 AM	3	47	52	74	176	08 AM	211	189	124	131	655	831
09 AM	61	71	51	75	258	09 AM	121	122	100	73	416	674
10 AM	64	48	84	66	262	10 AM	74	71	62	74	281	543
11 AM	76	53	78	65	272	11 AM	62	71	76	73	282	554
12 PM	87	104	93	90	374	12 PM	71	78	75	80	304	678
01 PM	90	84	47	79	300	01 PM	66	81	98	85	330	630
02 PM	68	72	83	101	324	02 PM	80	80	77	78	315	639
03 PM	87	109	115	145	456	03 PM	77	74	63	68	282	738
04 PM	110	139	118	94	461	04 PM	72	61	62	54	249	710
05 PM	142	92	103	162	499	05 PM	47	32	51	40	170	669
06 PM	100	90	75	102	367	06 PM	33	48	41	44	166	533
07 PM	53	56	37	50	196	07 PM	36	31	32	16	115	311
08 PM	38	43	19	32	132	08 PM	22	14	10	15	61	193
09 PM	20	21	17	11	69	09 PM	13	11	11	16	51	120
10 PM	12	22	20	39	93	10 PM	8	10	11	8	37	130
11 PM	21	26	23	16	86	11 PM	14	10	14	10	48	134
TOTAL:					**4751**						**5737**	**10488**

PHP: 853 **PHF:** 0.967 **D FACTOR:** 0.991

AADT: 10540 **K FACTOR:** 0.08

PUBLIC WORKS AND WASTE MANAGEMENT DEPARTMENT
TRAFFIC ENGINEERING DIVISION

SUMMARY FOR STATION NUMBER: 9534

	PHP	AADT	K	D	PHF
11/03/15	805	9841	0.08	0.743	0.842
11/04/15	787	9924	0.08	0.732	0.865
11/05/15	853	10540	0.08	0.991	0.967
AVG	815	10101	0.08	0.822	0.891

PUBLIC WORKS AND WASTE MANAGEMENT DEPARTMENT
TRAFFIC ENGINEERING DIVISION

DATE: 11/03/15 LOCATION: NW 154 ST

STATION: 9544 E/O NW 79 AVE SR 826 TO NW 87 AVE

EASTBOUND						WESTBOUND						TWO-WAY
TIME	1ST	2ND	3RD	4TH	TOTAL HR	TIME	1ST	2ND	3RD	4TH	TOTAL HR	TOTAL
12 AM	42	58	35	20	155	12 AM	59	46	41	32	178	333
01 AM	19	16	14	20	69	01 AM	30	26	38	21	115	184
02 AM	6	8	9	6	29	02 AM	17	16	8	10	51	80
03 AM	12	16	17	14	59	03 AM	12	16	9	10	47	106
04 AM	16	16	29	53	114	04 AM	10	13	10	15	48	162
05 AM	71	64	102	156	393	05 AM	22	22	50	64	158	551
06 AM	206	288	389	416	1299	06 AM	84	107	126	200	517	1816
07 AM	336	382	461	338	1517	07 AM	288	294	286	344	1212	2729
08 AM	425	522	507	438	1892	08 AM	398	409	352	390	1549	3441
09 AM	476	403	418	416	1713	09 AM	375	359	352	303	1389	3102
10 AM	390	367	356	376	1489	10 AM	351	302	312	374	1339	2828
11 AM	372	380	330	358	1440	11 AM	331	312	328	337	1308	2748
12 PM	417	456	396	418	1687	12 PM	332	401	396	414	1543	3230
01 PM	386	388	329	375	1478	01 PM	406	408	382	390	1586	3064
02 PM	397	404	346	383	1530	02 PM	372	376	432	410	1590	3120
03 PM	396	390	431	419	1636	03 PM	459	398	390	442	1689	3325
04 PM	400	447	434	490	1771	04 PM	452	444	445	445	1786	3557
05 PM	440	526	492	472	1930	05 PM	434	464	464	463	1825	3755
06 PM	464	416	446	400	1726	06 PM	479	479	472	476	1906	3632
07 PM	360	328	317	302	1307	07 PM	458	452	448	464	1822	3129
08 PM	254	242	262	210	968	08 PM	451	376	322	316	1465	2433
09 PM	222	232	170	169	793	09 PM	247	262	258	240	1007	1800
10 PM	160	152	92	102	506	10 PM	196	202	183	162	743	1249
11 PM	84	98	56	40	278	11 PM	106	97	86	90	379	657
TOTAL:					**25779**						**25252**	**51031**

PHP: 3748 **PHF:** 0.917 **D FACTOR:** 0.514

AADT: 51796 **K FACTOR:** 0.071

PUBLIC WORKS AND WASTE MANAGEMENT DEPARTMENT
TRAFFIC ENGINEERING DIVISION

DATE: 11/04/15 LOCATION: NW 154 ST

STATION: 9544 E/O NW 79 AVE SR 826 TO NW 87 AVE

EASTBOUND						WESTBOUND						TWO-WAY
TIME	1ST	2ND	3RD	4TH	TOTAL HR	TIME	1ST	2ND	3RD	4TH	TOTAL HR	TOTAL
12 AM	36	62	38	28	164	12 AM	68	62	38	60	228	392
01 AM	10	28	15	12	65	01 AM	37	18	26	27	108	173
02 AM	12	7	12	9	40	02 AM	14	12	23	16	65	105
03 AM	20	23	22	15	80	03 AM	13	14	10	8	45	125
04 AM	23	16	24	41	104	04 AM	11	18	24	17	70	174
05 AM	66	73	106	138	383	05 AM	25	30	40	55	150	533
06 AM	211	300	398	508	1417	06 AM	73	97	117	205	492	1909
07 AM	376	410	411	448	1645	07 AM	283	295	287	377	1242	2887
08 AM	418	426	457	400	1701	08 AM	362	372	390	442	1566	3267
09 AM	466	448	424	398	1736	09 AM	369	314	343	365	1391	3127
10 AM	367	354	374	366	1461	10 AM	320	308	325	334	1287	2748
11 AM	336	338	335	368	1377	11 AM	321	342	319	351	1333	2710
12 PM	373	427	403	405	1608	12 PM	340	398	430	368	1536	3144
01 PM	416	390	406	407	1619	01 PM	434	423	432	418	1707	3326
02 PM	390	428	416	441	1675	02 PM	396	414	430	416	1656	3331
03 PM	426	392	394	428	1640	03 PM	452	432	437	458	1779	3419
04 PM	367	468	404	491	1730	04 PM	465	412	462	445	1784	3514
05 PM	489	540	493	486	2008	05 PM	440	439	448	480	1807	3815
06 PM	459	462	400	394	1715	06 PM	462	465	474	480	1881	3596
07 PM	370	380	326	300	1376	07 PM	493	482	475	482	1932	3308
08 PM	282	260	250	230	1022	08 PM	428	344	322	296	1390	2412
09 PM	222	189	185	175	771	09 PM	276	290	256	249	1071	1842
10 PM	194	192	142	112	640	10 PM	226	185	148	164	723	1363
11 PM	94	94	81	55	324	11 PM	154	151	116	89	510	834
TOTAL:					**26301**						**25753**	**52054**

PHP: 3742 **PHF:** 0.93 **D FACTOR:** 0.526

AADT: 52575 **K FACTOR:** 0.071

PUBLIC WORKS AND WASTE MANAGEMENT DEPARTMENT
TRAFFIC ENGINEERING DIVISION

DATE: 11/05/15 LOCATION: NW 154 ST

STATION: 9544 E/O NW 79 AVE SR 826 TO NW 87 AVE

EASTBOUND						WESTBOUND						TWO-WAY
TIME	1ST	2ND	3RD	4TH	TOTAL HR	TIME	1ST	2ND	3RD	4TH	TOTAL HR	TOTAL
12 AM	64	70	30	33	197	12 AM	76	81	46	51	254	451
01 AM	21	26	24	24	95	01 AM	40	44	28	27	139	234
02 AM	10	21	10	19	60	02 AM	18	21	13	9	61	121
03 AM	18	28	23	12	81	03 AM	20	14	15	12	61	142
04 AM	19	19	37	47	122	04 AM	10	13	13	10	46	168
05 AM	51	76	117	140	384	05 AM	29	30	54	67	180	564
06 AM	182	279	372	512	1345	06 AM	68	110	129	202	509	1854
07 AM	456	448	410	402	1716	07 AM	294	307	322	377	1300	3016
08 AM	420	447	474	460	1801	08 AM	388	348	362	414	1512	3313
09 AM	464	410	418	432	1724	09 AM	366	358	367	356	1447	3171
10 AM	387	390	358	403	1538	10 AM	340	322	313	316	1291	2829
11 AM	379	376	322	377	1454	11 AM	338	326	318	298	1280	2734
12 PM	404	436	412	410	1662	12 PM	354	386	394	376	1510	3172
01 PM	420	416	378	370	1584	01 PM	424	406	416	423	1669	3253
02 PM	402	408	368	414	1592	02 PM	422	412	432	405	1671	3263
03 PM	386	424	415	442	1667	03 PM	434	424	417	456	1731	3398
04 PM	406	468	378	491	1743	04 PM	470	439	469	486	1864	3607
05 PM	482	525	478	481	1966	05 PM	470	460	446	458	1834	3800
06 PM	420	400	446	406	1672	06 PM	468	466	454	451	1839	3511
07 PM	362	357	276	308	1303	07 PM	438	495	466	448	1847	3150
08 PM	343	272	256	237	1108	08 PM	438	386	320	308	1452	2560
09 PM	191	218	216	186	811	09 PM	300	271	263	257	1091	1902
10 PM	166	154	122	116	558	10 PM	198	202	175	156	731	1289
11 PM	90	94	84	68	336	11 PM	136	130	96	88	450	786
TOTAL:					**26519**						**25769**	**52288**

PHP: 3722 **PHF:** 0.936 **D FACTOR:** 0.517

AADT: 52549 **K FACTOR:** 0.07

PUBLIC WORKS AND WASTE MANAGEMENT DEPARTMENT
TRAFFIC ENGINEERING DIVISION

SUMMARY FOR STATION NUMBER: 9544

	PHP	AADT	K	D	PHF
11/03/15	3748	51796	0.071	0.514	0.917
11/04/15	3742	52575	0.071	0.526	0.93
11/05/15	3722	52549	0.07	0.517	0.936
AVG	3737	52306	0.071	0.519	0.928

PUBLIC WORKS AND WASTE MANAGEMENT DEPARTMENT
TRAFFIC ENGINEERING DIVISION

DATE: 03/03/15 LOCATION: NW 169 ST

STATION: 9550 E/O NW 77 CT TO NW 67 AVE

EASTBOUND						WESTBOUND						TWO-WAY
TIME	1ST	2ND	3RD	4TH	TOTAL HR	TIME	1ST	2ND	3RD	4TH	TOTAL HR	TOTAL
12 AM	9	6	5	5	25	12 AM	12	15	14	12	53	78
01 AM	7	5	6	6	24	01 AM	4	9	10	1	24	48
02 AM	1	1	3	6	11	02 AM	1	4	5	2	12	23
03 AM	2	2	6	1	11	03 AM	3	1	2	1	7	18
04 AM	5	3	9	12	29	04 AM	1	3	0	1	5	34
05 AM	18	19	32	49	118	05 AM	4	4	6	6	20	138
06 AM	70	90	140	190	490	06 AM	8	37	37	65	147	637
07 AM	264	286	272	230	1052	07 AM	86	120	98	152	456	1508
08 AM	212	222	200	168	802	08 AM	144	116	109	88	457	1259
09 AM	150	112	78	76	416	09 AM	78	61	58	74	271	687
10 AM	92	82	70	59	303	10 AM	44	63	39	51	197	500
11 AM	64	78	58	74	274	11 AM	62	42	62	70	236	510
12 PM	74	66	79	55	274	12 PM	58	70	70	71	269	543
01 PM	74	66	70	72	282	01 PM	71	78	90	80	319	601
02 PM	111	86	94	111	402	02 PM	86	105	84	126	401	803
03 PM	103	118	128	116	465	03 PM	128	138	118	134	518	983
04 PM	108	122	95	110	435	04 PM	114	132	100	125	471	906
05 PM	102	134	122	118	476	05 PM	144	150	136	176	606	1082
06 PM	142	140	99	106	487	06 PM	126	148	134	147	555	1042
07 PM	112	89	78	87	366	07 PM	126	108	108	94	436	802
08 PM	76	68	58	54	256	08 PM	121	92	72	70	355	611
09 PM	54	70	43	41	208	09 PM	76	72	65	62	275	483
10 PM	38	37	26	30	131	10 PM	51	38	40	31	160	291
11 PM	23	13	19	9	64	11 PM	36	26	28	18	108	172
TOTAL:					**7401**						**6358**	**13759**

PHP: 1362 **PHF:** 0.92 **D FACTOR:** 0.698

AADT: 13546 **K FACTOR:** 0.106

PUBLIC WORKS AND WASTE MANAGEMENT DEPARTMENT
TRAFFIC ENGINEERING DIVISION

DATE: 03/04/15 LOCATION: NW 169 ST

STATION: 9550 E/O NW 77 CT TO NW 67 AVE

EASTBOUND						WESTBOUND						TWO-WAY
TIME	1ST	2ND	3RD	4TH	TOTAL HR	TIME	1ST	2ND	3RD	4TH	TOTAL HR	TOTAL
12 AM	10	11	6	4	31	12 AM	23	13	14	16	66	97
01 AM	8	2	3	6	19	01 AM	7	10	3	8	28	47
02 AM	2	2	2	1	7	02 AM	3	2	2	5	12	19
03 AM	1	6	3	3	13	03 AM	5	1	2	0	8	21
04 AM	2	6	9	11	28	04 AM	4	2	2	2	10	38
05 AM	19	17	26	52	114	05 AM	3	6	8	17	34	148
06 AM	65	88	144	222	519	06 AM	15	32	37	66	150	669
07 AM	270	299	276	210	1055	07 AM	88	94	131	152	465	1520
08 AM	222	196	214	158	790	08 AM	154	122	94	102	472	1262
09 AM	119	100	91	74	384	09 AM	100	64	53	37	254	638
10 AM	71	68	80	68	287	10 AM	46	47	58	40	191	478
11 AM	51	62	74	82	269	11 AM	63	64	62	66	255	524
12 PM	71	74	64	78	287	12 PM	65	73	74	79	291	578
01 PM	74	64	78	98	314	01 PM	92	56	109	94	351	665
02 PM	119	120	108	105	452	02 PM	94	87	110	88	379	831
03 PM	99	110	116	106	431	03 PM	128	131	115	146	520	951
04 PM	126	115	104	106	451	04 PM	127	142	103	146	518	969
05 PM	84	120	138	126	468	05 PM	138	144	136	162	580	1048
06 PM	131	97	110	115	453	06 PM	117	186	144	127	574	1027
07 PM	94	87	97	84	362	07 PM	108	132	98	96	434	796
08 PM	66	70	58	46	240	08 PM	98	92	90	78	358	598
09 PM	55	53	34	52	194	09 PM	64	60	52	55	231	425
10 PM	42	29	27	20	118	10 PM	41	36	34	33	144	262
11 PM	19	16	12	14	61	11 PM	43	43	24	29	139	200
TOTAL:					**7347**						**6464**	**13811**

PHP: 1363 **PHF:** 0.882 **D FACTOR:** 0.694

AADT: 13531 **K FACTOR:** 0.107

PUBLIC WORKS AND WASTE MANAGEMENT DEPARTMENT
TRAFFIC ENGINEERING DIVISION

DATE: 03/05/15 LOCATION: NW 169 ST

STATION: 9550 E/O NW 77 CT TO NW 67 AVE

EASTBOUND						WESTBOUND						TWO-WAY
TIME	1ST	2ND	3RD	4TH	TOTAL HR	TIME	1ST	2ND	3RD	4TH	TOTAL HR	TOTAL
12 AM	10	9	9	9	37	12 AM	15	14	16	15	60	97
01 AM	8	5	5	7	25	01 AM	5	6	6	10	27	52
02 AM	1	3	6	2	12	02 AM	10	5	4	1	20	32
03 AM	0	6	6	5	17	03 AM	2	5	3	4	14	31
04 AM	3	2	9	8	22	04 AM	3	3	3	3	12	34
05 AM	16	29	38	37	120	05 AM	5	3	2	11	21	141
06 AM	76	97	138	230	541	06 AM	15	32	39	62	148	689
07 AM	268	284	288	220	1060	07 AM	89	119	116	140	464	1524
08 AM	200	226	206	186	818	08 AM	154	120	108	98	480	1298
09 AM	119	84	112	92	407	09 AM	82	69	65	47	263	670
10 AM	81	102	76	79	338	10 AM	52	56	39	54	201	539
11 AM	72	73	80	69	294	11 AM	53	50	50	70	223	517
12 PM	79	84	87	80	330	12 PM	68	71	70	78	287	617
01 PM	74	86	76	82	318	01 PM	80	74	84	84	322	640
02 PM	110	88	104	100	402	02 PM	80	94	120	102	396	798
03 PM	102	128	124	140	494	03 PM	98	134	130	128	490	984
04 PM	127	105	122	119	473	04 PM	98	122	143	116	479	952
05 PM	94	125	130	124	473	05 PM	124	131	134	164	553	1026
06 PM	112	134	129	96	471	06 PM	127	167	130	130	554	1025
07 PM	105	86	90	81	362	07 PM	115	127	92	105	439	801
08 PM	77	68	80	71	296	08 PM	102	110	79	87	378	674
09 PM	62	64	48	44	218	09 PM	77	76	82	67	302	520
10 PM	33	36	18	31	118	10 PM	40	52	54	38	184	302
11 PM	17	18	4	14	53	11 PM	38	25	32	18	113	166
TOTAL:					**7699**						**6430**	**14129**

PHP: 1376 **PHF:** 0.92 **D FACTOR:** 0.696

AADT: 13774 **K FACTOR:** 0.105

PUBLIC WORKS AND WASTE MANAGEMENT DEPARTMENT
TRAFFIC ENGINEERING DIVISION

SUMMARY FOR STATION NUMBER: 9550

	PHP	AADT	K	D	PHF
03/03/15	1362	13546	0.106	0.698	0.92
03/04/15	1363	13531	0.107	0.694	0.882
03/05/15	1376	13774	0.105	0.696	0.92
AVG	1367	13617	0.106	0.696	0.907

PUBLIC WORKS AND WASTE MANAGEMENT DEPARTMENT
TRAFFIC ENGINEERING DIVISION

DATE: 03/03/15 LOCATION: NW 170 ST

STATION: 9552 E/O NW 87 AVE TO NW 77 AVE

EASTBOUND						WESTBOUND						TWO-WAY
TIME	1ST	2ND	3RD	4TH	TOTAL HR	TIME	1ST	2ND	3RD	4TH	TOTAL HR	TOTAL
12 AM	8	3	2	1	14	12 AM	8	2	5	2	17	31
01 AM	2	5	2	4	13	01 AM	2	1	3	3	9	22
02 AM	1	3	1	5	10	02 AM	2	1	1	1	5	15
03 AM	1	0	0	0	1	03 AM	0	0	0	1	1	2
04 AM	1	2	2	2	7	04 AM	1	1	1	0	3	10
05 AM	3	6	4	4	17	05 AM	2	3	4	8	17	34
06 AM	12	19	23	48	102	06 AM	6	23	33	77	139	241
07 AM	61	114	138	122	435	07 AM	99	117	107	103	426	861
08 AM	114	81	81	42	318	08 AM	97	106	62	41	306	624
09 AM	43	34	29	23	129	09 AM	31	25	24	34	114	243
10 AM	26	32	25	30	113	10 AM	20	22	24	30	96	209
11 AM	15	16	13	20	64	11 AM	16	21	26	20	83	147
12 PM	35	29	24	26	114	12 PM	17	24	17	17	75	189
01 PM	24	28	31	28	111	01 PM	22	31	31	31	115	226
02 PM	27	34	84	76	221	02 PM	54	52	57	47	210	431
03 PM	67	39	88	79	273	03 PM	72	73	66	43	254	527
04 PM	62	56	48	68	234	04 PM	53	45	46	43	187	421
05 PM	57	75	60	62	254	05 PM	35	34	61	69	199	453
06 PM	61	85	70	69	285	06 PM	71	77	66	59	273	558
07 PM	66	56	46	43	211	07 PM	37	37	42	37	153	364
08 PM	54	60	43	29	186	08 PM	34	33	24	18	109	295
09 PM	30	31	21	26	108	09 PM	22	20	40	25	107	215
10 PM	15	12	19	11	57	10 PM	18	12	15	16	61	118
11 PM	7	8	10	2	27	11 PM	10	10	8	4	32	59
TOTAL:					**3304**						**2991**	**6295**

PHP: 731 **PHF:** 0.788 **D FACTOR:** 0.505

AADT: 6198 **K FACTOR:** 0.133

PUBLIC WORKS AND WASTE MANAGEMENT DEPARTMENT
TRAFFIC ENGINEERING DIVISION

DATE: 03/04/15 LOCATION: NW 170 ST

STATION: 9552 E/O NW 87 AVE TO NW 77 AVE

EASTBOUND						WESTBOUND						TWO-WAY
TIME	1ST	2ND	3RD	4TH	TOTAL HR	TIME	1ST	2ND	3RD	4TH	TOTAL HR	TOTAL
12 AM	4	4	3	1	12	12 AM	7	2	2	3	14	26
01 AM	3	1	4	0	8	01 AM	7	2	3	1	13	21
02 AM	1	1	1	0	3	02 AM	1	0	2	2	5	8
03 AM	0	0	0	2	2	03 AM	1	0	1	0	2	4
04 AM	0	2	0	4	6	04 AM	0	0	1	0	1	7
05 AM	4	7	6	6	23	05 AM	1	3	4	7	15	38
06 AM	15	11	23	48	97	06 AM	9	16	39	77	141	238
07 AM	62	104	122	119	407	07 AM	117	111	115	97	440	847
08 AM	118	128	79	54	379	08 AM	117	95	75	43	330	709
09 AM	42	29	27	22	120	09 AM	29	29	27	30	115	235
10 AM	33	29	28	22	112	10 AM	26	19	15	16	76	188
11 AM	23	25	26	28	102	11 AM	17	30	19	25	91	193
12 PM	26	28	26	33	113	12 PM	16	20	25	16	77	190
01 PM	22	23	39	35	119	01 PM	32	23	22	30	107	226
02 PM	53	31	90	79	253	02 PM	44	45	62	51	202	455
03 PM	54	39	83	84	260	03 PM	49	70	63	55	237	497
04 PM	72	56	53	52	233	04 PM	49	43	43	46	181	414
05 PM	57	63	48	42	210	05 PM	41	48	67	56	212	422
06 PM	63	66	81	57	267	06 PM	59	71	59	31	220	487
07 PM	58	54	54	72	238	07 PM	44	40	40	29	153	391
08 PM	48	50	29	33	160	08 PM	30	28	31	16	105	265
09 PM	29	28	25	34	116	09 PM	28	27	23	20	98	214
10 PM	24	19	17	10	70	10 PM	36	11	7	6	60	130
11 PM	12	10	8	9	39	11 PM	16	16	10	10	52	91
TOTAL:					**3349**						**2947**	**6296**

PHP: 762 **PHF:** 0.94 **D FACTOR:** 0.519

AADT: 6168 **K FACTOR:** 0.13

PUBLIC WORKS AND WASTE MANAGEMENT DEPARTMENT
TRAFFIC ENGINEERING DIVISION

DATE: 03/05/15 LOCATION: NW 170 ST

STATION: 9552 E/O NW 87 AVE TO NW 77 AVE

EASTBOUND						WESTBOUND						TWO-WAY
TIME	1ST	2ND	3RD	4TH	TOTAL HR	TIME	1ST	2ND	3RD	4TH	TOTAL HR	TOTAL
12 AM	4	6	0	4	14	12 AM	7	5	1	4	17	31
01 AM	6	1	1	5	13	01 AM	4	3	4	1	12	25
02 AM	3	1	3	4	11	02 AM	3	6	0	0	9	20
03 AM	2	1	1	1	5	03 AM	1	0	0	0	1	6
04 AM	0	1	1	4	6	04 AM	1	0	0	0	1	7
05 AM	3	7	5	7	22	05 AM	3	9	4	6	22	44
06 AM	14	17	20	45	96	06 AM	12	20	48	65	145	241
07 AM	58	95	135	130	418	07 AM	116	137	115	90	458	876
08 AM	125	102	72	43	342	08 AM	135	96	69	43	343	685
09 AM	46	35	32	34	147	09 AM	31	22	25	30	108	255
10 AM	34	30	24	21	109	10 AM	19	14	13	16	62	171
11 AM	24	21	25	22	92	11 AM	27	24	25	23	99	191
12 PM	24	30	17	25	96	12 PM	24	24	20	25	93	189
01 PM	19	30	26	36	111	01 PM	19	26	23	35	103	214
02 PM	43	36	97	79	255	02 PM	39	58	46	45	188	443
03 PM	70	52	81	78	281	03 PM	66	75	49	52	242	523
04 PM	63	46	44	56	209	04 PM	39	35	41	39	154	363
05 PM	53	44	61	78	236	05 PM	45	31	52	57	185	421
06 PM	68	75	67	88	298	06 PM	63	78	58	54	253	551
07 PM	65	51	45	62	223	07 PM	43	49	47	34	173	396
08 PM	45	57	49	37	188	08 PM	30	34	34	24	122	310
09 PM	35	35	31	37	138	09 PM	32	29	35	19	115	253
10 PM	17	22	19	16	74	10 PM	27	19	13	14	73	147
11 PM	10	9	6	9	34	11 PM	12	9	17	9	47	81
TOTAL:					**3418**						**3025**	**6443**

PHP: 760 **PHF:** 0.836 **D FACTOR:** 0.523

AADT: 6281 **K FACTOR:** 0.132

PUBLIC WORKS AND WASTE MANAGEMENT DEPARTMENT
TRAFFIC ENGINEERING DIVISION

SUMMARY FOR STATION NUMBER: 9552

	PHP	AADT	K	D	PHF
03/03/15	731	6198	0.133	0.505	0.788
03/04/15	762	6168	0.13	0.519	0.94
03/05/15	760	6281	0.132	0.523	0.836
AVG	751	6215	0.132	0.516	0.855

Broward County Traffic Engineering Division

Attachment A

2300 W. Commercial Blvd.

Fort Lauderdale, FL 33309

SIGNAL: 3472
CITY: MIRAMAR
LOCATION: MIRAMAR PKWY & DYKES RD/SW 160 AVE

File Name : 3472_05052015
Site Code : 00000000
Start Date : 5/5/2015
Page No : 1

Groups Printed- Unshifted

	DYKES RD Northbound					DYKES RD Southbound					MIRAMAR PARKWAY Eastbound					MIRAMAR PARKWAY Westbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	99	80	41	0	220	4	39	142	0	185	0	275	7	0	282	100	165	55	0	320	1007
07:15 AM	114	66	50	0	230	18	77	156	0	251	2	337	9	0	348	143	190	62	0	395	1224
07:30 AM	125	78	53	0	256	8	46	195	0	249	20	315	18	0	353	162	178	54	0	394	1252
07:45 AM	138	66	42	0	246	8	64	215	0	287	42	441	26	0	509	223	182	81	0	486	1528
Total	476	290	186	0	952	38	226	708	0	972	64	1368	60	0	1492	628	715	252	0	1595	5011
08:00 AM	144	33	25	0	202	11	52	190	0	253	20	363	22	0	405	214	159	90	0	463	1323
08:15 AM	115	40	16	0	171	6	84	167	0	257	9	296	24	0	329	172	195	86	0	453	1210
08:30 AM	69	35	16	0	120	5	85	191	0	281	12	288	30	0	330	143	154	79	0	376	1107
08:45 AM	78	53	31	0	162	4	47	138	0	189	16	300	26	0	342	184	198	117	0	499	1192
Total	406	161	88	0	655	26	268	686	0	980	57	1247	102	0	1406	713	706	372	0	1791	4832
*** BREAK ***																					
11:00 AM	54	54	15	0	123	19	24	42	0	85	13	167	39	0	219	73	189	43	0	305	732
11:15 AM	49	50	16	6	121	22	28	51	0	101	12	250	52	0	314	105	191	37	0	333	869
11:30 AM	31	40	11	0	82	26	35	52	0	113	14	183	49	0	246	86	151	25	0	262	703
11:45 AM	54	36	25	0	115	23	27	160	0	210	14	202	47	0	263	131	219	42	0	392	980
Total	188	180	67	6	441	90	114	305	0	509	53	802	187	0	1042	395	750	147	0	1292	3284
12:00 PM	47	47	20	0	114	27	48	149	0	224	13	230	54	0	297	166	204	42	0	412	1047
12:15 PM	35	38	15	0	88	42	31	159	0	232	14	227	46	0	287	144	193	30	0	367	974
12:30 PM	46	58	16	0	120	39	45	189	0	273	15	186	78	0	279	183	206	52	0	441	1113
12:45 PM	34	40	25	0	99	35	55	192	3	285	16	275	61	0	352	146	211	52	0	409	1145
Total	162	183	76	0	421	143	179	689	3	1014	58	918	239	0	1215	639	814	176	0	1629	4279
*** BREAK ***																					
04:00 PM	75	46	32	0	153	68	84	171	0	323	34	254	63	0	351	243	381	81	0	705	1532
04:15 PM	97	41	30	0	168	77	75	206	0	358	34	231	45	0	310	255	384	89	0	728	1564
04:30 PM	168	44	68	0	280	74	79	128	4	285	38	237	35	0	310	182	363	112	0	657	1532
04:45 PM	225	88	104	0	417	48	81	152	8	289	36	265	57	0	358	216	412	79	0	707	1771
Total	565	219	234	0	1018	267	319	657	12	1255	142	987	200	0	1329	896	1540	361	0	2797	6399
05:00 PM	230	144	91	0	465	75	62	224	0	361	43	233	42	0	318	260	397	101	0	758	1902
05:15 PM	215	132	48	0	395	49	56	282	4	391	29	260	53	0	342	222	460	110	0	792	1920
05:30 PM	212	120	75	0	407	81	161	215	4	461	34	257	51	0	342	242	446	82	0	770	1980
05:45 PM	232	129	79	0	440	62	95	264	2	423	34	233	61	0	328	251	459	94	0	804	1995
Total	889	525	293	0	1707	267	374	985	10	1636	140	983	207	0	1330	975	1762	387	0	3124	7797
Grand Total	2686	1558	944	6	5194	831	1480	4030	25	6366	514	6305	995	0	7814	4246	6287	1695	0	12228	31602
Apprch %	51.7	30	18.2	0.1		13.1	23.2	63.3	0.4		6.6	80.7	12.7	0		34.7	51.4	13.9	0		
Total %	8.5	4.9	3	0	16.4	2.6	4.7	12.8	0.1	20.1	1.6	20	3.1	0	24.7	13.4	19.9	5.4	0	38.7	

HBC Engineering Company

13155 SW 134 Street, Suite 207
Miami, FL 33186

Site Code: Miramar EB E of I-75
Station ID: 27638

Start Time	30-Jan-14 Thu	I-75 Off-Ramp Morning	I-75 Off-Ramp Afternoon	Hour Totals Morning	Hour Totals Afternoon	Eastbound Morning	Eastbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		29	121			31	146				
12:15		20	148			29	165				
12:30		28	158			29	158				
12:45		16	139	93	566	19	151	108	620	201	1186
01:00		19	188			12	148				
01:15		10	184			9	172				
01:30		14	150			10	178				
01:45		10	185	53	707	9	164	40	662	93	1369
02:00		4	174			8	182				
02:15		4	159			8	188				
02:30		4	175			10	190				
02:45		8	151	20	659	8	174	34	734	54	1393
03:00		3	171			2	150				
03:15		8	154			7	178				
03:30		2	194			2	201				
03:45		7	242	20	761	2	224	13	753	33	1514
04:00		2	178			6	176				
04:15		4	230			3	214				
04:30		11	263			12	226				
04:45		16	373	33	1044	22	236	43	852	76	1896
05:00		16	351			10	252				
05:15		15	298			22	224				
05:30		21	384			30	263				
05:45		49	358	101	1391	44	236	106	975	207	2366
06:00		52	362			50	227				
06:15		90	318			83	254				
06:30		152	340			124	246				
06:45		158	373	452	1393	166	260	423	987	875	2380
07:00		204	418			174	252				
07:15		290	343			236	234				
07:30		268	322			244	211				
07:45		250	208	1012	1291	274	168	928	865	1940	2156
08:00		241	174			286	160				
08:15		214	134			280	122				
08:30		230	146			297	141				
08:45		248	130	933	584	299	118	1162	541	2095	1125
09:00		252	110			239	100				
09:15		224	106			218	95				
09:30		140	80			195	103				
09:45		165	88	781	384	200	99	852	397	1633	781
10:00		118	89			171	86				
10:15		161	76			174	78				
10:30		184	82			200	79				
10:45		157	55	620	302	154	59	699	302	1319	604
11:00		142	40			162	63				
11:15		150	67			143	56				
11:30		146	40			160	38				
11:45		140	33	578	180	145	26	610	183	1188	363
Total		4696	9262			5018	7871			9714	17133
Percent		33.6%	66.4%			38.9%	61.1%			36.2%	63.8%

HBC Engineering Company

13155 SW 134 Street, Suite 207
Miami, FL 33186

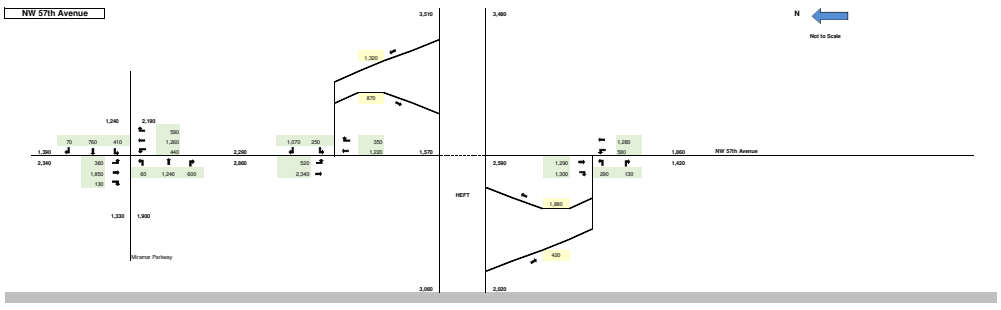
Site Code: Miramar WB E of I-75
Station ID: 27640

Start Time	23-Jan-14 Thu	I-75 On-Ramp Morning	I-75 On-Ramp Afternoon	Hour Totals Morning	Hour Totals Afternoon	Westbound Morning	Westbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		22	106			42	170				
12:15		16	128			32	170				
12:30		12	112			23	162				
12:45		6	118	56	464	18	164	115	666	171	1130
01:00		14	108			16	156				
01:15		5	110			14	182				
01:30		6	104			16	178				
01:45		9	130	34	452	14	188	60	704	94	1156
02:00		4	114			10	152				
02:15		8	139			12	194				
02:30		5	122			8	173				
02:45		12	132	29	507	6	182	36	701	65	1208
03:00		6	141			8	158				
03:15		8	134			8	170				
03:30		8	168			8	192				
03:45		8	163	30	606	7	166	31	686	61	1292
04:00		6	184			8	204				
04:15		7	174			12	178				
04:30		15	198			7	189				
04:45		14	231	42	787	16	238	43	809	85	1596
05:00		14	262			14	218				
05:15		24	245			18	236				
05:30		37	231			41	239				
05:45		43	218	118	956	72	233	145	926	263	1882
06:00		43	208			54	235				
06:15		76	208			86	274				
06:30		122	169			119	262				
06:45		152	130	393	715	214	239	473	1010	866	1725
07:00		188	146			191	228				
07:15		213	95			225	198				
07:30		226	104			241	192				
07:45		246	86	873	431	228	162	885	780	1758	1211
08:00		206	94			226	138				
08:15		192	82			206	164				
08:30		168	78			202	122				
08:45		177	70	743	324	209	94	843	518	1586	842
09:00		125	74			163	126				
09:15		137	100			176	114				
09:30		109	63			155	110				
09:45		96	72	467	309	166	84	660	434	1127	743
10:00		102	62			145	78				
10:15		74	52			114	65				
10:30		106	47			124	64				
10:45		100	40	382	201	139	52	522	259	904	460
11:00		104	31			118	48				
11:15		96	50			124	33				
11:30		106	27			106	40				
11:45		100	20	406	128	140	37	488	158	894	286
Total		3573	5880			4301	7651			7874	13531
Percent		37.8%	62.2%			36.0%	64.0%			36.8%	63.2%

APPENDIX I-B3:
Turnpike AM and PM Volumes

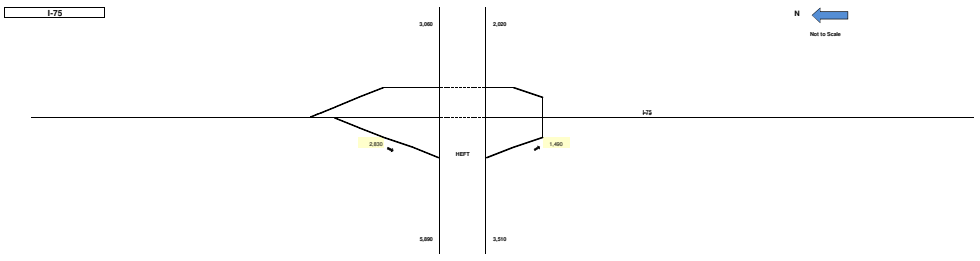
2013 AM Peak Season Peak Hour Volumes

NW 57th Avenue



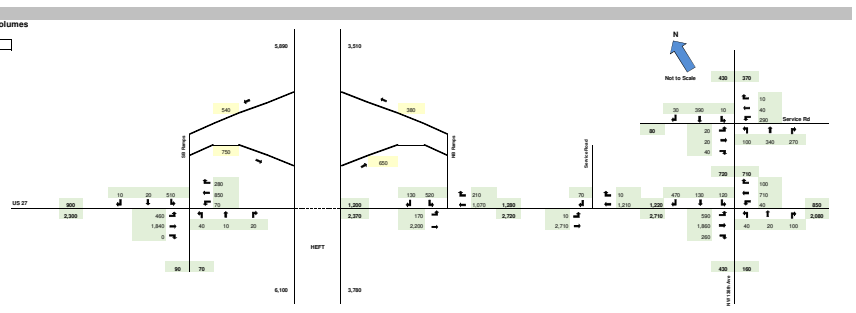
2013 AM Peak Season Peak Hour Volumes

I-75

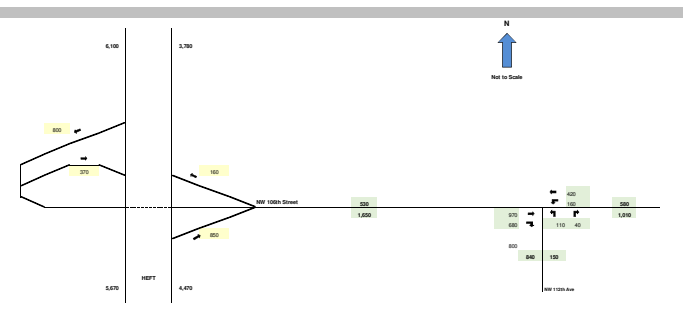


2013 AM Peak Season Peak Hour Volumes

US 27/Okeechobee Road

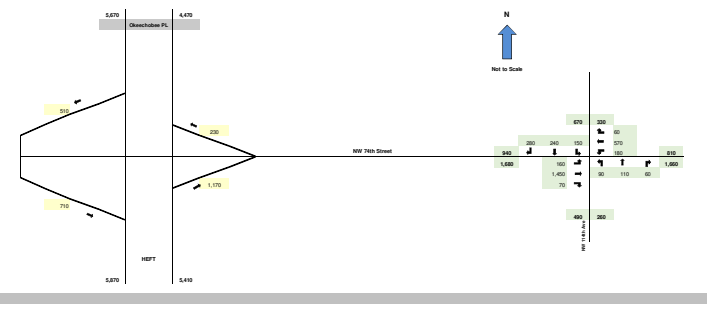


NW 106th Street

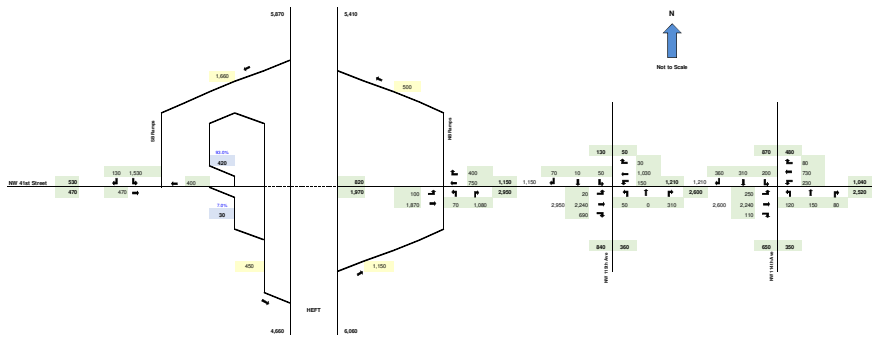


2013 AM Peak Season Peak Hour Volumes

NW 74th Street (Future Interchange)

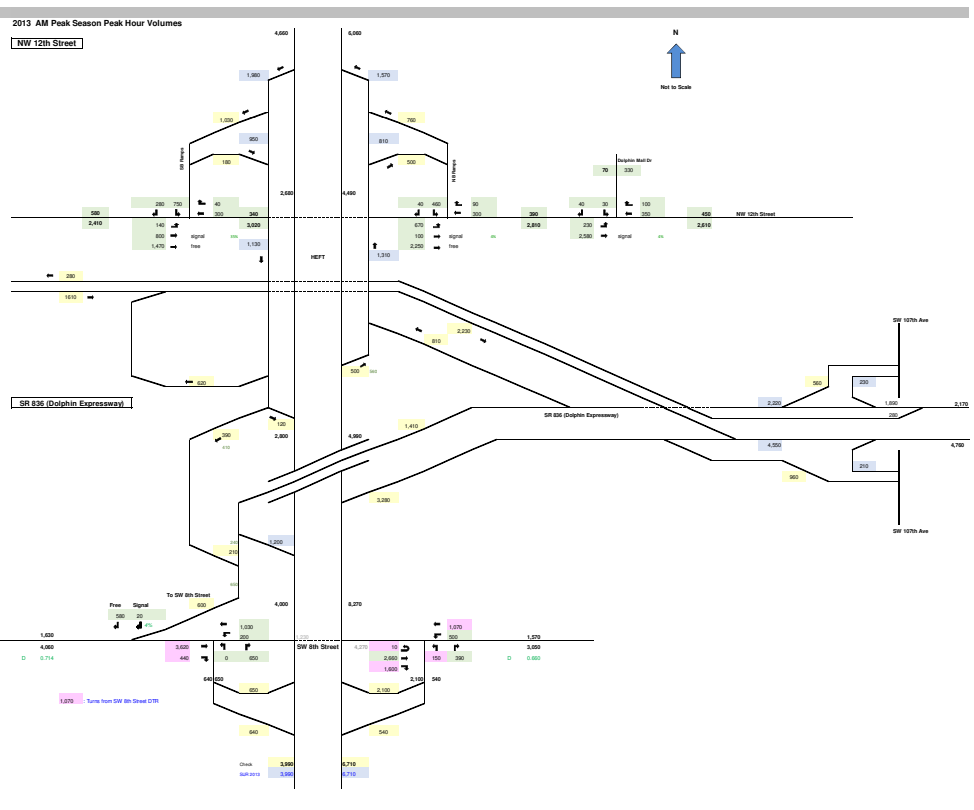


NW 41st Street



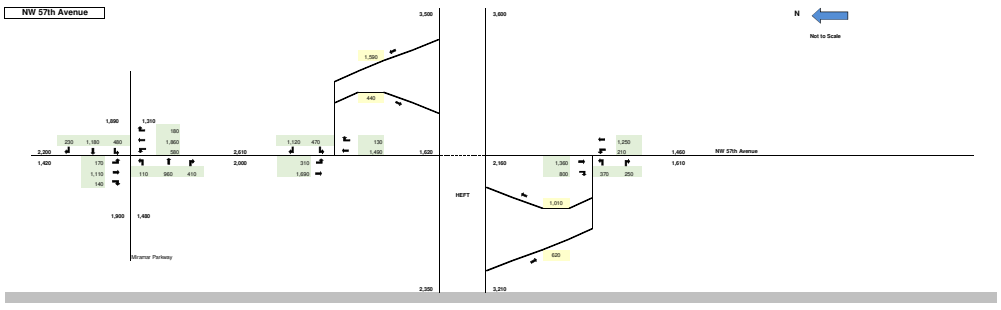
2013 AM Peak Season Peak Hour Volumes

NW 12th Street



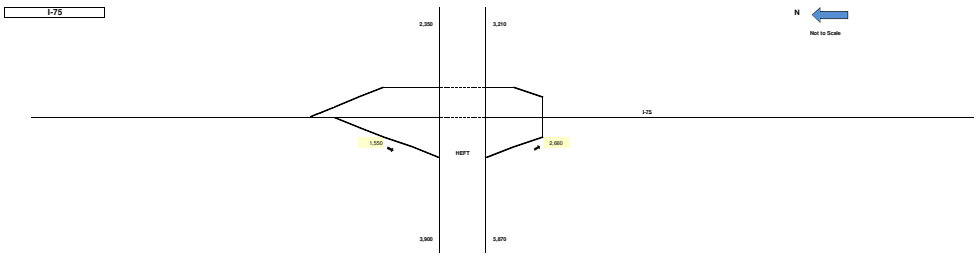
2013 PM Peak Season Peak Hour Volumes

NW 57th Avenue



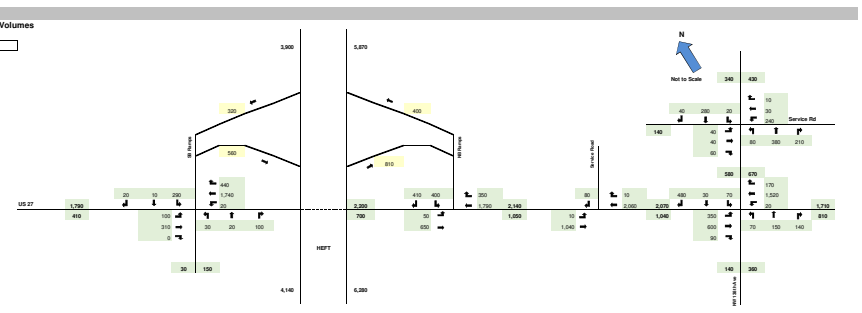
2013 PM Peak Season Peak Hour Volumes

I-75

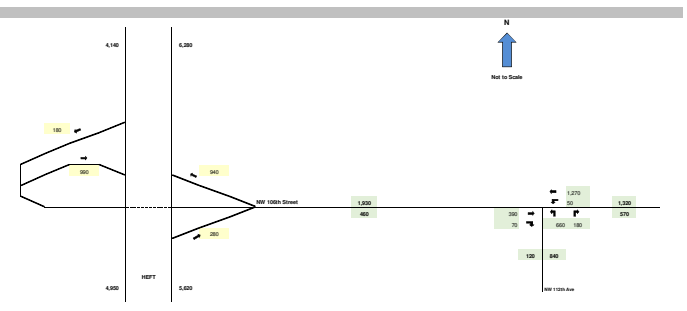


2013 PM Peak Season Peak Hour Volumes

US 27/Okeechobee Road

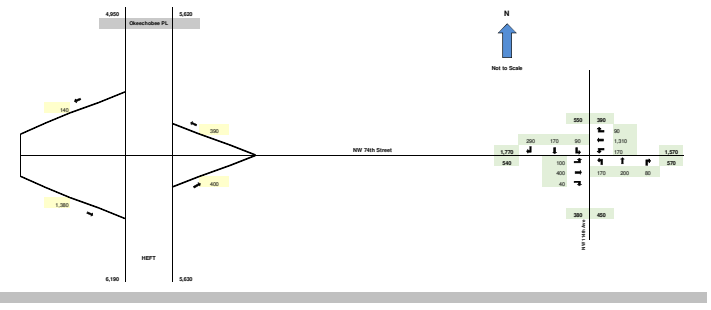


NW 106th Street

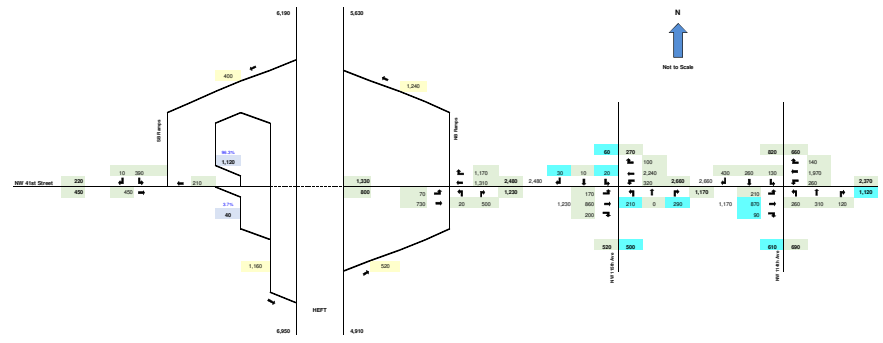


2013 PM Peak Season Peak Hour Volumes

NW 74th Street (Future Interchange)

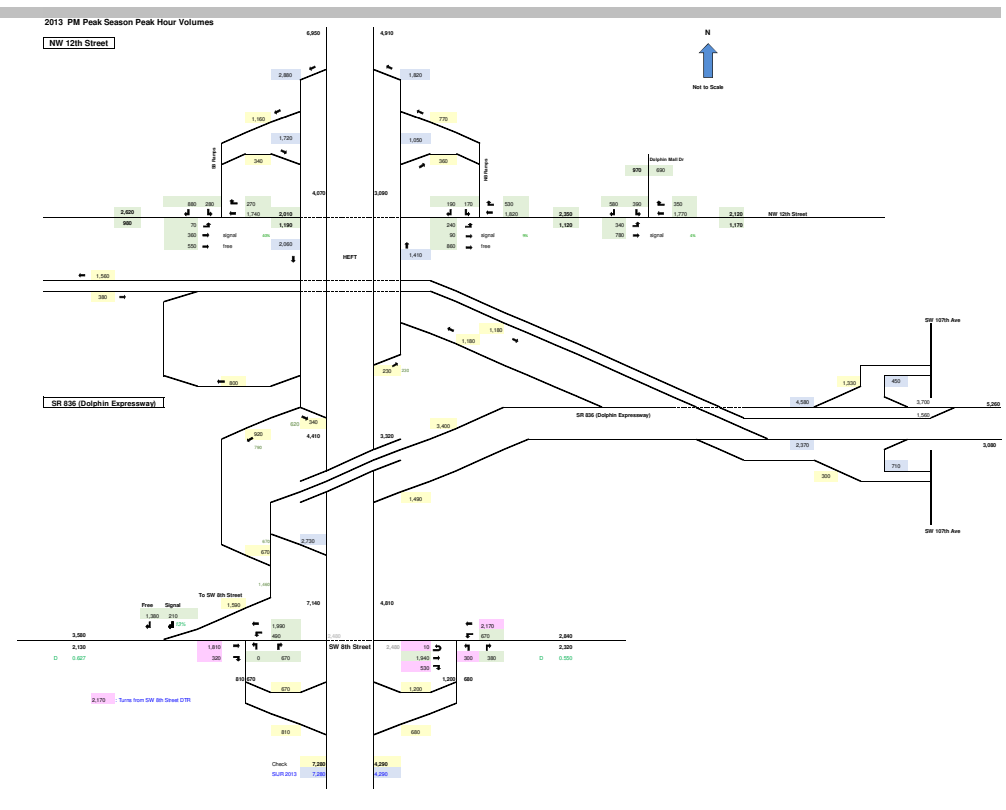


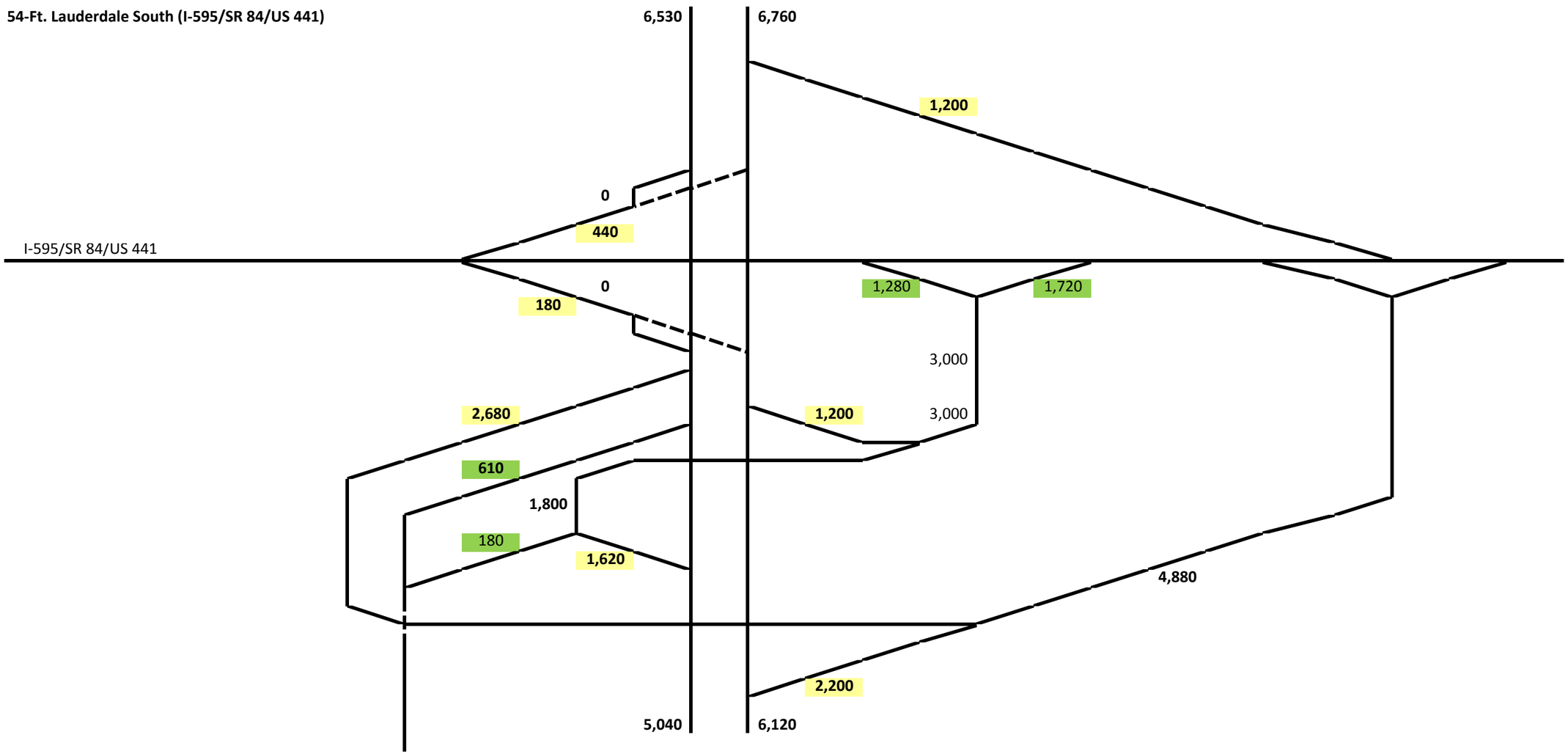
NW 41st Street



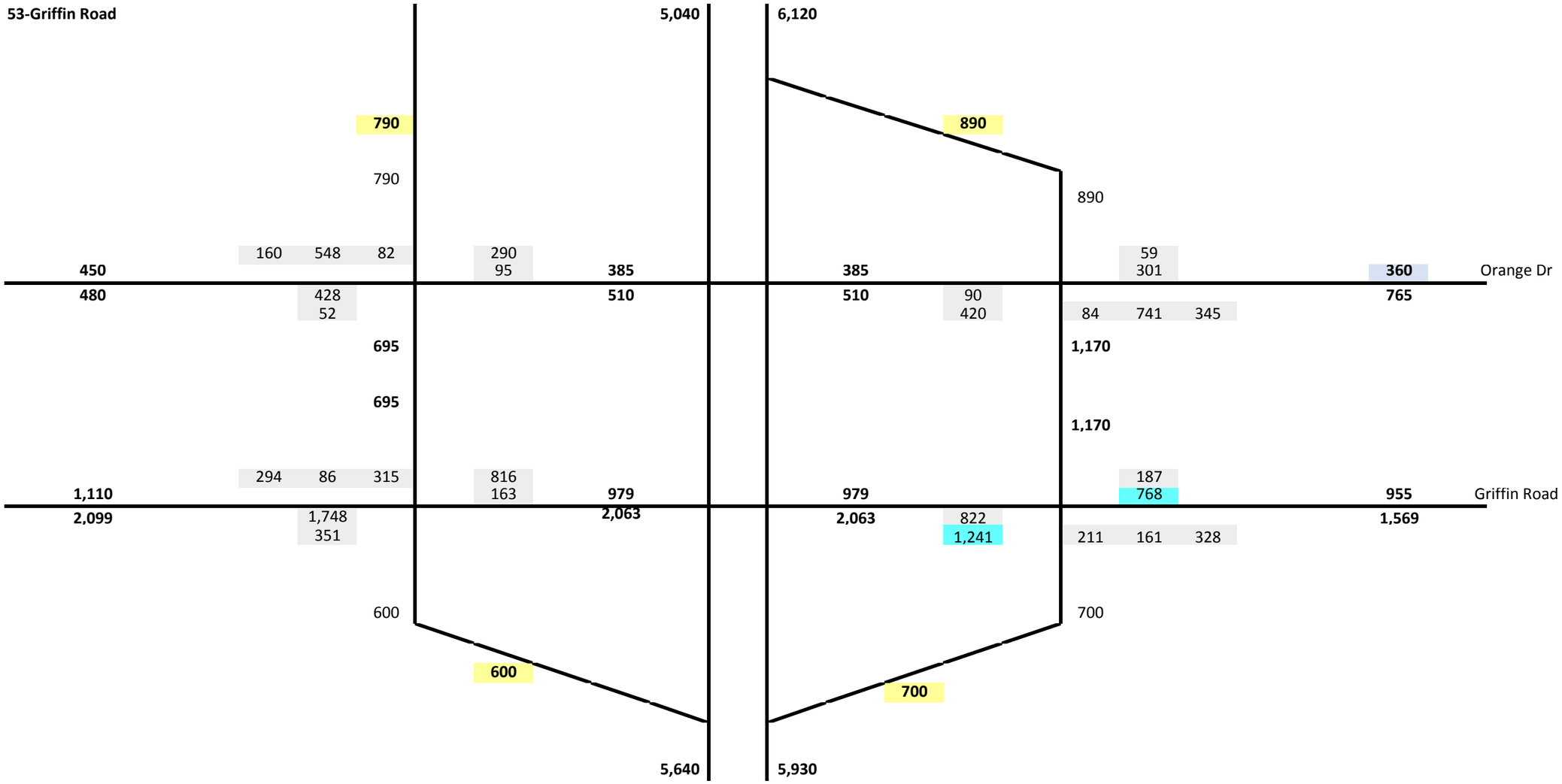
2013 PM Peak Season Peak Hour Volumes

NW 12th Street

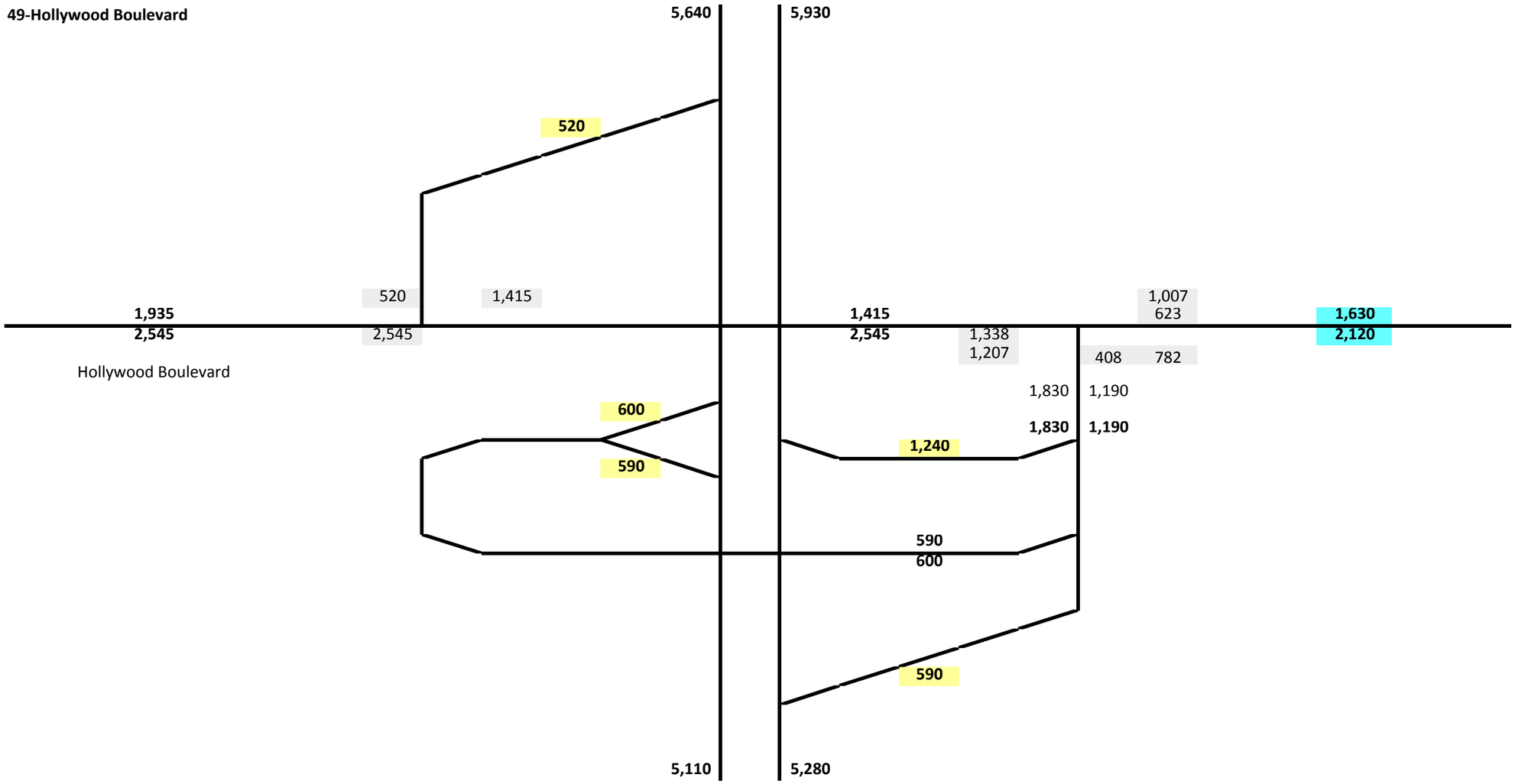




TNPK Mainline AM - Volume

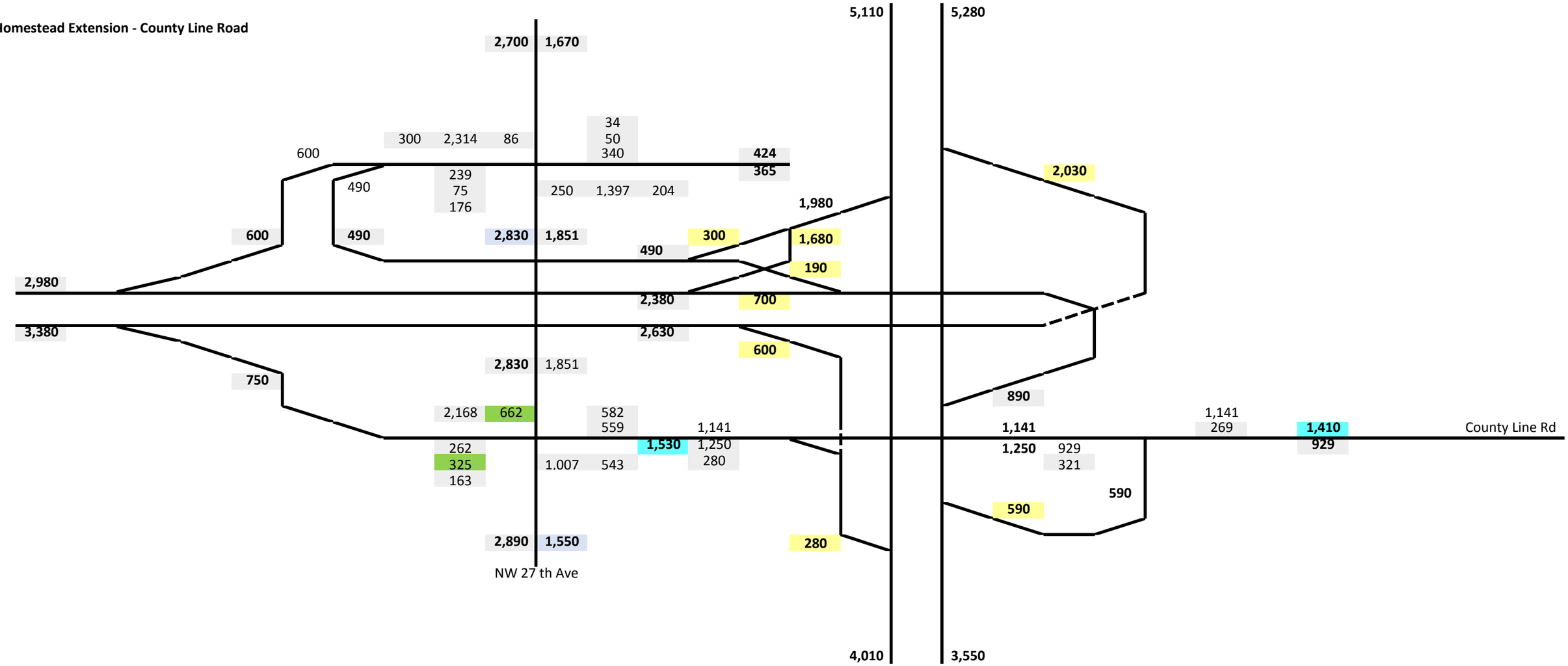


TNPK Mainline AM - Volume

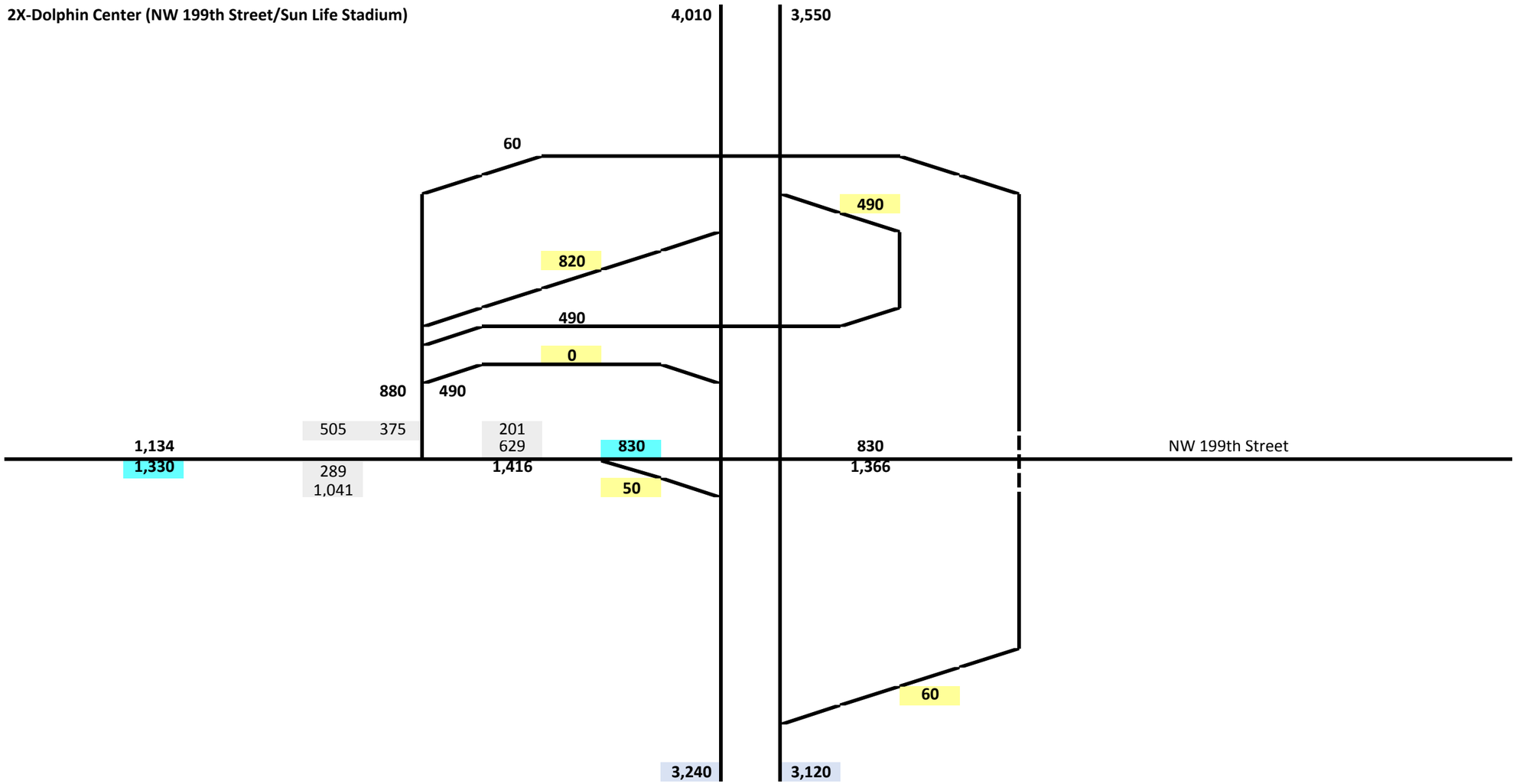


TNPK Mainline AM - Volume

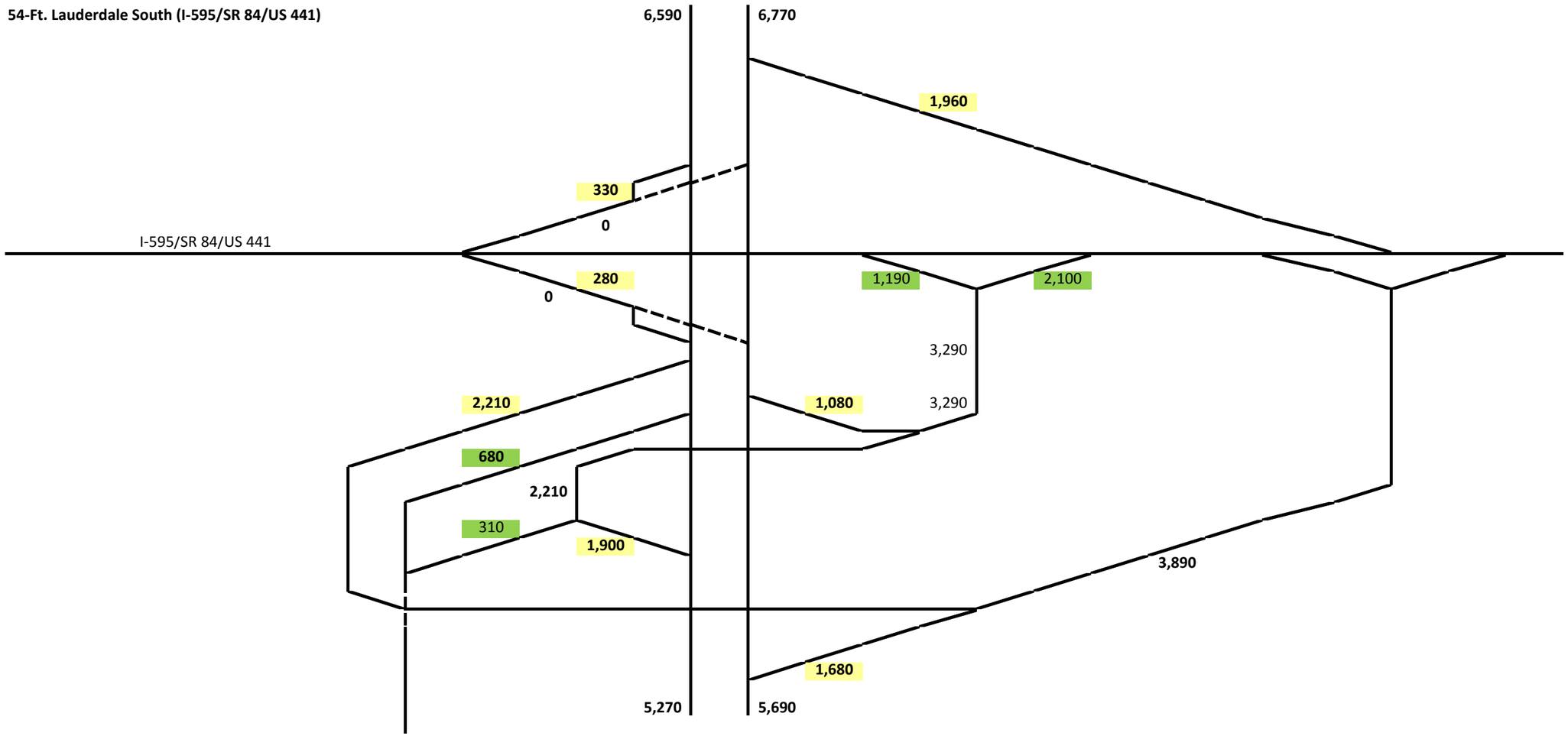
47 - Homestead Extension - County Line Road



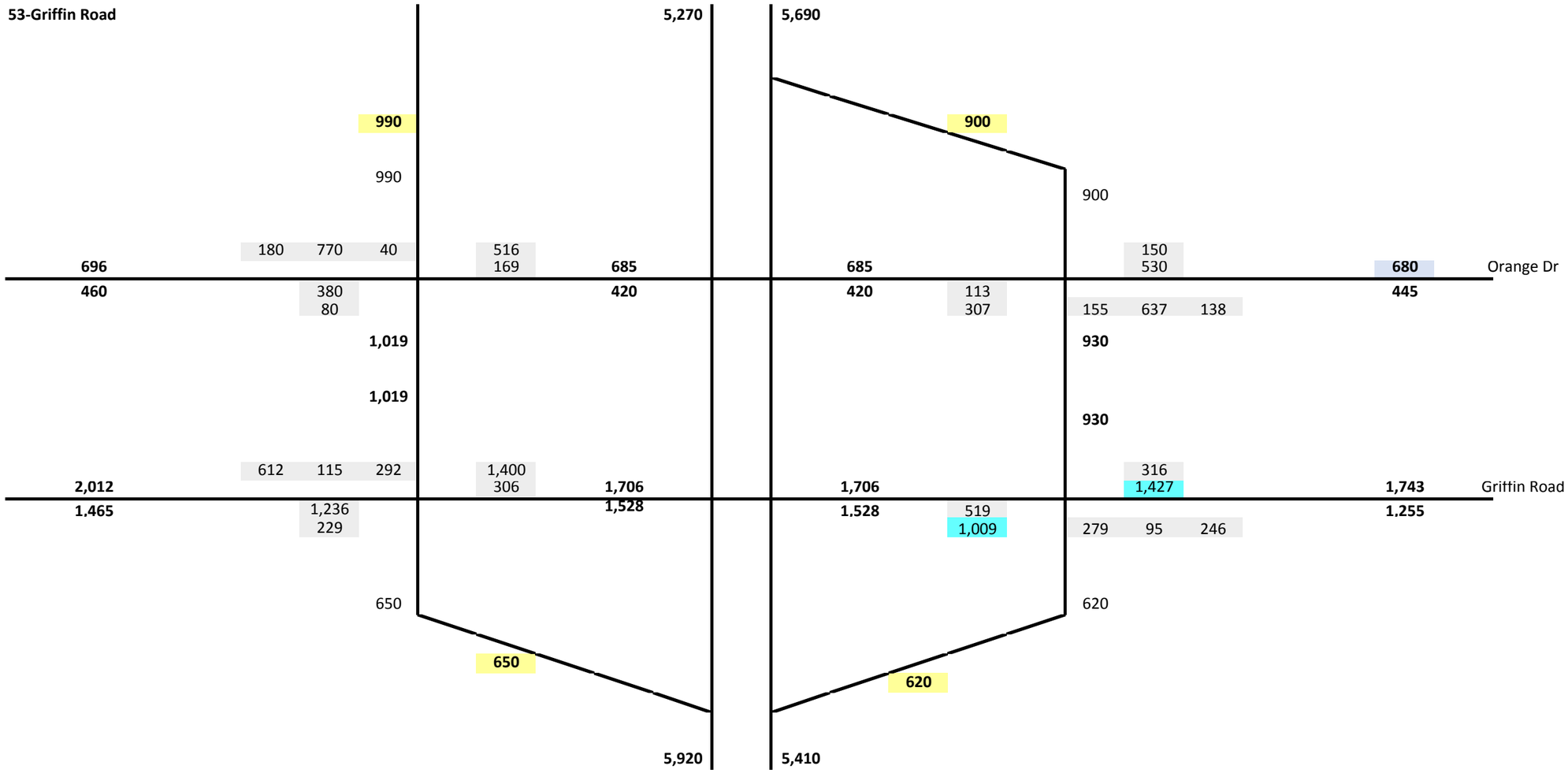
TNPK Mainline AM - Volume



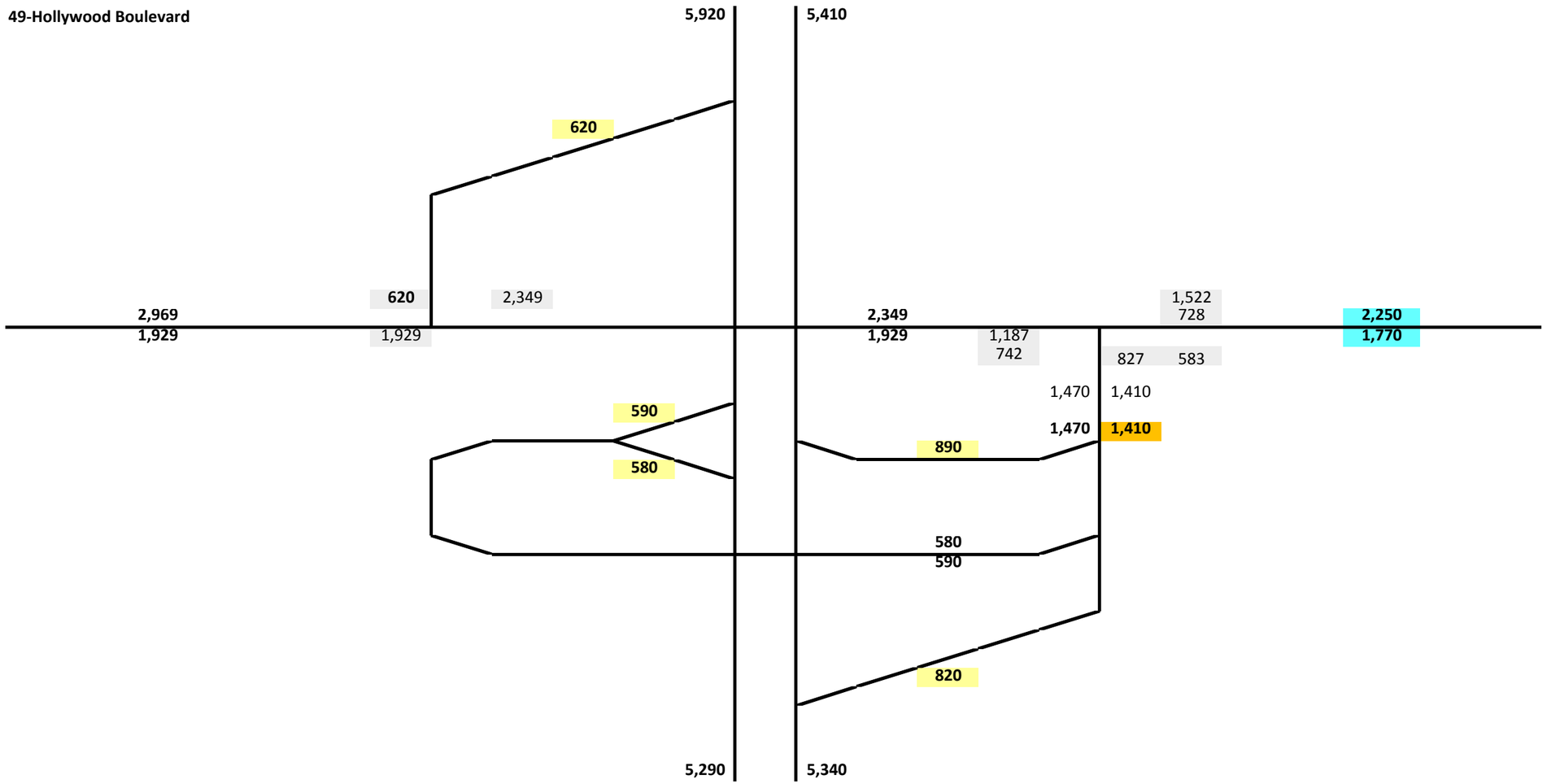
TNPK Mainline AM - Volume



TNPK Mainline PM - Volume

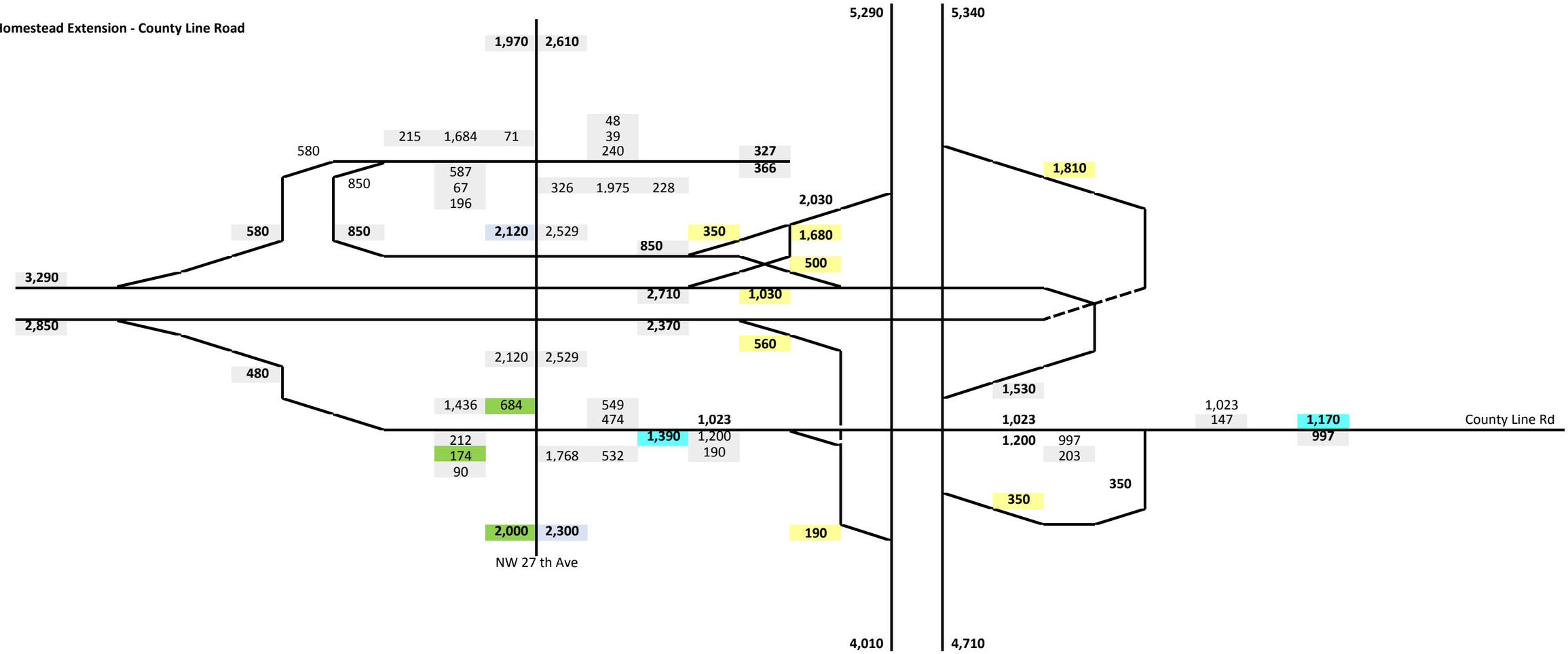


TNPK Mainline PM - Volume

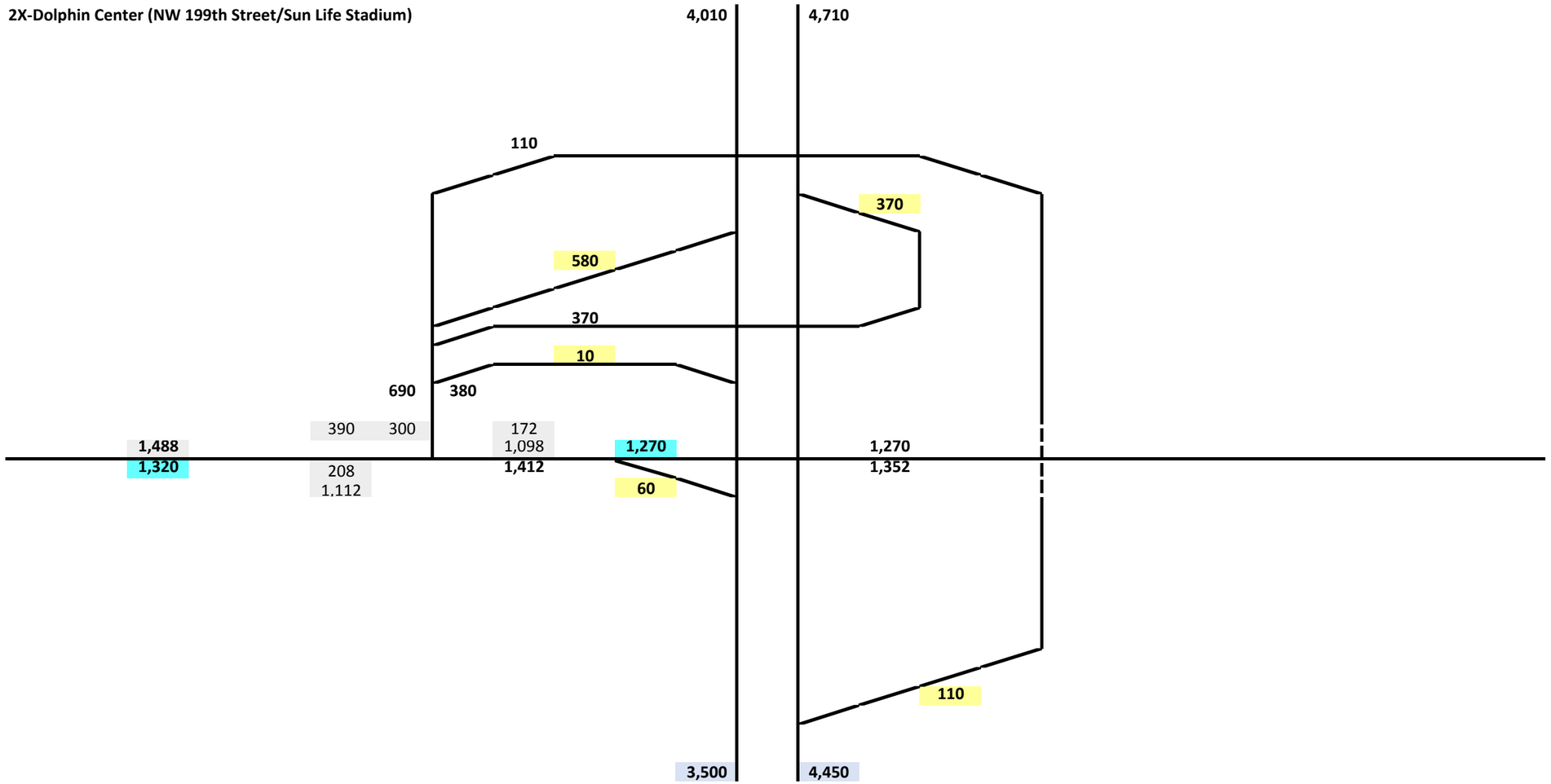


TNPK Mainline PM - Volume

47 - Homestead Extension - County Line Road



TNPK Mainline PM - Volume



TNPK Mainline PM - Volume

APPENDIX I-C:
Intersections TMCs

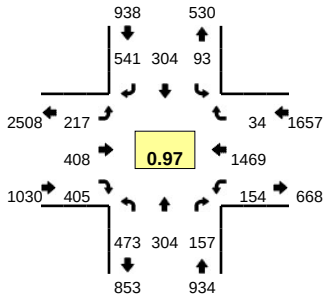
Type of peak hour being reported: Intersection Peak

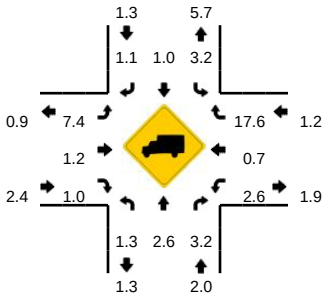
Method for determining peak hour: Total Entering Volume

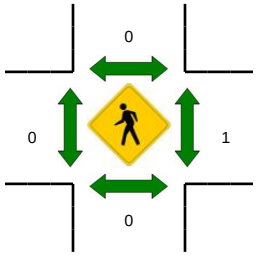
LOCATION: NW 87th Ave -- NW 186th St_Miami Gardens Dr
CITY/STATE: Hialeah, FL

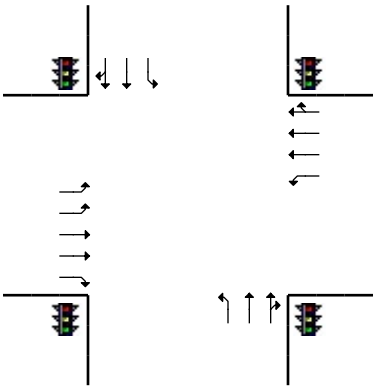
QC JOB #: 13778001
DATE: Wed, Apr 13 2016

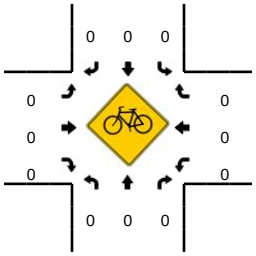
Peak-Hour: 7:30 AM -- 8:30 AM
Peak 15-Min: 8:15 AM -- 8:30 AM

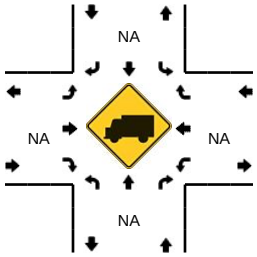


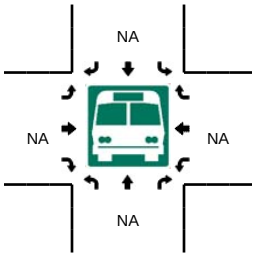












15-Min Count Period Beginning At	NW 87th Ave (Northbound)				NW 87th Ave (Southbound)				NW 186th St_Miami Gardens Dr (Eastbound)				NW 186th St_Miami Gardens Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	131	48	29	0	31	47	136	0	33	90	79	4	57	367	9	4	1065	
7:15 AM	118	72	56	0	19	74	147	0	47	111	100	11	38	343	1	2	1139	
7:30 AM	122	96	48	0	26	56	154	0	50	91	86	8	23	359	8	2	1129	
7:45 AM	124	79	27	0	19	86	139	0	38	92	94	8	32	361	7	5	1111	4444
8:00 AM	115	56	29	0	26	83	118	0	48	104	109	3	48	400	10	1	1150	4529
8:15 AM	112	73	53	0	22	79	130	0	56	121	116	6	41	349	9	2	1169	4559
8:30 AM	115	78	52	0	23	41	106	0	48	97	90	7	32	372	4	3	1068	4498
8:45 AM	84	46	21	0	29	51	105	0	46	89	97	3	41	325	17	5	959	4346

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	448	292	212	0	88	316	520	0	224	484	464	24	164	1396	36	8	4676
Heavy Trucks	4	4	8		4	0	0		16	4	0		0	4	16		60
Pedestrians		0				0				0				4			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

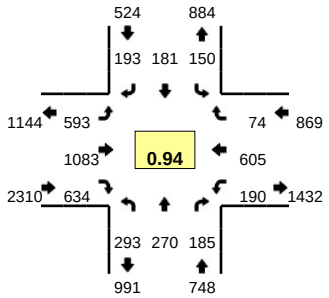
LOCATION: NW 87th Ave -- NW 186th St_Miami Gardens Dr

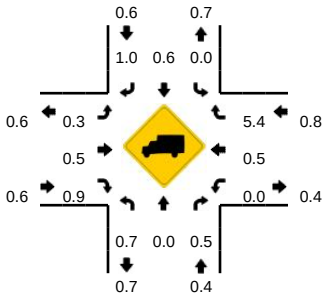
QC JOB #: 13778002

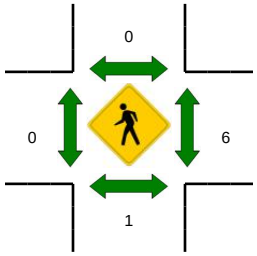
CITY/STATE: Hialeah, FL

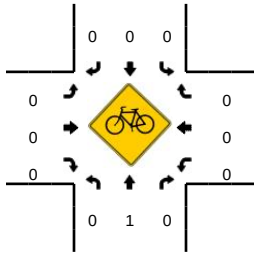
DATE: Wed, Apr 13 2016

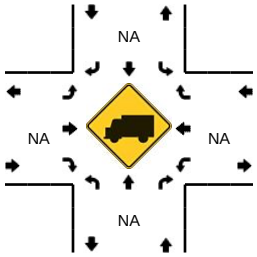
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:45 PM -- 6:00 PM

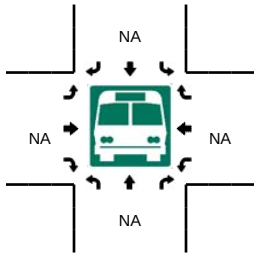












15-Min Count Period Beginning At	NW 87th Ave (Northbound)				NW 87th Ave (Southbound)				NW 186th St_Miami Gardens Dr (Eastbound)				NW 186th St_Miami Gardens Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	67	49	24	0	34	61	56	0	105	212	132	11	37	154	32	1	975	
4:15 PM	71	54	32	0	34	46	59	0	114	246	99	19	36	150	22	3	985	
4:30 PM	60	33	42	0	40	45	48	1	127	251	110	14	36	143	30	4	984	
4:45 PM	57	54	38	0	39	49	37	1	132	240	125	15	39	169	27	9	1031	3975
5:00 PM	62	47	48	0	41	48	35	0	123	245	141	24	40	161	20	2	1037	4037
5:15 PM	76	69	42	0	39	48	51	0	127	259	153	10	44	148	19	5	1090	4142
5:30 PM	68	74	43	0	40	44	60	0	149	286	165	7	43	145	17	0	1141	4299
5:45 PM	87	80	52	0	30	41	47	0	141	293	175	12	49	151	18	7	1183	4451

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	348	320	208	0	120	164	188	0	564	1172	700	48	196	604	72	28	4732
Heavy Trucks	0	0	0		0	0	0		4	4	8		0	0	4		20
Pedestrians		4				0				0				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

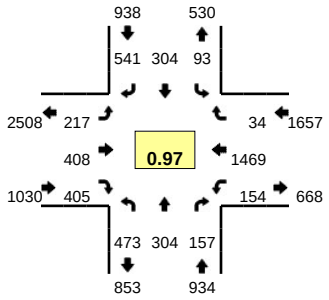
Type of peak hour being reported: Intersection Peak

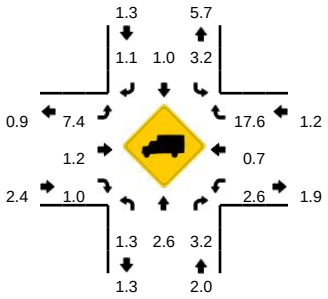
Method for determining peak hour: Total Entering Volume

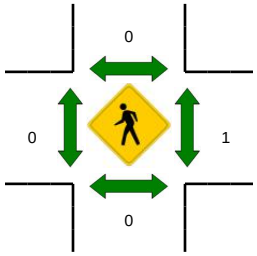
LOCATION: NW 87th Ave -- NW 186th St_Miami Gardens Dr
CITY/STATE: Hialeah, FL

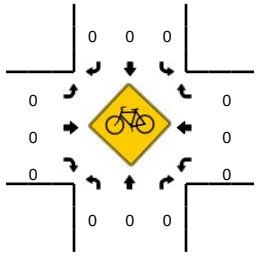
QC JOB #: 13778001
DATE: Wed, Apr 13 2016

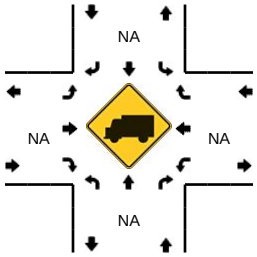
Peak-Hour: 7:30 AM -- 8:30 AM
Peak 15-Min: 8:15 AM -- 8:30 AM

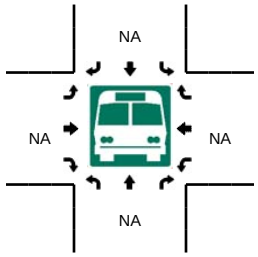












15-Min Count Period Beginning At	NW 87th Ave (Northbound)				NW 87th Ave (Southbound)				NW 186th St_Miami Gardens Dr (Eastbound)				NW 186th St_Miami Gardens Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	131	48	29	0	31	47	136	0	33	90	79	4	57	367	9	4	1065	
7:15 AM	118	72	56	0	19	74	147	0	47	111	100	11	38	343	1	2	1139	
7:30 AM	122	96	48	0	26	56	154	0	50	91	86	8	23	359	8	2	1129	
7:45 AM	124	79	27	0	19	86	139	0	38	92	94	8	32	361	7	5	1111	4444
8:00 AM	115	56	29	0	26	83	118	0	48	104	109	3	48	400	10	1	1150	4529
8:15 AM	112	73	53	0	22	79	130	0	56	121	116	6	41	349	9	2	1169	4559
8:30 AM	115	78	52	0	23	41	106	0	48	97	90	7	32	372	4	3	1068	4498
8:45 AM	84	46	21	0	29	51	105	0	46	89	97	3	41	325	17	5	959	4346

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	448	292	212	0	88	316	520	0	224	484	464	24	164	1396	36	8	4676
Heavy Trucks	4	4	8		4	0	0		16	4	0		0	4	16		60
Pedestrians		0				0				0				4			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

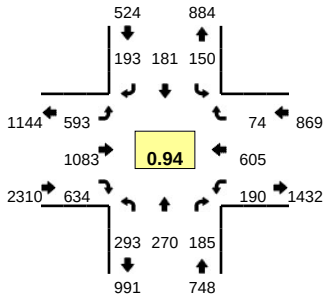
Type of peak hour being reported: Intersection Peak

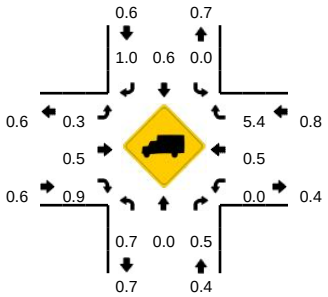
Method for determining peak hour: Total Entering Volume

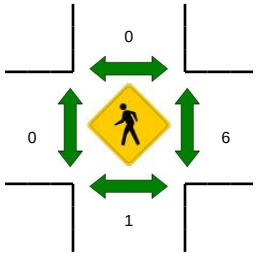
LOCATION: NW 87th Ave -- NW 186th St_Miami Gardens Dr
CITY/STATE: Hialeah, FL

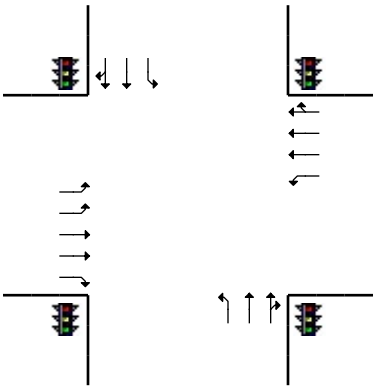
QC JOB #: 13778002
DATE: Wed, Apr 13 2016

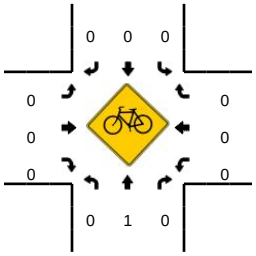
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:45 PM -- 6:00 PM

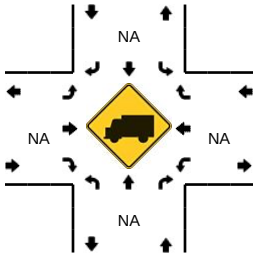


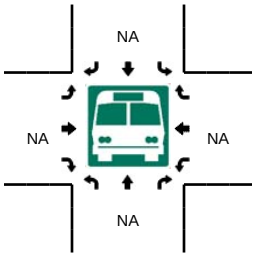












15-Min Count Period Beginning At	NW 87th Ave (Northbound)				NW 87th Ave (Southbound)				NW 186th St_Miami Gardens Dr (Eastbound)				NW 186th St_Miami Gardens Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	67	49	24	0	34	61	56	0	105	212	132	11	37	154	32	1	975	
4:15 PM	71	54	32	0	34	46	59	0	114	246	99	19	36	150	22	3	985	
4:30 PM	60	33	42	0	40	45	48	1	127	251	110	14	36	143	30	4	984	
4:45 PM	57	54	38	0	39	49	37	1	132	240	125	15	39	169	27	9	1031	3975
5:00 PM	62	47	48	0	41	48	35	0	123	245	141	24	40	161	20	2	1037	4037
5:15 PM	76	69	42	0	39	48	51	0	127	259	153	10	44	148	19	5	1090	4142
5:30 PM	68	74	43	0	40	44	60	0	149	286	165	7	43	145	17	0	1141	4299
5:45 PM	87	80	52	0	30	41	47	0	141	293	175	12	49	151	18	7	1183	4451

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	348	320	208	0	120	164	188	0	564	1172	700	48	196	604	72	28	4732
Heavy Trucks	0	0	0		0	0	0		4	4	8		0	0	4		20
Pedestrians		4				0				0				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

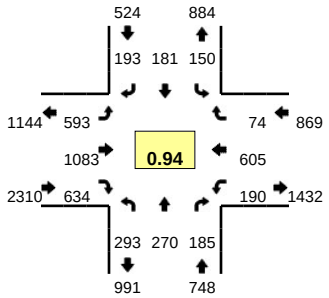
Type of peak hour being reported: Intersection Peak

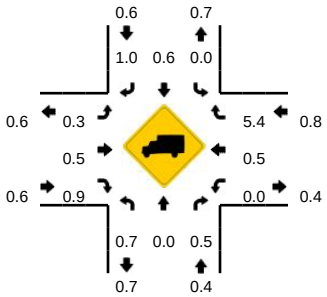
Method for determining peak hour: Total Entering Volume

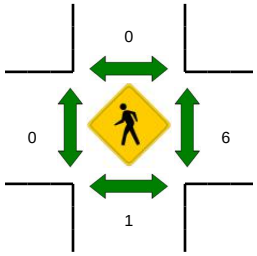
LOCATION: NW 87th Ave -- NW 186th St_Miami Gardens Dr
CITY/STATE: Hialeah, FL

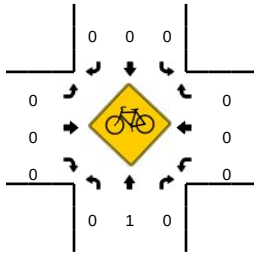
QC JOB #: 13778002
DATE: Wed, Apr 13 2016

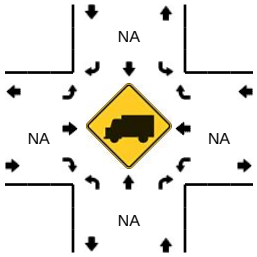
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:45 PM -- 6:00 PM

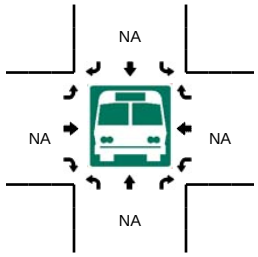












15-Min Count Period Beginning At	NW 87th Ave (Northbound)				NW 87th Ave (Southbound)				NW 186th St_Miami Gardens Dr (Eastbound)				NW 186th St_Miami Gardens Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	67	49	24	0	34	61	56	0	105	212	132	11	37	154	32	1	975	
4:15 PM	71	54	32	0	34	46	59	0	114	246	99	19	36	150	22	3	985	
4:30 PM	60	33	42	0	40	45	48	1	127	251	110	14	36	143	30	4	984	
4:45 PM	57	54	38	0	39	49	37	1	132	240	125	15	39	169	27	9	1031	3975
5:00 PM	62	47	48	0	41	48	35	0	123	245	141	24	40	161	20	2	1037	4037
5:15 PM	76	69	42	0	39	48	51	0	127	259	153	10	44	148	19	5	1090	4142
5:30 PM	68	74	43	0	40	44	60	0	149	286	165	7	43	145	17	0	1141	4299
5:45 PM	87	80	52	0	30	41	47	0	141	293	175	12	49	151	18	7	1183	4451

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	348	320	208	0	120	164	188	0	564	1172	700	48	196	604	72	28	4732
Heavy Trucks	0	0	0		0	0	0		4	4	8		0	0	4		20
Pedestrians		4				0				0				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

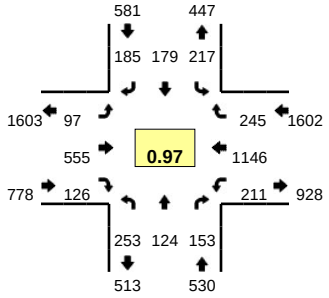
LOCATION: NW 82nd Ave -- NW 186th St_Miami Gardens Dr

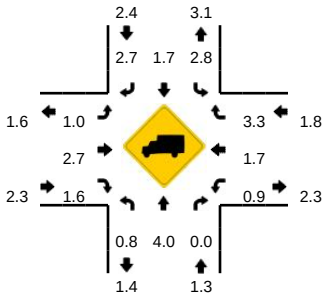
QC JOB #: 13778003

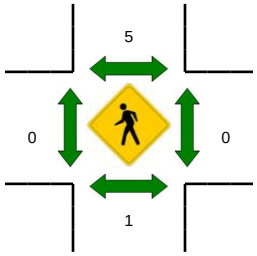
CITY/STATE: Hialeah, FL

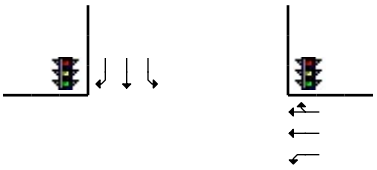
DATE: Wed, Apr 13 2016

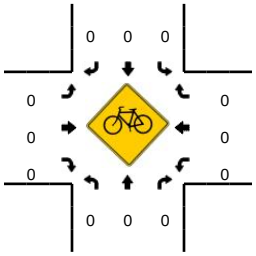
Peak-Hour: 7:45 AM -- 8:45 AM
Peak 15-Min: 8:15 AM -- 8:30 AM

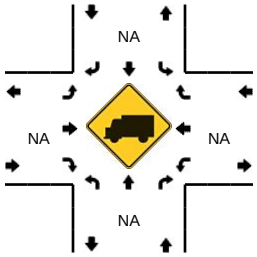


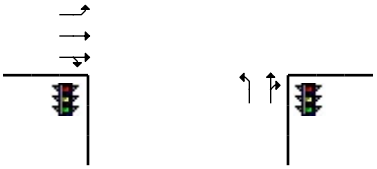


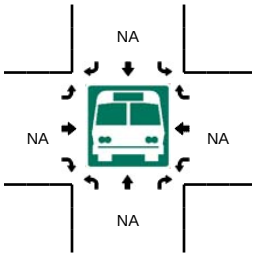












15-Min Count Period Beginning At	NW 82nd Ave (Northbound)				NW 82nd Ave (Southbound)				NW 186th St_Miami Gardens Dr (Eastbound)				NW 186th St_Miami Gardens Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	65	8	27	0	48	47	37	0	8	119	24	3	92	350	18	0	846	
7:15 AM	70	6	37	0	42	38	38	0	11	146	21	8	70	312	15	1	815	
7:30 AM	80	11	40	0	42	34	54	0	16	150	25	13	40	269	26	0	800	
7:45 AM	80	24	28	0	40	44	47	0	8	138	25	11	44	310	41	0	840	3301
8:00 AM	62	23	42	0	40	46	34	0	19	139	40	4	64	263	70	1	847	3302
8:15 AM	60	38	37	0	63	38	59	0	24	137	33	3	58	283	70	1	904	3391
8:30 AM	51	39	46	0	74	51	45	0	27	141	28	1	42	290	64	1	900	3491
8:45 AM	48	20	18	0	69	40	33	0	18	125	19	1	47	288	57	2	785	3436

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	240	152	148	0	252	152	236	0	96	548	132	12	232	1132	280	4	3616
Heavy Trucks	0	12	0		8	0	12		0	12	4		4	16	8		76
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

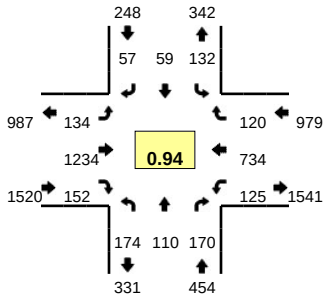
LOCATION: NW 82nd Ave -- NW 186th St_Miami Gardens Dr

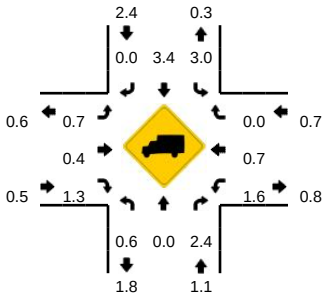
QC JOB #: 13778004

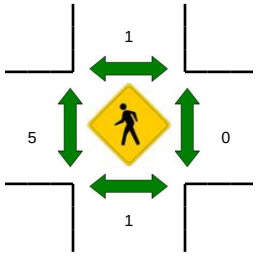
CITY/STATE: Hialeah, FL

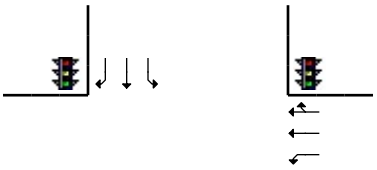
DATE: Wed, Apr 13 2016

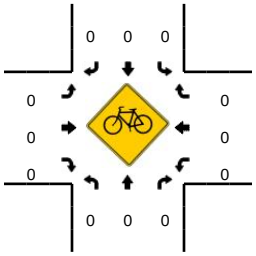
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:45 PM -- 6:00 PM

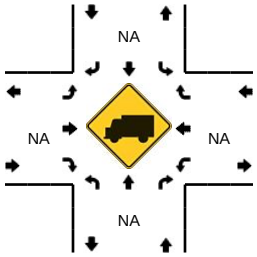


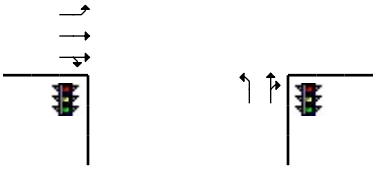


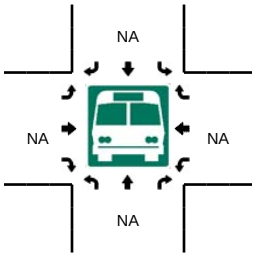












15-Min Count Period Beginning At	NW 82nd Ave (Northbound)				NW 82nd Ave (Southbound)				NW 186th St_Miami Gardens Dr (Eastbound)				NW 186th St_Miami Gardens Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	43	23	29	0	51	24	18	0	28	225	43	6	30	198	42	1	761	
4:15 PM	34	18	24	0	29	17	12	0	27	267	38	8	39	166	38	0	717	
4:30 PM	30	12	31	0	22	11	5	0	30	281	43	5	26	186	19	2	703	
4:45 PM	46	14	33	0	28	17	13	1	27	267	44	8	34	193	27	2	754	2935
5:00 PM	39	24	34	0	25	13	17	0	29	297	39	7	29	179	34	1	767	2941
5:15 PM	47	23	56	0	32	21	11	0	30	290	38	6	31	181	28	0	794	3018
5:30 PM	42	34	35	0	32	13	11	0	22	325	41	6	22	181	28	1	793	3108
5:45 PM	46	29	45	0	43	12	18	0	31	322	34	3	38	193	30	3	847	3201

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	184	116	180	0	172	48	72	0	124	1288	136	12	152	772	120	12	3388
Heavy Trucks	0	0	4		4	4	0		4	4	4		4	4	0		32
Pedestrians		0				0				16				0			16
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

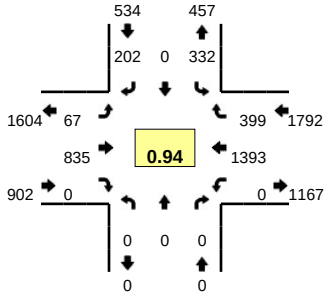
Type of peak hour being reported: Intersection Peak

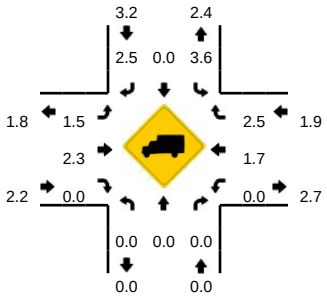
Method for determining peak hour: Total Entering Volume

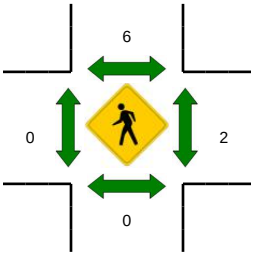
LOCATION: NW 79th Ave -- NW 186th St_Miami Gardens Dr
CITY/STATE: Hialeah, FL

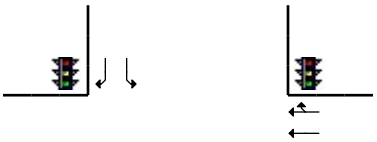
QC JOB #: 13778005
DATE: Wed, Apr 13 2016

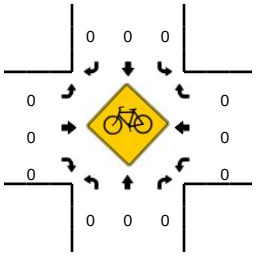
Peak-Hour: 7:45 AM -- 8:45 AM
Peak 15-Min: 8:15 AM -- 8:30 AM

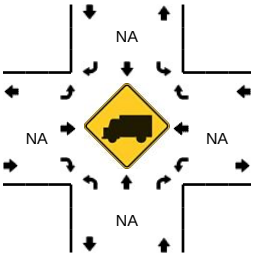


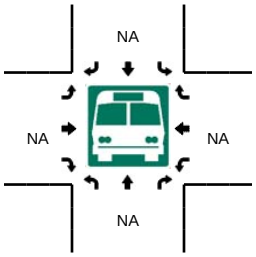












15-Min Count Period Beginning At	NW 79th Ave (Northbound)				NW 79th Ave (Southbound)				NW 186th St_Miami Gardens Dr (Eastbound)				NW 186th St_Miami Gardens Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	0	0	74	0	63	0	15	189	0	0	0	409	43	0	793	
7:15 AM	0	0	0	0	72	0	52	0	17	207	0	1	0	369	65	0	783	
7:30 AM	0	0	0	0	96	0	56	0	20	206	0	0	0	284	76	0	738	
7:45 AM	0	0	0	0	86	0	49	0	16	182	0	2	0	311	103	0	749	3063
8:00 AM	0	0	0	0	88	0	49	0	22	197	0	2	0	338	144	0	840	3110
8:15 AM	0	0	0	0	91	0	56	0	12	219	0	3	0	373	102	0	856	3183
8:30 AM	0	0	0	0	67	0	48	0	8	237	0	2	0	371	50	0	783	3228
8:45 AM	0	0	0	0	46	0	46	0	10	211	0	5	0	340	25	0	683	3162

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	364	0	224	0	48	876	0	12	0	1492	408	0	3424
Heavy Trucks	0	0	0		16	0	4		0	24	0		0	24	8		76
Pedestrians		0				12				0				0			12
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

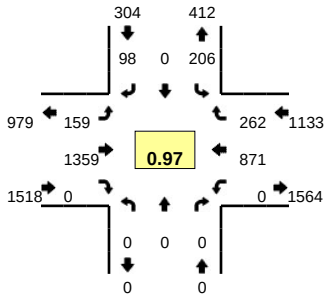
Type of peak hour being reported: Intersection Peak

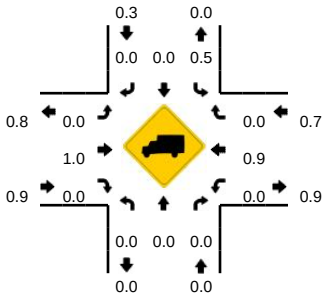
Method for determining peak hour: Total Entering Volume

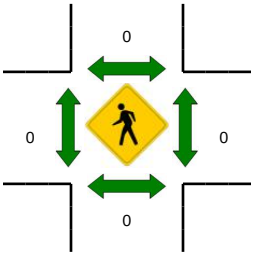
LOCATION: NW 79th Ave -- NW 186th St_Miami Gardens Dr
CITY/STATE: Hialeah, FL

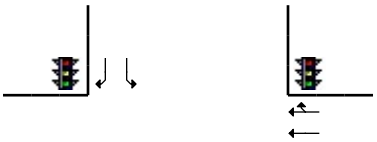
QC JOB #: 13778006
DATE: Wed, Apr 13 2016

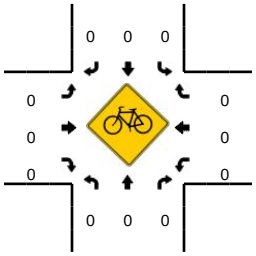
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:45 PM -- 6:00 PM

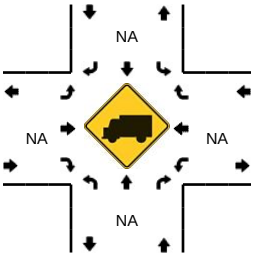


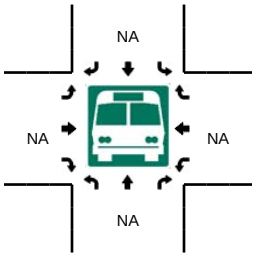












15-Min Count Period Beginning At	NW 79th Ave (Northbound)				NW 79th Ave (Southbound)				NW 186th St_Miami Gardens Dr (Eastbound)				NW 186th St_Miami Gardens Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	0	0	59	0	26	0	27	284	0	2	0	226	57	0	681	
4:15 PM	0	0	0	0	53	0	31	0	45	270	0	4	0	218	51	0	672	
4:30 PM	0	0	0	0	55	0	28	0	47	282	0	4	0	207	41	0	664	
4:45 PM	0	0	0	0	56	0	24	0	38	286	0	4	0	237	58	0	703	2720
5:00 PM	0	0	0	0	49	0	26	0	32	321	0	2	0	227	57	0	714	2753
5:15 PM	0	0	0	0	58	0	28	0	36	338	0	2	0	197	65	0	724	2805
5:30 PM	0	0	0	0	42	0	19	0	41	343	0	2	0	227	80	0	754	2895
5:45 PM	0	0	0	0	56	0	25	1	40	357	0	4	0	220	60	0	763	2955

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	224	0	100	4	160	1428	0	16	0	880	240	0	3052
Heavy Trucks	0	0	0		0	0	0		0	12	0		0	8	0		20
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

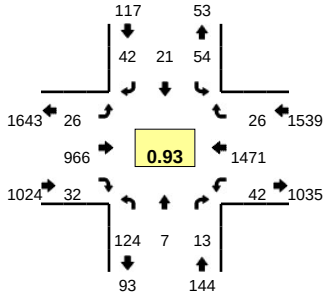
LOCATION: W Oakmont Dr -- NW 186th St_Miami Gardens Dr

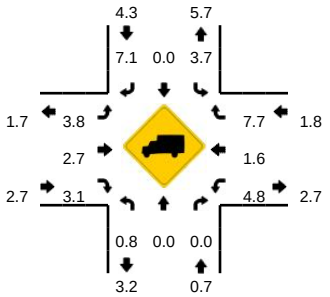
QC JOB #: 13778007

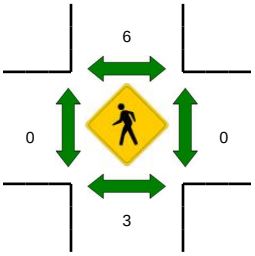
CITY/STATE: Hialeah, FL

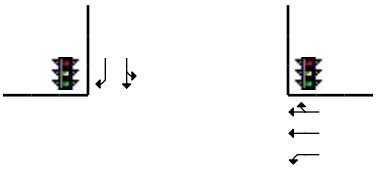
DATE: Wed, Apr 13 2016

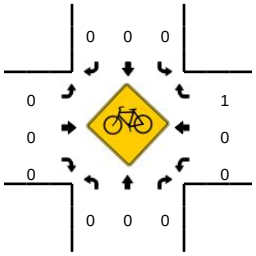
Peak-Hour: 7:45 AM -- 8:45 AM
Peak 15-Min: 8:15 AM -- 8:30 AM

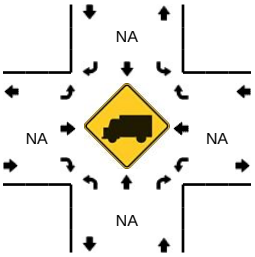


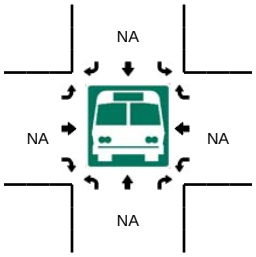












15-Min Count Period Beginning At	W Oakmont Dr (Northbound)				W Oakmont Dr (Southbound)				NW 186th St_Miami Gardens Dr (Eastbound)				NW 186th St_Miami Gardens Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	24	0	2	0	20	0	5	0	6	245	4	1	8	401	11	1	728	
7:15 AM	25	1	0	0	25	1	10	0	2	275	1	1	4	383	8	1	737	
7:30 AM	29	1	1	0	21	0	9	0	4	295	2	0	0	275	6	1	644	
7:45 AM	28	0	1	0	17	8	9	0	3	239	7	0	5	340	5	0	662	2771
8:00 AM	26	1	4	0	14	3	15	0	5	249	10	0	5	380	6	0	718	2761
8:15 AM	43	3	2	0	12	5	11	0	8	270	5	5	14	375	5	2	760	2784
8:30 AM	27	3	6	0	11	5	7	0	4	208	10	1	16	376	10	0	684	2824
8:45 AM	15	1	1	0	12	8	7	0	3	235	10	0	28	317	5	0	642	2804

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	172	12	8	0	48	20	44	0	32	1080	20	20	56	1500	20	8	3040
Heavy Trucks	0	0	0		0	0	4		0	40	4		0	32	0		80
Pedestrians		0				12				0				0			12
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

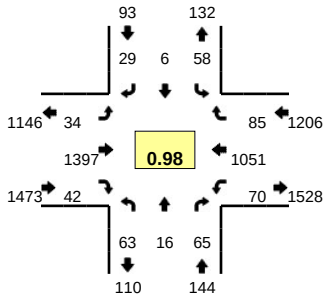
Type of peak hour being reported: Intersection Peak

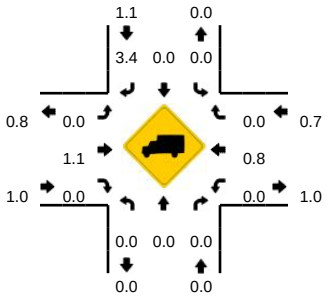
Method for determining peak hour: Total Entering Volume

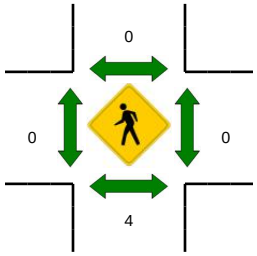
LOCATION: W Oakmont Dr -- NW 186th St_Miami Gardens Dr
CITY/STATE: Hialeah, FL

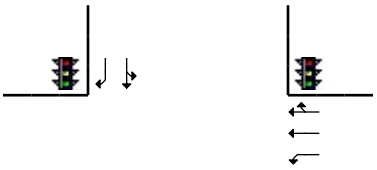
QC JOB #: 13778008
DATE: Wed, Apr 13 2016

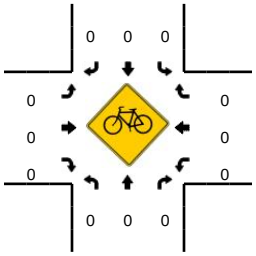
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:45 PM -- 6:00 PM

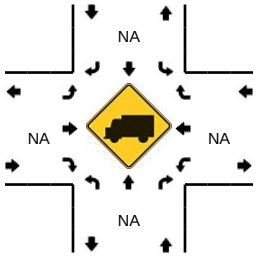


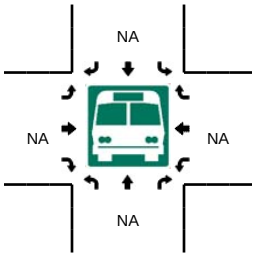












15-Min Count Period Beginning At	W Oakmont Dr (Northbound)				W Oakmont Dr (Southbound)				NW 186th St_Miami Gardens Dr (Eastbound)				NW 186th St_Miami Gardens Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	21	3	6	0	10	4	9	0	13	333	7	2	11	252	19	3	693	
4:15 PM	15	2	10	1	16	1	2	0	10	283	10	2	11	229	19	0	611	
4:30 PM	14	5	7	0	19	0	8	0	8	318	10	1	6	222	15	1	634	
4:45 PM	14	6	10	0	6	1	6	0	8	305	8	1	16	259	21	2	663	2601
5:00 PM	20	5	19	0	14	0	9	0	8	328	8	0	19	264	19	1	714	2622
5:15 PM	16	2	15	0	14	0	6	0	10	356	9	2	11	246	21	3	711	2722
5:30 PM	9	3	9	0	11	3	8	0	6	350	18	1	14	287	25	0	744	2832
5:45 PM	18	6	22	0	19	3	6	0	7	363	7	0	18	254	20	4	747	2916

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	72	24	88	0	76	12	24	0	28	1452	28	0	72	1016	80	16	2988
Heavy Trucks	0	0	0		0	0	0		0	12	0		0	4	0		16
Pedestrians		4				0				0				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

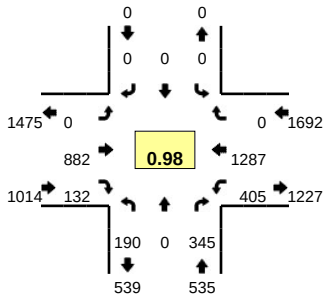
Type of peak hour being reported: Intersection Peak

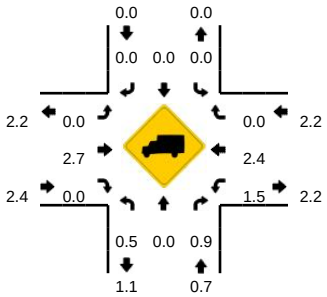
Method for determining peak hour: Total Entering Volume

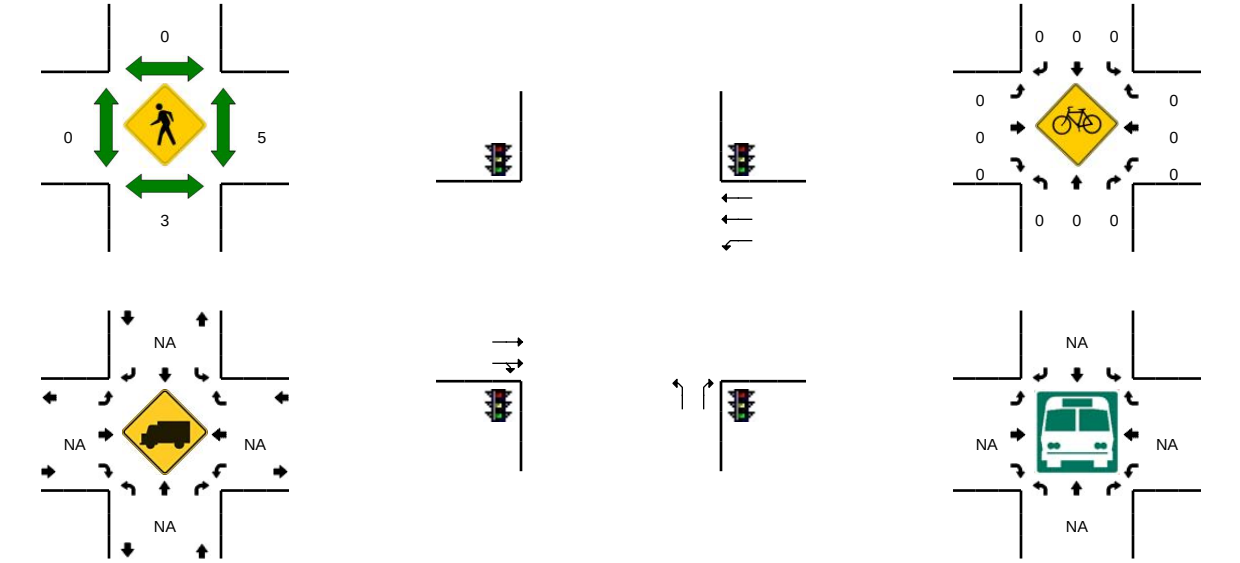
LOCATION: NW 75th Ave -- NW 186th St_Miami Gardens Dr
CITY/STATE: Hialeah, FL

QC JOB #: 13778009
DATE: Wed, Apr 13 2016

Peak-Hour: 8:00 AM -- 9:00 AM
Peak 15-Min: 8:30 AM -- 8:45 AM







15-Min Count Period Beginning At	NW 75th Ave (Northbound)				NW 75th Ave (Southbound)				NW 186th St_Miami Gardens Dr (Eastbound)				NW 186th St_Miami Gardens Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	47	0	70	1	0	0	0	0	0	200	49	0	118	342	0	0	827	
7:15 AM	43	0	57	1	0	0	0	0	0	242	56	0	106	349	0	1	855	
7:30 AM	30	0	60	1	0	0	0	0	0	255	49	0	68	238	0	0	701	
7:45 AM	35	0	43	2	0	0	0	0	0	212	36	0	95	308	0	0	731	3114
8:00 AM	40	0	58	0	0	0	0	0	0	227	44	0	82	334	0	0	785	3072
8:15 AM	53	0	73	0	0	0	0	0	0	240	36	0	88	322	0	0	812	3029
8:30 AM	52	0	104	0	0	0	0	0	0	192	27	0	121	332	0	0	828	3156
8:45 AM	43	0	110	2	0	0	0	0	0	223	25	0	114	299	0	0	816	3241

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	208	0	416	0	0	0	0	0	0	768	108	0	484	1328	0	0	3312
Heavy Trucks	0	0	0		0	0	0		0	16	0		16	28	0		60
Pedestrians		4				0				0				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

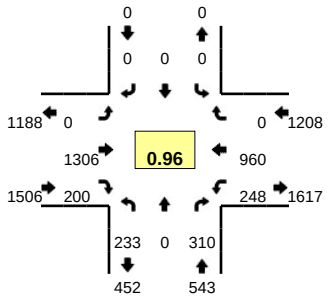
LOCATION: NW 75th Ave -- NW 186th St_Miami Gardens Dr

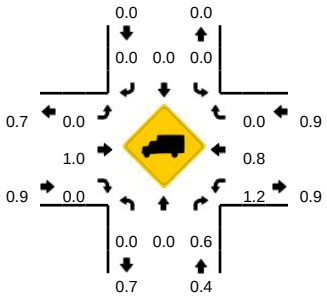
QC JOB #: 13778010

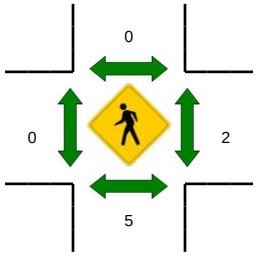
CITY/STATE: Hialeah, FL

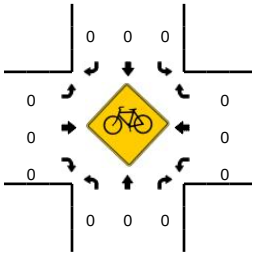
DATE: Wed, Apr 13 2016

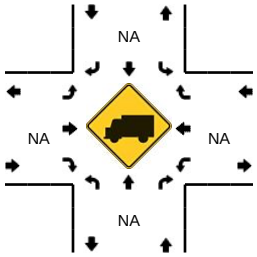
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:30 PM -- 5:45 PM

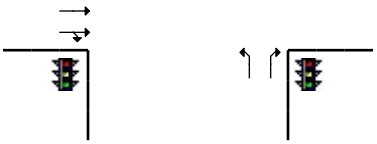


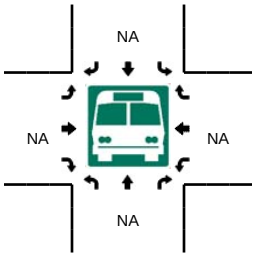












15-Min Count Period Beginning At	NW 75th Ave (Northbound)				NW 75th Ave (Southbound)				NW 186th St_Miami Gardens Dr (Eastbound)				NW 186th St_Miami Gardens Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	45	0	100	2	0	0	0	0	0	325	34	0	53	215	0	2	776	
4:15 PM	36	0	49	0	0	0	0	0	0	278	32	0	55	220	0	1	671	
4:30 PM	33	0	53	3	0	0	0	0	0	282	52	0	38	200	0	0	661	
4:45 PM	51	0	43	4	0	0	0	0	0	281	52	1	74	237	0	1	744	2852
5:00 PM	48	0	60	3	0	0	0	0	0	310	42	0	59	245	0	1	768	2844
5:15 PM	61	0	87	1	0	0	0	0	0	318	55	0	66	221	0	0	809	2982
5:30 PM	53	0	75	1	0	0	0	0	0	335	51	0	65	269	0	0	849	3170
5:45 PM	66	0	88	0	0	0	0	0	0	343	52	0	57	225	0	0	831	3257

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	212	0	300	4	0	0	0	0	0	1340	204	0	260	1076	0	0	3396
Heavy Trucks	0	0	0		0	0	0		0	4	0		0	4	0		8
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

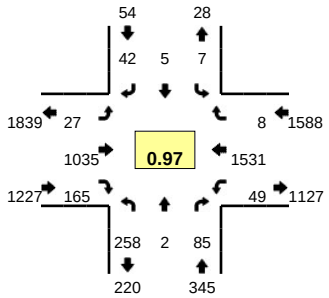
Type of peak hour being reported: Intersection Peak

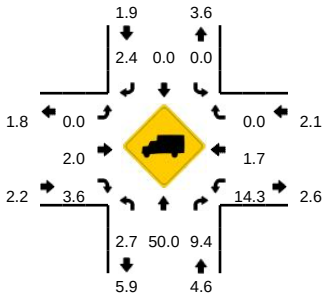
Method for determining peak hour: Total Entering Volume

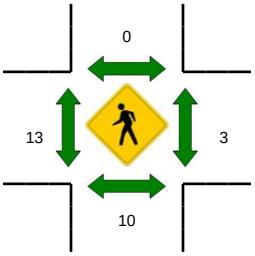
LOCATION: NW 73rd Ave -- NW 186th St_Miami Gardens Dr
CITY/STATE: Hialeah, FL

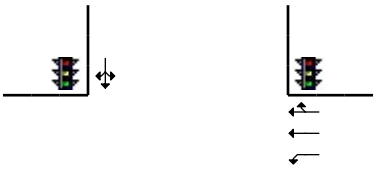
QC JOB #: 13778011
DATE: Wed, Apr 13 2016

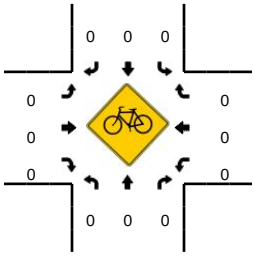
Peak-Hour: 8:00 AM -- 9:00 AM
Peak 15-Min: 8:15 AM -- 8:30 AM

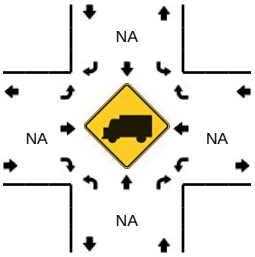


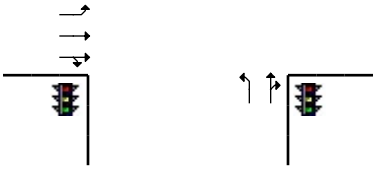


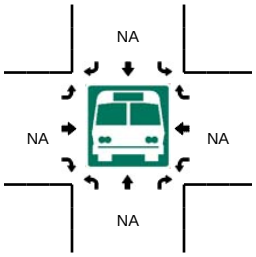












15-Min Count Period Beginning At	NW 73rd Ave (Northbound)				NW 73rd Ave (Southbound)				NW 186th St_Miami Gardens Dr (Eastbound)				NW 186th St_Miami Gardens Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	95	0	33	0	7	5	16	0	5	267	14	4	16	411	0	1	874	
7:15 AM	108	0	36	0	4	1	16	0	4	274	33	1	11	366	1	0	855	
7:30 AM	94	0	32	0	7	0	18	0	4	256	21	1	3	228	0	0	664	
7:45 AM	92	4	19	0	4	4	14	0	5	233	33	2	5	304	3	0	722	3115
8:00 AM	88	1	11	0	2	1	19	0	1	219	42	1	3	352	1	0	741	2982
8:15 AM	64	0	25	0	2	1	5	0	4	281	50	1	12	383	4	0	832	2959
8:30 AM	57	0	27	1	1	0	8	0	7	259	38	3	19	398	0	0	818	3113
8:45 AM	48	1	22	0	2	3	10	0	6	276	35	4	15	398	3	0	823	3214

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	256	0	100	0	8	4	20	0	16	1124	200	4	48	1532	16	0	3328
Heavy Trucks	20	0	0		0	0	0		0	32	16		8	16	0		92
Pedestrians		12				0				24				4			40
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

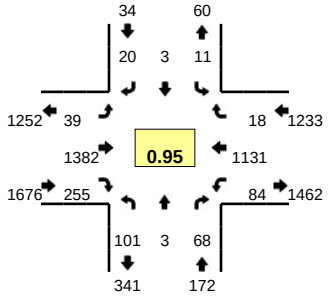
Type of peak hour being reported: Intersection Peak

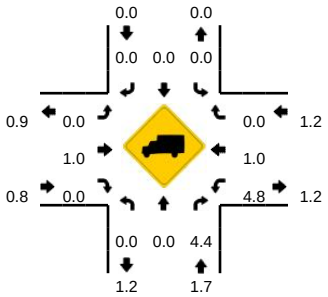
Method for determining peak hour: Total Entering Volume

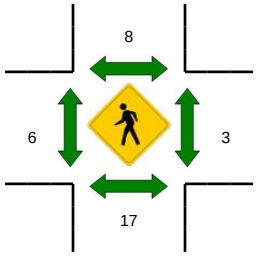
LOCATION: NW 73rd Ave -- NW 186th St_Miami Gardens Dr
CITY/STATE: Hialeah, FL

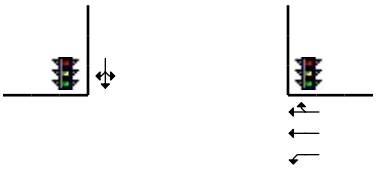
QC JOB #: 13778012
DATE: Wed, Apr 13 2016

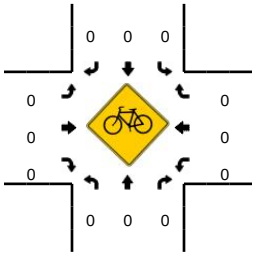
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:30 PM -- 5:45 PM

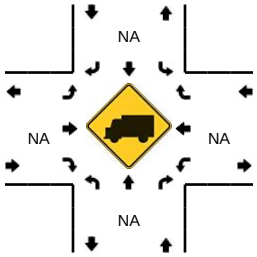


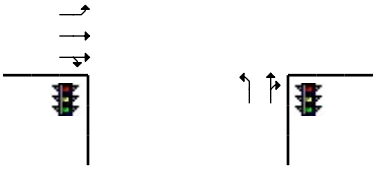


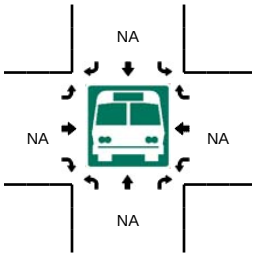












15-Min Count Period Beginning At	NW 73rd Ave (Northbound)				NW 73rd Ave (Southbound)				NW 186th St_Miami Gardens Dr (Eastbound)				NW 186th St_Miami Gardens Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	36	1	34	0	7	0	3	0	8	391	47	2	15	253	4	2	803	
4:15 PM	25	0	12	0	5	1	3	0	5	285	45	0	19	262	4	0	666	
4:30 PM	30	1	17	0	3	2	1	0	5	295	40	0	20	234	6	0	654	
4:45 PM	28	0	9	0	2	0	3	0	5	295	40	1	22	281	7	0	693	2816
5:00 PM	19	0	22	0	1	1	3	0	9	320	54	0	21	303	5	0	758	2771
5:15 PM	28	1	19	0	2	1	8	0	9	345	64	0	19	268	4	1	769	2874
5:30 PM	27	2	15	0	6	0	6	0	9	358	62	0	22	308	5	0	820	3040
5:45 PM	27	0	12	0	2	1	3	0	12	359	75	0	21	252	4	0	768	3115

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	108	8	60	0	24	0	24	0	36	1432	248	0	88	1232	20	0	3280
Heavy Trucks	0	0	0		0	0	0		0	4	0		0	8	0		12
Pedestrians		4				8				4				0			16
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

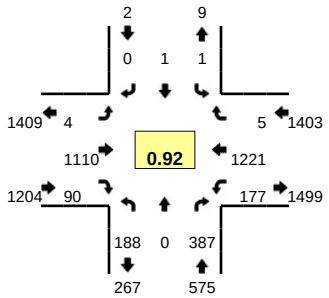
LOCATION: NW 68th Ave -- NW 186th St_Miami Gardens Dr

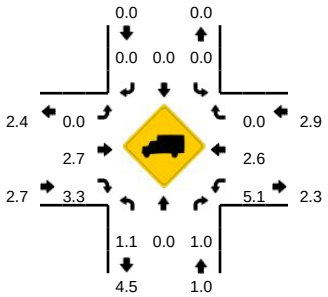
QC JOB #: 13778013

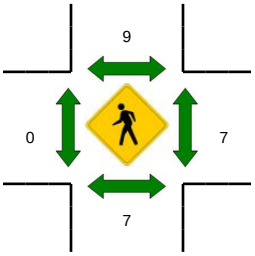
CITY/STATE: Hialeah, FL

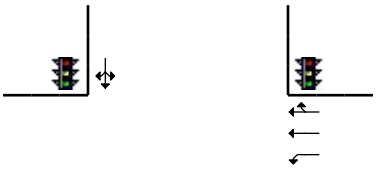
DATE: Wed, Apr 13 2016

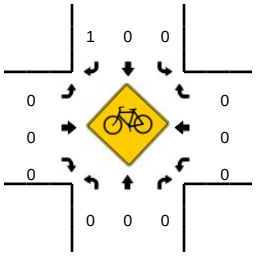
Peak-Hour: 8:00 AM -- 9:00 AM
Peak 15-Min: 8:15 AM -- 8:30 AM

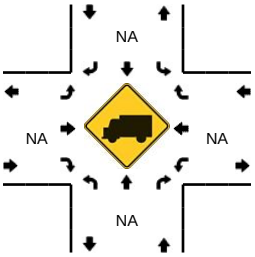


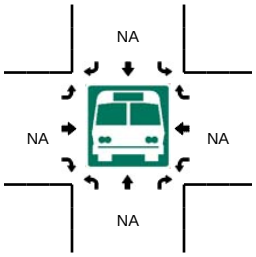












15-Min Count Period Beginning At	NW 68th Ave (Northbound)				NW 68th Ave (Southbound)				NW 186th St_Miami Gardens Dr (Eastbound)				NW 186th St_Miami Gardens Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	86	2	79	0	0	0	2	0	0	256	83	0	47	328	3	0	886	
7:15 AM	87	2	100	0	0	1	1	0	1	233	45	0	37	308	1	0	816	
7:30 AM	43	0	98	0	2	1	0	0	0	292	26	0	33	187	3	0	685	
7:45 AM	42	2	108	0	2	0	1	0	0	245	31	0	40	196	3	0	670	3057
8:00 AM	50	0	123	0	0	0	0	0	1	251	20	0	37	278	1	1	762	2933
8:15 AM	50	0	91	0	0	0	0	0	3	311	28	0	58	327	0	0	868	2985
8:30 AM	44	0	98	0	1	1	0	0	0	248	22	0	51	301	2	0	768	3068
8:45 AM	44	0	75	0	0	0	0	0	0	300	20	0	30	315	2	0	786	3184

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	200	0	364	0	0	0	0	0	12	1244	112	0	232	1308	0	0	3472
Heavy Trucks	0	0	0		0	0	0		0	48	8		12	24	0		92
Pedestrians		8				4				0				8			20
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

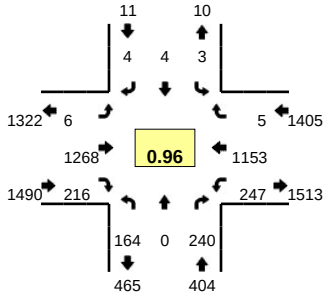
Type of peak hour being reported: Intersection Peak

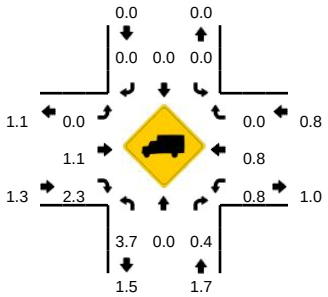
Method for determining peak hour: Total Entering Volume

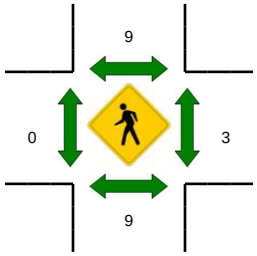
LOCATION: NW 68th Ave -- NW 186th St_Miami Gardens Dr
CITY/STATE: Hialeah, FL

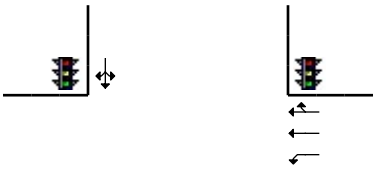
QC JOB #: 13778014
DATE: Wed, Apr 13 2016

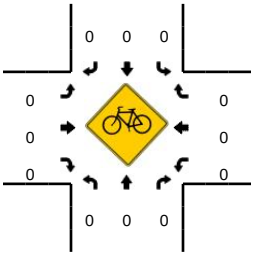
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:30 PM -- 5:45 PM

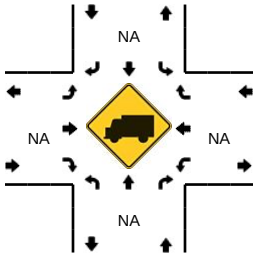


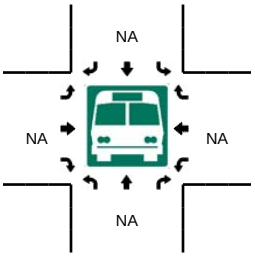












15-Min Count Period Beginning At	NW 68th Ave (Northbound)				NW 68th Ave (Southbound)				NW 186th St_Miami Gardens Dr (Eastbound)				NW 186th St_Miami Gardens Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	26	0	46	0	0	1	3	0	5	363	49	0	56	259	1	1	810	
4:15 PM	36	1	43	0	0	0	0	0	2	290	45	0	75	271	1	1	765	
4:30 PM	36	1	45	0	0	0	0	0	0	265	58	0	73	252	0	0	730	
4:45 PM	31	0	52	0	0	0	0	0	1	251	54	0	76	297	1	0	763	3068
5:00 PM	38	0	61	0	3	0	0	0	0	292	47	0	62	317	0	0	820	3078
5:15 PM	35	0	69	0	0	1	1	0	0	323	54	1	60	256	2	1	803	3116
5:30 PM	53	0	39	0	0	2	1	0	1	331	51	0	62	314	3	1	858	3244
5:45 PM	38	0	71	0	0	1	2	0	4	322	64	0	61	266	0	0	829	3310

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	212	0	156	0	0	8	4	0	4	1324	204	0	248	1256	12	4	3432
Heavy Trucks	0	0	0		0	0	0		0	4	8		4	8	0		24
Pedestrians		8				8				0				0			16
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

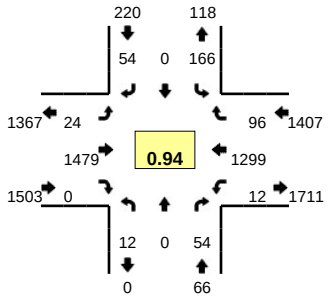
Type of peak hour being reported: Intersection Peak

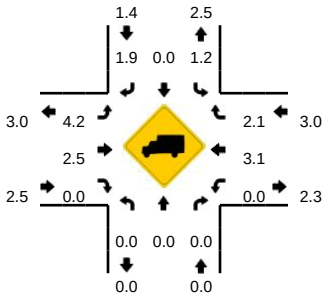
Method for determining peak hour: Total Entering Volume

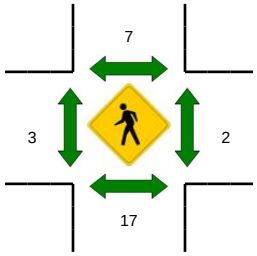
LOCATION: Bobolink Dr -- NW 186th St_Miami Gardens Dr
CITY/STATE: Hialeah, FL

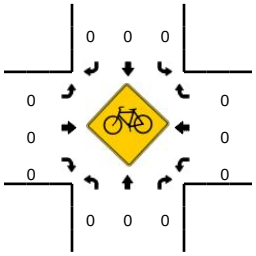
QC JOB #: 13778015
DATE: Wed, Apr 13 2016

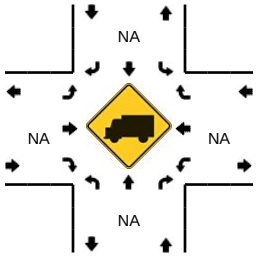
Peak-Hour: 8:00 AM -- 9:00 AM
Peak 15-Min: 8:15 AM -- 8:30 AM

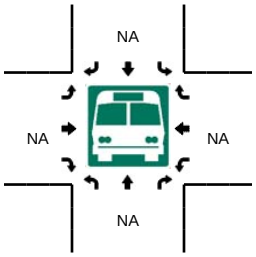












15-Min Count Period Beginning At	Bobolink Dr (Northbound)				Bobolink Dr (Southbound)				NW 186th St_Miami Gardens Dr (Eastbound)				NW 186th St_Miami Gardens Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	3	1	27	0	53	0	22	0	4	313	0	0	0	395	9	5	832	
7:15 AM	0	0	17	0	47	0	13	0	4	325	0	1	0	328	17	2	754	
7:30 AM	0	0	19	0	42	0	12	0	1	383	0	0	0	260	18	5	740	
7:45 AM	2	1	12	0	46	0	15	0	2	340	0	0	0	248	23	2	691	3017
8:00 AM	1	0	12	0	44	0	16	0	6	384	0	1	0	301	24	3	792	2977
8:15 AM	4	0	23	0	41	0	11	0	4	398	0	0	0	341	27	3	852	3075
8:30 AM	5	0	12	0	45	0	15	0	7	328	0	1	0	318	18	0	749	3084
8:45 AM	2	0	7	0	36	0	12	0	5	369	0	0	0	339	27	6	803	3196

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	16	0	92	0	164	0	44	0	16	1592	0	0	0	1364	108	12	3408
Heavy Trucks	0	0	0		8	0	4		4	56	0		0	32	8		112
Pedestrians		16				4				8				4			32
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

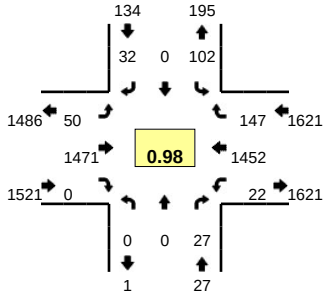
Type of peak hour being reported: Intersection Peak

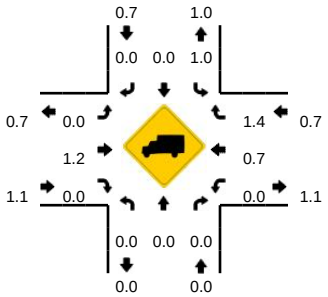
Method for determining peak hour: Total Entering Volume

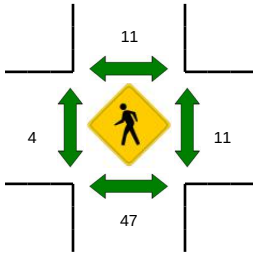
LOCATION: Bobolink Dr -- NW 186th St_Miami Gardens Dr
CITY/STATE: Hialeah, FL

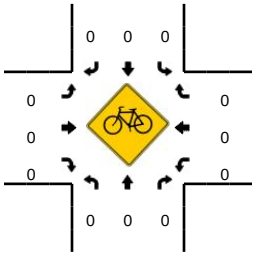
QC JOB #: 13778016
DATE: Wed, Apr 13 2016

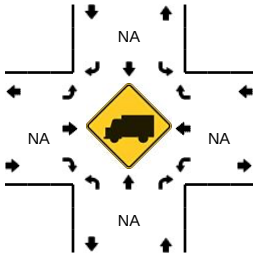
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:45 PM -- 6:00 PM

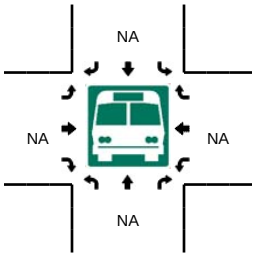












15-Min Count Period Beginning At	Bobolink Dr (Northbound)				Bobolink Dr (Southbound)				NW 186th St_Miami Gardens Dr (Eastbound)				NW 186th St_Miami Gardens Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	1	0	4	0	18	0	7	0	15	394	0	0	0	317	30	5	791	
4:15 PM	0	0	6	0	28	0	8	0	15	321	0	1	0	340	38	10	767	
4:30 PM	0	0	1	0	25	0	9	0	8	303	0	1	0	318	31	5	701	
4:45 PM	0	0	5	0	23	0	4	0	8	295	0	0	0	387	45	10	777	3036
5:00 PM	0	0	6	0	20	0	6	0	12	347	0	0	1	391	30	5	818	3063
5:15 PM	0	0	4	0	23	0	8	0	14	379	0	1	0	330	37	7	803	3099
5:30 PM	0	0	8	0	30	0	9	0	11	363	0	0	0	380	31	6	838	3236
5:45 PM	0	0	9	0	29	0	9	0	11	382	0	1	0	351	49	3	844	3303

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	36	0	116	0	36	0	44	1528	0	4	0	1404	196	12	3376
Heavy Trucks	0	0	0		0	0	0		0	12	0		0	4	4		20
Pedestrians		72				16				8				20			116
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

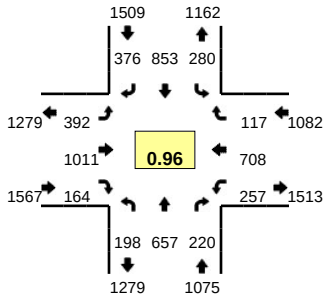
Type of peak hour being reported: Intersection Peak

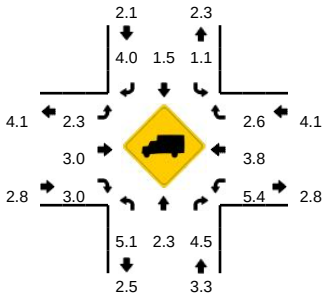
Method for determining peak hour: Total Entering Volume

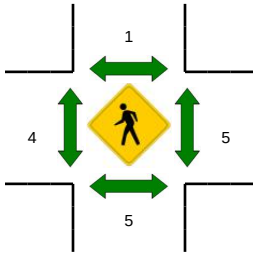
LOCATION: NW 67th Ave -- NW 186th St/Miami Gardens Dr
CITY/STATE: Miami-Dade, FL

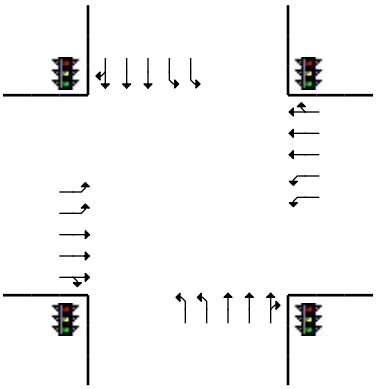
QC JOB #: 13778017
DATE: Wed, Apr 13 2016

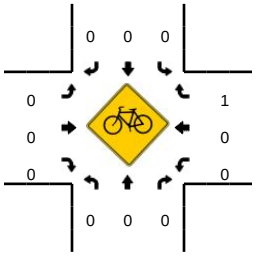
Peak-Hour: 8:00 AM -- 9:00 AM
Peak 15-Min: 8:00 AM -- 8:15 AM

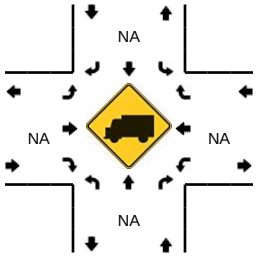


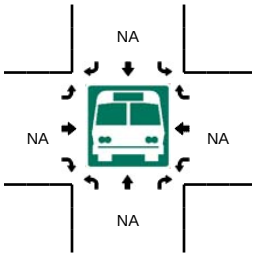












15-Min Count Period Beginning At	NW 67th Ave (Northbound)				NW 67th Ave (Southbound)				NW 186th St/Miami Gardens Dr (Eastbound)				NW 186th St/Miami Gardens Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	68	165	95	0	49	224	51	0	51	222	60	0	98	205	14	0	1302	
7:15 AM	60	207	79	0	55	205	47	0	84	233	43	1	69	162	21	2	1268	
7:30 AM	51	205	65	2	77	195	103	1	104	265	50	0	46	154	18	0	1336	
7:45 AM	37	186	59	2	71	188	57	0	86	236	43	0	68	122	28	0	1183	5089
8:00 AM	40	200	50	0	77	232	69	0	103	270	37	0	73	179	36	0	1366	5153
8:15 AM	47	174	59	5	73	242	82	0	105	263	45	1	62	149	29	0	1336	5221
8:30 AM	59	168	65	0	74	213	115	0	84	235	37	1	61	157	29	1	1299	5184
8:45 AM	45	115	46	2	56	166	110	0	96	243	45	2	59	223	23	1	1232	5233

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	160	800	200	0	308	928	276	0	412	1080	148	0	292	716	144	0	5464
Heavy Trucks	12	28	12		0	20	8		4	16	0		24	32	4		160
Pedestrians		0				0				8				8			16
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

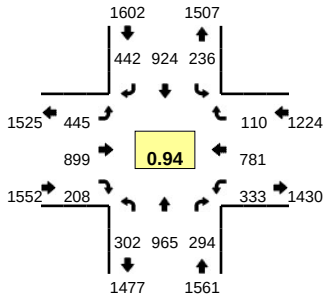
Type of peak hour being reported: Intersection Peak

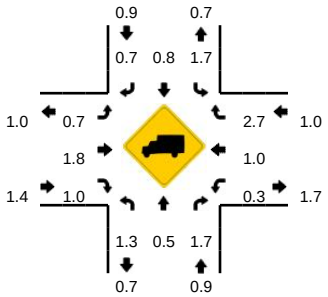
Method for determining peak hour: Total Entering Volume

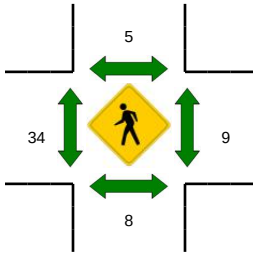
LOCATION: NW 67th Ave -- NW 186th St/Miami Gardens Dr
CITY/STATE: Miami-Dade, FL

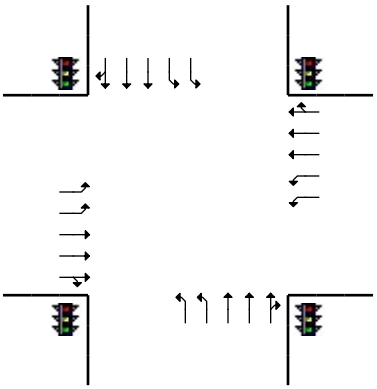
QC JOB #: 13778018
DATE: Wed, Apr 13 2016

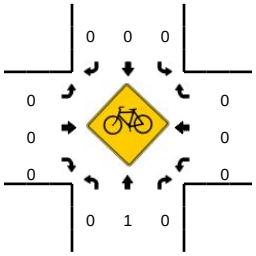
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:30 PM -- 5:45 PM

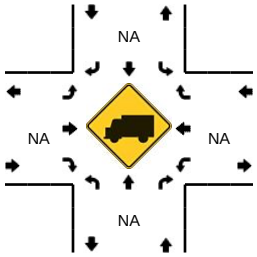


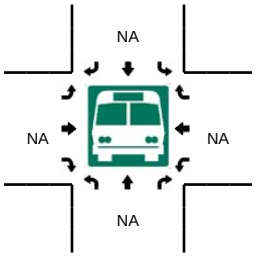












15-Min Count Period Beginning At	NW 67th Ave (Northbound)				NW 67th Ave (Southbound)				NW 186th St/Miami Gardens Dr (Eastbound)				NW 186th St/Miami Gardens Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	69	188	66	3	50	182	76	0	90	251	43	4	59	211	25	2	1319	
4:15 PM	63	182	87	9	48	200	83	0	113	230	50	2	80	215	25	1	1388	
4:30 PM	75	198	84	4	67	176	81	2	94	200	39	3	66	210	36	2	1337	
4:45 PM	86	197	70	5	36	188	97	0	110	210	36	2	78	234	26	0	1375	5419
5:00 PM	77	228	70	7	60	218	107	0	94	200	40	5	82	217	31	0	1436	5536
5:15 PM	74	222	68	1	61	242	101	0	104	239	51	1	89	202	30	1	1486	5634
5:30 PM	70	276	96	2	61	227	115	1	122	233	61	1	85	195	29	0	1574	5871
5:45 PM	67	239	60	4	53	237	119	0	111	227	56	7	75	167	20	1	1443	5939

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	280	1104	384	8	244	908	460	4	488	932	244	4	340	780	116	0	6296
Heavy Trucks	0	4	0		12	4	0		8	24	0		0	4	4		60
Pedestrians		16				8				20				4			48
Bicycles	0	1	0		0	0	0		0	0	0		0	0	0		1
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

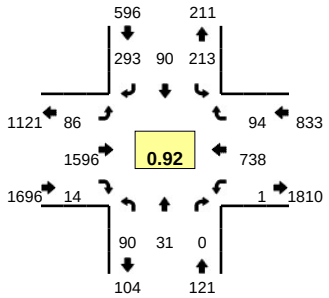
LOCATION: NW 62nd Ave -- NW 186th St_Miami Gardens Dr

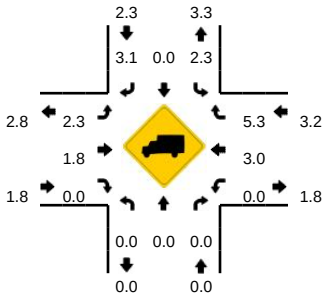
QC JOB #: 13778019

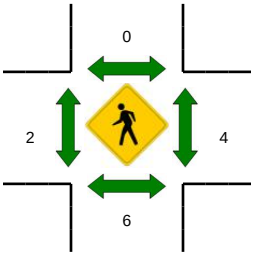
CITY/STATE: Miami-Dade, FL

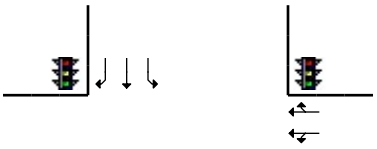
DATE: Wed, Apr 13 2016

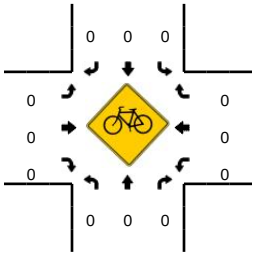
Peak-Hour: 7:00 AM -- 8:00 AM
Peak 15-Min: 7:00 AM -- 7:15 AM

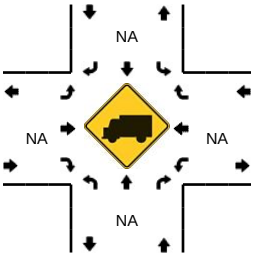


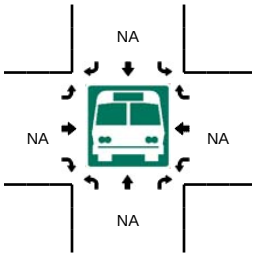












15-Min Count Period Beginning At	NW 62nd Ave (Northbound)				NW 62nd Ave (Southbound)				NW 186th St_Miami Gardens Dr (Eastbound)				NW 186th St_Miami Gardens Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	22	4	0	0	39	12	101	0	15	398	5	0	0	273	12	0	881	
7:15 AM	18	5	0	0	47	21	61	0	30	413	5	0	0	146	38	1	785	
7:30 AM	20	12	0	0	76	30	60	0	18	420	3	0	0	146	22	0	807	
7:45 AM	30	10	0	0	51	27	71	0	23	365	1	0	0	173	22	0	773	3246
8:00 AM	22	14	1	0	54	20	64	0	23	377	9	0	0	192	38	0	814	3179
8:15 AM	21	7	0	0	63	25	71	0	17	375	3	1	0	147	24	0	754	3148
8:30 AM	17	1	1	0	34	12	43	0	22	359	4	0	0	207	17	0	717	3058
8:45 AM	23	3	0	0	39	7	45	0	20	322	8	1	0	235	19	0	722	3007

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	88	16	0	0	156	48	404	0	60	1592	20	0	0	1092	48	0	3524
Heavy Trucks	0	0	0		4	0	4		0	36	0		0	24	4		72
Pedestrians		16				0				8				8			32
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

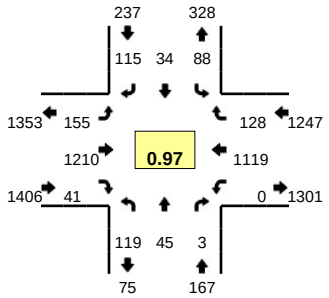
LOCATION: NW 62nd Ave -- NW 186th St_Miami Gardens Dr

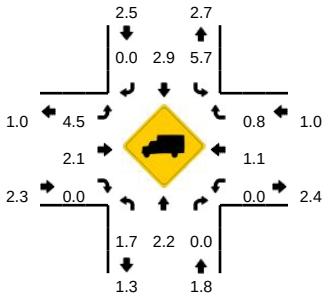
QC JOB #: 13778020

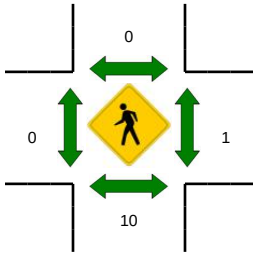
CITY/STATE: Miami-Dade, FL

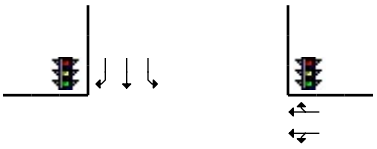
DATE: Wed, Apr 13 2016

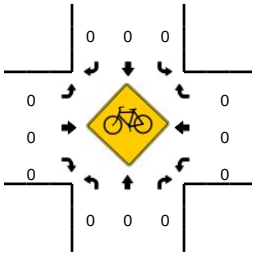
Peak-Hour: 4:15 PM -- 5:15 PM
Peak 15-Min: 4:15 PM -- 4:30 PM

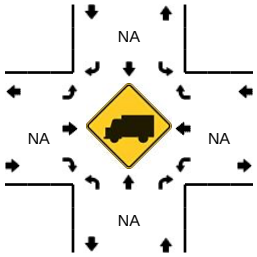


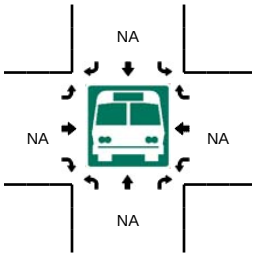












15-Min Count Period Beginning At	NW 62nd Ave (Northbound)				NW 62nd Ave (Southbound)				NW 186th St_Miami Gardens Dr (Eastbound)				NW 186th St_Miami Gardens Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	21	4	2	0	28	3	25	0	47	326	11	0	0	266	35	0	768	
4:15 PM	30	11	0	0	28	8	20	0	48	326	13	0	0	278	28	0	790	
4:30 PM	25	15	1	0	22	5	28	0	36	303	10	0	0	277	35	0	757	
4:45 PM	35	8	1	0	20	9	34	0	39	285	7	0	0	277	26	0	741	3056
5:00 PM	29	11	1	0	18	12	33	0	32	296	11	0	0	287	39	0	769	3057
5:15 PM	41	14	0	0	24	8	33	0	38	300	8	1	0	286	31	0	784	3051
5:30 PM	37	14	1	0	24	9	35	0	40	317	12	0	0	229	37	1	756	3050
5:45 PM	27	9	0	0	21	6	31	0	40	318	5	0	0	237	27	1	722	3031

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	120	44	0	0	112	32	80	0	192	1304	52	0	0	1112	112	0	3160
Heavy Trucks	0	4	0		8	0	0		16	36	0		0	12	4		80
Pedestrians		8				0				0				0			8
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

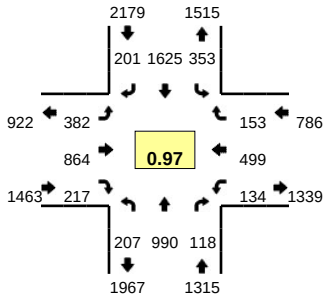
Type of peak hour being reported: Intersection Peak

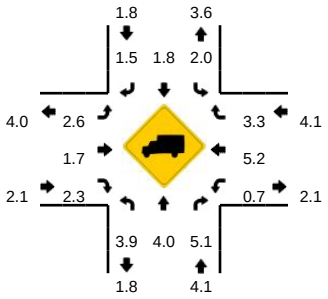
Method for determining peak hour: Total Entering Volume

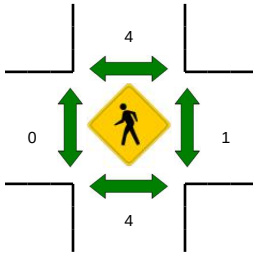
LOCATION: SR 823/Red Rd -- NW 186th St/Miami Gardens Dr
CITY/STATE: Miami Gardens, FL

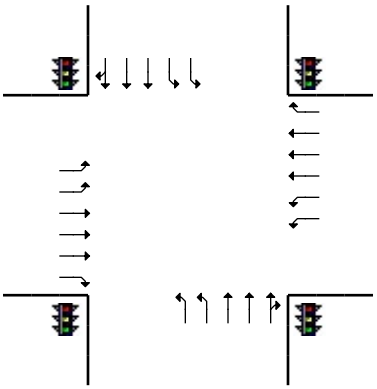
QC JOB #: 13778021
DATE: Wed, Apr 13 2016

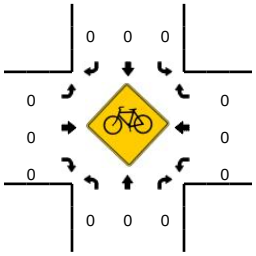
Peak-Hour: 7:00 AM -- 8:00 AM
Peak 15-Min: 7:00 AM -- 7:15 AM

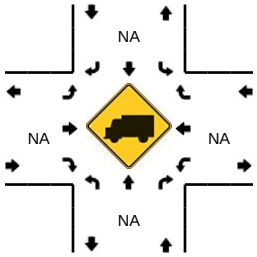


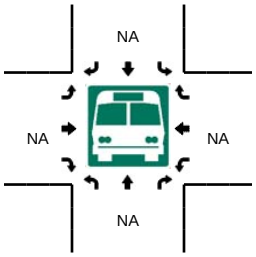












15-Min Count Period Beginning At	SR 823/Red Rd (Northbound)				SR 823/Red Rd (Southbound)				NW 186th St/Miami Gardens Dr (Eastbound)				NW 186th St/Miami Gardens Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	48	253	24	0	71	426	61	1	78	214	61	1	24	185	35	1	1483	
7:15 AM	56	272	31	0	91	393	46	2	100	226	48	2	39	106	45	1	1458	
7:30 AM	41	227	25	0	78	406	38	1	103	252	55	4	32	104	41	7	1414	
7:45 AM	62	238	38	0	108	400	56	1	86	172	53	8	30	104	32	0	1388	5743
8:00 AM	67	231	42	0	87	356	61	1	76	185	77	11	21	109	44	1	1369	5629
8:15 AM	60	238	34	0	85	350	42	1	108	211	76	4	32	106	33	3	1383	5554
8:30 AM	41	216	25	1	52	385	75	1	86	205	49	7	43	125	39	2	1352	5492
8:45 AM	67	211	36	0	52	339	60	3	69	141	78	11	62	124	39	8	1300	5404

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	192	1012	96	0	284	1704	244	4	312	856	244	4	96	740	140	4	5932
Heavy Trucks	4	32	0		8	36	4		4	20	8		0	28	0		144
Pedestrians		12				8				0				4			24
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

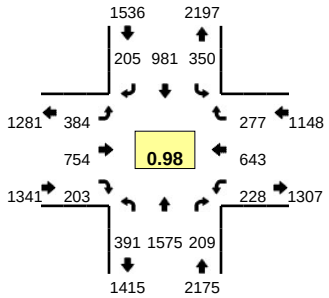
Type of peak hour being reported: Intersection Peak

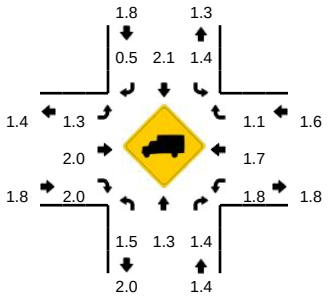
Method for determining peak hour: Total Entering Volume

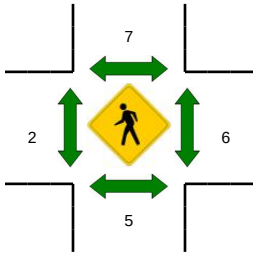
LOCATION: SR 823/Red Rd -- NW 186th St/Miami Gardens Dr
CITY/STATE: Miami Gardens, FL

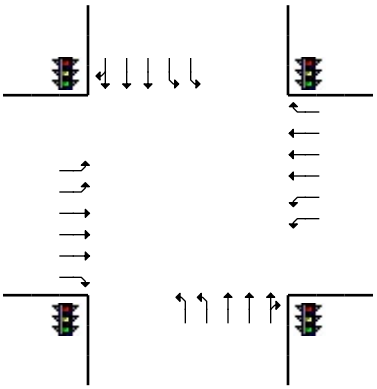
QC JOB #: 13778022
DATE: Wed, Apr 13 2016

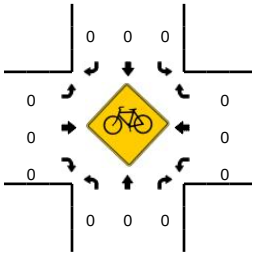
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

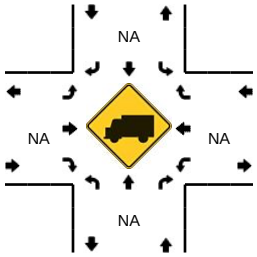


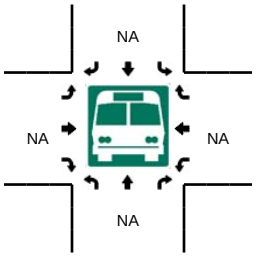












15-Min Count Period Beginning At	SR 823/Red Rd (Northbound)				SR 823/Red Rd (Southbound)				NW 186th St/Miami Gardens Dr (Eastbound)				NW 186th St/Miami Gardens Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	73	326	59	0	58	234	51	1	78	204	67	21	60	125	56	0	1413	
4:15 PM	105	334	50	0	82	254	55	3	75	162	53	6	45	140	56	0	1420	
4:30 PM	106	318	35	0	81	252	50	2	88	186	62	14	47	172	61	0	1474	
4:45 PM	99	337	54	0	78	234	47	0	76	163	51	11	57	167	46	0	1420	5727
5:00 PM	83	397	62	1	74	231	48	2	91	167	49	8	56	139	64	0	1472	5786
5:15 PM	112	425	51	0	88	267	50	2	58	178	49	12	58	174	61	0	1585	5951
5:30 PM	117	375	42	0	91	235	51	2	91	205	50	13	52	171	74	0	1569	6046
5:45 PM	76	378	54	2	91	248	56	0	99	204	55	12	62	159	78	0	1574	6200

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	448	1700	204	0	352	1068	200	8	232	712	196	48	232	696	244	0	6340
Heavy Trucks	12	32	4		4	16	0		4	24	0		4	12	0		112
Pedestrians		0				0				4				8			12
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

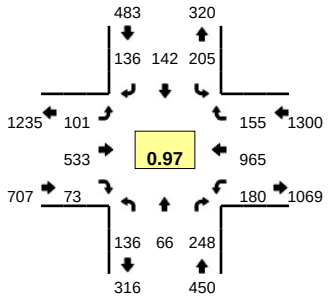
LOCATION: NW 97th Ave_W 36th Ave -- NW 138th St_W 84th St

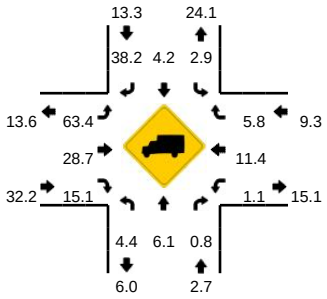
QC JOB #: 13778023

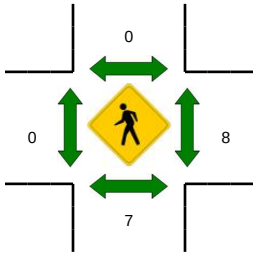
CITY/STATE: Miami-Dade, FL

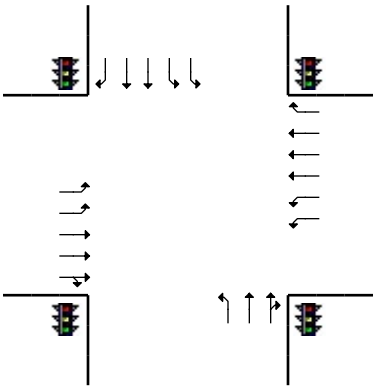
DATE: Thu, Apr 14 2016

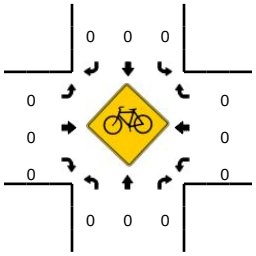
Peak-Hour: 7:00 AM -- 8:00 AM
Peak 15-Min: 7:15 AM -- 7:30 AM

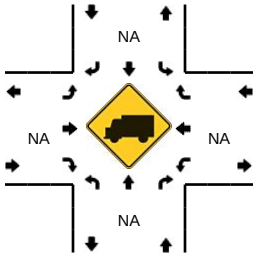


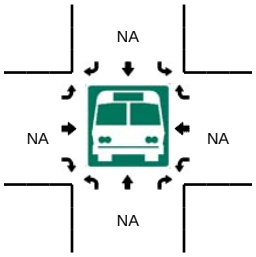












15-Min Count Period Beginning At	NW 97th Ave_W 36th Ave (Northbound)				NW 97th Ave_W 36th Ave (Southbound)				NW 138th St_W 84th St (Eastbound)				NW 138th St_W 84th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	24	15	54	1	62	30	32	0	28	149	16	0	26	222	51	16	726	
7:15 AM	32	26	60	0	58	37	36	0	29	127	21	1	18	247	52	17	761	
7:30 AM	47	14	60	2	45	39	35	0	21	122	17	1	23	259	25	25	735	
7:45 AM	29	11	74	1	40	36	33	0	21	135	19	0	30	237	27	25	718	2940
8:00 AM	19	7	54	3	33	26	28	0	23	120	16	1	43	226	28	42	669	2883
8:15 AM	38	11	50	6	41	20	26	0	30	129	19	0	34	243	17	14	678	2800
8:30 AM	24	12	65	2	30	15	28	0	16	151	13	1	19	236	22	12	646	2711
8:45 AM	15	2	35	2	30	13	33	0	17	173	7	0	20	231	25	16	619	2612

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	128	104	240	0	232	148	144	0	116	508	84	4	72	988	208	68	3044
Heavy Trucks	8	0	4		8	8	60		68	160	8		0	116	4		444
Pedestrians		8				0				0				8			16
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

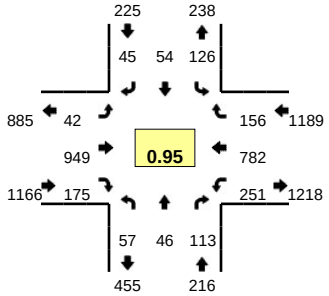
LOCATION: NW 97th Ave_W 36th Ave -- NW 138th St_W 84th St

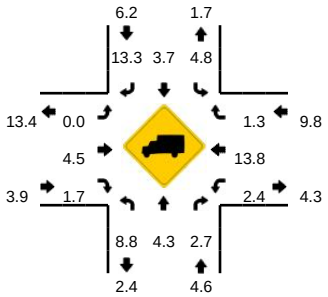
QC JOB #: 13778024

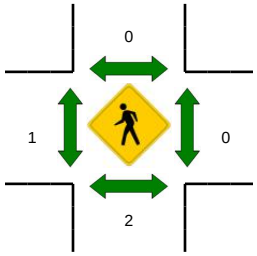
CITY/STATE: Miami-Dade, FL

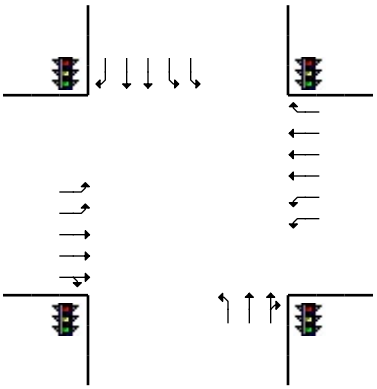
DATE: Thu, Apr 14 2016

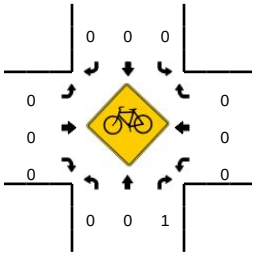
Peak-Hour: 4:45 PM -- 5:45 PM
Peak 15-Min: 5:30 PM -- 5:45 PM

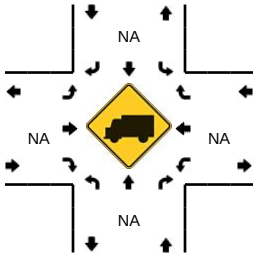


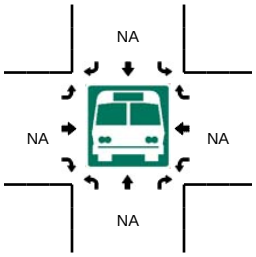












15-Min Count Period Beginning At	NW 97th Ave_W 36th Ave (Northbound)				NW 97th Ave_W 36th Ave (Southbound)				NW 138th St_W 84th St (Eastbound)				NW 138th St_W 84th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	10	12	31	2	36	15	14	0	6	241	20	0	28	180	38	7	640	
4:15 PM	13	12	46	2	27	13	6	0	11	212	32	0	49	184	31	27	665	
4:30 PM	15	9	29	4	29	10	10	0	10	201	46	1	36	196	36	18	650	
4:45 PM	13	7	27	2	26	16	11	0	10	250	39	1	48	227	36	4	717	2672
5:00 PM	12	10	26	0	40	19	8	0	10	215	35	1	54	178	29	8	645	2677
5:15 PM	12	14	26	1	30	9	17	0	7	237	47	2	51	190	45	9	697	2709
5:30 PM	15	15	34	2	30	10	9	0	9	247	54	2	68	187	46	9	737	2796
5:45 PM	18	15	32	1	20	13	8	0	12	171	26	1	53	206	38	6	620	2699

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	60	60	136	8	120	40	36	0	36	988	216	8	272	748	184	36	2948
Heavy Trucks	4	0	4		8	0	4		0	44	0		4	104	0		172
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

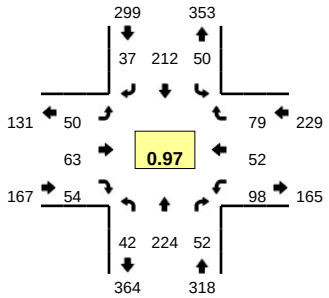
Type of peak hour being reported: Intersection Peak

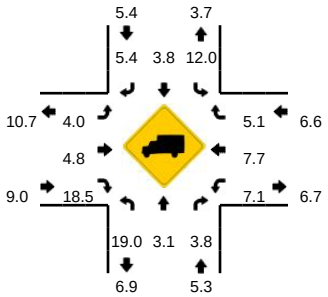
Method for determining peak hour: Total Entering Volume

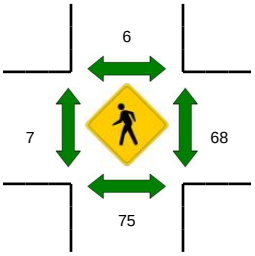
LOCATION: NW 97th Ave_W 36th Ave -- NW 130th St
CITY/STATE: Miami-Dade, FL

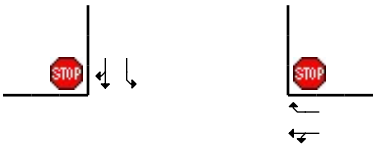
QC JOB #: 13778025
DATE: Thu, Apr 14 2016

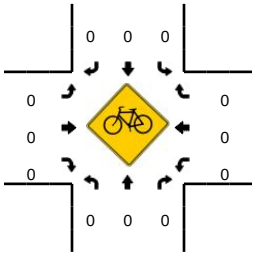
Peak-Hour: 7:45 AM -- 8:45 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

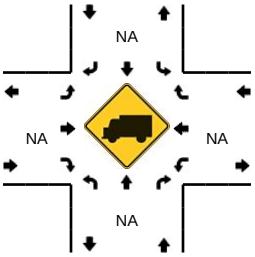


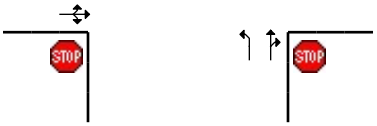


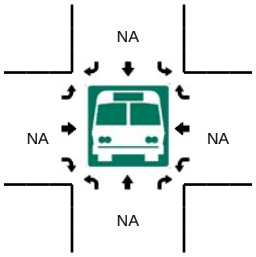












15-Min Count Period Beginning At	NW 97th Ave_W 36th Ave (Northbound)				NW 97th Ave_W 36th Ave (Southbound)				NW 130th St (Eastbound)				NW 130th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	5	61	18	0	15	49	6	0	3	13	18	0	27	7	13	0	235	
7:15 AM	5	75	22	0	14	51	7	0	2	10	3	0	19	9	27	0	244	
7:30 AM	4	82	20	0	16	49	4	0	5	8	7	0	21	6	21	0	243	
7:45 AM	5	61	18	0	12	65	3	0	8	14	14	0	30	10	20	0	260	982
8:00 AM	16	47	5	0	16	45	14	0	7	15	9	0	25	18	18	0	235	982
8:15 AM	14	56	10	0	12	52	11	0	9	17	11	0	29	18	21	0	260	998
8:30 AM	7	60	19	0	10	50	9	0	26	17	20	0	14	6	20	0	258	1013
8:45 AM	3	52	25	0	5	42	4	0	2	14	4	0	12	9	9	0	181	934

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	20	244	72	0	48	260	12	0	32	56	56	0	120	40	80	0	1040
Heavy Trucks	4	20	0		8	4	0		4	4	12		20	8	0		84
Pedestrians		68				0				0				56			124
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

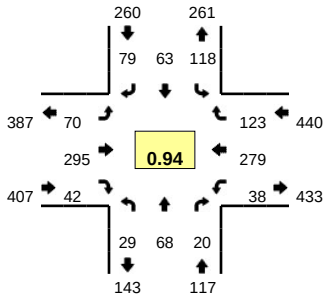
Type of peak hour being reported: Intersection Peak

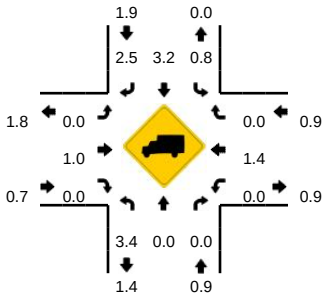
Method for determining peak hour: Total Entering Volume

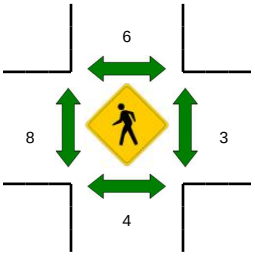
LOCATION: NW 97th Ave_W 36th Ave -- NW 130th St
CITY/STATE: Miami-Dade, FL

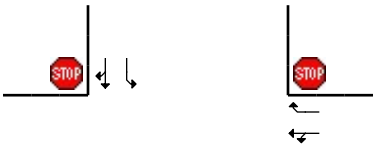
QC JOB #: 13778026
DATE: Tue, Apr 19 2016

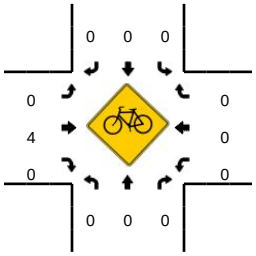
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

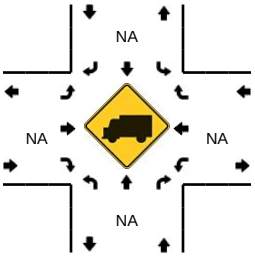


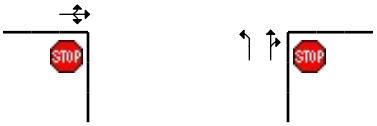


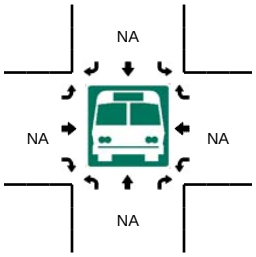












15-Min Count Period Beginning At	NW 97th Ave_W 36th Ave (Northbound)				NW 97th Ave_W 36th Ave (Southbound)				NW 130th St (Eastbound)				NW 130th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	1	9	12	0	22	14	18	0	23	76	10	0	10	33	29	0	257	
4:15 PM	1	16	4	0	24	9	19	0	15	44	4	0	6	60	24	0	226	
4:30 PM	4	13	8	0	26	15	18	0	15	65	4	0	9	60	40	0	277	
4:45 PM	2	15	9	0	38	13	12	0	18	69	8	0	17	47	26	0	274	1034
5:00 PM	10	22	3	0	28	15	18	0	17	63	11	0	9	82	28	0	306	1083
5:15 PM	9	17	4	0	26	19	22	0	13	83	15	0	9	70	37	0	324	1181
5:30 PM	3	17	6	0	36	11	16	0	21	81	8	0	11	75	26	0	311	1215
5:45 PM	7	12	7	0	28	18	23	0	19	68	8	0	9	52	32	0	283	1224

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	36	68	16	0	104	76	88	0	52	332	60	0	36	280	148	0	1296
Heavy Trucks	0	0	0		0	0	4		0	0	0		0	4	0		8
Pedestrians		4				8				8				4			24
Bicycles	0	0	0		0	0	0		0	2	0		0	0	0		2
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

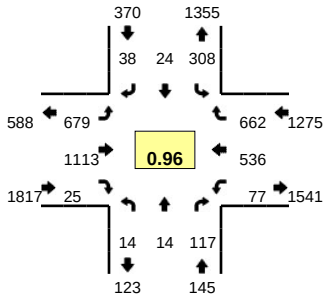
LOCATION: Ronald Reagan Turnpike Ramp (S) -- N Okeechobee Rd

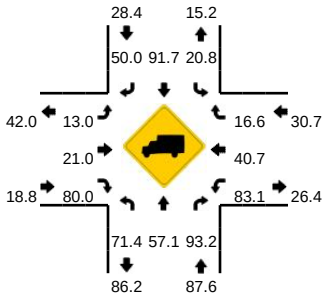
CITY/STATE: Hialeah, FL

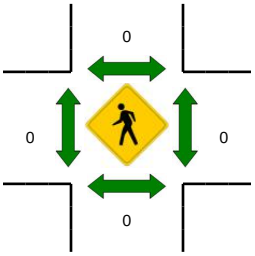
QC JOB #: 13778027

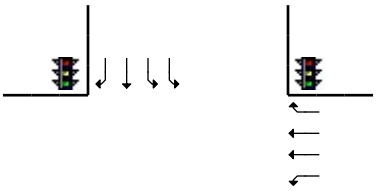
DATE: Thu, Apr 14 2016

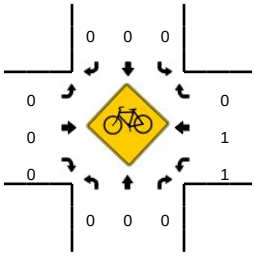
Peak-Hour: 7:30 AM -- 8:30 AM
Peak 15-Min: 8:00 AM -- 8:15 AM

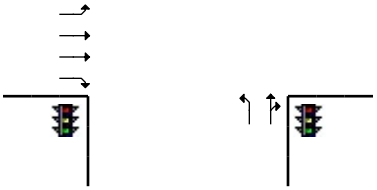


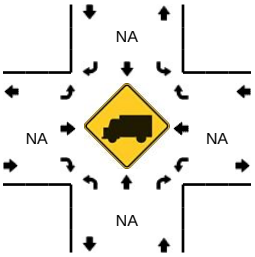


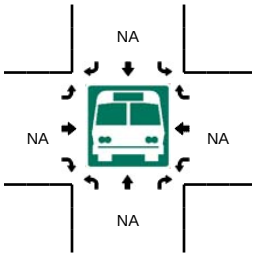












15-Min Count Period Beginning At	Ronald Reagan Turnpike Ramp (S) (Northbound)				Ronald Reagan Turnpike Ramp (S) (Southbound)				N Okeechobee Rd (Eastbound)				N Okeechobee Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	1	22	0	97	15	25	0	108	261	5	0	30	153	108	0	825	
7:15 AM	4	1	32	0	89	5	11	0	143	250	4	0	22	111	100	1	773	
7:30 AM	4	4	35	0	67	5	7	0	133	280	9	0	18	169	177	2	910	
7:45 AM	5	1	31	0	92	12	16	0	187	240	6	0	21	108	142	1	862	3370
8:00 AM	1	5	25	0	72	6	10	0	165	311	9	0	16	143	180	0	943	3488
8:15 AM	4	4	26	0	77	1	5	0	194	282	1	0	19	116	163	0	892	3607
8:30 AM	2	0	29	0	73	3	5	0	197	266	8	0	19	136	120	1	859	3556
8:45 AM	3	4	15	0	73	10	8	0	143	244	8	0	22	166	153	0	849	3543

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	4	20	100	0	288	24	40	0	660	1244	36	0	64	572	720	0	3772
Heavy Trucks	0	16	92		60	24	24		64	220	32		60	256	132		980
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		1	1	0		2
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

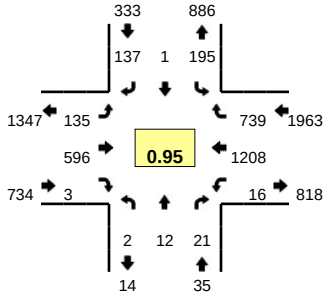
LOCATION: Ronald Reagan Turnpike Ramp (S) -- N Okeechobee Rd

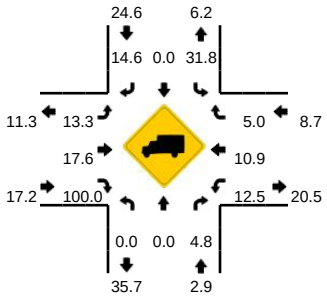
CITY/STATE: Hialeah, FL

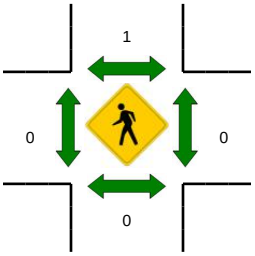
QC JOB #: 13778028

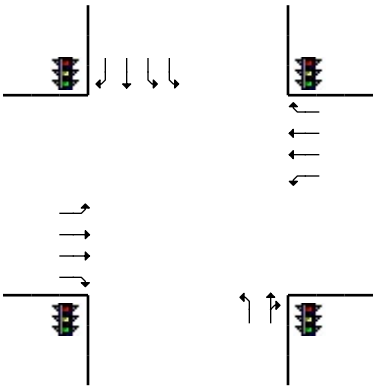
DATE: Thu, Apr 14 2016

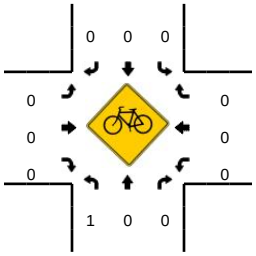
Peak-Hour: 4:45 PM -- 5:45 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

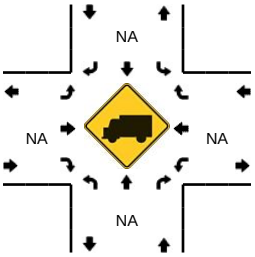


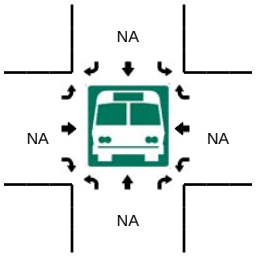












15-Min Count Period Beginning At	Ronald Reagan Turnpike Ramp (S) (Northbound)				Ronald Reagan Turnpike Ramp (S) (Southbound)				N Okeechobee Rd (Eastbound)				N Okeechobee Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	1	4	7	0	51	0	21	0	34	185	0	0	1	248	128	0	680	
4:15 PM	0	0	5	0	53	1	26	0	58	165	0	0	0	251	169	1	729	
4:30 PM	1	2	8	0	47	2	22	0	40	140	1	0	1	253	204	2	723	
4:45 PM	0	3	1	0	50	0	29	0	36	149	2	0	3	276	181	1	731	2863
5:00 PM	1	5	11	0	51	1	38	0	28	145	1	0	3	279	226	2	791	2974
5:15 PM	0	3	6	0	53	0	44	0	34	147	0	0	4	329	184	1	805	3050
5:30 PM	1	1	3	0	41	0	26	0	37	155	0	0	0	324	148	2	738	3065
5:45 PM	0	0	3	0	41	0	49	0	32	131	1	0	4	257	124	2	644	2978

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	12	24	0	212	0	176	0	136	588	0	0	16	1316	736	4	3220
Heavy Trucks	0	0	4		64	0	16		20	76	0		8	140	32		360
Pedestrians		0				4				0				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

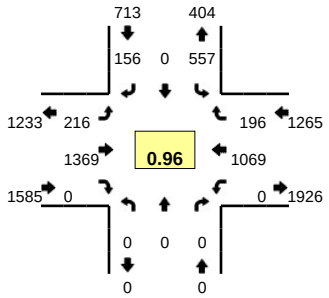
Type of peak hour being reported: Intersection Peak

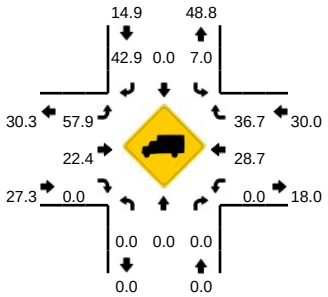
Method for determining peak hour: Total Entering Volume

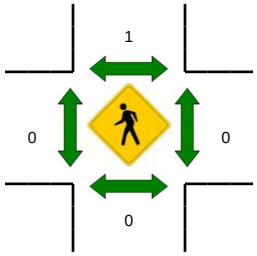
LOCATION: Ronald Reagan Turnpike Ramp (N) -- N Okeechobee Rd
CITY/STATE: Miami-Dade, FL

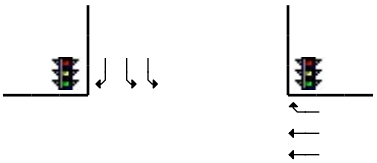
QC JOB #: 13778029
DATE: Thu, Apr 14 2016

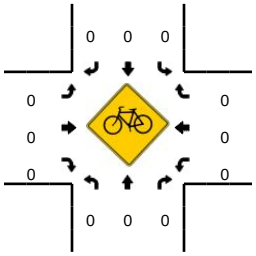
Peak-Hour: 7:30 AM -- 8:30 AM
Peak 15-Min: 8:00 AM -- 8:15 AM

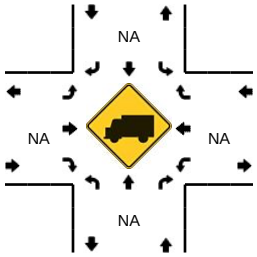


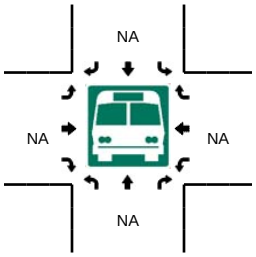












15-Min Count Period Beginning At	Ronald Reagan Turnpike Ramp (N) (Northbound)				Ronald Reagan Turnpike Ramp (N) (Southbound)				N Okeechobee Rd (Eastbound)				N Okeechobee Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	0	0	142	0	45	0	51	315	0	0	0	259	48	0	860	
7:15 AM	0	0	0	0	146	0	44	0	75	317	0	0	0	215	45	0	842	
7:30 AM	0	0	0	0	137	0	48	0	49	337	0	2	0	280	58	0	911	
7:45 AM	0	0	0	0	159	0	32	0	49	321	0	0	0	258	42	0	861	3474
8:00 AM	0	0	0	0	133	0	33	0	53	373	0	1	0	283	49	0	925	3539
8:15 AM	0	0	0	0	128	0	43	0	57	338	0	5	0	248	47	0	866	3563
8:30 AM	0	0	0	0	159	0	50	0	41	337	0	10	0	258	41	0	896	3548
8:45 AM	0	0	0	0	132	0	43	0	37	289	0	5	0	266	36	0	808	3495

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	532	0	132	0	212	1492	0	4	0	1132	196	0	3700
Heavy Trucks	0	0	0		40	0	64		100	320	0		0	364	80		968
Pedestrians		0				4				0				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

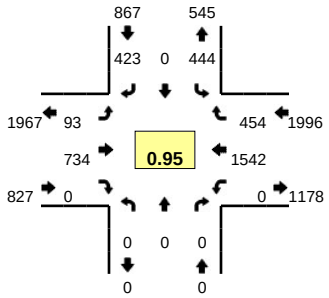
LOCATION: Ronald Reagan Turnpike Ramp (N) -- N Okeechobee Rd

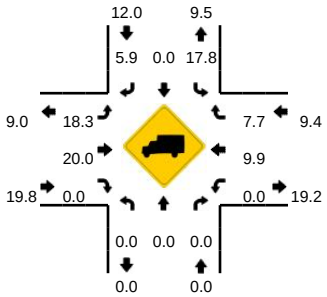
CITY/STATE: Miami-Dade, FL

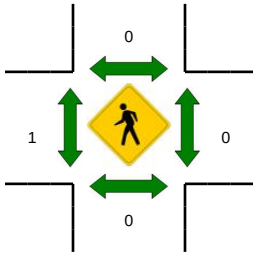
QC JOB #: 13778030

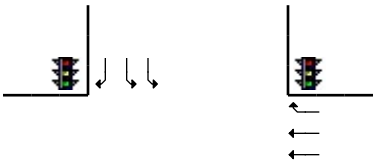
DATE: Thu, Apr 14 2016

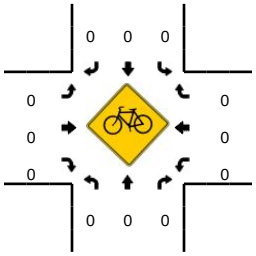
Peak-Hour: 4:45 PM -- 5:45 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

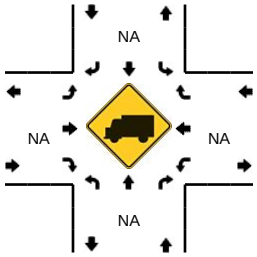


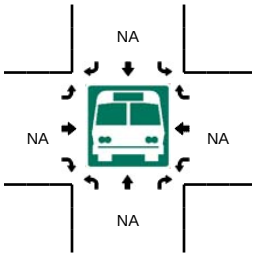












15-Min Count Period Beginning At	Ronald Reagan Turnpike Ramp (N) (Northbound)				Ronald Reagan Turnpike Ramp (N) (Southbound)				N Okeechobee Rd (Eastbound)				N Okeechobee Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	0	0	116	0	67	0	22	227	0	0	0	303	65	0	800	
4:15 PM	0	0	0	0	125	0	85	0	17	212	0	0	0	333	67	0	839	
4:30 PM	0	0	0	0	129	0	87	0	19	184	0	0	0	386	91	0	896	
4:45 PM	0	0	0	0	109	0	102	0	20	180	0	0	0	369	101	0	881	3416
5:00 PM	0	0	0	0	88	0	99	0	21	192	0	0	0	421	101	0	922	3538
5:15 PM	0	0	0	0	130	0	120	0	21	182	0	2	0	402	114	0	971	3670
5:30 PM	0	0	0	0	117	0	102	0	29	180	0	0	0	350	138	0	916	3690
5:45 PM	0	0	0	0	69	0	57	0	19	169	0	1	0	369	88	0	772	3581

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	520	0	480	0	84	728	0	8	0	1608	456	0	3884
Heavy Trucks	0	0	0		84	0	32		12	120	0		0	132	36		416
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

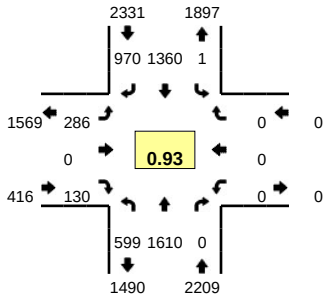
Type of peak hour being reported: Intersection Peak

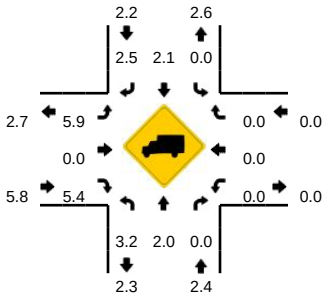
Method for determining peak hour: Total Entering Volume

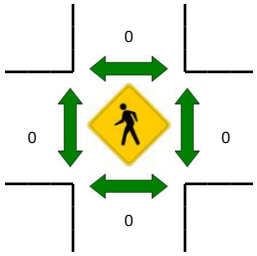
LOCATION: SR 823/Red Rd -- Ronald Reagan Turnpike Ramp (E)
CITY/STATE: Miami-Dade, FL

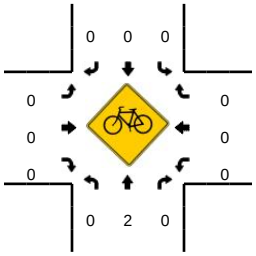
QC JOB #: 13778031
DATE: Wed, Apr 13 2016

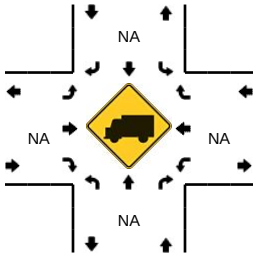
Peak-Hour: 7:15 AM -- 8:15 AM
Peak 15-Min: 7:15 AM -- 7:30 AM

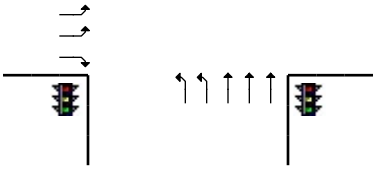


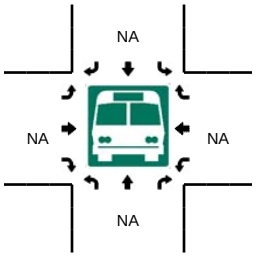












15-Min Count Period Beginning At	SR 823/Red Rd (Northbound)				SR 823/Red Rd (Southbound)				Ronald Reagan Turnpike Ramp (E) (Eastbound)				Ronald Reagan Turnpike Ramp (E) (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	149	344	0	0	0	278	270	0	44	0	22	0	0	0	0	0	1107	
7:15 AM	182	445	0	0	0	306	297	1	62	0	33	0	0	0	0	0	1326	
7:30 AM	161	449	0	0	0	330	257	0	59	0	32	0	0	0	0	0	1288	
7:45 AM	133	369	0	0	0	383	226	0	77	0	28	0	0	0	0	0	1216	4937
8:00 AM	123	347	0	0	0	341	190	0	88	0	37	0	0	0	0	0	1126	4956
8:15 AM	138	423	0	0	0	338	232	0	71	0	32	0	0	0	0	0	1234	4864
8:30 AM	116	296	0	0	0	340	203	0	75	0	33	0	0	0	0	0	1063	4639
8:45 AM	93	296	0	0	0	285	239	0	78	0	35	0	0	0	0	0	1026	4449

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	728	1780	0	0	0	1224	1188	4	248	0	132	0	0	0	0	0	5304
Heavy Trucks	16	36	0		0	24	28		20	0	4		0	0	0		128
Pedestrians		0				0				0				0			0
Bicycles	0	1	0		0	0	0		0	0	0		0	0	0		1
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

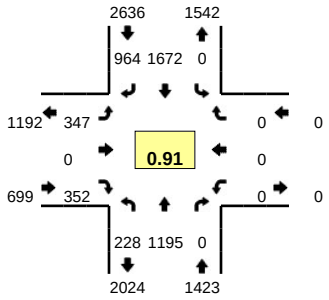
Type of peak hour being reported: Intersection Peak

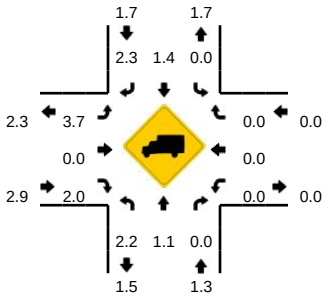
Method for determining peak hour: Total Entering Volume

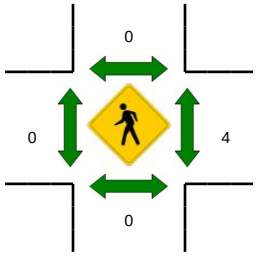
LOCATION: SR 823/Red Rd -- Ronald Reagan Turnpike Ramp (E)
CITY/STATE: Miami-Dade, FL

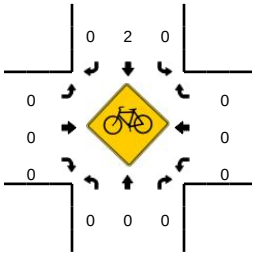
QC JOB #: 13778032
DATE: Wed, Apr 13 2016

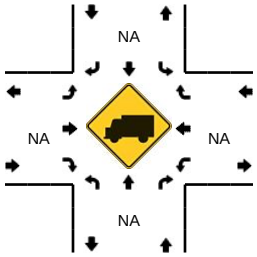
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:30 PM -- 5:45 PM

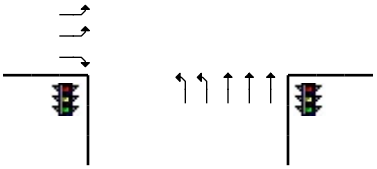


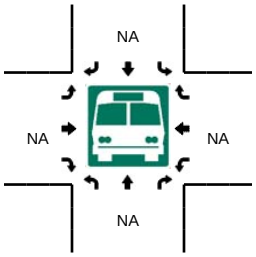












15-Min Count Period Beginning At	SR 823/Red Rd (Northbound)				SR 823/Red Rd (Southbound)				Ronald Reagan Turnpike Ramp (E) (Eastbound)				Ronald Reagan Turnpike Ramp (E) (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	52	241	0	1	0	335	204	0	66	0	48	0	0	0	0	0	947	
4:15 PM	42	230	0	1	0	288	190	0	59	0	57	0	0	0	0	0	867	
4:30 PM	52	281	0	0	0	405	180	0	55	0	65	0	0	0	0	0	1038	
4:45 PM	61	280	0	0	0	336	168	0	55	0	66	0	0	0	0	0	966	3818
5:00 PM	54	266	0	0	0	412	239	0	73	0	96	0	0	0	0	0	1140	4011
5:15 PM	52	273	0	0	0	404	257	0	96	0	78	0	0	0	0	0	1160	4304
5:30 PM	59	355	0	0	0	466	254	0	96	0	81	0	0	0	0	0	1311	4577
5:45 PM	63	301	0	0	0	390	214	0	82	0	97	0	0	0	0	0	1147	4758

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	236	1420	0	0	0	1864	1016	0	384	0	324	0	0	0	0	0	5244
Heavy Trucks	4	20	0		0	32	24		16	0	16		0	0	0		112
Pedestrians		0				0				0				8			8
Bicycles	0	0	0		0	2	0		0	0	0		0	0	0		2
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

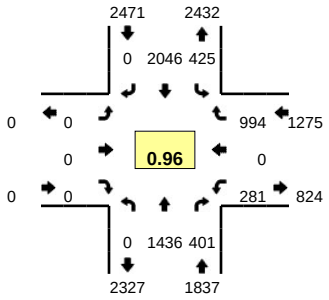
Type of peak hour being reported: Intersection Peak

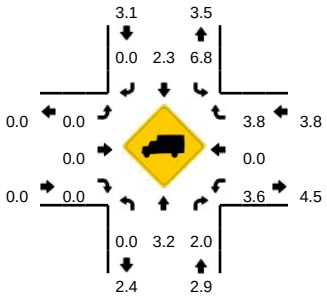
Method for determining peak hour: Total Entering Volume

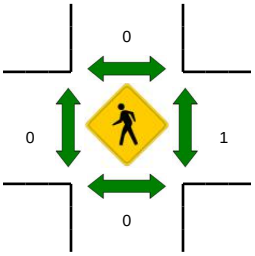
LOCATION: SR 823/Red Rd -- Ronald Reagan Turnpike Ramp (W)
CITY/STATE: Miramar, FL

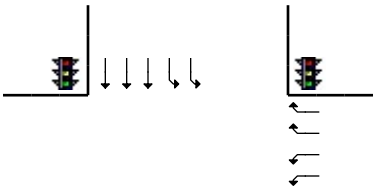
QC JOB #: 13778033
DATE: Wed, Apr 13 2016

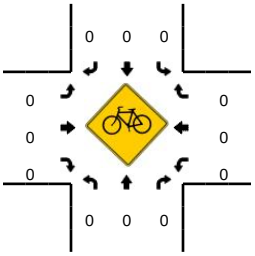
Peak-Hour: 7:15 AM -- 8:15 AM
Peak 15-Min: 7:30 AM -- 7:45 AM

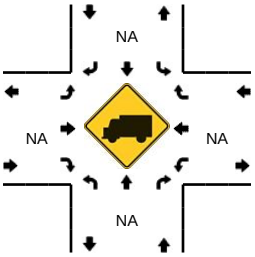


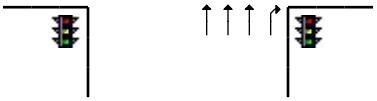


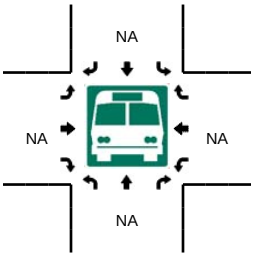












15-Min Count Period Beginning At	SR 823/Red Rd (Northbound)				SR 823/Red Rd (Southbound)				Ronald Reagan Turnpike Ramp (W) (Eastbound)				Ronald Reagan Turnpike Ramp (W) (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	261	106	0	158	517	0	0	0	0	0	0	61	0	176	0	1279	
7:15 AM	0	312	130	0	171	548	0	0	0	0	0	0	59	0	201	0	1421	
7:30 AM	0	400	119	0	100	504	0	1	0	0	0	0	68	0	265	0	1457	
7:45 AM	0	369	83	0	92	530	0	0	0	0	0	0	72	0	262	0	1408	5565
8:00 AM	0	355	69	0	60	464	0	1	0	0	0	0	82	0	266	0	1297	5583
8:15 AM	0	417	57	0	68	523	0	1	0	0	0	0	60	0	276	0	1402	5564
8:30 AM	0	395	55	0	56	502	0	2	0	0	0	0	60	0	289	0	1359	5466
8:45 AM	0	326	37	0	48	456	0	0	0	0	0	0	64	0	271	0	1202	5260

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	1600	476	0	400	2016	0	4	0	0	0	0	272	0	1060	0	5828
Heavy Trucks	0	48	4		20	44	0		0	0	0		20	0	44		180
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

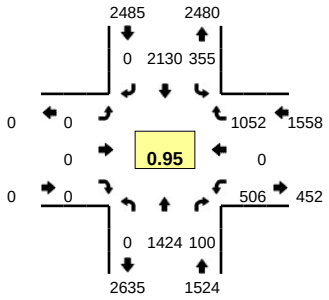
Type of peak hour being reported: Intersection Peak

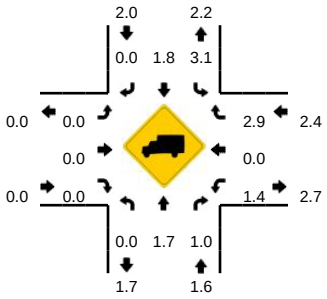
Method for determining peak hour: Total Entering Volume

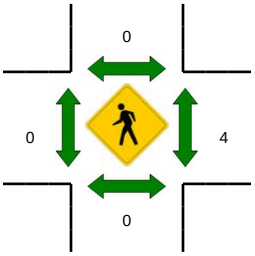
LOCATION: SR 823/Red Rd -- Ronald Reagan Turnpike Ramp (W)
CITY/STATE: Miramar, FL

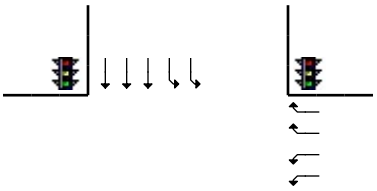
QC JOB #: 13778034
DATE: Wed, Apr 13 2016

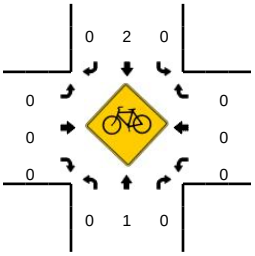
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:30 PM -- 5:45 PM

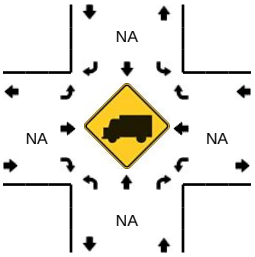


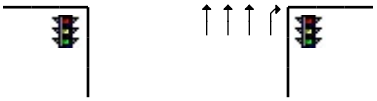


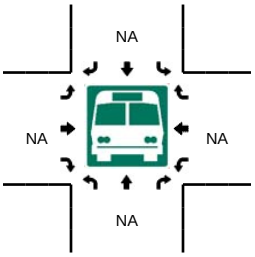












15-Min Count Period Beginning At	SR 823/Red Rd (Northbound)				SR 823/Red Rd (Southbound)				Ronald Reagan Turnpike Ramp (W) (Eastbound)				Ronald Reagan Turnpike Ramp (W) (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	282	41	0	62	452	0	1	0	0	0	0	75	0	164	0	1077	
4:15 PM	0	269	24	0	61	432	0	0	0	0	0	0	67	0	202	0	1055	
4:30 PM	0	298	32	0	84	462	0	2	0	0	0	0	100	0	227	0	1205	
4:45 PM	0	299	22	0	78	424	0	0	0	0	0	0	105	0	219	0	1147	4484
5:00 PM	0	324	23	0	112	557	0	2	0	0	0	0	106	0	219	0	1343	4750
5:15 PM	0	349	23	0	95	520	0	2	0	0	0	0	141	0	278	0	1408	5103
5:30 PM	0	374	30	0	83	585	0	0	0	0	0	0	130	0	258	1	1461	5359
5:45 PM	0	377	24	0	61	468	0	0	0	0	0	0	128	0	297	0	1355	5567

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	1496	120	0	332	2340	0	0	0	0	0	0	520	0	1032	4	5844
Heavy Trucks	0	40	0		8	36	0		0	0	0		12	0	44		140
Pedestrians		0				0				0				8			8
Bicycles	0	1	0		0	2	0		0	0	0		0	0	0		3
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

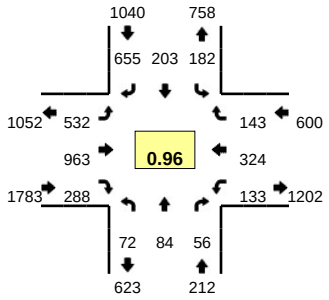
Type of peak hour being reported: Intersection Peak

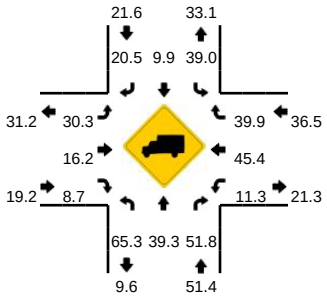
Method for determining peak hour: Total Entering Volume

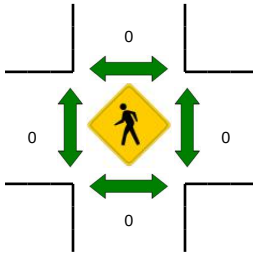
LOCATION: NW 138th St -- N Okeechobee Rd
CITY/STATE: Miami-Dade, FL

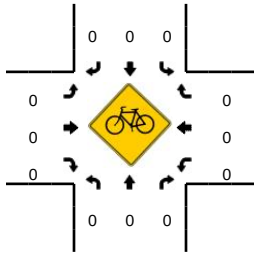
QC JOB #: 13778035
DATE: Wed, Apr 13 2016

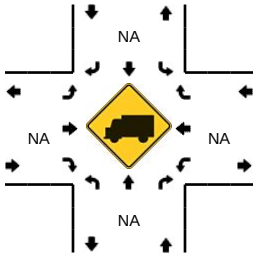
Peak-Hour: 7:15 AM -- 8:15 AM
Peak 15-Min: 8:00 AM -- 8:15 AM

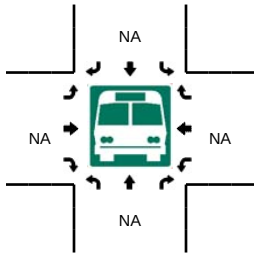












15-Min Count Period Beginning At	NW 138th St (Northbound)				NW 138th St (Southbound)				N Okeechobee Rd (Eastbound)				N Okeechobee Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	17	21	12	0	29	37	159	0	147	214	63	1	27	71	30	0	828	
7:15 AM	15	16	10	0	49	47	154	0	131	238	74	0	32	87	45	0	898	
7:30 AM	19	28	15	0	43	53	170	0	141	216	72	0	40	81	20	0	898	
7:45 AM	19	20	20	0	44	59	166	0	131	228	65	0	38	64	38	1	893	3517
8:00 AM	19	20	11	0	46	44	165	0	128	281	77	1	22	92	40	0	946	3635
8:15 AM	14	10	15	0	44	45	148	0	137	249	68	0	15	102	36	0	883	3620
8:30 AM	25	24	20	0	46	58	160	0	129	210	81	0	28	69	37	0	887	3609
8:45 AM	19	12	16	0	45	46	169	0	140	206	67	0	26	75	27	0	848	3564

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	76	80	44	0	184	176	660	0	512	1124	308	4	88	368	160	0	3784
Heavy Trucks	44	12	20		52	28	136		176	176	36		24	184	72		960
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

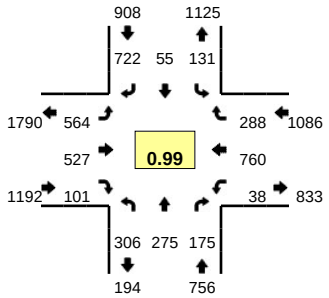
Type of peak hour being reported: Intersection Peak

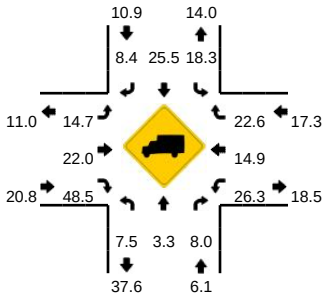
Method for determining peak hour: Total Entering Volume

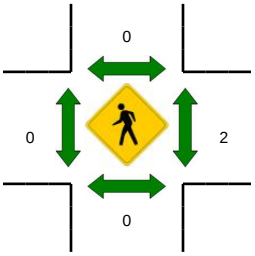
LOCATION: NW 138th St -- N Okeechobee Rd
CITY/STATE: Miami-Dade, FL

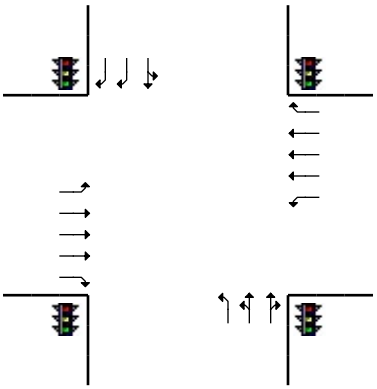
QC JOB #: 13778036
DATE: Wed, Apr 13 2016

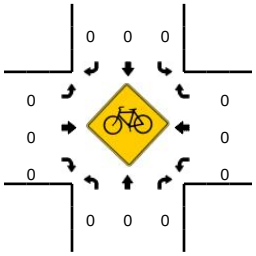
Peak-Hour: 4:30 PM -- 5:30 PM
Peak 15-Min: 5:00 PM -- 5:15 PM

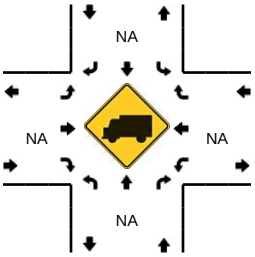


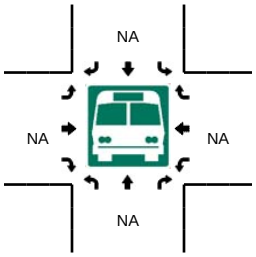












15-Min Count Period Beginning At	NW 138th St (Northbound)				NW 138th St (Southbound)				N Okeechobee Rd (Eastbound)				N Okeechobee Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	48	66	26	0	38	11	123	0	150	124	58	0	11	133	53	1	842	
4:15 PM	74	42	25	0	35	18	152	0	135	146	30	0	9	181	72	0	919	
4:30 PM	88	79	49	0	39	14	172	0	139	119	26	0	8	163	68	0	964	
4:45 PM	55	74	49	0	31	12	191	0	157	138	31	2	12	160	71	0	983	3708
5:00 PM	92	70	44	0	31	14	179	0	131	132	17	0	10	205	75	0	1000	3866
5:15 PM	71	52	33	0	30	15	180	0	135	138	27	0	8	232	74	0	995	3942
5:30 PM	101	97	46	0	27	15	145	0	128	100	21	0	9	209	63	0	961	3939
5:45 PM	44	40	24	0	30	13	165	0	130	101	18	0	4	176	76	0	821	3777

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	368	280	176	0	124	56	716	0	524	528	68	0	40	820	300	0	4000
Heavy Trucks	16	8	16		16	20	64		80	108	44		16	132	52		572
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

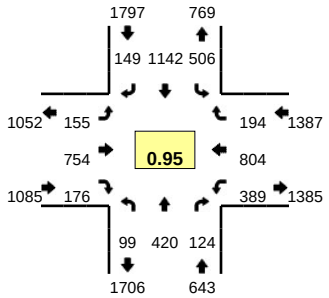
LOCATION: Hialeah Gardens Blvd -- N Okeechobee Rd

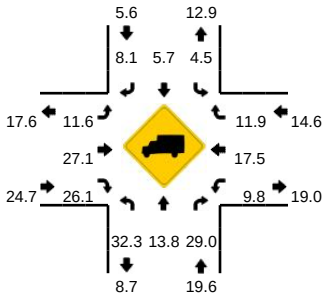
CITY/STATE: Medley, FL

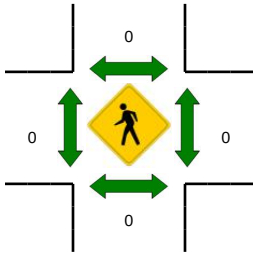
QC JOB #: 13778037

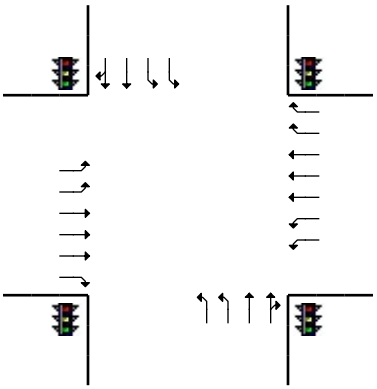
DATE: Thu, Apr 14 2016

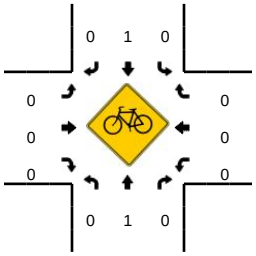
Peak-Hour: 7:15 AM -- 8:15 AM
Peak 15-Min: 7:30 AM -- 7:45 AM

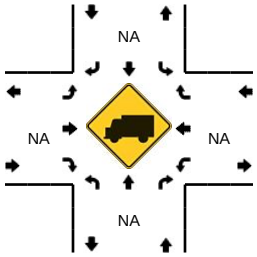


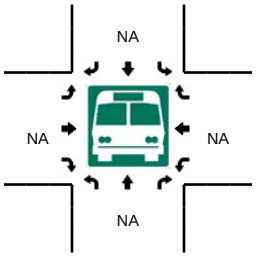












15-Min Count Period Beginning At	Hialeah Gardens Blvd (Northbound)				Hialeah Gardens Blvd (Southbound)				N Okeechobee Rd (Eastbound)				N Okeechobee Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	13	86	35	0	163	244	23	0	25	176	28	0	88	175	74	0	1130	
7:15 AM	28	91	22	0	144	280	33	0	30	189	38	0	99	178	40	0	1172	
7:30 AM	25	113	40	0	132	303	45	0	38	194	41	0	99	215	48	0	1293	
7:45 AM	29	108	25	0	111	292	42	0	47	180	48	0	95	211	43	0	1231	4826
8:00 AM	17	108	37	0	119	267	29	0	40	191	49	0	95	200	63	1	1216	4912
8:15 AM	16	117	35	0	90	245	27	0	42	236	37	0	79	145	48	0	1117	4857
8:30 AM	16	110	46	0	78	275	35	0	38	205	48	0	108	136	48	0	1143	4707
8:45 AM	19	75	27	0	54	129	19	0	34	175	40	0	49	127	19	1	768	4244

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	100	452	160	0	528	1212	180	0	152	776	164	0	396	860	192	0	5172
Heavy Trucks	40	60	36		32	84	12		12	208	44		24	128	12		692
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

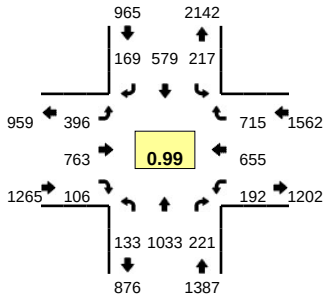
LOCATION: Hialeah Gardens Blvd -- N Okeechobee Rd

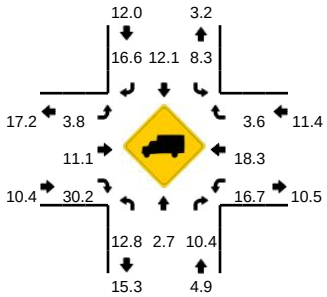
QC JOB #: 13778038

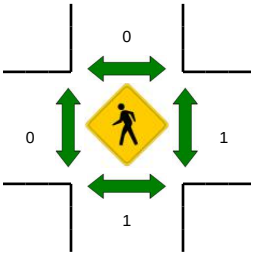
CITY/STATE: Medley, FL

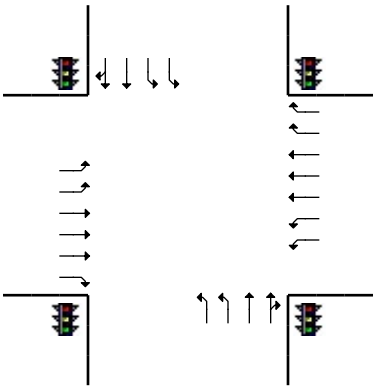
DATE: Tue, Apr 19 2016

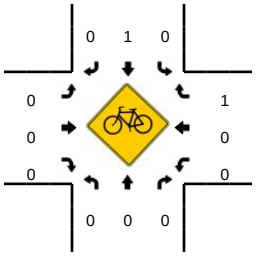
Peak-Hour: 4:30 PM -- 5:30 PM
Peak 15-Min: 4:45 PM -- 5:00 PM

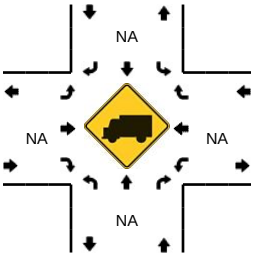


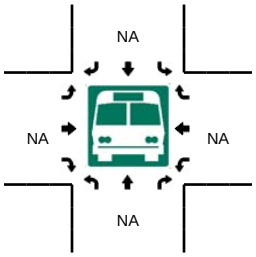












15-Min Count Period Beginning At	Hialeah Gardens Blvd (Northbound)				Hialeah Gardens Blvd (Southbound)				N Okeechobee Rd (Eastbound)				N Okeechobee Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	32	236	58	0	55	137	34	0	72	159	38	0	68	149	162	2	1202	
4:15 PM	28	230	64	0	55	182	32	0	69	162	25	0	58	156	163	0	1224	
4:30 PM	32	251	64	0	54	151	52	0	99	170	36	0	63	152	163	0	1287	
4:45 PM	29	302	45	0	61	141	32	0	99	226	22	0	47	143	167	0	1314	5027
5:00 PM	29	247	56	0	52	138	35	0	108	179	27	1	46	182	205	0	1305	5130
5:15 PM	43	233	56	0	50	149	50	0	88	188	21	1	35	178	180	1	1273	5179
5:30 PM	32	242	50	0	51	145	39	0	96	167	24	0	45	166	192	0	1249	5141
5:45 PM	38	253	51	0	52	129	24	0	85	162	24	0	34	183	229	0	1264	5091

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	116	1208	180	0	244	564	128	0	396	904	88	0	188	572	668	0	5256
Heavy Trucks	8	44	16		20	92	16		8	104	28		32	116	32		516
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

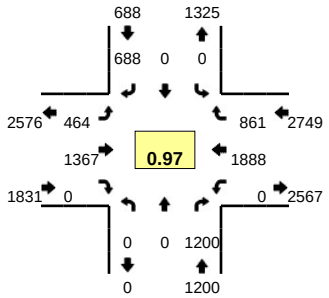
Type of peak hour being reported: Intersection Peak

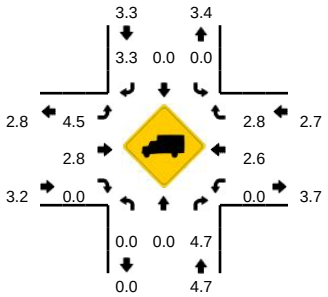
Method for determining peak hour: Total Entering Volume

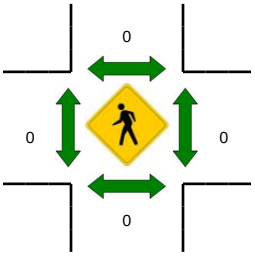
LOCATION: I -75 Ramp (N) -- Miramar Pkwy
CITY/STATE: Miami-Dade, FL

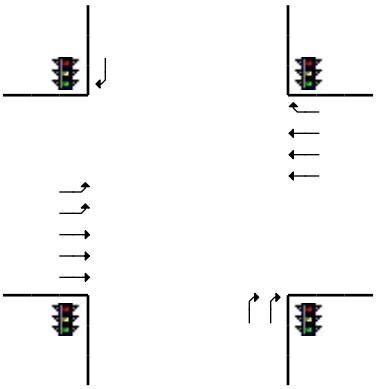
QC JOB #: 13778039
DATE: Wed, Apr 13 2016

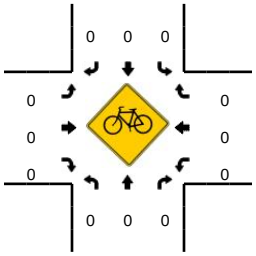
Peak-Hour: 7:45 AM -- 8:45 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

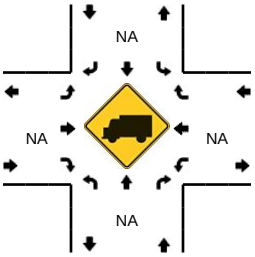


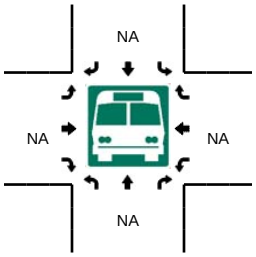












15-Min Count Period Beginning At	I -75 Ramp (N) (Northbound)				I -75 Ramp (N) (Southbound)				Miramar Pkwy (Eastbound)				Miramar Pkwy (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	172	0	0	0	115	0	116	236	0	0	0	381	173	0	1193	
7:15 AM	0	0	223	0	0	0	141	0	163	288	0	0	0	502	188	3	1508	
7:30 AM	0	0	212	0	0	0	186	0	79	271	0	0	0	597	201	0	1546	
7:45 AM	0	0	286	0	0	0	192	0	116	323	0	0	0	520	232	0	1669	5916
8:00 AM	0	0	287	0	0	0	182	0	113	343	0	0	0	500	213	0	1638	6361
8:15 AM	0	0	327	0	0	0	152	0	105	325	0	0	0	466	217	0	1592	6445
8:30 AM	0	0	300	0	0	0	162	0	130	376	0	0	0	402	199	0	1569	6468
8:45 AM	0	0	281	0	0	0	140	0	122	389	0	0	0	376	186	0	1494	6293

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	1144	0	0	0	768	0	464	1292	0	0	0	2080	928	0	6676
Heavy Trucks	0	0	60		0	0	24		20	48	0		0	48	16		216
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

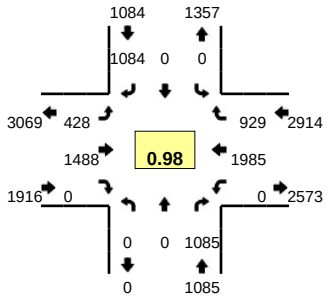
Type of peak hour being reported: Intersection Peak

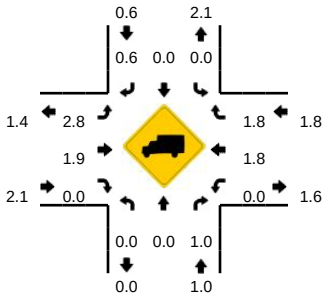
Method for determining peak hour: Total Entering Volume

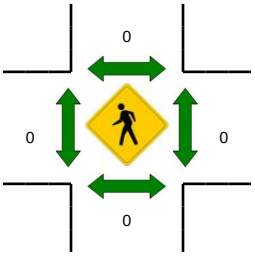
LOCATION: I -75 Ramp (N) -- Miramar Pkwy
CITY/STATE: Miami-Dade, FL

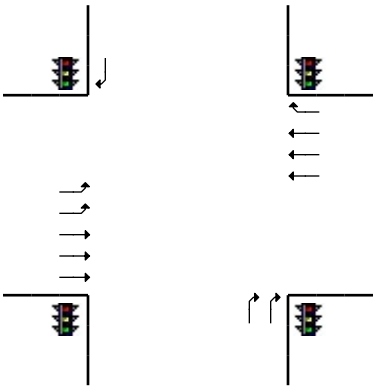
QC JOB #: 13778040
DATE: Wed, Apr 13 2016

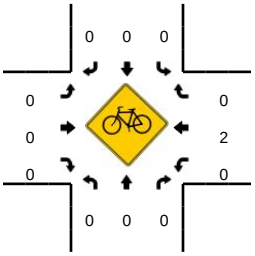
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

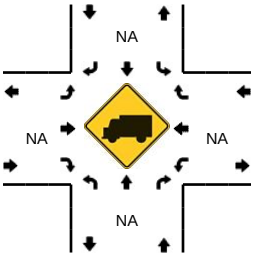


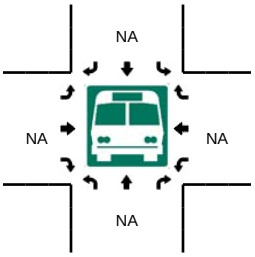












15-Min Count Period Beginning At	I -75 Ramp (N) (Northbound)				I -75 Ramp (N) (Southbound)				Miramar Pkwy (Eastbound)				Miramar Pkwy (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	222	0	0	0	261	0	95	298	0	0	0	446	164	0	1486	
4:15 PM	0	0	234	0	0	0	265	0	83	355	0	0	0	442	196	0	1575	
4:30 PM	0	0	256	0	0	0	289	0	110	385	0	0	0	454	228	0	1722	
4:45 PM	0	0	247	0	0	0	254	0	104	358	0	0	0	452	231	0	1646	6429
5:00 PM	0	0	255	0	0	0	286	0	103	350	0	0	0	464	245	0	1703	6646
5:15 PM	0	0	262	0	0	0	221	0	118	396	0	0	0	540	247	0	1784	6855
5:30 PM	0	0	296	0	0	0	265	0	102	362	0	0	0	489	228	0	1742	6875
5:45 PM	0	0	272	0	0	0	312	0	105	380	0	0	0	492	209	0	1770	6999

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	1048	0	0	0	884	0	472	1584	0	0	0	2160	988	0	7136
Heavy Trucks	0	0	8		0	0	12		8	32	0		0	32	8		100
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	1	0		1
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

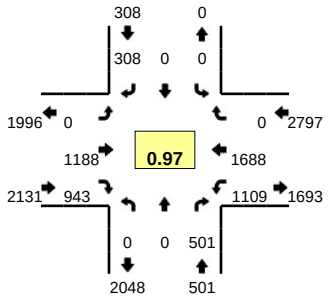
Type of peak hour being reported: Intersection Peak

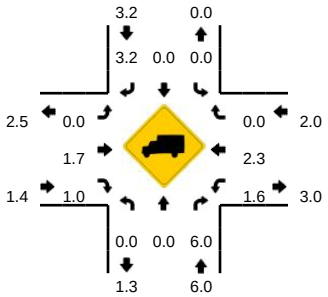
Method for determining peak hour: Total Entering Volume

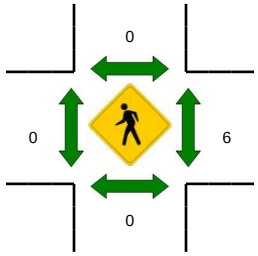
LOCATION: I -75 Ramp (S) -- Miramar Pkwy
CITY/STATE: Miami-Dade, FL

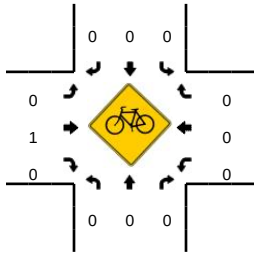
QC JOB #: 13778041
DATE: Wed, Apr 13 2016

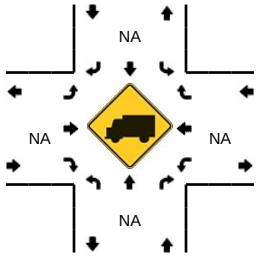
Peak-Hour: 7:15 AM -- 8:15 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

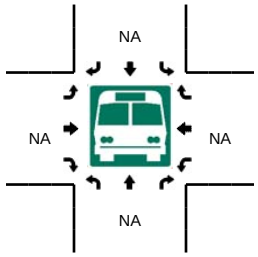












15-Min Count Period Beginning At	I -75 Ramp (S) (Northbound)				I -75 Ramp (S) (Southbound)				Miramar Pkwy (Eastbound)				Miramar Pkwy (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	99	0	0	0	78	0	0	309	328	0	271	249	0	1	1335	
7:15 AM	0	0	118	0	0	0	75	0	0	327	305	0	285	356	0	1	1467	
7:30 AM	0	0	133	0	0	0	63	0	0	210	238	0	279	438	0	0	1361	
7:45 AM	0	0	134	0	0	0	77	0	0	308	216	0	288	454	0	1	1478	5641
8:00 AM	0	0	116	0	0	0	93	0	0	343	184	0	253	440	0	2	1431	5737
8:15 AM	0	0	141	0	0	0	87	0	0	303	183	0	261	355	0	3	1333	5603
8:30 AM	0	0	131	0	0	0	65	0	0	399	179	0	238	380	0	1	1393	5635
8:45 AM	0	0	153	0	0	0	80	0	0	343	243	0	208	345	0	2	1374	5531

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	536	0	0	0	308	0	0	1232	864	0	1152	1816	0	4	5912
Heavy Trucks	0	0	32		0	0	8		0	32	8		28	40	0		148
Pedestrians		0				0				0				8			8
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

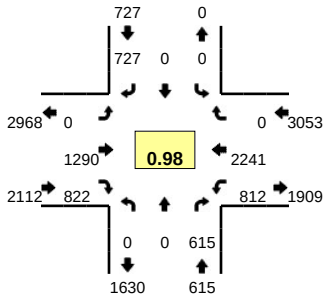
Type of peak hour being reported: Intersection Peak

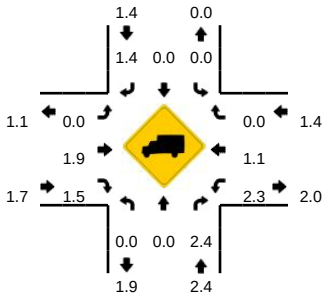
Method for determining peak hour: Total Entering Volume

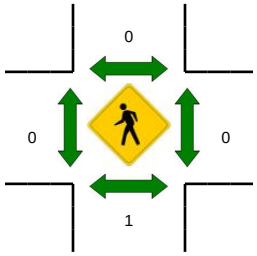
LOCATION: I -75 Ramp (S) -- Miramar Pkwy
CITY/STATE: Miami-Dade, FL

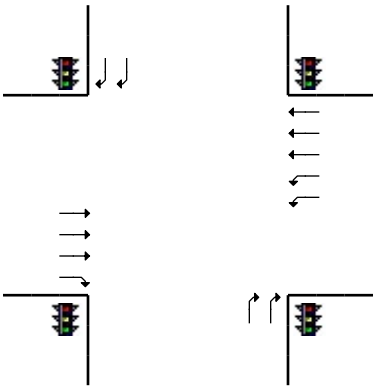
QC JOB #: 13778042
DATE: Wed, Apr 13 2016

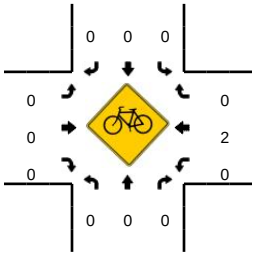
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

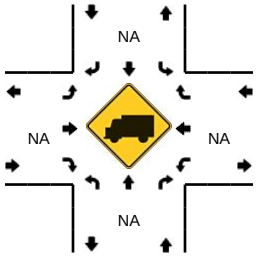


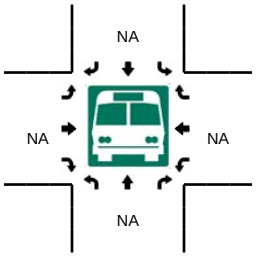












15-Min Count Period Beginning At	I -75 Ramp (S) (Northbound)				I -75 Ramp (S) (Southbound)				Miramar Pkwy (Eastbound)				Miramar Pkwy (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	118	0	0	0	144	0	0	274	202	0	182	523	0	2	1445	
4:15 PM	0	0	149	0	0	0	138	0	0	286	174	0	178	545	0	2	1472	
4:30 PM	0	0	132	0	0	0	171	0	0	355	179	0	203	498	0	4	1542	
4:45 PM	0	0	136	0	0	0	176	0	0	331	215	0	191	555	0	2	1606	6065
5:00 PM	0	0	136	0	0	0	183	0	0	323	228	0	206	540	0	1	1617	6237
5:15 PM	0	0	170	0	0	0	163	0	0	324	226	0	231	546	0	0	1660	6425
5:30 PM	0	0	150	0	0	0	205	0	0	305	205	0	167	564	0	1	1597	6480
5:45 PM	0	0	159	0	0	0	176	0	0	338	163	0	204	591	0	2	1633	6507

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	680	0	0	0	652	0	0	1296	904	0	924	2184	0	0	6640
Heavy Trucks	0	0	12		0	0	12		0	28	12		24	24	0		112
Pedestrians		4				0				0				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	1	0		1
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

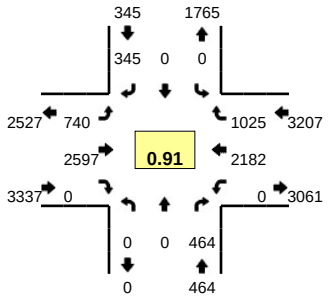
Type of peak hour being reported: Intersection Peak

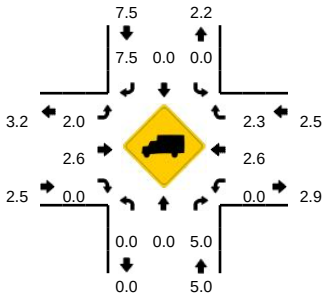
Method for determining peak hour: Total Entering Volume

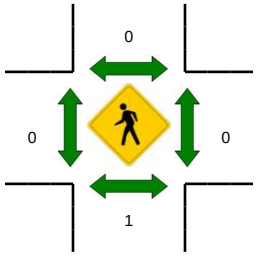
LOCATION: I -75 Ramp (N) -- Pines Blvd
CITY/STATE: Pembroke Pines, FL

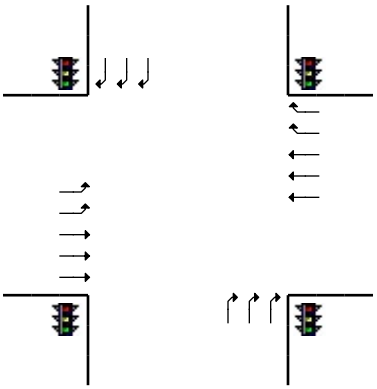
QC JOB #: 13778043
DATE: Wed, Apr 13 2016

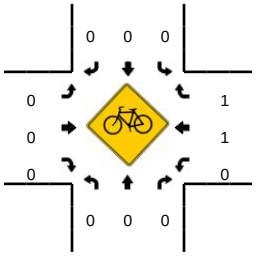
Peak-Hour: 7:15 AM -- 8:15 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

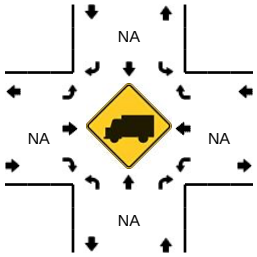


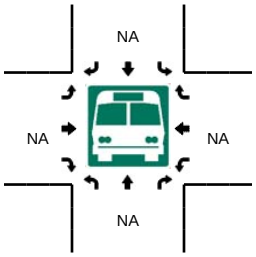












15-Min Count Period Beginning At	I -75 Ramp (N) (Northbound)				I -75 Ramp (N) (Southbound)				Pines Blvd (Eastbound)				Pines Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	92	0	0	0	66	0	197	432	0	0	0	518	190	0	1495	
7:15 AM	0	0	98	0	0	0	69	0	202	590	0	0	0	549	250	0	1758	
7:30 AM	0	0	108	0	0	0	90	0	205	642	0	0	0	538	285	0	1868	
7:45 AM	0	0	139	0	0	0	92	0	162	703	0	0	0	626	294	0	2016	7137
8:00 AM	0	0	119	0	0	0	94	0	171	662	0	0	0	469	196	0	1711	7353
8:15 AM	0	0	121	0	0	0	101	0	174	620	0	3	0	433	224	0	1676	7271
8:30 AM	0	0	124	0	0	0	108	0	130	635	0	1	0	509	243	0	1750	7153
8:45 AM	0	0	131	0	0	0	102	0	149	683	0	0	0	502	189	0	1756	6893

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	556	0	0	0	368	0	648	2812	0	0	0	2504	1176	0	8064
Heavy Trucks	0	0	12		0	0	40		24	64	0		0	60	32		232
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

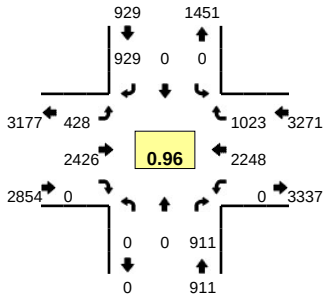
Type of peak hour being reported: Intersection Peak

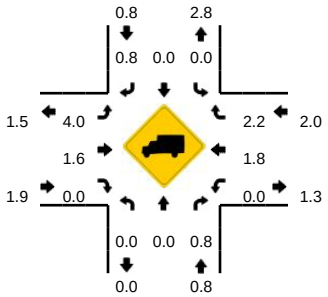
Method for determining peak hour: Total Entering Volume

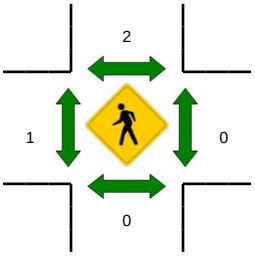
LOCATION: I -75 Ramp (N) -- Pines Blvd
CITY/STATE: Pembroke Pines, FL

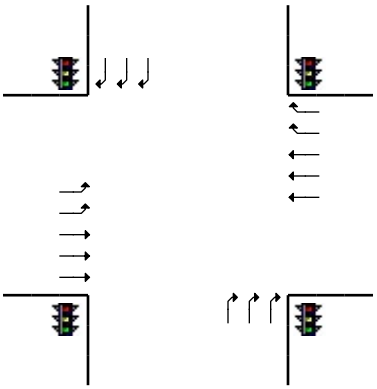
QC JOB #: 13778044
DATE: Wed, Apr 13 2016

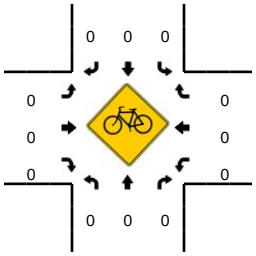
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

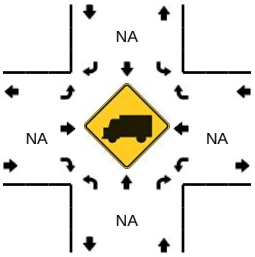


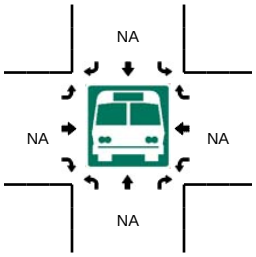












15-Min Count Period Beginning At	I -75 Ramp (N) (Northbound)				I -75 Ramp (N) (Southbound)				Pines Blvd (Eastbound)				Pines Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	193	0	0	0	164	0	125	486	0	2	0	511	214	0	1695	
4:15 PM	0	0	195	0	0	0	146	0	129	554	0	0	0	556	202	0	1782	
4:30 PM	0	0	226	0	0	0	200	0	113	503	0	2	0	485	232	0	1761	
4:45 PM	0	0	226	0	0	0	203	0	121	538	0	0	0	545	203	0	1836	7074
5:00 PM	0	0	181	0	0	0	186	0	95	602	0	0	0	596	249	0	1909	7288
5:15 PM	0	0	263	0	0	0	253	0	109	590	0	0	0	585	277	0	2077	7583
5:30 PM	0	0	214	0	0	0	238	0	113	629	0	0	0	579	265	0	2038	7860
5:45 PM	0	0	253	0	0	0	252	0	111	605	0	0	0	488	232	0	1941	7965

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	1052	0	0	0	1012	0	436	2360	0	0	0	2340	1108	0	8308
Heavy Trucks	0	0	12		0	0	0		20	36	0		0	40	32		140
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

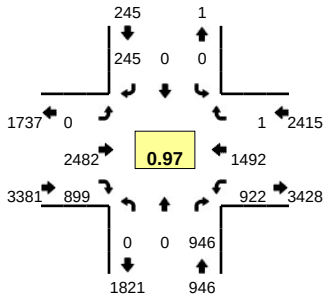
Type of peak hour being reported: Intersection Peak

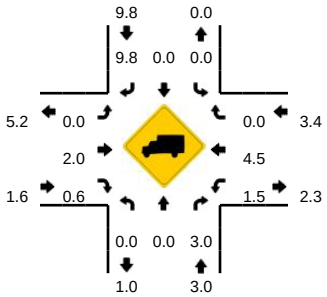
Method for determining peak hour: Total Entering Volume

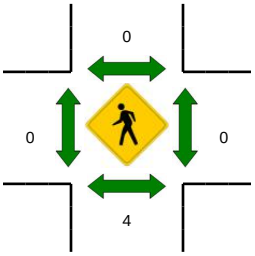
LOCATION: I -75 Ramp (S) -- Pines Blvd
CITY/STATE: Broward, FL

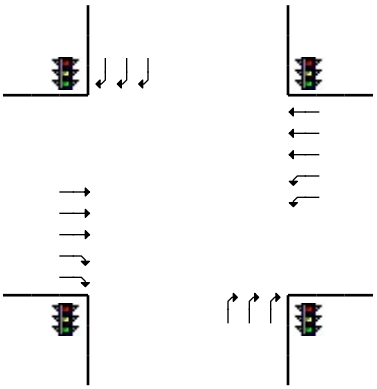
QC JOB #: 13778045
DATE: Wed, Apr 13 2016

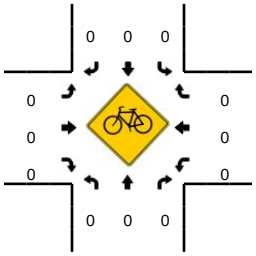
Peak-Hour: 7:15 AM -- 8:15 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

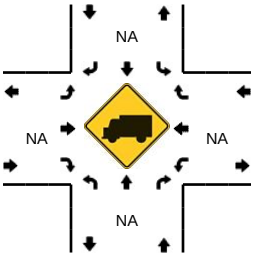


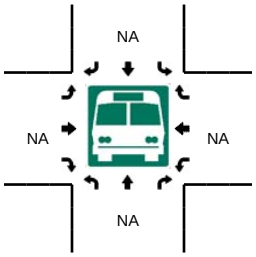












15-Min Count Period Beginning At	I -75 Ramp (S) (Northbound)				I -75 Ramp (S) (Southbound)				Pines Blvd (Eastbound)				Pines Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	146	0	0	0	61	0	0	507	338	0	249	324	0	0	1625	
7:15 AM	0	0	209	0	0	0	58	0	0	627	262	0	246	328	0	0	1730	
7:30 AM	0	0	245	0	0	0	62	0	0	622	222	0	259	359	1	0	1770	
7:45 AM	0	0	257	0	0	0	50	0	0	608	198	0	227	464	0	0	1804	6929
8:00 AM	0	0	235	0	0	0	75	0	0	625	217	0	190	341	0	0	1683	6987
8:15 AM	0	0	130	0	0	0	52	0	1	677	205	0	122	376	0	1	1564	6821
8:30 AM	0	0	300	0	0	0	78	0	0	495	193	0	224	413	0	0	1703	6754
8:45 AM	0	0	271	0	0	0	86	0	0	576	189	0	181	417	0	0	1720	6670

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	1028	0	0	0	200	0	0	2432	792	0	908	1856	0	0	7216
Heavy Trucks	0	0	24		0	0	20		0	52	0		20	64	0		180
Pedestrians		4				0				0				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

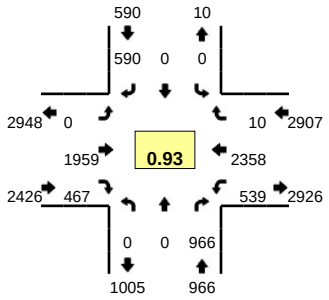
Type of peak hour being reported: Intersection Peak

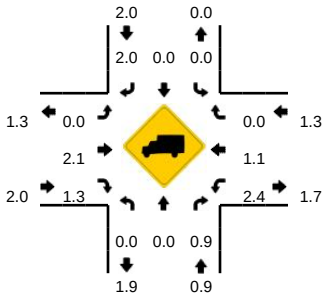
Method for determining peak hour: Total Entering Volume

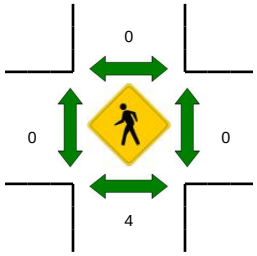
LOCATION: I -75 Ramp (S) -- Pines Blvd
CITY/STATE: Broward, FL

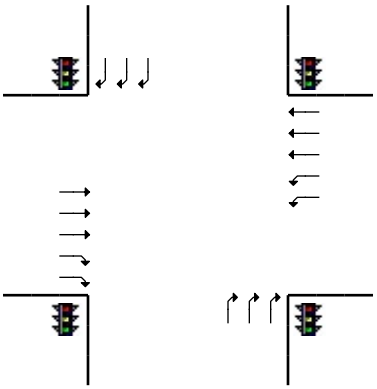
QC JOB #: 13778046
DATE: Wed, Apr 13 2016

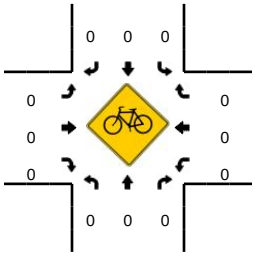
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

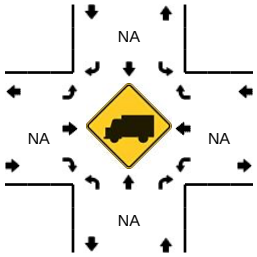


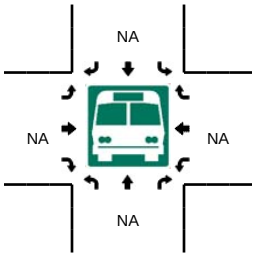












15-Min Count Period Beginning At	I -75 Ramp (S) (Northbound)				I -75 Ramp (S) (Southbound)				Pines Blvd (Eastbound)				Pines Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	164	0	0	0	120	0	0	452	83	0	163	483	0	0	1465	
4:15 PM	0	0	189	0	0	0	94	0	0	557	121	0	128	521	0	0	1610	
4:30 PM	0	0	167	0	0	0	142	0	0	491	113	0	133	501	0	1	1548	
4:45 PM	0	0	203	0	0	0	142	0	0	473	96	0	168	539	0	0	1621	6244
5:00 PM	0	0	169	0	0	0	123	0	0	521	144	0	122	495	9	0	1583	6362
5:15 PM	0	0	287	0	0	0	160	0	0	458	122	0	188	630	1	1	1847	6599
5:30 PM	0	0	269	0	0	0	116	0	0	508	96	0	138	657	0	0	1784	6835
5:45 PM	0	0	241	0	0	0	191	0	0	472	105	0	90	576	0	0	1675	6889

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	1148	0	0	0	640	0	0	1832	488	0	752	2520	4	4	7388
Heavy Trucks	0	0	4		0	0	8		0	36	8		16	24	0		96
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

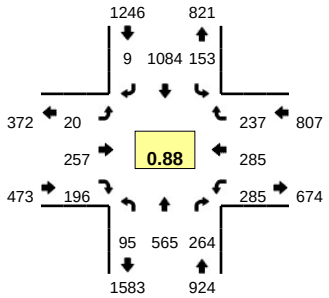
LOCATION: Hialeah Gardens Blvd -- W 68th St

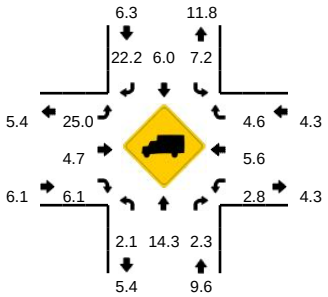
CITY/STATE: Miami-Dade, FL

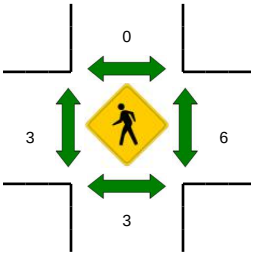
QC JOB #: 13778047

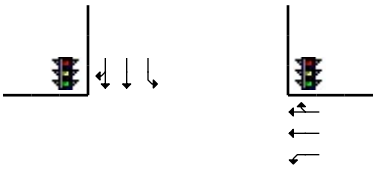
DATE: Thu, Apr 14 2016

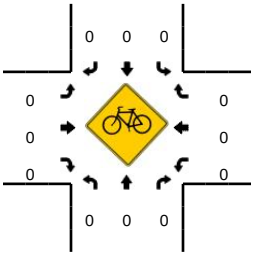
Peak-Hour: 7:00 AM -- 8:00 AM
Peak 15-Min: 7:00 AM -- 7:15 AM

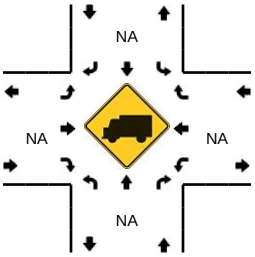


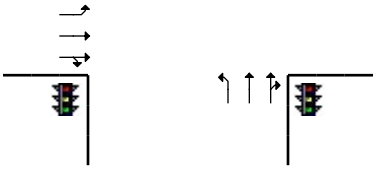


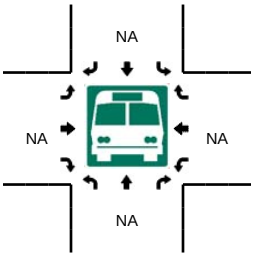












15-Min Count Period Beginning At	Hialeah Gardens Blvd (Northbound)				Hialeah Gardens Blvd (Southbound)				W 68th St (Eastbound)				W 68th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	33	159	74	8	35	296	1	0	10	71	88	0	101	57	45	0	978	
7:15 AM	20	156	81	9	32	251	1	0	7	66	49	0	81	71	65	0	889	
7:30 AM	12	141	57	1	41	295	3	0	2	52	24	1	49	69	68	0	815	
7:45 AM	12	109	52	0	45	242	4	0	0	68	35	0	54	88	59	0	768	3450
8:00 AM	13	107	37	0	51	245	4	0	4	46	30	0	55	99	62	0	753	3225
8:15 AM	12	116	47	0	33	208	7	0	4	95	36	0	33	80	57	0	728	3064
8:30 AM	11	113	40	1	52	214	9	1	1	86	18	0	46	62	46	0	700	2949
8:45 AM	10	88	29	0	36	106	10	1	1	73	13	1	29	88	51	0	536	2717

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	132	636	296	32	140	1184	4	0	40	284	352	0	404	228	180	0	3912
Heavy Trucks	4	64	4		12	64	4		8	8	8		4	4	8		192
Pedestrians		4				0				4				24			32
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

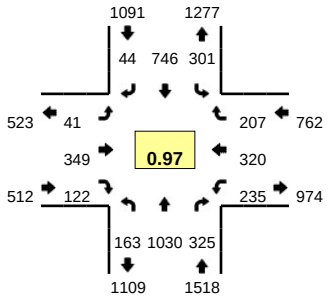
LOCATION: Hialeah Gardens Blvd -- W 68th St

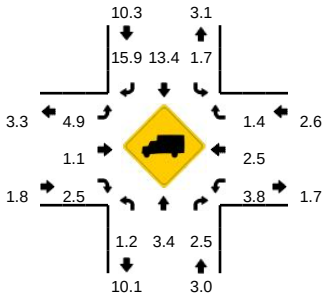
CITY/STATE: Miami-Dade, FL

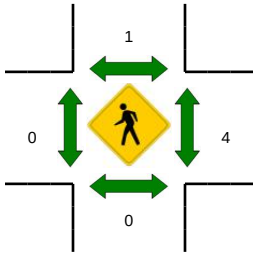
QC JOB #: 13778048

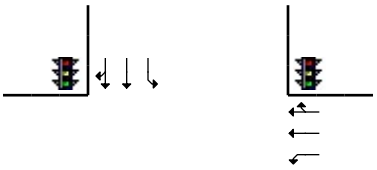
DATE: Thu, Apr 14 2016

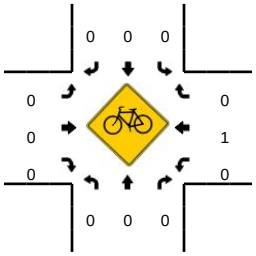
Peak-Hour: 4:45 PM -- 5:45 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

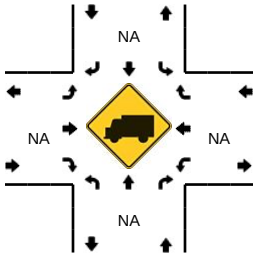


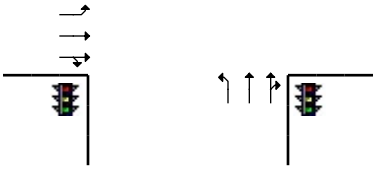


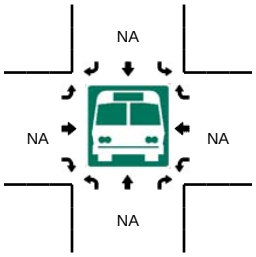












15-Min Count Period Beginning At	Hialeah Gardens Blvd (Northbound)				Hialeah Gardens Blvd (Southbound)				W 68th St (Eastbound)				W 68th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	61	227	69	0	64	150	14	0	10	85	23	1	42	82	59	0	887	
4:15 PM	37	269	65	1	54	148	16	0	12	86	25	0	55	95	51	1	915	
4:30 PM	39	244	91	2	72	168	19	0	12	75	30	0	63	62	38	1	916	
4:45 PM	41	241	72	3	75	163	11	0	6	90	26	0	53	79	41	0	901	3619
5:00 PM	36	266	68	1	82	211	15	1	11	85	32	2	61	76	48	0	995	3727
5:15 PM	39	264	98	1	59	194	7	0	11	88	28	0	59	92	61	0	1001	3813
5:30 PM	41	259	87	1	84	178	11	0	11	86	36	0	62	73	57	0	986	3883
5:45 PM	53	245	82	0	70	154	11	0	13	77	23	0	40	86	41	0	895	3877

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	156	1056	392	4	236	776	28	0	44	352	112	0	236	368	244	0	4004
Heavy Trucks	4	16	4		0	136	0		4	8	4		0	4	0		180
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	1	0		1
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

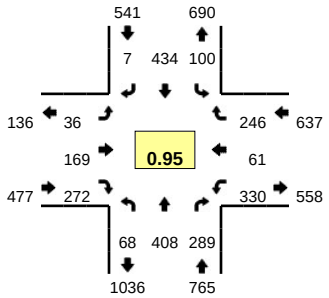
Type of peak hour being reported: Intersection Peak

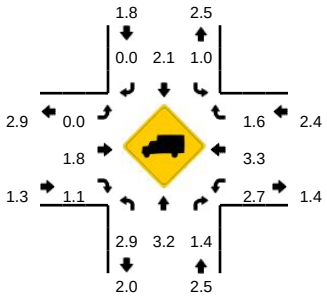
Method for determining peak hour: Total Entering Volume

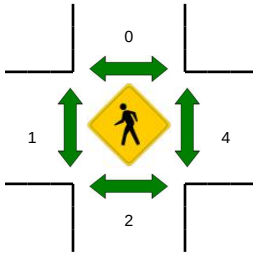
LOCATION: NW 87th Ave -- NW 170th St
CITY/STATE: Hialeah, FL

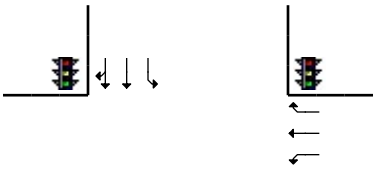
QC JOB #: 13778049
DATE: Wed, Apr 13 2016

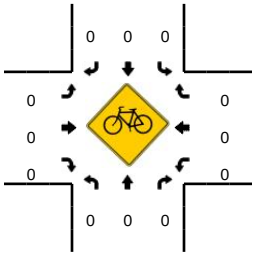
Peak-Hour: 7:30 AM -- 8:30 AM
Peak 15-Min: 7:30 AM -- 7:45 AM

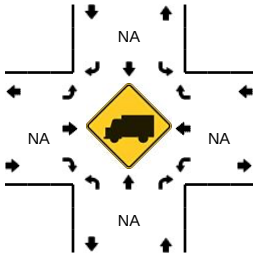


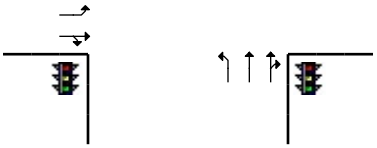


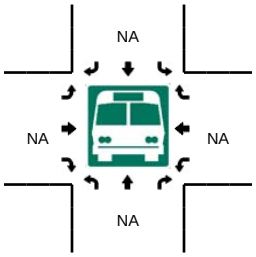












15-Min Count Period Beginning At	NW 87th Ave (Northbound)				NW 87th Ave (Southbound)				NW 170th St (Eastbound)				NW 170th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	7	93	40	0	20	121	1	0	4	32	63	0	73	5	76	0	535	
7:15 AM	15	146	70	0	21	75	1	0	6	40	58	0	52	15	113	0	612	
7:30 AM	17	124	77	0	20	98	1	0	10	52	73	0	81	18	68	0	639	
7:45 AM	14	87	65	0	28	115	1	0	4	28	59	0	81	12	51	0	545	2331
8:00 AM	17	95	86	0	24	105	3	0	2	41	61	0	97	18	53	0	602	2398
8:15 AM	20	102	61	0	28	116	2	0	20	48	79	0	71	13	74	0	634	2420
8:30 AM	1	82	23	0	35	114	3	1	9	32	56	0	89	10	34	0	489	2270
8:45 AM	2	57	26	0	27	148	1	0	3	3	24	0	50	2	32	0	375	2100

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	68	496	308	0	80	392	4	0	40	208	292	0	324	72	272	0	2556
Heavy Trucks	4	12	8		4	8	0		0	0	8		20	4	4		72
Pedestrians		4				0				0				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

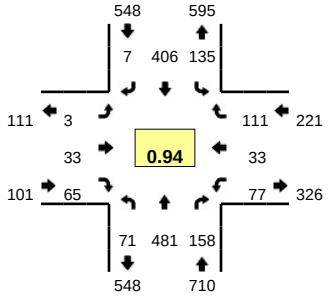
Type of peak hour being reported: Intersection Peak

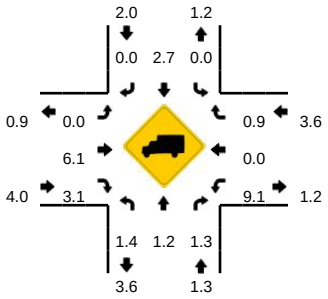
Method for determining peak hour: Total Entering Volume

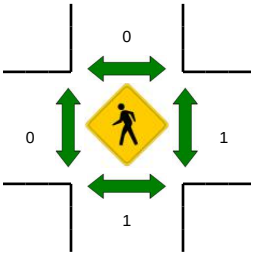
LOCATION: NW 87th Ave -- NW 170th St
CITY/STATE: Hialeah, FL

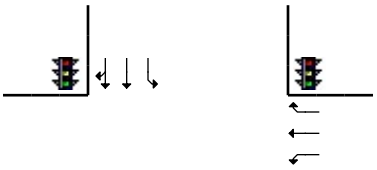
QC JOB #: 13778050
DATE: Thu, Apr 14 2016

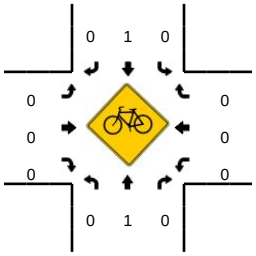
Peak-Hour: 4:30 PM -- 5:30 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

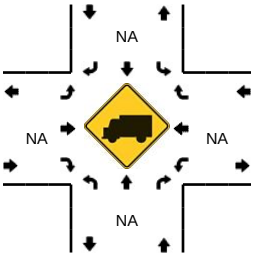


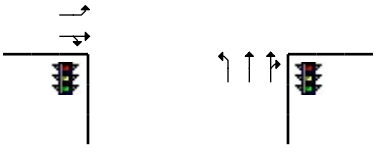


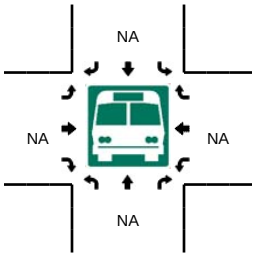












15-Min Count Period Beginning At	NW 87th Ave (Northbound)				NW 87th Ave (Southbound)				NW 170th St (Eastbound)				NW 170th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	21	84	25	0	46	78	5	0	1	10	23	0	13	3	29	0	338	
4:15 PM	20	95	25	0	36	85	1	0	2	6	23	0	19	7	31	0	350	
4:30 PM	20	106	36	0	44	92	3	0	0	10	20	0	19	6	31	0	387	
4:45 PM	15	97	37	0	29	98	1	0	2	10	15	0	20	6	31	0	361	1436
5:00 PM	15	139	49	0	33	101	3	0	1	6	17	0	21	10	19	0	414	1512
5:15 PM	21	139	36	0	29	115	0	0	0	7	13	0	17	11	30	0	418	1580
5:30 PM	21	96	28	0	44	94	1	0	2	11	16	0	16	2	21	0	352	1545
5:45 PM	17	109	38	0	38	80	2	0	0	6	20	0	33	10	27	0	380	1564

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	84	556	144	0	116	460	0	0	0	28	52	0	68	44	120	0	1672
Heavy Trucks	0	16	4		0	12	0		0	0	0		4	0	0		36
Pedestrians		0				0				0				4			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

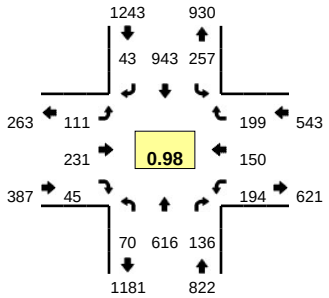
LOCATION: Hialeah Gardens Blvd -- NW 130th St

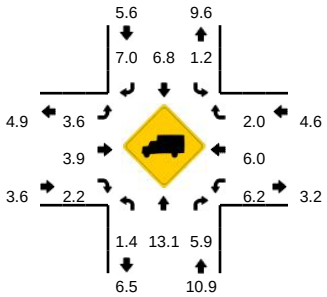
CITY/STATE: Miami-Dade, FL

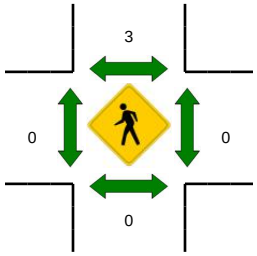
QC JOB #: 13778051

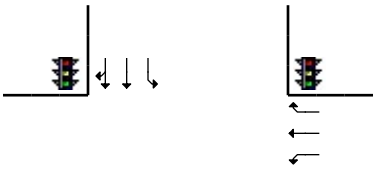
DATE: Thu, Apr 14 2016

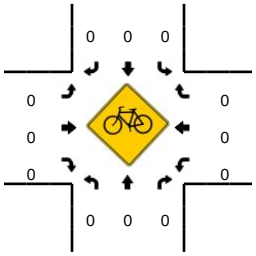
Peak-Hour: 7:00 AM -- 8:00 AM
Peak 15-Min: 7:15 AM -- 7:30 AM

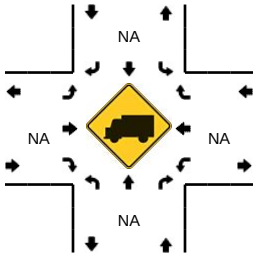


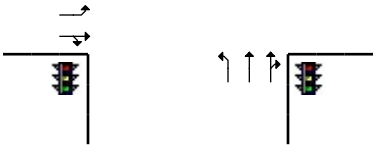


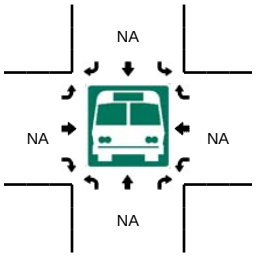












15-Min Count Period Beginning At	Hialeah Gardens Blvd (Northbound)				Hialeah Gardens Blvd (Southbound)				NW 130th St (Eastbound)				NW 130th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	17	149	26	0	60	275	8	1	29	47	21	0	54	24	47	0	758	
7:15 AM	20	170	27	0	60	229	14	2	32	58	10	0	56	33	50	0	761	
7:30 AM	19	165	45	0	61	214	11	0	32	59	6	0	50	46	49	1	758	
7:45 AM	14	132	38	0	72	225	10	1	18	67	8	0	33	47	53	0	718	2995
8:00 AM	12	134	24	1	71	242	16	0	17	63	4	0	31	60	33	0	708	2945
8:15 AM	5	148	17	0	60	183	14	0	27	58	7	0	46	58	37	0	660	2844
8:30 AM	9	153	27	1	45	197	6	0	27	62	14	0	38	30	41	0	650	2736
8:45 AM	7	121	22	0	48	181	6	1	27	66	6	0	26	26	27	0	564	2582

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	80	680	108	0	240	916	56	8	128	232	40	0	224	132	200	0	3044
Heavy Trucks	4	84	20		4	80	0		0	12	0		4	4	8		220
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

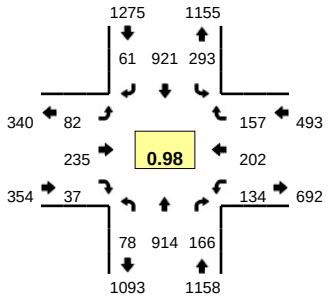
LOCATION: Hialeah Gardens Blvd -- NW 130th St

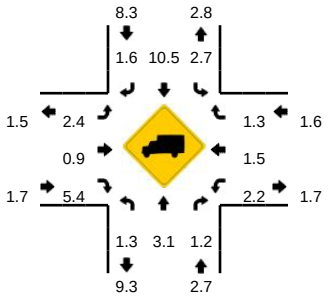
CITY/STATE: Miami-Dade, FL

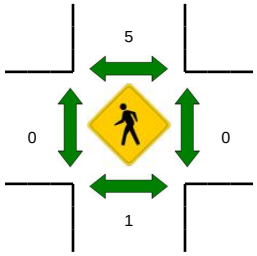
QC JOB #: 13778052

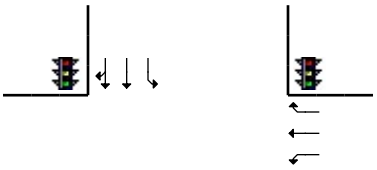
DATE: Thu, Apr 14 2016

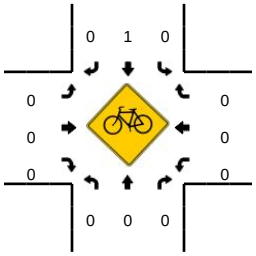
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

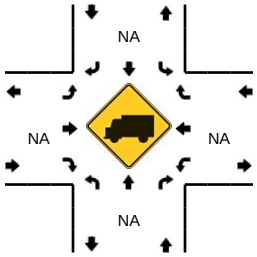


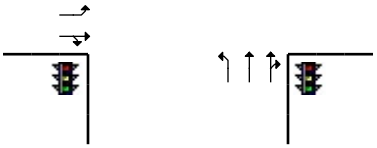


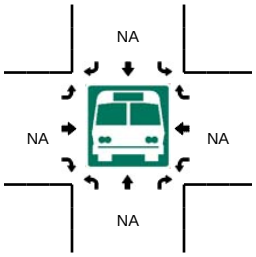












15-Min Count Period Beginning At	Hialeah Gardens Blvd (Northbound)				Hialeah Gardens Blvd (Southbound)				NW 130th St (Eastbound)				NW 130th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	18	208	36	0	55	192	13	1	33	61	8	0	30	59	35	0	749	
4:15 PM	14	252	51	0	52	212	26	0	28	50	5	0	25	63	41	0	819	
4:30 PM	20	259	41	0	63	200	11	1	18	41	7	0	40	56	48	0	805	
4:45 PM	17	215	44	0	45	204	12	0	27	60	15	0	41	60	44	0	784	3157
5:00 PM	21	247	35	0	60	266	14	1	14	53	10	0	34	36	46	0	837	3245
5:15 PM	20	272	48	1	68	231	11	1	22	61	9	0	26	42	28	0	840	3266
5:30 PM	24	205	44	0	68	204	20	0	20	64	8	0	42	70	34	0	803	3264
5:45 PM	12	190	39	0	95	220	16	0	26	57	10	0	32	54	49	0	800	3280

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	80	1088	192	4	272	924	44	4	88	244	36	0	104	168	112	0	3360
Heavy Trucks	0	28	0		16	120	0		4	0	4		4	0	4		180
Pedestrians		0				8				0				0			8
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

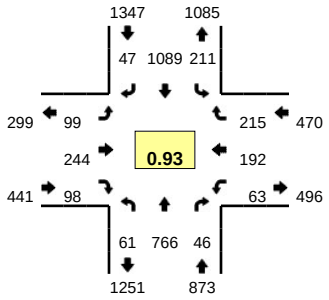
LOCATION: Hialeah Gardens Blvd -- W 80th St

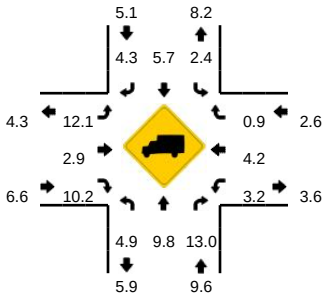
CITY/STATE: Hialeah, FL

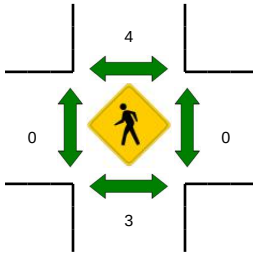
QC JOB #: 13778053

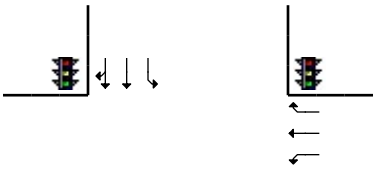
DATE: Thu, Apr 14 2016

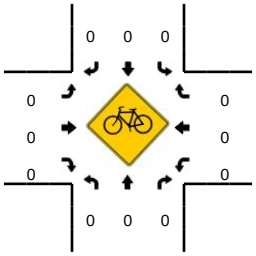
Peak-Hour: 7:00 AM -- 8:00 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

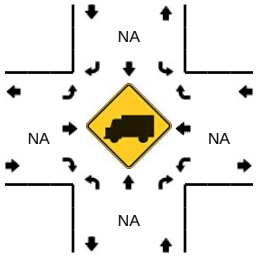


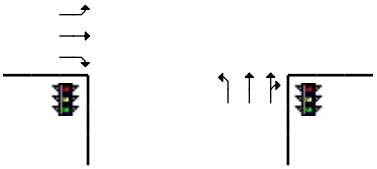


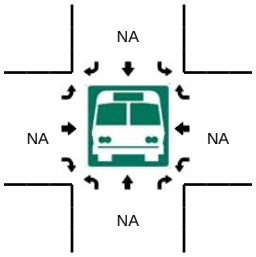












15-Min Count Period Beginning At	Hialeah Gardens Blvd (Northbound)				Hialeah Gardens Blvd (Southbound)				W 80th St (Eastbound)				W 80th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	15	180	16	0	48	306	9	3	32	44	31	0	17	28	36	0	765	
7:15 AM	13	193	15	1	48	274	11	1	25	61	15	0	14	53	60	0	784	
7:30 AM	12	169	6	0	51	256	8	0	19	63	29	0	17	60	49	0	739	
7:45 AM	20	224	9	0	59	253	19	1	23	76	23	0	15	51	70	0	843	3131
8:00 AM	13	157	13	1	55	301	23	0	30	41	24	0	10	41	45	0	754	3120
8:15 AM	25	179	19	0	69	224	16	3	26	75	26	0	8	57	35	0	762	3098
8:30 AM	18	193	11	0	57	203	8	1	28	55	21	0	22	50	44	0	711	3070
8:45 AM	16	146	12	0	59	218	14	3	13	41	21	0	16	35	29	0	623	2850

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	80	896	36	0	236	1012	76	4	92	304	92	0	60	204	280	0	3372
Heavy Trucks	0	60	4		4	60	0		16	4	12		8	12	0		180
Pedestrians		0				8				0				0			8
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

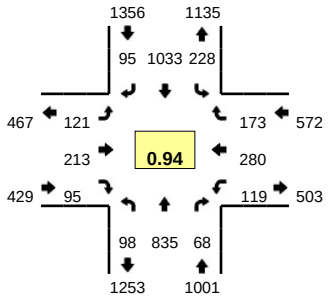
LOCATION: Hialeah Gardens Blvd -- W 80th St

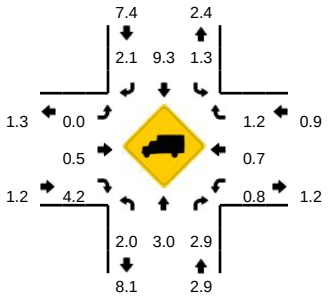
CITY/STATE: Hialeah, FL

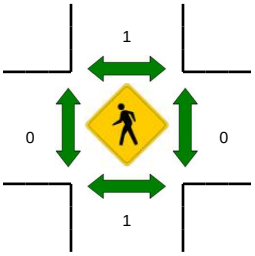
QC JOB #: 13778054

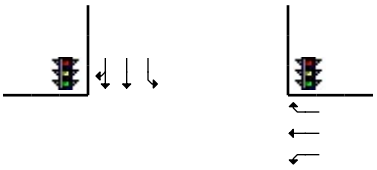
DATE: Thu, Apr 14 2016

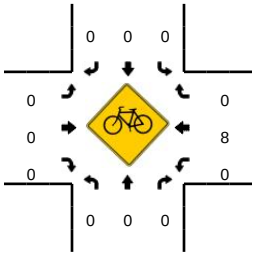
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

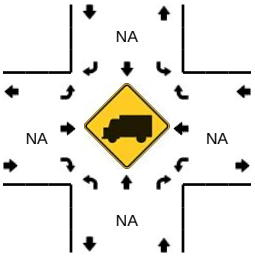


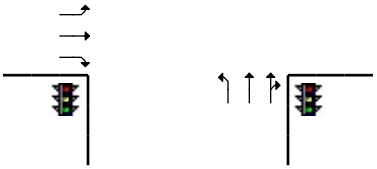


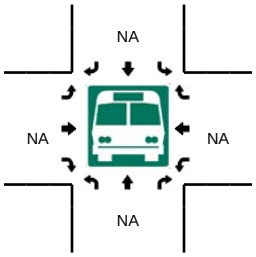












15-Min Count Period Beginning At	Hialeah Gardens Blvd (Northbound)				Hialeah Gardens Blvd (Southbound)				W 80th St (Eastbound)				W 80th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	23	218	21	0	53	203	18	2	20	42	28	0	32	61	47	0	768	
4:15 PM	24	247	23	2	38	236	11	0	22	39	11	0	28	61	25	0	767	
4:30 PM	23	234	24	0	56	233	28	0	22	47	23	0	22	52	34	0	798	
4:45 PM	24	235	29	0	48	220	21	0	33	63	17	0	34	73	30	0	827	3160
5:00 PM	25	200	20	1	55	238	15	2	44	52	31	0	34	64	48	0	829	3221
5:15 PM	20	245	23	1	62	299	26	1	29	49	17	0	24	65	36	0	897	3351
5:30 PM	22	180	14	0	59	255	25	2	23	58	18	0	26	62	40	0	784	3337
5:45 PM	25	210	11	4	46	241	29	1	25	54	29	0	35	89	49	0	848	3358

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	80	980	92	4	248	1196	104	4	116	196	68	0	96	260	144	0	3588
Heavy Trucks	0	36	4		0	140	8		0	0	8		0	4	0		200
Pedestrians		0				4				0				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	2	0		2
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

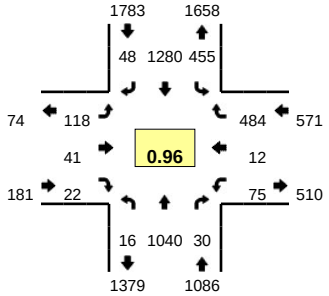
LOCATION: Hialeah Gardens Blvd -- W 84th St

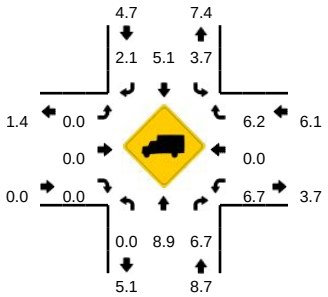
CITY/STATE: Miami-Dade, FL

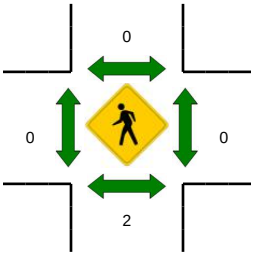
QC JOB #: 13778055

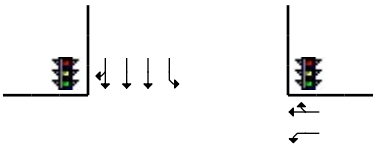
DATE: Thu, Apr 14 2016

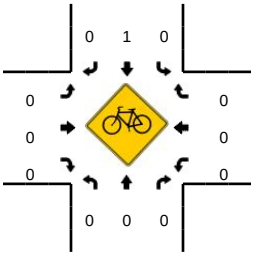
Peak-Hour: 7:15 AM -- 8:15 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

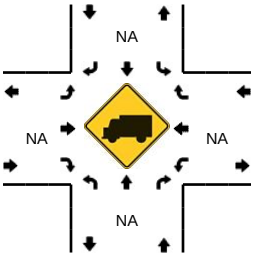


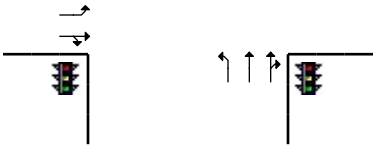


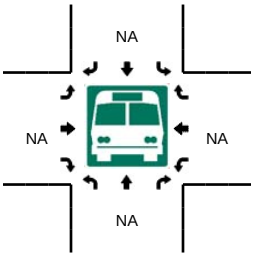












15-Min Count Period Beginning At	Hialeah Gardens Blvd (Northbound)				Hialeah Gardens Blvd (Southbound)				W 84th St (Eastbound)				W 84th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	2	235	10	0	124	348	4	2	13	4	8	0	12	3	90	0	855	
7:15 AM	3	264	7	0	96	309	12	5	22	4	7	0	17	2	129	0	877	
7:30 AM	1	247	8	1	115	305	12	7	36	8	4	0	16	3	130	0	893	
7:45 AM	4	314	6	0	97	311	11	4	35	12	5	0	20	3	118	0	940	3565
8:00 AM	6	215	9	1	131	355	13	0	25	17	6	0	22	4	107	0	911	3621
8:15 AM	3	238	16	0	105	271	10	2	25	11	6	0	20	9	108	0	824	3568
8:30 AM	5	268	7	3	107	249	19	1	20	10	8	0	9	4	97	0	807	3482
8:45 AM	11	170	11	2	124	262	13	1	12	6	8	0	16	2	111	0	749	3291

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	16	1256	24	0	388	1244	44	16	140	48	20	0	80	12	472	0	3760
Heavy Trucks	0	100	0		4	56	0		0	0	0		4	0	36		200
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	1	0		0	0	0		0	0	0		1
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

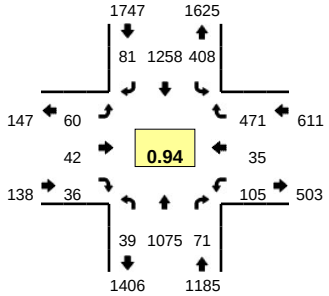
LOCATION: Hialeah Gardens Blvd -- W 84th St

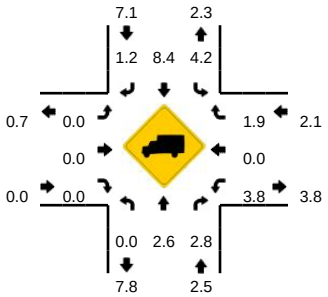
CITY/STATE: Miami-Dade, FL

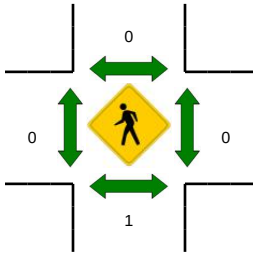
QC JOB #: 13778056

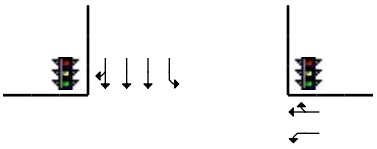
DATE: Thu, Apr 14 2016

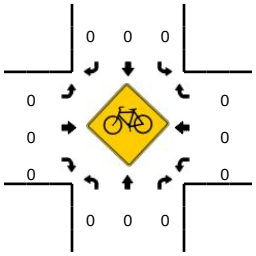
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

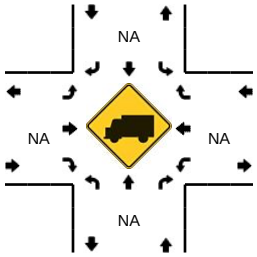


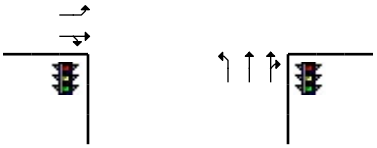


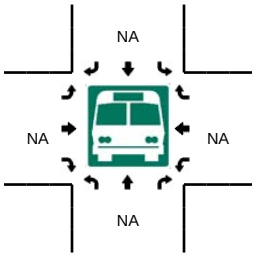












15-Min Count Period Beginning At	Hialeah Gardens Blvd (Northbound)				Hialeah Gardens Blvd (Southbound)				W 84th St (Eastbound)				W 84th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	9	252	23	2	67	255	15	3	7	7	5	0	23	4	111	0	783	
4:15 PM	8	250	26	0	108	289	20	6	11	8	7	0	18	6	101	0	858	
4:30 PM	11	301	29	0	81	270	17	2	7	12	6	0	25	11	115	0	887	
4:45 PM	10	287	17	0	95	288	11	2	9	10	7	0	28	9	124	1	898	3426
5:00 PM	8	257	20	4	102	284	15	8	11	13	5	0	31	6	126	0	890	3533
5:15 PM	9	308	23	3	102	348	19	1	14	6	12	0	22	6	108	1	982	3657
5:30 PM	2	245	9	1	91	316	25	3	17	8	7	0	25	11	128	0	888	3658
5:45 PM	12	265	19	0	94	310	22	7	18	15	12	0	26	12	109	0	921	3681

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	36	1232	92	12	408	1392	76	4	56	24	48	0	88	24	432	4	3928
Heavy Trucks	0	40	4		16	144	4		0	0	0		4	0	8		220
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

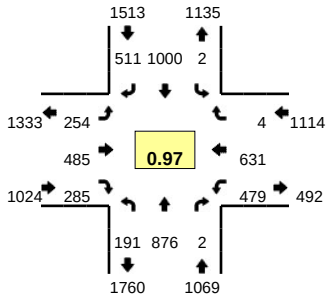
LOCATION: Hialeah Gardens Blvd -- NW 138th St_W 84th St_I-75 Ramps

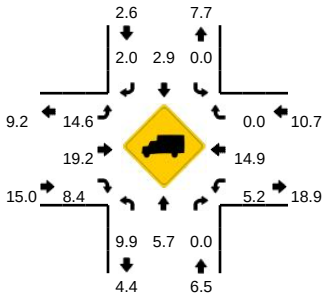
QC JOB #: 13778057

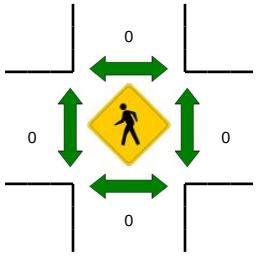
CITY/STATE: Miami-Dade, FL

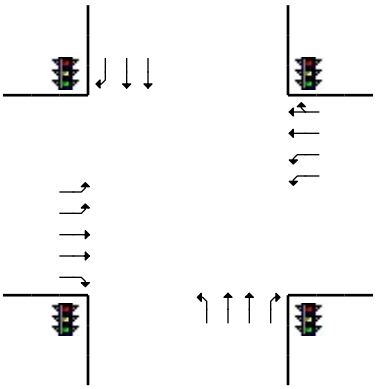
DATE: Thu, Apr 14 2016

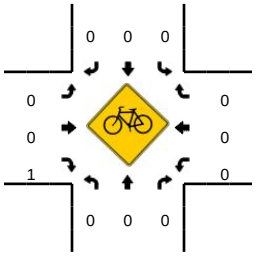
Peak-Hour: 7:15 AM -- 8:15 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

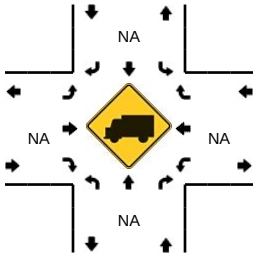


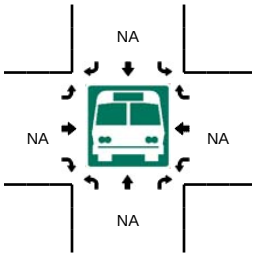












15-Min Count Period Beginning At	Hialeah Gardens Blvd (Northbound)				Hialeah Gardens Blvd (Southbound)				NW 138th St_W 84th St_I-75 Ramps (Eastbound)				NW 138th St_W 84th St_I-75 Ramps (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	43	153	0	0	0	280	111	0	69	118	59	0	124	158	0	0	1115	
7:15 AM	47	216	1	0	0	231	113	0	52	120	60	0	133	165	1	0	1139	
7:30 AM	56	223	1	0	0	227	126	0	63	122	78	0	114	165	2	3	1180	
7:45 AM	43	253	0	1	0	260	136	0	66	120	75	1	103	157	1	2	1218	4652
8:00 AM	44	184	0	0	0	282	136	2	72	123	72	0	124	144	0	0	1183	4720
8:15 AM	54	177	0	0	0	222	141	0	63	116	56	0	115	134	1	1	1080	4661
8:30 AM	65	172	0	1	0	215	119	1	70	111	67	0	90	132	2	0	1045	4526
8:45 AM	68	139	0	0	0	230	119	0	66	123	81	0	97	118	2	8	1051	4359

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	172	1012	0	4	0	1040	544	0	264	480	300	4	412	628	4	8	4872
Heavy Trucks	8	76	0		0	36	16		32	92	8		16	88	0		372
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	1		0	0	0		1
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM

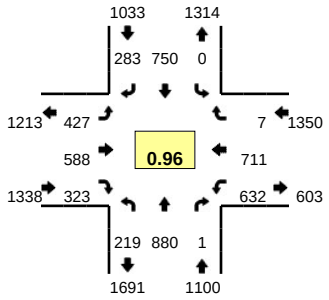
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

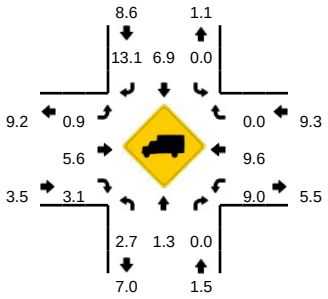
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

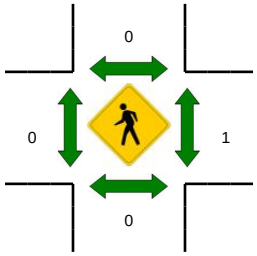
LOCATION: Hialeah Gardens Blvd -- NW 138th St_W 84th St_I-75 Ramps
CITY/STATE: Miami-Dade, FL

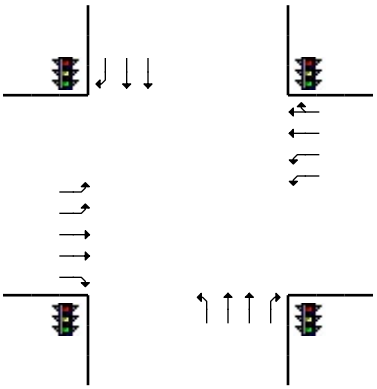
QC JOB #: 13778058
DATE: Thu, Apr 14 2016

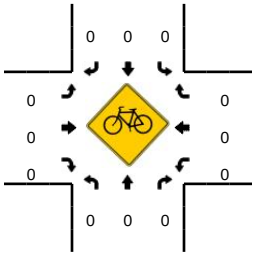
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

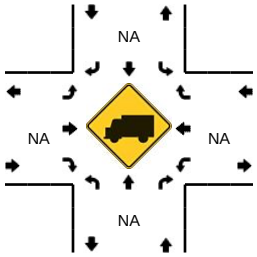


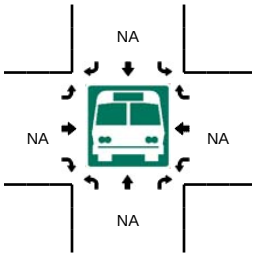












15-Min Count Period Beginning At	Hialeah Gardens Blvd (Northbound)				Hialeah Gardens Blvd (Southbound)				NW 138th St_W 84th St_I-75 Ramps (Eastbound)				NW 138th St_W 84th St_I-75 Ramps (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	56	166	2	0	0	133	73	0	96	130	81	0	153	149	4	5	1048	
4:15 PM	59	157	1	0	0	150	50	2	68	136	78	0	148	192	4	2	1047	
4:30 PM	61	206	1	0	0	145	73	0	68	136	114	0	128	167	4	2	1105	
4:45 PM	51	213	0	0	0	192	78	0	94	124	73	1	119	176	1	4	1126	4326
5:00 PM	41	217	0	0	0	148	57	0	133	160	77	0	172	184	1	2	1192	4470
5:15 PM	53	227	0	0	0	181	74	0	111	171	96	0	147	196	1	3	1260	4683
5:30 PM	60	222	1	0	0	234	71	0	106	128	78	0	127	163	1	3	1194	4772
5:45 PM	65	214	0	0	0	187	81	0	77	129	72	0	172	168	4	6	1175	4821

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	212	908	0	0	0	724	296	0	444	684	384	0	588	784	4	12	5040
Heavy Trucks	8	12	0		0	56	44		0	28	8		68	56	0		280
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/25/2016 12:03 AM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

APPENDIX I-D:
Existing Intersection LOS

APPENDIX I-D1:
Existing Intersection LOS AM Analysis

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	217	408	345	154	1469	34	473	304	157	93	304	541
Future Volume (veh/h)	217	408	345	154	1469	34	473	304	157	93	304	541
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1743	1743	1900	1743	1743	1743
Adj Flow Rate, veh/h	224	421	356	159	1514	35	488	313	162	96	313	558
Adj No. of Lanes	2	2	1	1	3	0	1	2	0	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	9	9	9	9	9	9
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	133	1240	555	69	1791	41	125	637	322	55	447	380
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.04	0.35	0.35	0.04	0.35	0.35	0.08	0.30	0.30	0.03	0.26	0.26
Ln Grp Delay, s/veh	382.8	23.5	31.4	681.0	35.8	41.2	1363.8	30.5	31.0	448.8	40.5	259.9
Ln Grp LOS	F	C	C	F	D	D	F	C	C	F	D	F
Approach Vol, veh/h		1001			1708			963			967	
Approach Delay, s/veh		106.7			97.6			706.3			207.6	
Approach LOS		F			F			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	3.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	10.0	35.0	10.0	39.0	14.0	31.0	10.0	39.0
Change Period (Y+Rc), s	6.9	6.9	6.4	6.4	6.9	6.9	6.4	6.4
Max Green (Gmax), s	3.1	28.1	3.6	32.6	7.1	24.1	3.6	32.6
Max Allow Headway (MAH), s	3.8	4.8	3.7	4.9	3.8	4.8	3.8	4.9
Max Q Clear (g_c+I1), s	5.1	13.7	5.6	19.6	9.1	26.1	5.6	27.5
Green Ext Time (g_e), s	0.0	6.3	0.0	10.1	0.0	0.0	0.0	4.4
Prob of Phs Call (p_c)	0.92	1.00	0.98	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	1660	1792	1660	3476

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	2131	3574	1743	5164

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	1078	1599	1482	119

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	2	0
Grp Vol (v), veh/h	96	0	159	0	488	0	224	0
Grp Sat Flow (s), veh/h/ln	1660	0	1792	0	1660	0	1738	0
Q Serve Time (g_s), s	3.1	0.0	3.6	0.0	7.1	0.0	3.6	0.0
Cycle Q Clear Time (g_c), s	3.1	0.0	3.6	0.0	7.1	0.0	3.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	55	0	69	0	125	0	133	0
V/C Ratio (X)	1.75	0.00	2.32	0.00	3.89	0.00	1.68	0.00
Avail Cap (c_a), veh/h	55	0	69	0	125	0	133	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	45.5	0.0	45.2	0.0	43.5	0.0	45.2	0.0
Incr Delay (d2), s/veh	403.4	0.0	635.8	0.0	1320.4	0.0	337.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	448.8	0.0	681.0	0.0	1363.8	0.0	382.8	0.0
1st-Term Q (Q1), veh/ln	1.4	0.0	1.8	0.0	3.2	0.0	1.7	0.0
2nd-Term Q (Q2), veh/ln	6.1	0.0	12.1	0.0	46.0	0.0	6.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	7.5	0.0	13.9	0.0	49.2	0.0	8.0	0.0
%ile Storage Ratio (RQ%)	0.60	0.00	1.46	0.00	4.40	0.00	0.32	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	10.3	0.0	22.6	0.0	90.7	0.0	22.7	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.4	0.0	0.6	0.0	1.0	0.0	0.4	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	1	0	2
Grp Vol (v), veh/h	0	242	0	421	0	313	0	1004
Grp Sat Flow (s), veh/h/ln	0	1656	0	1787	0	1743	0	1712
Q Serve Time (g_s), s	0.0	11.3	0.0	8.2	0.0	15.3	0.0	25.5
Cycle Q Clear Time (g_c), s	0.0	11.3	0.0	8.2	0.0	15.3	0.0	25.5
Lane Grp Cap (c), veh/h	0	495	0	1240	0	447	0	1187
V/C Ratio (X)	0.00	0.49	0.00	0.34	0.00	0.70	0.00	0.85
Avail Cap (c_a), veh/h	0	495	0	1240	0	447	0	1187
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	27.0	0.0	22.7	0.0	31.7	0.0	28.4
Incr Delay (d2), s/veh	0.0	3.4	0.0	0.7	0.0	8.8	0.0	7.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	30.5	0.0	23.5	0.0	40.5	0.0	35.8
1st-Term Q (Q1), veh/ln	0.0	5.1	0.0	4.0	0.0	7.3	0.0	12.0

2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.1	0.0	1.1	0.0	1.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	5.6	0.0	4.2	0.0	8.4	0.0	13.2
%ile Storage Ratio (RQ%)	0.00	0.20	0.00	0.09	0.00	0.32	0.00	0.61
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	233	0	356	0	558	0	545
Grp Sat Flow (s), veh/h/ln	0	1553	0	1599	0	1482	0	1860
Q Serve Time (g_s), s	0.0	11.7	0.0	17.6	0.0	24.1	0.0	25.5
Cycle Q Clear Time (g_c), s	0.0	11.7	0.0	17.6	0.0	24.1	0.0	25.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.69	0.00	1.00	0.00	1.00	0.00	0.06
Lane Grp Cap (c), veh/h	0	464	0	555	0	380	0	645
V/C Ratio (X)	0.00	0.50	0.00	0.64	0.00	1.47	0.00	0.85
Avail Cap (c_a), veh/h	0	464	0	555	0	380	0	645
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	27.2	0.0	25.8	0.0	35.0	0.0	28.4
Incr Delay (d2), s/veh	0.0	3.9	0.0	5.6	0.0	224.9	0.0	12.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	31.0	0.0	31.4	0.0	259.9	0.0	41.2
1st-Term Q (Q1), veh/ln	0.0	5.0	0.0	7.8	0.0	9.8	0.0	13.0
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.9	0.0	23.7	0.0	2.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	5.5	0.0	8.6	0.0	33.5	0.0	15.3
%ile Storage Ratio (RQ%)	0.00	0.20	0.00	0.42	0.00	1.29	0.00	0.71
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	44.5	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		248.9						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	97	555	126	211	1146	245	253	124	153	217	179	125
Future Volume (veh/h)	97	555	126	211	1146	245	253	124	153	217	179	125
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	100	572	130	218	1181	253	261	128	158	224	185	129
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	119	1069	242	221	1251	266	259	120	149	236	272	231
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.07	0.37	0.37	0.12	0.43	0.43	0.15	0.16	0.16	0.13	0.15	0.15
Ln Grp Delay, s/veh	96.0	33.8	33.9	69.2	37.0	38.0	111.7	0.0	125.2	98.0	63.5	59.0
Ln Grp LOS	F	C	C	E	D	D	F		F	F	E	E
Approach Vol, veh/h		802			1652			547			538	
Approach Delay, s/veh		41.6			41.7			118.7			76.8	
Approach LOS		D			D			F			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	23.4	26.6	22.0	53.0	25.0	25.0	14.8	60.2
Change Period (Y+Rc), s	6.6	6.6	6.4	6.4	6.6	6.6	6.4	6.4
Max Green (Gmax), s	16.8	20.0	15.6	46.6	18.4	18.4	8.4	53.8
Max Allow Headway (MAH), s	3.8	5.1	3.7	5.1	3.8	5.1	3.7	5.1
Max Q Clear (g_c+I1), s	17.8	22.0	17.3	21.6	20.4	13.9	9.0	51.4
Green Ext Time (g_e), s	0.0	0.0	0.0	16.0	0.0	1.4	0.0	2.1
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	0.97	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1757		1774		1757		1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		752		2868		1845		2906

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		929		650		1568		618

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	224	0	218	0	261	0	100	0
Grp Sat Flow (s), veh/h/ln	1757	0	1774	0	1757	0	1774	0
Q Serve Time (g_s), s	15.8	0.0	15.3	0.0	18.4	0.0	7.0	0.0
Cycle Q Clear Time (g_c), s	15.8	0.0	15.3	0.0	18.4	0.0	7.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	236	0	221	0	259	0	119	0
V/C Ratio (X)	0.95	0.00	0.98	0.00	1.01	0.00	0.84	0.00
Avail Cap (c_a), veh/h	236	0	221	0	259	0	119	0
Upstream Filter (I)	1.00	0.00	0.09	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	53.7	0.0	54.6	0.0	53.3	0.0	57.6	0.0
Incr Delay (d2), s/veh	44.4	0.0	14.7	0.0	58.3	0.0	38.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	98.0	0.0	69.2	0.0	111.7	0.0	96.0	0.0
1st-Term Q (Q1), veh/ln	7.7	0.0	7.5	0.0	8.9	0.0	3.4	0.0
2nd-Term Q (Q2), veh/ln	2.9	0.0	0.9	0.0	4.2	0.0	1.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	10.6	0.0	8.4	0.0	13.1	0.0	4.7	0.0
%ile Storage Ratio (RQ%)	2.00	0.00	0.79	0.00	2.48	0.00	0.37	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T		T		T
Lanes in Grp	0	0	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	352	0	185	0	715
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	1845	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	19.5	0.0	11.9	0.0	48.3
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	19.5	0.0	11.9	0.0	48.3
Lane Grp Cap (c), veh/h	0	0	0	660	0	272	0	762
V/C Ratio (X)	0.00	0.00	0.00	0.53	0.00	0.68	0.00	0.94
Avail Cap (c_a), veh/h	0	0	0	660	0	272	0	762
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	0.0	0.0	30.7	0.0	50.5	0.0	34.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	3.1	0.0	13.0	0.0	3.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	33.8	0.0	63.5	0.0	37.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	9.5	0.0	6.1	0.0	23.5

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.6	0.0	1.0	0.0	0.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	10.1	0.0	7.0	0.0	24.1
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.13	0.00	0.25	0.00	0.41
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	286	0	350	0	129	0	719
Grp Sat Flow (s), veh/h/ln	0	1681	0	1748	0	1568	0	1754
Q Serve Time (g_s), s	0.0	20.0	0.0	19.6	0.0	9.6	0.0	49.4
Cycle Q Clear Time (g_c), s	0.0	20.0	0.0	19.6	0.0	9.6	0.0	49.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.55	0.00	0.37	0.00	1.00	0.00	0.35
Lane Grp Cap (c), veh/h	0	269	0	652	0	231	0	755
V/C Ratio (X)	0.00	1.06	0.00	0.54	0.00	0.56	0.00	0.95
Avail Cap (c_a), veh/h	0	269	0	652	0	231	0	755
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	52.5	0.0	30.7	0.0	49.5	0.0	34.4
Incr Delay (d2), s/veh	0.0	72.7	0.0	3.2	0.0	9.4	0.0	3.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	125.2	0.0	33.9	0.0	59.0	0.0	38.0
1st-Term Q (Q1), veh/ln	0.0	9.3	0.0	9.4	0.0	4.1	0.0	23.8
2nd-Term Q (Q2), veh/ln	0.0	5.4	0.0	0.6	0.0	0.6	0.0	0.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	14.7	0.0	10.0	0.0	4.7	0.0	24.5
%ile Storage Ratio (RQ%)	0.00	0.49	0.00	0.13	0.00	0.17	0.00	0.42
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	4.3	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		58.9						
HCM 2010 LOS		E						

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	67	835	1393	399	332	142
Future Volume (veh/h)	67	835	1393	399	332	142
Number	7	4	8	18	1	16
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00			1.00	1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1676	1676	1676	1710	1660	1660
Adj Flow Rate, veh/h	71	888	1482	424	353	151
Adj No. of Lanes	1	2	2	0	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	3	3
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	40	1919	1227	336	370	330
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.60	0.50	0.50	0.23	0.23
Ln Grp Delay, s/veh	442.1	9.2	105.7	141.7	66.2	30.4
Ln Grp LOS	F	A	F	F	E	C
Approach Vol, veh/h		959	1906		504	
Approach Delay, s/veh		41.3	124.1		55.5	
Approach LOS		D	F		E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	6			4			7	8
Case No	9.0			4.0			2.0	8.0
Phs Duration (G+Y+Rc), s	25.0			54.0			8.4	45.6
Change Period (Y+Rc), s	6.5			6.4			6.4	6.4
Max Green (Gmax), s	18.5			46.6			2.0	39.2
Max Allow Headway (MAH), s	3.9			5.1			3.7	5.1
Max Q Clear (g_c+I1), s	19.4			14.1			4.0	41.2
Green Ext Time (g_e), s	0.0			26.4			0.0	0.0
Prob of Phs Call (p_c)	1.00			1.00			0.79	1.00
Prob of Max Out (p_x)	0.00			0.00			1.00	0.00
Left-Turn Movement Data								
Assigned Mvmt	1						7	3
Mvmt Sat Flow, veh/h	1581						1597	0
Through Movement Data								
Assigned Mvmt	6			4				8
Mvmt Sat Flow, veh/h	0			3269				2556
Right-Turn Movement Data								
Assigned Mvmt	16			14				18
Mvmt Sat Flow, veh/h	1411			0				677
Left Lane Group Data								
Assigned Mvmt	1	0	0	0	0	0	7	3
Lane Assignment							(Prot)	

Lanes in Grp	1	0	0	0	0	0	1	0
Grp Vol (v), veh/h	353	0	0	0	0	0	71	0
Grp Sat Flow (s), veh/h/ln	1581	0	0	0	0	0	1597	0
Q Serve Time (g_s), s	17.4	0.0	0.0	0.0	0.0	0.0	2.0	0.0
Cycle Q Clear Time (g_c), s	17.4	0.0	0.0	0.0	0.0	0.0	2.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1581	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.2
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	370	0	0	0	0	0	40	0
V/C Ratio (X)	0.95	0.00	0.00	0.00	0.00	0.00	1.76	0.00
Avail Cap (c_a), veh/h	370	0	0	0	0	0	40	0
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.72	0.00
Uniform Delay (d1), s/veh	29.8	0.0	0.0	0.0	0.0	0.0	38.5	0.0
Incr Delay (d2), s/veh	36.4	0.0	0.0	0.0	0.0	0.0	403.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	66.2	0.0	0.0	0.0	0.0	0.0	442.1	0.0
1st-Term Q (Q1), veh/ln	7.6	0.0	0.0	0.0	0.0	0.0	0.9	0.0
2nd-Term Q (Q2), veh/ln	3.7	0.0	0.0	0.0	0.0	0.0	4.5	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	11.3	0.0	0.0	0.0	0.0	0.0	5.4	0.0
%ile Storage Ratio (RQ%)	0.56	0.00	0.00	0.00	0.00	0.00	0.62	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	7.6	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0
Middle Lane Group Data								
Assigned Mvmt	6	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	1
Grp Vol (v), veh/h	0	0	0	888	0	0	0	931
Grp Sat Flow (s), veh/h/ln	0	0	0	1593	0	0	0	1593
Q Serve Time (g_s), s	0.0	0.0	0.0	12.1	0.0	0.0	0.0	39.2
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	12.1	0.0	0.0	0.0	39.2
Lane Grp Cap (c), veh/h	0	0	0	1919	0	0	0	790
V/C Ratio (X)	0.00	0.00	0.00	0.46	0.00	0.00	0.00	1.18
Avail Cap (c_a), veh/h	0	0	0	1919	0	0	0	790
Upstream Filter (I)	0.00	0.00	0.00	0.72	0.00	0.00	0.00	0.38
Uniform Delay (d1), s/veh	0.0	0.0	0.0	8.7	0.0	0.0	0.0	19.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.6	0.0	0.0	0.0	85.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	9.2	0.0	0.0	0.0	105.7
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	5.3	0.0	0.0	0.0	17.1

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	18.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	5.5	0.0	0.0	0.0	36.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.52
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.3
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	16	0	0	14	0	0	0	18
Lane Assignment	R							T+R
Lanes in Grp	1	0	0	0	0	0	0	1
Grp Vol (v), veh/h	151	0	0	0	0	0	0	975
Grp Sat Flow (s), veh/h/ln	1411	0	0	0	0	0	0	1557
Q Serve Time (g_s), s	7.2	0.0	0.0	0.0	0.0	0.0	0.0	39.2
Cycle Q Clear Time (g_c), s	7.2	0.0	0.0	0.0	0.0	0.0	0.0	39.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44
Lane Grp Cap (c), veh/h	330	0	0	0	0	0	0	773
V/C Ratio (X)	0.46	0.00	0.00	0.00	0.00	0.00	0.00	1.26
Avail Cap (c_a), veh/h	330	0	0	0	0	0	0	773
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38
Uniform Delay (d1), s/veh	25.9	0.0	0.0	0.0	0.0	0.0	0.0	19.9
Incr Delay (d2), s/veh	4.5	0.0	0.0	0.0	0.0	0.0	0.0	121.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	30.4	0.0	0.0	0.0	0.0	0.0	0.0	141.7
1st-Term Q (Q1), veh/ln	5.8	0.0	0.0	0.0	0.0	0.0	0.0	16.7
2nd-Term Q (Q2), veh/ln	0.4	0.0	0.0	0.0	0.0	0.0	0.0	26.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	6.2	0.0	0.0	0.0	0.0	0.0	0.0	42.9
%ile Storage Ratio (RQ%)	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.62
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.5
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Intersection Summary								
HCM 2010 Ctrl Delay		90.3						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	966	32	42	1471	26	124	7	13	54	21	42
Future Volume (veh/h)	26	966	32	42	1471	26	124	7	13	54	21	42
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1845	1845	1900	1845	1845
Adj Flow Rate, veh/h	27	986	33	43	1501	27	127	7	13	55	21	43
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	31	1992	67	52	2070	37	133	7	125	87	33	105
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.02	0.57	0.57	0.03	0.58	0.58	0.08	0.08	0.08	0.07	0.07	0.07
Ln Grp Delay, s/veh	68.1	9.6	9.5	77.9	13.0	12.9	94.1	0.0	29.0	52.1	0.0	39.9
Ln Grp LOS	E	A	A	E	B	B	F		C	D		D
Approach Vol, veh/h		1046			1571			147			119	
Approach Delay, s/veh		11.1			14.7			88.3			47.7	
Approach LOS		B			B			F			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	6	2	3	4			7	8
Case No	11.0	11.0	2.0	4.0			2.0	4.0
Phs Duration (G+Y+Rc), s	11.0	12.0	8.3	43.4			7.5	44.1
Change Period (Y+Rc), s	6.7	6.9	6.4	* 6.6			6.4	* 6.6
Max Green (Gmax), s	4.3	5.1	2.0	* 26			2.0	* 26
Max Allow Headway (MAH), s	4.9	5.2	3.8	5.2			3.7	5.2
Max Q Clear (g_c+I1), s	4.7	6.9	3.5	12.8			3.0	21.6
Green Ext Time (g_e), s	0.0	0.0	0.0	11.6			0.0	4.5
Prob of Phs Call (p_c)	1.00	1.00	0.53	1.00			0.38	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.00			1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1	5	3				7	
Mvmt Sat Flow, veh/h	1288	1669	1774				1774	
Through Movement Data								
Assigned Mvmt	6	2		4				8
Mvmt Sat Flow, veh/h	492	92		3495				3557
Right-Turn Movement Data								
Assigned Mvmt	16	12		14				18
Mvmt Sat Flow, veh/h	1568	1568		117				64
Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	7	0
Lane Assignment	L+T	L+T	(Prot)				(Prot)	

Lanes in Grp	1	1	1	0	0	0	1	0
Grp Vol (v), veh/h	76	134	43	0	0	0	27	0
Grp Sat Flow (s), veh/h/ln	1780	1761	1774	0	0	0	1774	0
Q Serve Time (g_s), s	2.7	4.9	1.5	0.0	0.0	0.0	1.0	0.0
Cycle Q Clear Time (g_c), s	2.7	4.9	1.5	0.0	0.0	0.0	1.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.72	0.95	1.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	120	140	52	0	0	0	31	0
V/C Ratio (X)	0.64	0.95	0.82	0.00	0.00	0.00	0.86	0.00
Avail Cap (c_a), veh/h	120	140	55	0	0	0	55	0
Upstream Filter (I)	1.00	1.00	0.74	0.00	0.00	0.00	0.77	0.00
Uniform Delay (d1), s/veh	29.1	29.3	30.9	0.0	0.0	0.0	31.4	0.0
Incr Delay (d2), s/veh	23.0	64.8	47.0	0.0	0.0	0.0	36.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	52.1	94.1	77.9	0.0	0.0	0.0	68.1	0.0
1st-Term Q (Q1), veh/ln	1.3	2.3	0.8	0.0	0.0	0.0	0.5	0.0
2nd-Term Q (Q2), veh/ln	0.8	2.5	0.7	0.0	0.0	0.0	0.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	2.1	4.9	1.4	0.0	0.0	0.0	0.8	0.0
%ile Storage Ratio (RQ%)	0.11	0.27	0.11	0.00	0.00	0.00	0.11	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	6	2	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	499	0	0	0	746
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	10.8	0.0	0.0	0.0	19.5
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	10.8	0.0	0.0	0.0	19.5
Lane Grp Cap (c), veh/h	0	0	0	1009	0	0	0	1030
V/C Ratio (X)	0.00	0.00	0.00	0.49	0.00	0.00	0.00	0.72
Avail Cap (c_a), veh/h	0	0	0	1009	0	0	0	1030
Upstream Filter (I)	0.00	0.00	0.00	0.77	0.00	0.00	0.00	0.74
Uniform Delay (d1), s/veh	0.0	0.0	0.0	8.2	0.0	0.0	0.0	9.7
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.3	0.0	0.0	0.0	3.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	9.6	0.0	0.0	0.0	13.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	5.3	0.0	0.0	0.0	9.3

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	5.6	0.0	0.0	0.0	10.3
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.60
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	16	12	0	14	0	0	0	18
Lane Assignment	R	R		T+R				T+R
Lanes in Grp	1	1	0	1	0	0	0	1
Grp Vol (v), veh/h	43	13	0	520	0	0	0	782
Grp Sat Flow (s), veh/h/ln	1568	1568	0	1842	0	0	0	1851
Q Serve Time (g_s), s	1.7	0.5	0.0	10.8	0.0	0.0	0.0	19.6
Cycle Q Clear Time (g_c), s	1.7	0.5	0.0	10.8	0.0	0.0	0.0	19.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	1.00	0.00	0.06	0.00	0.00	0.00	0.03
Lane Grp Cap (c), veh/h	105	125	0	1050	0	0	0	1078
V/C Ratio (X)	0.41	0.10	0.00	0.49	0.00	0.00	0.00	0.73
Avail Cap (c_a), veh/h	105	125	0	1050	0	0	0	1078
Upstream Filter (I)	1.00	1.00	0.00	0.77	0.00	0.00	0.00	0.74
Uniform Delay (d1), s/veh	28.6	27.3	0.0	8.2	0.0	0.0	0.0	9.7
Incr Delay (d2), s/veh	11.3	1.7	0.0	1.3	0.0	0.0	0.0	3.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	39.9	29.0	0.0	9.5	0.0	0.0	0.0	12.9
1st-Term Q (Q1), veh/ln	0.7	0.2	0.0	5.5	0.0	0.0	0.0	9.8
2nd-Term Q (Q2), veh/ln	0.3	0.1	0.0	0.4	0.0	0.0	0.0	0.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	1.1	0.3	0.0	5.9	0.0	0.0	0.0	10.7
%ile Storage Ratio (RQ%)	0.68	0.06	0.00	0.08	0.00	0.00	0.00	0.63
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	18.5
HCM 2010 LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	882	132	405	1287	190	285
Future Volume (veh/h)	882	132	405	1287	190	285
Number	4	14	3	8	5	12
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)		1.00	1.00		1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1845	1845
Adj Flow Rate, veh/h	900	135	413	1313	194	291
Adj No. of Lanes	2	0	1	2	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	3	3
Opposing Right Turn Influence			Yes		Yes	
Cap, veh/h	1132	170	196	1978	484	432
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.37	0.37	0.11	0.56	0.28	0.28
Ln Grp Delay, s/veh	29.2	29.1	538.9	12.5	25.5	33.3
Ln Grp LOS	C	C	F	B	C	C
Approach Vol, veh/h	1035			1726	485	
Approach Delay, s/veh	29.1			138.4	30.1	
Approach LOS	C			F	C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Case No		9.0	2.0	8.0				4.0
Phs Duration (G+Y+Rc), s		28.0	15.0	35.0				50.0
Change Period (Y+Rc), s		6.5	6.4	6.4				6.4
Max Green (Gmax), s		21.5	8.6	28.6				43.6
Max Allow Headway (MAH), s		4.0	3.8	5.3				5.3
Max Q Clear (g_c+I1), s		14.9	10.6	22.3				22.3
Green Ext Time (g_e), s		1.0	0.0	5.6				16.6
Prob of Phs Call (p_c)		1.00	1.00	1.00				1.00
Prob of Max Out (p_x)		0.00	1.00	0.00				0.00
Left-Turn Movement Data								
Assigned Mvmt		5	3	7				
Mvmt Sat Flow, veh/h		1757	1774	0				
Through Movement Data								
Assigned Mvmt		2		4				8
Mvmt Sat Flow, veh/h		0		3181				3632
Right-Turn Movement Data								
Assigned Mvmt		12		14				18
Mvmt Sat Flow, veh/h		1568		463				0
Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	0	0	0
Lane Assignment			(Prot)					

Lanes in Grp	0	1	1	0	0	0	0	0
Grp Vol (v), veh/h	0	194	413	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1757	1774	0	0	0	0	0
Q Serve Time (g_s), s	0.0	7.0	8.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	7.0	8.6	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1757	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	28.6	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	484	196	0	0	0	0	0
V/C Ratio (X)	0.00	0.40	2.11	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	484	196	0	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.23	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	23.0	34.7	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.5	504.2	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	25.5	538.9	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.4	4.2	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	27.4	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	3.7	31.6	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.16	3.49	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	54.4	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	2
Grp Vol (v), veh/h	0	0	0	516	0	0	0	1313
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	20.3	0.0	0.0	0.0	20.3
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	20.3	0.0	0.0	0.0	20.3
Lane Grp Cap (c), veh/h	0	0	0	649	0	0	0	1978
V/C Ratio (X)	0.00	0.00	0.00	0.79	0.00	0.00	0.00	0.66
Avail Cap (c_a), veh/h	0	0	0	649	0	0	0	1978
Upstream Filter (I)	0.00	0.00	0.00	0.71	0.00	0.00	0.00	0.23
Uniform Delay (d1), s/veh	0.0	0.0	0.0	22.1	0.0	0.0	0.0	12.1
Incr Delay (d2), s/veh	0.0	0.0	0.0	7.1	0.0	0.0	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	29.2	0.0	0.0	0.0	12.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	9.9	0.0	0.0	0.0	9.8

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	11.2	0.0	0.0	0.0	10.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.66	0.00	0.00	0.00	0.26
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	0	0	18
Lane Assignment		R		T+R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	291	0	519	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1568	0	1781	0	0	0	0
Q Serve Time (g_s), s	0.0	12.9	0.0	20.3	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	12.9	0.0	20.3	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.26	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	432	0	653	0	0	0	0
V/C Ratio (X)	0.00	0.67	0.00	0.80	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	432	0	653	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.71	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	25.1	0.0	22.1	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	8.1	0.0	7.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	33.3	0.0	29.1	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	5.5	0.0	10.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.0	0.0	1.3	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	6.5	0.0	11.2	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.27	0.00	0.66	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		87.4						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	1035	165	49	1531	8	258	2	85	7	5	42
Future Volume (veh/h)	27	1035	165	49	1531	8	258	2	85	7	5	42
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1900	1900	1845	1900
Adj Flow Rate, veh/h	28	1067	170	51	1578	8	266	2	88	7	5	43
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	0	1	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	33	1828	291	48	2187	11	509	10	461	85	73	371
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.02	0.60	0.60	0.03	0.61	0.61	0.30	0.30	0.30	0.30	0.30	0.30
Ln Grp Delay, s/veh	75.9	10.6	10.7	164.6	13.2	13.0	26.0	0.0	20.1	19.2	0.0	0.0
Ln Grp LOS	E	B	B	F	B	B	C		C	B		
Approach Vol, veh/h		1265			1637			356			55	
Approach Delay, s/veh		12.1			17.8			24.5			19.2	
Approach LOS		B			B			C			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		6.0	2.0	4.0		8.0	2.0	4.0
Phs Duration (G+Y+Rc), s		29.0	8.4	51.0		29.0	7.8	51.6
Change Period (Y+Rc), s		* 6.8	6.4	6.4		* 6.8	6.4	6.4
Max Green (Gmax), s		* 22	2.0	30.6		* 22	2.0	30.6
Max Allow Headway (MAH), s		4.5	3.8	5.3		4.5	3.8	5.3
Max Q Clear (g_c+I1), s		14.1	4.0	18.0		3.8	3.2	24.7
Green Ext Time (g_e), s		1.1	0.0	11.5		1.6	0.0	5.6
Prob of Phs Call (p_c)		1.00	0.65	1.00		1.00	0.44	1.00
Prob of Max Out (p_x)		0.00	1.00	0.00		0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		1339	1774			102	1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		35		3060		243		3611

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1538		487		1237		18

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0
Lane Assignment			(Prot)			L+T+R	(Prot)	

Lanes in Grp	0	1	1	0	0	1	1	0
Grp Vol (v), veh/h	0	266	51	0	0	55	28	0
Grp Sat Flow (s), veh/h/ln	0	1339	1774	0	0	1582	1774	0
Q Serve Time (g_s), s	0.0	10.3	2.0	0.0	0.0	0.0	1.2	0.0
Cycle Q Clear Time (g_c), s	0.0	12.1	2.0	0.0	0.0	1.8	1.2	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1339	0	0	0	1327	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	1757	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	22.2	0.0	0.0	0.0	22.2	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	20.4	0.0	0.0	0.0	19.1	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	10.3	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	10.7	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	0.00	0.13	1.00	0.00
Lane Grp Cap (c), veh/h	0	509	48	0	0	530	33	0
V/C Ratio (X)	0.00	0.52	1.06	0.00	0.00	0.10	0.84	0.00
Avail Cap (c_a), veh/h	0	509	48	0	0	530	48	0
Upstream Filter (I)	0.00	1.00	0.69	0.00	0.00	1.00	0.61	0.00
Uniform Delay (d1), s/veh	0.0	22.2	36.0	0.0	0.0	18.8	36.2	0.0
Incr Delay (d2), s/veh	0.0	3.8	126.6	0.0	0.0	0.4	39.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	26.0	164.6	0.0	0.0	19.2	75.9	0.0
1st-Term Q (Q1), veh/ln	0.0	4.7	1.0	0.0	0.0	0.8	0.6	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.5	1.7	0.0	0.0	0.1	0.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	5.2	2.7	0.0	0.0	0.9	0.9	0.0
%ile Storage Ratio (RQ%)	0.00	0.60	0.28	0.00	0.00	0.07	0.12	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	616	0	0	0	773
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	15.9	0.0	0.0	0.0	22.6
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	15.9	0.0	0.0	0.0	22.6
Lane Grp Cap (c), veh/h	0	0	0	1057	0	0	0	1072
V/C Ratio (X)	0.00	0.00	0.00	0.58	0.00	0.00	0.00	0.72
Avail Cap (c_a), veh/h	0	0	0	1057	0	0	0	1072
Upstream Filter (I)	0.00	0.00	0.00	0.61	0.00	0.00	0.00	0.69
Uniform Delay (d1), s/veh	0.0	0.0	0.0	9.2	0.0	0.0	0.0	10.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.4	0.0	0.0	0.0	2.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	10.6	0.0	0.0	0.0	13.2
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	7.7	0.0	0.0	0.0	11.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	8.1	0.0	0.0	0.0	11.8
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.16
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R				T+R
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	90	0	621	0	0	0	813
Grp Sat Flow (s), veh/h/ln	0	1573	0	1777	0	0	0	1860
Q Serve Time (g_s), s	0.0	3.1	0.0	16.0	0.0	0.0	0.0	22.7
Cycle Q Clear Time (g_c), s	0.0	3.1	0.0	16.0	0.0	0.0	0.0	22.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.98	0.00	0.27	0.00	0.78	0.00	0.01
Lane Grp Cap (c), veh/h	0	472	0	1061	0	0	0	1126
V/C Ratio (X)	0.00	0.19	0.00	0.58	0.00	0.00	0.00	0.72
Avail Cap (c_a), veh/h	0	472	0	1061	0	0	0	1126
Upstream Filter (I)	0.00	1.00	0.00	0.61	0.00	0.00	0.00	0.69
Uniform Delay (d1), s/veh	0.0	19.2	0.0	9.2	0.0	0.0	0.0	10.2
Incr Delay (d2), s/veh	0.0	0.9	0.0	1.4	0.0	0.0	0.0	2.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	20.1	0.0	10.7	0.0	0.0	0.0	13.0
1st-Term Q (Q1), veh/ln	0.0	1.4	0.0	7.8	0.0	0.0	0.0	11.5
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.4	0.0	0.0	0.0	0.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.5	0.0	8.2	0.0	0.0	0.0	12.4
%ile Storage Ratio (RQ%)	0.00	0.13	0.00	0.21	0.00	0.00	0.00	0.17
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	16.4
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	1110	90	177	1221	5	188	0	327	1	1	0
Future Volume (veh/h)	4	1110	90	177	1221	5	188	0	327	1	1	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1845	1900	1845	1900
Adj Flow Rate, veh/h	4	1207	98	192	1327	5	204	0	355	1	1	0
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	199	1488	121	193	1924	7	585	650	553	283	261	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.45	0.45	0.45	0.03	0.53	0.53	0.35	0.00	0.35	0.35	0.35	0.00
Ln Grp Delay, s/veh	21.6	22.3	22.3	46.1	13.9	13.9	20.8	0.0	26.8	16.4	0.0	0.0
Ln Grp LOS	C	C	C	D	B	B	C		C	B		
Approach Vol, veh/h		1309			1524			559			2	
Approach Delay, s/veh		22.3			17.9			24.6			16.4	
Approach LOS		C			B			C			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Case No		5.0	1.2	6.0		8.0		4.0
Phs Duration (G+Y+Rc), s		32.0	6.5	39.5		32.0		46.0
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5		4.5
Max Green (Gmax), s		27.5	2.0	29.5		27.5		41.5
Max Allow Headway (MAH), s		4.0	3.8	5.3		4.0		5.3
Max Q Clear (g_c+I1), s		16.8	4.0	26.7		2.1		23.2
Green Ext Time (g_e), s		1.5	0.0	2.7		1.9		15.5
Prob of Phs Call (p_c)		1.00	0.98	1.00		1.00		1.00
Prob of Max Out (p_x)		0.00	1.00	0.00		0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3	7		1		
Mvmt Sat Flow, veh/h		1397	1774	409		606		

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1845		3316		740		3616

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		269		0		14

Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	1	0	0
Lane Assignment			(Pr/Pm)			L+T		

Lanes in Grp	0	1	1	1	0	1	0	0
Grp Vol (v), veh/h	0	204	192	4	0	2	0	0
Grp Sat Flow (s), veh/h/ln	0	1397	1774	409	0	1346	0	0
Q Serve Time (g_s), s	0.0	8.6	2.0	0.6	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	8.6	2.0	15.2	0.0	0.1	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1397	420	409	0	1043	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	1757	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	27.5	37.0	35.0	0.0	27.5	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	27.4	10.3	20.3	0.0	27.5	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	8.6	10.3	0.6	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	1.00	0.00	0.50	0.00	0.00
Lane Grp Cap (c), veh/h	0	585	193	199	0	544	0	0
V/C Ratio (X)	0.00	0.35	0.99	0.02	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	585	193	199	0	544	0	0
Upstream Filter (I)	0.00	1.00	0.09	0.40	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	19.1	28.5	21.5	0.0	16.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.6	17.6	0.1	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	20.8	46.1	21.6	0.0	16.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.3	3.2	0.1	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.9	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	3.6	4.1	0.1	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.65	0.33	0.01	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T				T
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	643	0	0	0	649
Grp Sat Flow (s), veh/h/ln	0	1845	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	24.6	0.0	0.0	0.0	21.2
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	24.6	0.0	0.0	0.0	21.2
Lane Grp Cap (c), veh/h	0	650	0	794	0	0	0	942
V/C Ratio (X)	0.00	0.00	0.00	0.81	0.00	0.00	0.00	0.69
Avail Cap (c_a), veh/h	0	650	0	794	0	0	0	942
Upstream Filter (I)	0.00	0.00	0.00	0.40	0.00	0.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	0.0	0.0	18.6	0.0	0.0	0.0	13.5
Incr Delay (d2), s/veh	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	22.3	0.0	0.0	0.0	13.9
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	11.8	0.0	0.0	0.0	10.3

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	12.6	0.0	0.0	0.0	10.4
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.27
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R				T+R
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	355	0	662	0	0	0	683
Grp Sat Flow (s), veh/h/ln	0	1568	0	1815	0	0	0	1860
Q Serve Time (g_s), s	0.0	14.8	0.0	24.7	0.0	0.0	0.0	21.2
Cycle Q Clear Time (g_c), s	0.0	14.8	0.0	24.7	0.0	0.0	0.0	21.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.15	0.00	0.00	0.00	0.01
Lane Grp Cap (c), veh/h	0	553	0	815	0	0	0	990
V/C Ratio (X)	0.00	0.64	0.00	0.81	0.00	0.00	0.00	0.69
Avail Cap (c_a), veh/h	0	553	0	815	0	0	0	990
Upstream Filter (I)	0.00	1.00	0.00	0.40	0.00	0.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	21.1	0.0	18.7	0.0	0.0	0.0	13.5
Incr Delay (d2), s/veh	0.0	5.6	0.0	3.6	0.0	0.0	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	26.8	0.0	22.3	0.0	0.0	0.0	13.9
1st-Term Q (Q1), veh/ln	0.0	6.4	0.0	12.3	0.0	0.0	0.0	10.8
2nd-Term Q (Q2), veh/ln	0.0	0.9	0.0	0.8	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.2	0.0	13.1	0.0	0.0	0.0	10.9
%ile Storage Ratio (RQ%)	0.00	0.59	0.00	0.18	0.00	0.00	0.00	0.28
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		20.7						
HCM 2010 LOS		C						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	1479	0	12	1299	96	12	0	54	166	0	54
Future Volume (veh/h)	24	1479	0	12	1299	96	12	0	54	166	0	54
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	26	1573	0	13	1382	102	13	0	57	177	0	57
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	52	1311	0	29	1195	88	121	37	380	532	0	470
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.37	0.00	0.02	0.36	0.36	0.30	0.00	0.30	0.30	0.00	0.30
Ln Grp Delay, s/veh	32.7	113.1	0.0	39.9	105.4	107.9	15.9	0.0	0.0	18.2	0.0	15.8
Ln Grp LOS	C	F		D	F	F	B			B		B
Approach Vol, veh/h		1599			1497			70			234	
Approach Delay, s/veh		111.7			106.1			15.9			17.6	
Approach LOS		F			F			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		8.0	2.0	4.0		6.0	2.0	4.0
Phs Duration (G+Y+Rc), s		24.0	7.4	28.6		24.0	8.2	27.8
Change Period (Y+Rc), s		6.0	6.4	6.4		6.0	6.4	6.4
Max Green (Gmax), s		18.0	5.0	18.6		18.0	5.0	18.6
Max Allow Headway (MAH), s		4.6	3.8	5.3		4.6	3.8	5.3
Max Q Clear (g_c+I1), s		3.9	2.4	24.2		7.7	2.9	23.4
Green Ext Time (g_e), s		1.1	0.0	0.0		0.9	0.0	0.0
Prob of Phs Call (p_c)		1.00	0.19	1.00		1.00	0.35	1.00
Prob of Max Out (p_x)		0.00	1.00	0.00		0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		166	1774			1328	1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		123		3632		0		3343

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1267		0		1568		246

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0
Lane Assignment		L+T+R	(Prot)				(Prot)	

Lanes in Grp	0	1	1	0	0	1	1	0
Grp Vol (v), veh/h	0	70	13	0	0	177	26	0
Grp Sat Flow (s), veh/h/ln	0	1556	1774	0	0	1328	1774	0
Q Serve Time (g_s), s	0.0	0.0	0.4	0.0	0.0	3.8	0.9	0.0
Cycle Q Clear Time (g_c), s	0.0	1.9	0.4	0.0	0.0	5.7	0.9	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1368	0	0	0	1328	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	1757	0	0
Perm LT Eff Green (g_p), s	0.0	18.0	0.0	0.0	0.0	18.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	16.4	0.0	0.0	0.0	16.1	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	3.8	0.0	0.0
Time to First Blk (g_f), s	0.0	7.4	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.19	1.00	0.00	0.00	1.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	538	29	0	0	532	52	0
V/C Ratio (X)	0.00	0.13	0.45	0.00	0.00	0.33	0.50	0.00
Avail Cap (c_a), veh/h	0	538	148	0	0	532	148	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	0.00	1.00	0.54	0.00
Uniform Delay (d1), s/veh	0.0	15.4	29.2	0.0	0.0	16.6	28.7	0.0
Incr Delay (d2), s/veh	0.0	0.5	10.7	0.0	0.0	1.7	4.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	15.9	39.9	0.0	0.0	18.2	32.7	0.0
1st-Term Q (Q1), veh/ln	0.0	0.8	0.2	0.0	0.0	2.3	0.4	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.1	0.0	0.0	0.2	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.9	0.3	0.0	0.0	2.6	0.5	0.0
%ile Storage Ratio (RQ%)	0.00	0.06	0.04	0.00	0.00	0.44	0.07	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	1
Grp Vol (v), veh/h	0	0	0	1573	0	0	0	729
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	22.2	0.0	0.0	0.0	21.4
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	22.2	0.0	0.0	0.0	21.4
Lane Grp Cap (c), veh/h	0	0	0	1311	0	0	0	632
V/C Ratio (X)	0.00	0.00	0.00	1.20	0.00	0.00	0.00	1.15
Avail Cap (c_a), veh/h	0	0	0	1311	0	0	0	632
Upstream Filter (I)	0.00	0.00	0.00	0.54	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	18.9	0.0	0.0	0.0	19.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	94.2	0.0	0.0	0.0	86.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	113.1	0.0	0.0	0.0	105.4
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	10.7	0.0	0.0	0.0	10.4

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	17.1	0.0	0.0	0.0	15.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	27.9	0.0	0.0	0.0	25.5
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.73	0.00	0.00	0.00	2.10
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	65.5	0.0	0.0	0.0	24.2
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment						T+R		T+R
Lanes in Grp	0	0	0	0	0	1	0	1
Grp Vol (v), veh/h	0	0	0	0	0	57	0	755
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	1568	0	1819
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	1.6	0.0	21.4
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	1.6	0.0	21.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.81	0.00	0.00	0.00	1.00	0.00	0.14
Lane Grp Cap (c), veh/h	0	0	0	0	0	470	0	650
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.12	0.00	1.16
Avail Cap (c_a), veh/h	0	0	0	0	0	470	0	650
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	15.3	0.0	19.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.5	0.0	88.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	15.8	0.0	107.9
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.7	0.0	10.7
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	16.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.7	0.0	26.7
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.06	0.00	2.20
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.1
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Intersection Summary								
HCM 2010 Ctrl Delay		100.8						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	392	1011	164	257	708	117	198	657	220	280	853	376
Future Volume (veh/h)	392	1011	164	257	708	117	198	657	220	280	853	376
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	408	1053	171	268	738	122	206	684	229	292	889	392
Adj No. of Lanes	2	3	0	2	3	0	2	3	0	2	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	466	1481	240	331	1306	214	264	968	319	352	974	428
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.14	0.34	0.34	0.10	0.30	0.30	0.08	0.26	0.26	0.10	0.28	0.28
Ln Grp Delay, s/veh	66.0	38.5	42.0	61.1	37.9	40.3	62.8	45.1	50.6	63.9	56.0	67.4
Ln Grp LOS	E	D	D	E	D	D	E	D	D	E	E	E
Approach Vol, veh/h		1632			1128			1119			1573	
Approach Delay, s/veh		46.3			44.0			49.9			60.4	
Approach LOS		D			D			D			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	4.0
Phs Duration (G+Y+Rc), s	18.4	37.0	17.9	46.7	15.3	40.1	22.6	42.0
Change Period (Y+Rc), s	6.0	6.0	6.4	6.4	6.0	6.0	6.4	6.4
Max Green (Gmax), s	15.0	31.0	15.6	33.6	12.0	34.0	17.6	31.6
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.3	3.8	5.3	3.8	5.3
Max Q Clear (g_c+I1), s	12.1	22.2	11.2	27.0	9.1	32.2	16.0	19.2
Green Ext Time (g_e), s	0.3	7.4	0.4	5.5	0.2	1.7	0.3	9.6
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	0.63	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3408		3442		3408		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3748		4411		3428		4404

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1236		715		1508		722

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	292	0	268	0	206	0	408	0
Grp Sat Flow (s), veh/h/ln	1704	0	1721	0	1704	0	1721	0
Q Serve Time (g_s), s	10.1	0.0	9.2	0.0	7.1	0.0	14.0	0.0
Cycle Q Clear Time (g_c), s	10.1	0.0	9.2	0.0	7.1	0.0	14.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	352	0	331	0	264	0	466	0
V/C Ratio (X)	0.83	0.00	0.81	0.00	0.78	0.00	0.88	0.00
Avail Cap (c_a), veh/h	426	0	447	0	341	0	505	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	52.8	0.0	53.2	0.0	54.4	0.0	50.9	0.0
Incr Delay (d2), s/veh	11.1	0.0	7.9	0.0	8.5	0.0	15.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	63.9	0.0	61.1	0.0	62.8	0.0	66.0	0.0
1st-Term Q (Q1), veh/ln	4.7	0.0	4.4	0.0	3.3	0.0	6.6	0.0
2nd-Term Q (Q2), veh/ln	0.5	0.0	0.4	0.0	0.3	0.0	1.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	5.3	0.0	4.7	0.0	3.7	0.0	7.6	0.0
%ile Storage Ratio (RQ%)	0.46	0.00	0.35	0.00	0.28	0.00	0.64	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	2	0	2
Grp Vol (v), veh/h	0	612	0	809	0	871	0	567
Grp Sat Flow (s), veh/h/ln	0	1679	0	1695	0	1679	0	1695
Q Serve Time (g_s), s	0.0	19.8	0.0	25.0	0.0	30.1	0.0	16.9
Cycle Q Clear Time (g_c), s	0.0	19.8	0.0	25.0	0.0	30.1	0.0	16.9
Lane Grp Cap (c), veh/h	0	867	0	1138	0	954	0	1005
V/C Ratio (X)	0.00	0.71	0.00	0.71	0.00	0.91	0.00	0.56
Avail Cap (c_a), veh/h	0	867	0	1138	0	954	0	1005
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	40.4	0.0	34.8	0.0	41.5	0.0	35.7
Incr Delay (d2), s/veh	0.0	4.8	0.0	3.8	0.0	14.5	0.0	2.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	45.1	0.0	38.5	0.0	56.0	0.0	37.9
1st-Term Q (Q1), veh/ln	0.0	9.2	0.0	11.7	0.0	13.9	0.0	7.9

2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.6	0.0	1.9	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	9.8	0.0	12.3	0.0	15.8	0.0	8.3
%ile Storage Ratio (RQ%)	0.00	0.55	0.00	0.49	0.00	0.60	0.00	1.31
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	301	0	415	0	410	0	293
Grp Sat Flow (s), veh/h/ln	0	1627	0	1736	0	1579	0	1735
Q Serve Time (g_s), s	0.0	20.2	0.0	25.0	0.0	30.2	0.0	17.2
Cycle Q Clear Time (g_c), s	0.0	20.2	0.0	25.0	0.0	30.2	0.0	17.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.76	0.00	0.41	0.00	0.96	0.00	0.42
Lane Grp Cap (c), veh/h	0	420	0	583	0	448	0	515
V/C Ratio (X)	0.00	0.72	0.00	0.71	0.00	0.91	0.00	0.57
Avail Cap (c_a), veh/h	0	420	0	583	0	448	0	515
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	40.5	0.0	34.8	0.0	41.6	0.0	35.7
Incr Delay (d2), s/veh	0.0	10.1	0.0	7.2	0.0	25.8	0.0	4.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	50.6	0.0	42.0	0.0	67.4	0.0	40.3
1st-Term Q (Q1), veh/ln	0.0	9.1	0.0	12.0	0.0	13.1	0.0	8.2
2nd-Term Q (Q2), veh/ln	0.0	1.2	0.0	1.2	0.0	3.2	0.0	0.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	10.3	0.0	13.2	0.0	16.3	0.0	8.9
%ile Storage Ratio (RQ%)	0.00	0.58	0.00	0.53	0.00	0.62	0.00	1.41
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		50.6						
HCM 2010 LOS		D						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	1596	14	1	738	94	90	31	0	213	90	233
Future Volume (veh/h)	86	1596	14	1	738	94	90	31	0	213	90	233
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	93	1735	15	1	802	102	98	34	0	232	98	253
Adj No. of Lanes	1	2	0	0	2	0	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	73	2671	23	23	2048	260	36	223	190	36	223	190
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.04	0.74	0.74	0.66	0.66	0.66	0.02	0.12	0.00	0.02	0.12	0.12
Ln Grp Delay, s/veh	274.8	12.8	12.7	13.1	0.0	13.2	925.8	64.8	0.0	2585.9	71.8	251.7
Ln Grp LOS	F	B	B	B		B	F	E		F	E	F
Approach Vol, veh/h		1843			905			132			583	
Approach Delay, s/veh		25.9			13.2			704.0			1150.3	
Approach LOS		C			B			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6	7	8
Case No	2.0	3.0		4.0	2.0	3.0	2.0	8.0
Phs Duration (G+Y+Rc), s	9.0	26.0		126.0	9.0	26.0	13.0	113.0
Change Period (Y+Rc), s	* 5.7	6.5		6.4	* 5.7	6.5	6.4	6.4
Max Green (Gmax), s	* 3.3	19.5		119.6	* 3.3	19.5	6.6	100.6
Max Allow Headway (MAH), s	3.8	4.5		5.3	3.8	4.5	3.8	5.3
Max Q Clear (g_c+I1), s	5.3	4.7		40.7	5.3	21.5	8.6	21.1
Green Ext Time (g_e), s	0.0	1.4		47.3	0.0	0.0	0.0	47.5
Prob of Phs Call (p_c)	1.00	1.00		1.00	0.99	1.00	0.98	1.00
Prob of Max Out (p_x)	0.00	0.00		0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1				5		7	3
Mvmt Sat Flow, veh/h	1757				1757		1774	0

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1845		3596		1845		3093

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		31		1568		393

Left Lane Group Data								
Assigned Mvmt	1	0	0	0	5	0	7	3
Lane Assignment	(Prot)				(Prot)		(Prot)	L+T

Lanes in Grp	1	0	0	0	1	0	1	1
Grp Vol (v), veh/h	232	0	0	0	98	0	93	483
Grp Sat Flow (s), veh/h/ln	1757	0	0	0	1757	0	1774	1860
Q Serve Time (g_s), s	3.3	0.0	0.0	0.0	3.3	0.0	6.6	0.0
Cycle Q Clear Time (g_c), s	3.3	0.0	0.0	0.0	3.3	0.0	6.6	19.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	279
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	106.6
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.9
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	94.9
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	36	0	0	0	36	0	73	1254
V/C Ratio (X)	6.44	0.00	0.00	0.00	2.72	0.00	1.28	0.39
Avail Cap (c_a), veh/h	36	0	0	0	36	0	73	1254
Upstream Filter (I)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.76
Uniform Delay (d1), s/veh	78.8	0.0	0.0	0.0	78.8	0.0	77.2	12.4
Incr Delay (d2), s/veh	2507.0	0.0	0.0	0.0	847.0	0.0	197.6	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	2585.9	0.0	0.0	0.0	925.8	0.0	274.8	13.1
1st-Term Q (Q1), veh/ln	1.6	0.0	0.0	0.0	1.6	0.0	3.2	9.8
2nd-Term Q (Q2), veh/ln	25.1	0.0	0.0	0.0	8.5	0.0	4.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	26.7	0.0	0.0	0.0	10.1	0.0	7.2	10.0
%ile Storage Ratio (RQ%)	6.83	0.00	0.00	0.00	1.84	0.00	0.44	0.13
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	49.0	0.0	0.0	0.0	15.5	0.0	5.1	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	1.6	0.0	0.0	0.0	0.7	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	34	0	853	0	98	0	0
Grp Sat Flow (s), veh/h/ln	0	1845	0	1770	0	1845	0	0
Q Serve Time (g_s), s	0.0	2.7	0.0	38.5	0.0	7.9	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	2.7	0.0	38.5	0.0	7.9	0.0	0.0
Lane Grp Cap (c), veh/h	0	223	0	1315	0	223	0	0
V/C Ratio (X)	0.00	0.15	0.00	0.65	0.00	0.44	0.00	0.00
Avail Cap (c_a), veh/h	0	223	0	1315	0	223	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	63.3	0.0	10.3	0.0	65.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.4	0.0	2.5	0.0	6.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	64.8	0.0	12.8	0.0	71.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.4	0.0	18.5	0.0	4.1	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.9	0.0	0.4	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.4	0.0	19.4	0.0	4.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.16	0.00	0.23	0.00	0.23	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	897	0	253	0	422
Grp Sat Flow (s), veh/h/ln	0	1568	0	1857	0	1568	0	1626
Q Serve Time (g_s), s	0.0	0.0	0.0	38.7	0.0	19.5	0.0	19.1
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	38.7	0.0	19.5	0.0	19.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.02	0.00	1.00	0.00	0.24
Lane Grp Cap (c), veh/h	0	190	0	1380	0	190	0	1076
V/C Ratio (X)	0.00	0.00	0.00	0.65	0.00	1.33	0.00	0.39
Avail Cap (c_a), veh/h	0	190	0	1380	0	190	0	1076
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.76
Uniform Delay (d1), s/veh	0.0	0.0	0.0	10.3	0.0	70.8	0.0	12.4
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.4	0.0	180.9	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	12.7	0.0	251.7	0.0	13.2
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	19.7	0.0	8.5	0.0	8.6
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.9	0.0	9.5	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	20.6	0.0	18.0	0.0	8.8
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.24	0.00	0.93	0.00	0.12
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	15.8	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	237.7
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	382	864	157	134	499	93	207	990	118	353	1625	201
Future Volume (veh/h)	382	864	157	134	499	93	207	990	118	353	1625	201
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	394	891	162	138	514	96	213	1021	122	364	1675	207
Adj No. of Lanes	2	3	0	2	3	1	2	3	0	2	3	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	348	798	144	183	692	215	259	2211	264	399	2388	294
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.10	0.18	0.18	0.05	0.14	0.14	0.08	0.48	0.48	0.12	0.53	0.53
Ln Grp Delay, s/veh	136.4	121.4	126.2	82.8	70.6	66.6	82.5	29.0	29.9	96.4	31.5	33.8
Ln Grp LOS	F	F	F	F	E	E	F	C	C	F	C	C
Approach Vol, veh/h		1447			748			1356			2246	
Approach Delay, s/veh		126.7			72.3			37.6			42.7	
Approach LOS		F			E			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	26.0	86.3	15.1	36.6	19.3	93.0	23.0	28.7
Change Period (Y+Rc), s	6.8	6.8	6.4	6.4	6.8	6.8	6.4	6.4
Max Green (Gmax), s	19.2	73.2	16.6	28.6	19.2	73.2	16.6	28.6
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.2	3.8	5.3	3.8	5.2
Max Q Clear (g_c+I1), s	19.3	26.4	8.5	32.2	12.1	47.7	18.6	17.9
Green Ext Time (g_e), s	0.0	37.3	0.2	0.0	0.4	22.4	0.0	4.4
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	0.01	1.00	0.06	0.00	1.00	0.76

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3408		3442		3408		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		4562		4331		4544		5085

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		544		784		560		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	364	0	138	0	213	0	394	0
Grp Sat Flow (s), veh/h/ln	1704	0	1721	0	1704	0	1721	0
Q Serve Time (g_s), s	17.3	0.0	6.5	0.0	10.1	0.0	16.6	0.0
Cycle Q Clear Time (g_c), s	17.3	0.0	6.5	0.0	10.1	0.0	16.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	399	0	183	0	259	0	348	0
V/C Ratio (X)	0.91	0.00	0.76	0.00	0.82	0.00	1.13	0.00
Avail Cap (c_a), veh/h	399	0	348	0	399	0	348	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	0.09	0.00
Uniform Delay (d1), s/veh	71.6	0.0	76.6	0.0	74.7	0.0	73.7	0.0
Incr Delay (d2), s/veh	24.8	0.0	6.2	0.0	7.8	0.0	62.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	96.4	0.0	82.8	0.0	82.5	0.0	136.4	0.0
1st-Term Q (Q1), veh/ln	8.1	0.0	3.1	0.0	4.8	0.0	7.9	0.0
2nd-Term Q (Q2), veh/ln	1.4	0.0	0.2	0.0	0.3	0.0	3.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	9.5	0.0	3.2	0.0	5.0	0.0	10.9	0.0
%ile Storage Ratio (RQ%)	0.42	0.00	0.17	0.00	0.32	0.00	0.55	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	11.4	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	2	0	3
Grp Vol (v), veh/h	0	751	0	697	0	1236	0	514
Grp Sat Flow (s), veh/h/ln	0	1679	0	1695	0	1679	0	1695
Q Serve Time (g_s), s	0.0	24.3	0.0	30.2	0.0	45.3	0.0	15.9
Cycle Q Clear Time (g_c), s	0.0	24.3	0.0	30.2	0.0	45.3	0.0	15.9
Lane Grp Cap (c), veh/h	0	1627	0	624	0	1765	0	692
V/C Ratio (X)	0.00	0.46	0.00	1.12	0.00	0.70	0.00	0.74
Avail Cap (c_a), veh/h	0	1627	0	624	0	1765	0	887
Upstream Filter (I)	0.00	1.00	0.00	0.09	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	28.0	0.0	66.9	0.0	29.2	0.0	68.1
Incr Delay (d2), s/veh	0.0	0.9	0.0	54.5	0.0	2.3	0.0	2.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	29.0	0.0	121.4	0.0	31.5	0.0	70.6
1st-Term Q (Q1), veh/ln	0.0	11.3	0.0	14.1	0.0	20.9	0.0	7.5

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	4.7	0.0	0.6	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	11.5	0.0	18.9	0.0	21.5	0.0	7.6
%ile Storage Ratio (RQ%)	0.00	0.52	0.00	0.25	0.00	0.83	0.00	0.13
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	18.1	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	392	0	356	0	646	0	96
Grp Sat Flow (s), veh/h/ln	0	1749	0	1724	0	1746	0	1583
Q Serve Time (g_s), s	0.0	24.4	0.0	30.2	0.0	45.7	0.0	9.1
Cycle Q Clear Time (g_c), s	0.0	24.4	0.0	30.2	0.0	45.7	0.0	9.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.31	0.00	0.45	0.00	0.32	0.00	1.00
Lane Grp Cap (c), veh/h	0	848	0	318	0	918	0	215
V/C Ratio (X)	0.00	0.46	0.00	1.12	0.00	0.70	0.00	0.45
Avail Cap (c_a), veh/h	0	848	0	318	0	918	0	276
Upstream Filter (I)	0.00	1.00	0.00	0.09	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	28.1	0.0	66.9	0.0	29.3	0.0	65.2
Incr Delay (d2), s/veh	0.0	1.8	0.0	59.3	0.0	4.5	0.0	1.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	29.9	0.0	126.2	0.0	33.8	0.0	66.6
1st-Term Q (Q1), veh/ln	0.0	11.8	0.0	14.4	0.0	21.9	0.0	4.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	5.2	0.0	1.1	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	12.2	0.0	19.6	0.0	23.0	0.0	4.1
%ile Storage Ratio (RQ%)	0.00	0.56	0.00	0.26	0.00	0.89	0.00	0.15
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	9.7	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		66.3						
HCM 2010 LOS		E						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	101	533	73	180	965	95	136	66	248	205	142	136
Future Volume (veh/h)	101	533	73	180	965	95	136	66	248	205	142	136
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1900	1712	1712	1712	1776	1776	1900	1776	1776	1776
Adj Flow Rate, veh/h	104	549	75	186	995	98	140	68	256	211	146	140
Adj No. of Lanes	2	3	0	2	3	1	1	2	0	2	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	11	11	11	11	11	11	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	104	999	134	104	1120	349	175	716	641	297	1389	621
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.24	0.24	0.03	0.24	0.24	0.10	0.42	0.42	0.09	0.41	0.41
Ln Grp Delay, s/veh	131.3	31.1	32.1	432.5	42.3	28.6	47.8	16.0	20.0	43.3	16.6	18.2
Ln Grp LOS	F	C	C	F	D	C	D	B	B	D	B	B
Approach Vol, veh/h		728			1279			464			497	
Approach Delay, s/veh		45.7			98.0			27.8			28.4	
Approach LOS		D			F			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	12.2	43.9	7.0	27.8	13.4	42.8	7.0	27.8
Change Period (Y+Rc), s	4.0	5.3	4.0	* 6	4.0	5.3	4.0	* 6
Max Green (Gmax), s	23.0	23.7	3.0	* 22	32.0	14.7	3.0	* 22
Max Allow Headway (MAH), s	3.8	5.1	3.8	5.2	3.8	5.1	3.8	5.2
Max Q Clear (g_c+I1), s	7.7	12.7	5.0	12.7	9.4	7.5	5.0	20.7
Green Ext Time (g_e), s	0.6	2.7	0.0	6.7	0.4	2.1	0.0	1.1
Prob of Phs Call (p_c)	1.00	1.00	0.99	1.00	0.97	1.00	0.93	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.82	0.00	0.00	1.00	1.00

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	3281	3163	1691	3163

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	1687	4167	3374	4673

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	1509	561	1509	1455

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	1	0	2	0
Grp Vol (v), veh/h	211	0	186	0	140	0	104	0
Grp Sat Flow (s), veh/h/ln	1640	0	1581	0	1691	0	1581	0
Q Serve Time (g_s), s	5.7	0.0	3.0	0.0	7.4	0.0	3.0	0.0
Cycle Q Clear Time (g_c), s	5.7	0.0	3.0	0.0	7.4	0.0	3.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	297	0	104	0	175	0	104	0
V/C Ratio (X)	0.71	0.00	1.78	0.00	0.80	0.00	1.00	0.00
Avail Cap (c_a), veh/h	829	0	104	0	595	0	104	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.98	0.00	1.00	0.00
Uniform Delay (d1), s/veh	40.2	0.0	44.0	0.0	39.9	0.0	44.0	0.0
Incr Delay (d2), s/veh	3.1	0.0	388.5	0.0	7.9	0.0	87.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	43.3	0.0	432.5	0.0	47.8	0.0	131.3	0.0
1st-Term Q (Q1), veh/ln	2.6	0.0	1.3	0.0	3.4	0.0	1.3	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	5.6	0.0	0.4	0.0	1.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	2.7	0.0	6.9	0.0	3.8	0.0	2.6	0.0
%ile Storage Ratio (RQ%)	0.37	0.00	0.97	0.00	0.63	0.00	0.20	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	20.4	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	2	0	3
Grp Vol (v), veh/h	0	68	0	408	0	146	0	995
Grp Sat Flow (s), veh/h/ln	0	1687	0	1558	0	1687	0	1558
Q Serve Time (g_s), s	0.0	2.2	0.0	10.4	0.0	2.4	0.0	18.7
Cycle Q Clear Time (g_c), s	0.0	2.2	0.0	10.4	0.0	2.4	0.0	18.7
Lane Grp Cap (c), veh/h	0	716	0	747	0	1389	0	1120
V/C Ratio (X)	0.00	0.09	0.00	0.55	0.00	0.11	0.00	0.89
Avail Cap (c_a), veh/h	0	716	0	753	0	1389	0	1130
Upstream Filter (I)	0.00	0.98	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	15.7	0.0	30.3	0.0	16.5	0.0	33.4
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.8	0.0	0.2	0.0	8.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	16.0	0.0	31.1	0.0	16.6	0.0	42.3
1st-Term Q (Q1), veh/ln	0.0	1.0	0.0	4.5	0.0	1.1	0.0	8.0

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.1	0.0	4.6	0.0	1.1	0.0	8.9
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.05	0.00	0.01	0.00	0.15
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	256	0	216	0	140	0	98
Grp Sat Flow (s), veh/h/ln	0	1509	0	1613	0	1509	0	1455
Q Serve Time (g_s), s	0.0	10.7	0.0	10.7	0.0	5.5	0.0	5.0
Cycle Q Clear Time (g_c), s	0.0	10.7	0.0	10.7	0.0	5.5	0.0	5.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.35	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	641	0	386	0	621	0	349
V/C Ratio (X)	0.00	0.40	0.00	0.56	0.00	0.23	0.00	0.28
Avail Cap (c_a), veh/h	0	641	0	390	0	621	0	352
Upstream Filter (I)	0.00	0.98	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	18.1	0.0	30.4	0.0	17.4	0.0	28.2
Incr Delay (d2), s/veh	0.0	1.8	0.0	1.7	0.0	0.8	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	20.0	0.0	32.1	0.0	18.2	0.0	28.6
1st-Term Q (Q1), veh/ln	0.0	4.4	0.0	4.7	0.0	2.3	0.0	2.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.2	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	4.7	0.0	4.9	0.0	2.4	0.0	2.0
%ile Storage Ratio (RQ%)	0.00	0.05	0.00	0.05	0.00	0.40	0.00	0.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	62.5
HCM 2010 LOS	E

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	63	54	98	52	79	42	224	52	50	212	37
Future Volume (veh/h)	50	63	54	98	52	79	42	224	52	50	212	37
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1900	1900	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	52	65	56	101	54	81	43	231	54	52	219	38
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	159	136	91	309	138	309	729	840	196	704	889	154
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.60	0.60	0.60	0.60	0.60	0.60
Ln Grp Delay, s/veh	17.3	0.0	0.0	16.4	0.0	15.7	5.3	0.0	4.9	5.4	0.0	4.2
Ln Grp LOS	B			B		B	A		A	A		A
Approach Vol, veh/h		173			236			328			309	
Approach Delay, s/veh		17.3			16.1			5.0			4.4	
Approach LOS		B			B			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		8.0		6.0		7.0
Phs Duration (G+Y+Rc), s		31.6		13.4		31.6		13.4
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green (Gmax), s		18.0		18.0		18.0		18.0
Max Allow Headway (MAH), s		5.2		5.2		5.2		5.2
Max Q Clear (g_c+I1), s		6.0		7.2		6.7		5.5
Green Ext Time (g_e), s		3.0		1.7		2.9		1.8
Prob of Phs Call (p_c)		1.00		0.99		1.00		0.99
Prob of Max Out (p_x)		0.00		0.17		0.00		0.10

Left-Turn Movement Data				
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		1066		277		1039		898

Through Movement Data				
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1393		693		1475		701

Right-Turn Movement Data				
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		326		464		256		1568

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment				L+T+R				L+T

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	43	0	173	0	52	0	155
Grp Sat Flow (s), veh/h/ln	0	1066	0	1434	0	1039	0	1599
Q Serve Time (g_s), s	0.0	0.9	0.0	1.7	0.0	1.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	4.0	0.0	5.2	0.0	4.7	0.0	3.5
Perm LT Sat Flow (s_l), veh/h/ln	0	1066	0	1274	0	1039	0	1291
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	1701
Perm LT Eff Green (g_p), s	0.0	27.1	0.0	8.9	0.0	27.1	0.0	8.9
Perm LT Serve Time (g_u), s	0.0	24.0	0.0	5.3	0.0	23.6	0.0	3.6
Perm LT Q Serve Time (g_ps), s	0.0	0.9	0.0	1.7	0.0	1.1	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	2.6	0.0	0.0	0.0	1.1
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	2.6	0.0	0.0	0.0	1.1
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	0.30	0.00	1.00	0.00	0.65
Lane Grp Cap (c), veh/h	0	729	0	386	0	704	0	447
V/C Ratio (X)	0.00	0.06	0.00	0.45	0.00	0.07	0.00	0.35
Avail Cap (c_a), veh/h	0	729	0	697	0	704	0	734
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	5.1	0.0	16.4	0.0	5.4	0.0	15.9
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.8	0.0	0.0	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	5.3	0.0	17.3	0.0	5.4	0.0	16.4
1st-Term Q (Q1), veh/ln	0.0	0.3	0.0	2.0	0.0	0.3	0.0	1.7
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.3	0.0	2.1	0.0	0.3	0.0	1.7
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.09	0.00	0.00	0.00	0.06
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment								
Lanes in Grp	0	0	0	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R				T+R		R
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	285	0	0	0	257	0	81
Grp Sat Flow (s), veh/h/ln	0	1718	0	0	0	1731	0	1568
Q Serve Time (g_s), s	0.0	3.6	0.0	0.0	0.0	3.1	0.0	2.0
Cycle Q Clear Time (g_c), s	0.0	3.6	0.0	0.0	0.0	3.1	0.0	2.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.19	0.00	0.32	0.00	0.15	0.00	1.00
Lane Grp Cap (c), veh/h	0	1036	0	0	0	1044	0	309
V/C Ratio (X)	0.00	0.28	0.00	0.00	0.00	0.25	0.00	0.26
Avail Cap (c_a), veh/h	0	1036	0	0	0	1044	0	627
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	4.3	0.0	0.0	0.0	4.2	0.0	15.3
Incr Delay (d2), s/veh	0.0	0.7	0.0	0.0	0.0	0.1	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	4.9	0.0	0.0	0.0	4.2	0.0	15.7
1st-Term Q (Q1), veh/ln	0.0	1.7	0.0	0.0	0.0	1.4	0.0	0.9
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.9	0.0	0.0	0.0	1.4	0.0	0.9
%ile Storage Ratio (RQ%)	0.00	0.09	0.00	0.00	0.00	0.02	0.00	0.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		9.4						
HCM 2010 LOS		A						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	679	1113	25	77	536	397	14	14	117	308	24	23
Future Volume (veh/h)	679	1113	25	77	536	397	14	14	117	308	24	23
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1696	1696	1696	1696	1696	1696	1900	1696	1900	1696	1696	1696
Adj Flow Rate, veh/h	707	1159	26	80	558	0	15	15	122	321	25	0
Adj No. of Lanes	1	2	1	1	2	1	0	1	0	2	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	12	12	12	12	12	12	12	12	12	12	12	12
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	734	1904	852	100	639	286	0	16	129	132	320	272
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.45	0.59	0.59	0.06	0.20	0.00	0.00	0.10	0.10	0.04	0.19	0.00
Ln Grp Delay, s/veh	56.8	18.8	11.4	65.4	56.2	0.0	0.0	0.0	119.0	730.6	44.5	0.0
Ln Grp LOS	E	B	B	E	E				F	F	D	
Approach Vol, veh/h		1892			638			137			346	
Approach Delay, s/veh		32.9			57.4			119.0			681.1	
Approach LOS		C			E			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	4.0	2.0	3.0	0.0	3.0
Phs Duration (G+Y+Rc), s	67.5	33.5	12.0	20.0	15.3	85.7	0.0	32.0
Change Period (Y+Rc), s	7.1	7.1	6.4	6.9	7.1	7.1	6.9	* 6.9
Max Green (Gmax), s	67.9	18.9	5.6	13.1	30.9	55.9	13.1	* 5.6
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.5	3.8	5.3	0.0	5.5
Max Q Clear (g_c+I1), s	58.5	24.3	7.6	14.4	8.5	32.6	0.0	3.6
Green Ext Time (g_e), s	2.0	0.0	0.0	0.0	0.2	13.9	0.0	0.2
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.95	1.00	0.00	1.00
Prob of Max Out (p_x)	0.19	0.00	1.00	1.00	0.00	0.00	0.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1616		3134		1616		0	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3223		161		3223		1696

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1442		1306		1442		1442

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)			

Lanes in Grp	1	0	2	0	1	0	0	0
Grp Vol (v), veh/h	707	0	321	0	80	0	0	0
Grp Sat Flow (s), veh/h/ln	1616	0	1567	0	1616	0	0	0
Q Serve Time (g_s), s	56.5	0.0	5.6	0.0	6.5	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	56.5	0.0	5.6	0.0	6.5	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	734	0	132	0	100	0	0	0
V/C Ratio (X)	0.96	0.00	2.43	0.00	0.80	0.00	0.00	0.00
Avail Cap (c_a), veh/h	825	0	132	0	375	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.25	0.00	0.00	0.00
Uniform Delay (d1), s/veh	35.2	0.0	63.7	0.0	61.6	0.0	0.0	0.0
Incr Delay (d2), s/veh	21.6	0.0	666.9	0.0	3.8	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	56.8	0.0	730.6	0.0	65.4	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	25.1	0.0	2.4	0.0	2.9	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	4.4	0.0	12.2	0.0	0.1	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	29.5	0.0	14.6	0.0	3.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.94	0.00	0.64	0.00	0.24	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	47.3	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	2	0	0	0	2	0	1
Grp Vol (v), veh/h	0	558	0	0	0	1159	0	25
Grp Sat Flow (s), veh/h/ln	0	1612	0	0	0	1612	0	1696
Q Serve Time (g_s), s	0.0	22.3	0.0	0.0	0.0	30.6	0.0	1.6
Cycle Q Clear Time (g_c), s	0.0	22.3	0.0	0.0	0.0	30.6	0.0	1.6
Lane Grp Cap (c), veh/h	0	639	0	0	0	1904	0	320
V/C Ratio (X)	0.00	0.87	0.00	0.00	0.00	0.61	0.00	0.08
Avail Cap (c_a), veh/h	0	639	0	0	0	1904	0	320
Upstream Filter (I)	0.00	0.25	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	51.7	0.0	0.0	0.0	17.4	0.0	44.4
Incr Delay (d2), s/veh	0.0	4.5	0.0	0.0	0.0	1.5	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	56.2	0.0	0.0	0.0	18.8	0.0	44.5
1st-Term Q (Q1), veh/ln	0.0	9.9	0.0	0.0	0.0	13.5	0.0	0.8

2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.0	0.4	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	10.3	0.0	0.0	0.0	13.9	0.0	0.8
%ile Storage Ratio (RQ%)	0.00	0.14	0.00	0.00	0.00	0.12	0.00	0.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	137	0	26	0	0
Grp Sat Flow (s), veh/h/ln	0	1442	0	1466	0	1442	0	1442
Q Serve Time (g_s), s	0.0	0.0	0.0	12.4	0.0	1.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	12.4	0.0	1.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.89	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	286	0	144	0	852	0	272
V/C Ratio (X)	0.00	0.00	0.00	0.95	0.00	0.03	0.00	0.00
Avail Cap (c_a), veh/h	0	286	0	144	0	852	0	272
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	59.6	0.0	11.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	59.4	0.0	0.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	119.0	0.0	11.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	5.0	0.0	0.4	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	2.4	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	7.4	0.0	0.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.48	0.00	0.05	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	116.4
HCM 2010 LOS	F

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	216	1369	1069	118	557	94
Future Volume (veh/h)	216	1369	1069	118	557	94
Number	1	6	2	12	3	18
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00			1.00	1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1696	1696	1696	1696	1696	1696
Adj Flow Rate, veh/h	225	1426	1114	0	580	0
Adj No. of Lanes	1	2	2	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	12	12	12	12	12	12
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	160	1985	1381	618	691	318
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.10	0.62	0.43	0.00	0.22	0.00
Ln Grp Delay, s/veh	224.1	10.8	24.1	0.0	34.9	0.0
Ln Grp LOS	F	B	C		C	
Approach Vol, veh/h		1651	1114		580	
Approach Delay, s/veh		39.9	24.1		34.9	
Approach LOS		D	C		C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8			6		
Case No	2.0	7.0	9.0			4.0		
Phs Duration (G+Y+Rc), s	15.0	41.4	23.6			56.4		
Change Period (Y+Rc), s	7.1	7.1	6.0			7.1		
Max Green (Gmax), s	7.9	27.9	24.0			42.9		
Max Allow Headway (MAH), s	3.8	5.3	3.8			5.3		
Max Q Clear (g_c+I1), s	9.9	26.2	16.2			26.4		
Green Ext Time (g_e), s	0.0	1.7	1.5			14.3		
Prob of Phs Call (p_c)	0.99	1.00	1.00			1.00		
Prob of Max Out (p_x)	1.00	0.00	0.19			0.00		

Left-Turn Movement Data			
Assigned Mvmt	1	5	3
Mvmt Sat Flow, veh/h	1616	0	3134

Through Movement Data			
Assigned Mvmt		2	8			6
Mvmt Sat Flow, veh/h		3308	0			3308

Right-Turn Movement Data			
Assigned Mvmt		12	18			16
Mvmt Sat Flow, veh/h		1442	1442			0

Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	0	0
Lane Assignment	(Prot)							

Lanes in Grp	1	0	2	0	0	0	0	0
Grp Vol (v), veh/h	225	0	580	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1616	0	1567	0	0	0	0	0
Q Serve Time (g_s), s	7.9	0.0	14.2	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	7.9	0.0	14.2	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1567	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	34.3	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	160	0	691	0	0	0	0	0
V/C Ratio (X)	1.41	0.00	0.84	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	160	0	940	0	0	0	0	0
Upstream Filter (I)	0.09	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	36.0	0.0	29.8	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	188.0	0.0	5.1	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	224.1	0.0	34.9	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	3.5	0.0	6.1	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	8.3	0.0	0.5	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	11.8	0.0	6.6	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.69	0.00	0.41	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	16.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1114	0	0	0	1426	0	0
Grp Sat Flow (s), veh/h/ln	0	1612	0	0	0	1612	0	0
Q Serve Time (g_s), s	0.0	24.2	0.0	0.0	0.0	24.4	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	24.2	0.0	0.0	0.0	24.4	0.0	0.0
Lane Grp Cap (c), veh/h	0	1381	0	0	0	1985	0	0
V/C Ratio (X)	0.00	0.81	0.00	0.00	0.00	0.72	0.00	0.00
Avail Cap (c_a), veh/h	0	1381	0	0	0	1985	0	0
Upstream Filter (I)	0.00	0.80	0.00	0.00	0.00	0.09	0.00	0.00
Uniform Delay (d1), s/veh	0.0	20.0	0.0	0.0	0.0	10.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	4.2	0.0	0.0	0.0	0.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	24.1	0.0	0.0	0.0	10.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	10.7	0.0	0.0	0.0	10.7	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	11.5	0.0	0.0	0.0	10.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.09	0.00	0.00	0.00	0.15	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lane Assignment		R	R					
Lanes in Grp	0	1	1	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1442	1442	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	618	318	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	618	433	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		33.8						
HCM 2010 LOS		C						

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	286	78	599	1610	1360	582
Future Volume (veh/h)	286	78	599	1610	1360	582
Number	7	14	5	2	6	16
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00	1.00			1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1827	1827	1827	1827
Adj Flow Rate, veh/h	308	0	644	1731	1462	0
Adj No. of Lanes	2	1	2	3	3	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	4	4	4	4
Opposing Right Turn Influence	Yes		Yes			
Cap, veh/h	367	169	732	4024	2733	851
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.11	0.00	0.22	0.81	0.55	0.00
Ln Grp Delay, s/veh	70.1	0.0	57.9	4.4	21.2	0.0
Ln Grp LOS	E		E	A	C	
Approach Vol, veh/h	308			2375	1462	
Approach Delay, s/veh	70.1			18.9	21.2	
Approach LOS	E			B	C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Case No		4.0		9.0	2.0	7.0		
Phs Duration (G+Y+Rc), s		121.4		21.6	37.0	84.4		
Change Period (Y+Rc), s		6.0		6.4	6.0	6.0		
Max Green (Gmax), s		108.0		22.6	84.0	18.0		
Max Allow Headway (MAH), s		5.2		3.8	3.8	5.2		
Max Q Clear (g_c+I1), s		16.7		14.6	28.4	28.8		
Green Ext Time (g_e), s		67.6		0.7	2.6	0.0		
Prob of Phs Call (p_c)		1.00		1.00	1.00	1.00		
Prob of Max Out (p_x)		0.00		0.06	0.00	0.00		
Left-Turn Movement Data								
Assigned Mvmt				7	5	1		
Mvmt Sat Flow, veh/h				3442	3375	0		
Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		5152		0		5152		
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		0		1583		1553		
Left Lane Group Data								
Assigned Mvmt	0	0	0	7	5	1	0	0
Lane Assignment					(Prot)			

Lanes in Grp	0	0	0	2	2	0	0	0
Grp Vol (v), veh/h	0	0	0	308	644	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1721	1688	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	12.6	26.4	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	12.6	26.4	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1721	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	78.4	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	367	732	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.84	0.88	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	544	1983	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	62.7	54.2	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	7.5	3.7	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	70.1	57.9	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	6.0	12.3	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.4	0.4	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	6.4	12.7	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.50	0.76	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	3	0	0	0	3	0	0
Grp Vol (v), veh/h	0	1731	0	0	0	1462	0	0
Grp Sat Flow (s), veh/h/ln	0	1663	0	0	0	1663	0	0
Q Serve Time (g_s), s	0.0	14.7	0.0	0.0	0.0	26.8	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	14.7	0.0	0.0	0.0	26.8	0.0	0.0
Lane Grp Cap (c), veh/h	0	4024	0	0	0	2733	0	0
V/C Ratio (X)	0.00	0.43	0.00	0.00	0.00	0.53	0.00	0.00
Avail Cap (c_a), veh/h	0	4024	0	0	0	2733	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.71	0.00	0.00
Uniform Delay (d1), s/veh	0.0	4.1	0.0	0.0	0.0	20.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.0	0.0	0.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	4.4	0.0	0.0	0.0	21.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	6.6	0.0	0.0	0.0	12.3	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	6.7	0.0	0.0	0.0	12.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.21	0.00	0.00	0.00	0.20	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment				R		R		
Lanes in Grp	0	0	0	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1583	0	1553	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	169	0	851	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	250	0	851	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		23.5						
HCM 2010 LOS		C						

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	281	994	1436	241	425	2046
Future Volume (veh/h)	281	994	1436	241	425	2046
Number	3	18	2	12	1	6
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1845	1845	1845	1845
Adj Flow Rate, veh/h	293	1035	1496	0	443	2131
Adj No. of Lanes	2	2	3	1	2	3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	3	3	3	3
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	881	713	2575	802	559	3839
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.26	0.26	0.51	0.00	0.16	0.76
Ln Grp Delay, s/veh	20.9	236.6	12.6	0.0	32.0	4.0
Ln Grp LOS	C	F	B		C	A
Approach Vol, veh/h	1328		1496			2574
Approach Delay, s/veh	189.0		12.6			8.8
Approach LOS	F		B			A

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8			6		
Case No	2.0	7.0	9.0			4.0		
Phs Duration (G+Y+Rc), s	17.3	41.7	24.4			59.0		
Change Period (Y+Rc), s	6.0	6.0	6.4			6.0		
Max Green (Gmax), s	15.0	18.0	18.0			39.0		
Max Allow Headway (MAH), s	3.8	5.2	4.0			5.2		
Max Q Clear (g_c+I1), s	10.6	16.3	20.0			14.0		
Green Ext Time (g_e), s	0.7	1.7	0.0			23.8		
Prob of Phs Call (p_c)	1.00	1.00	1.00			1.00		
Prob of Max Out (p_x)	0.74	0.00	1.00			0.00		

Left-Turn Movement Data			
Assigned Mvmt	1	5	3
Mvmt Sat Flow, veh/h	3408	0	3375

Through Movement Data			
Assigned Mvmt		2	8			6
Mvmt Sat Flow, veh/h		5202	0			5202

Right-Turn Movement Data			
Assigned Mvmt		12	18			16
Mvmt Sat Flow, veh/h		1568	2733			0

Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	0	0
Lane Assignment	(Prot)							

Lanes in Grp	2	0	2	0	0	0	0	0
Grp Vol (v), veh/h	443	0	293	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1704	0	1688	0	0	0	0	0
Q Serve Time (g_s), s	8.6	0.0	4.8	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	8.6	0.0	4.8	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1688	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	35.3	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	559	0	881	0	0	0	0	0
V/C Ratio (X)	0.79	0.00	0.33	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	741	0	881	0	0	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	27.7	0.0	20.6	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	4.3	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	32.0	0.0	20.9	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	4.1	0.0	2.2	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	4.4	0.0	2.3	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.26	0.00	0.12	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	3	0	0	0	3	0	0
Grp Vol (v), veh/h	0	1496	0	0	0	2131	0	0
Grp Sat Flow (s), veh/h/ln	0	1679	0	0	0	1679	0	0
Q Serve Time (g_s), s	0.0	14.3	0.0	0.0	0.0	12.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	14.3	0.0	0.0	0.0	12.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	2575	0	0	0	3839	0	0
V/C Ratio (X)	0.00	0.58	0.00	0.00	0.00	0.56	0.00	0.00
Avail Cap (c_a), veh/h	0	2575	0	0	0	3839	0	0
Upstream Filter (I)	0.00	0.87	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	11.7	0.0	0.0	0.0	3.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.8	0.0	0.0	0.0	0.6	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	12.6	0.0	0.0	0.0	4.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	6.5	0.0	0.0	0.0	5.3	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	6.7	0.0	0.0	0.0	5.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.11	0.00	0.00	0.00	0.13	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lane Assignment		R	R					
Lanes in Grp	0	1	2	0	0	0	0	0
Grp Vol (v), veh/h	0	0	1035	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1568	1367	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	18.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	18.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	802	713	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	1.45	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	802	713	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	25.5	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	211.1	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	236.6	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	6.7	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	20.9	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	27.6	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	1.10	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	80.5	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		54.2						
HCM 2010 LOS		D						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	532	963	228	133	324	83	72	84	56	182	203	655
Future Volume (veh/h)	532	963	228	133	324	83	72	84	56	182	203	655
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1712	1712	1712	1712	1712	1712	1900	1900	1712	1712
Adj Flow Rate, veh/h	554	1003	238	139	338	0	75	88	58	190	211	682
Adj No. of Lanes	1	3	1	1	3	1	1	2	0	0	1	2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	11	11	11	11	11	11	11	11	11	11	11	11
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	433	2271	707	161	1491	464	92	536	327	0	293	439
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.27	0.49	0.49	0.10	0.32	0.00	0.06	0.28	0.28	0.00	0.17	0.17
Ln Grp Delay, s/veh	194.6	27.3	26.0	83.8	40.3	0.0	90.1	44.1	44.3	0.0	71.0	327.2
Ln Grp LOS	F	C	C	F	D		F	D	D		E	F
Approach Vol, veh/h		1795			477			221			893	
Approach Delay, s/veh		78.8			53.0			59.7			266.6	
Approach LOS		E			D			E			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	0.0	4.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	50.0	58.1	0.0	51.9	23.3	84.9	16.8	35.1
Change Period (Y+Rc), s	7.5	7.1	7.6	* 7.7	7.5	7.1	* 7.7	* 7.7
Max Green (Gmax), s	42.5	37.9	27.4	* 22	42.5	37.9	* 22	* 27
Max Allow Headway (MAH), s	3.8	5.1	0.0	4.5	3.8	5.1	3.8	4.5
Max Q Clear (g_c+I1), s	44.5	10.5	0.0	8.0	15.4	24.5	9.3	29.4
Green Ext Time (g_e), s	0.0	12.5	0.0	4.6	0.4	8.2	0.1	0.0
Prob of Phs Call (p_c)	1.00	1.00	0.00	1.00	1.00	1.00	0.96	1.00
Prob of Max Out (p_x)	1.00	0.00	0.00	0.20	0.00	0.00	0.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1630		0		1630		1630	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		4673		1943		4673		1712

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1455		1186		1455		2561

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)				(Prot)		(Prot)	

Lanes in Grp	1	0	0	0	1	0	1	0
Grp Vol (v), veh/h	554	0	0	0	139	0	75	0
Grp Sat Flow (s), veh/h/ln	1630	0	0	0	1630	0	1630	0
Q Serve Time (g_s), s	42.5	0.0	0.0	0.0	13.4	0.0	7.3	0.0
Cycle Q Clear Time (g_c), s	42.5	0.0	0.0	0.0	13.4	0.0	7.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	433	0	0	0	161	0	92	0
V/C Ratio (X)	1.28	0.00	0.00	0.00	0.86	0.00	0.81	0.00
Avail Cap (c_a), veh/h	433	0	0	0	433	0	227	0
Upstream Filter (I)	0.58	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	58.8	0.0	0.0	0.0	71.1	0.0	74.6	0.0
Incr Delay (d2), s/veh	135.9	0.0	0.0	0.0	12.7	0.0	15.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	194.6	0.0	0.0	0.0	83.8	0.0	90.1	0.0
1st-Term Q (Q1), veh/ln	19.1	0.0	0.0	0.0	6.1	0.0	3.3	0.0
2nd-Term Q (Q2), veh/ln	16.3	0.0	0.0	0.0	0.6	0.0	0.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	35.5	0.0	0.0	0.0	6.6	0.0	3.7	0.0
%ile Storage Ratio (RQ%)	1.31	0.00	0.00	0.00	0.43	0.00	0.20	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	30.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	1	0	3	0	1
Grp Vol (v), veh/h	0	338	0	73	0	1003	0	211
Grp Sat Flow (s), veh/h/ln	0	1558	0	1626	0	1558	0	1712
Q Serve Time (g_s), s	0.0	8.5	0.0	5.4	0.0	22.5	0.0	18.6
Cycle Q Clear Time (g_c), s	0.0	8.5	0.0	5.4	0.0	22.5	0.0	18.6
Lane Grp Cap (c), veh/h	0	1491	0	449	0	2271	0	293
V/C Ratio (X)	0.00	0.23	0.00	0.16	0.00	0.44	0.00	0.72
Avail Cap (c_a), veh/h	0	1491	0	449	0	2271	0	293
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.58	0.00	1.00
Uniform Delay (d1), s/veh	0.0	40.0	0.0	43.9	0.0	26.9	0.0	62.7
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.2	0.0	0.4	0.0	8.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	40.3	0.0	44.1	0.0	27.3	0.0	71.0
1st-Term Q (Q1), veh/ln	0.0	3.7	0.0	2.4	0.0	9.7	0.0	8.9

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	3.7	0.0	2.5	0.0	9.7	0.0	9.5
%ile Storage Ratio (RQ%)	0.00	0.04	0.00	0.13	0.00	0.08	0.00	0.28
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	2
Grp Vol (v), veh/h	0	0	0	73	0	238	0	682
Grp Sat Flow (s), veh/h/ln	0	1455	0	1502	0	1455	0	1280
Q Serve Time (g_s), s	0.0	0.0	0.0	6.0	0.0	16.1	0.0	27.4
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	6.0	0.0	16.1	0.0	27.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.79	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	464	0	415	0	707	0	439
V/C Ratio (X)	0.00	0.00	0.00	0.18	0.00	0.34	0.00	1.56
Avail Cap (c_a), veh/h	0	464	0	415	0	707	0	439
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.58	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	44.1	0.0	25.3	0.0	66.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.7	0.0	260.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	44.3	0.0	26.0	0.0	327.2
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	2.5	0.0	6.4	0.0	9.7
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	15.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	2.5	0.0	6.6	0.0	25.6
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.14	0.00	0.36	0.00	0.76
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.9
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	123.4
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	754	116	389	804	134	99	420	124	506	1142	149
Future Volume (veh/h)	155	754	116	389	804	134	99	420	124	506	1142	149
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1776	1776	1776	1776	1776	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	163	794	122	409	846	141	104	442	131	533	1202	157
Adj No. of Lanes	2	3	1	2	3	2	2	2	0	2	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	7	7	7	7	7	7	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	209	1293	403	213	1299	712	146	934	275	374	1283	167
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.27	0.27	0.06	0.27	0.27	0.04	0.36	0.36	0.11	0.43	0.43
Ln Grp Delay, s/veh	75.8	50.7	46.1	501.9	51.6	43.4	78.0	37.5	37.6	273.7	60.2	61.2
Ln Grp LOS	E	D	D	F	D	D	E	D	D	F	E	E
Approach Vol, veh/h		1079			1396			677			1892	
Approach Delay, s/veh		54.0			182.7			43.8			120.7	
Approach LOS		D			F			D			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	4.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	16.8	47.7	24.0	62.4	17.0	47.6	14.3	72.1
Change Period (Y+Rc), s	7.2	* 7.3	6.8	* 7.6	7.2	* 7.3	* 7.6	* 7.6
Max Green (Gmax), s	15.8	* 31	17.2	* 59	9.8	* 37	* 9.4	* 65
Max Allow Headway (MAH), s	3.8	5.1	3.8	5.3	3.8	5.1	3.8	5.3
Max Q Clear (g_c+I1), s	9.4	25.4	19.2	22.2	11.8	23.7	6.7	60.1
Green Ext Time (g_e), s	0.3	4.3	0.0	19.5	0.0	9.3	0.1	4.5
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00
Prob of Max Out (p_x)	0.09	0.00	1.00	0.41	1.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3281		3281		3281		3281	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		4848		2573		4848		3003

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		2656		756		1509		391

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	163	0	533	0	409	0	104	0
Grp Sat Flow (s), veh/h/ln	1640	0	1640	0	1640	0	1640	0
Q Serve Time (g_s), s	7.4	0.0	17.2	0.0	9.8	0.0	4.7	0.0
Cycle Q Clear Time (g_c), s	7.4	0.0	17.2	0.0	9.8	0.0	4.7	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	209	0	374	0	213	0	146	0
V/C Ratio (X)	0.78	0.00	1.43	0.00	1.92	0.00	0.71	0.00
Avail Cap (c_a), veh/h	343	0	374	0	213	0	204	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	69.6	0.0	66.9	0.0	70.6	0.0	71.2	0.0
Incr Delay (d2), s/veh	6.2	0.0	206.8	0.0	431.3	0.0	6.8	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	75.8	0.0	273.7	0.0	501.9	0.0	78.0	0.0
1st-Term Q (Q1), veh/ln	3.4	0.0	7.8	0.0	4.4	0.0	2.2	0.0
2nd-Term Q (Q2), veh/ln	0.2	0.0	10.7	0.0	12.8	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	3.5	0.0	18.5	0.0	17.2	0.0	2.3	0.0
%ile Storage Ratio (RQ%)	0.20	0.00	0.37	0.00	0.87	0.00	0.06	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	39.8	0.0	49.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.4	0.0	0.5	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	1	0	3	0	1
Grp Vol (v), veh/h	0	846	0	289	0	794	0	673
Grp Sat Flow (s), veh/h/ln	0	1616	0	1687	0	1616	0	1687
Q Serve Time (g_s), s	0.0	23.4	0.0	19.8	0.0	21.7	0.0	57.5
Cycle Q Clear Time (g_c), s	0.0	23.4	0.0	19.8	0.0	21.7	0.0	57.5
Lane Grp Cap (c), veh/h	0	1299	0	612	0	1293	0	721
V/C Ratio (X)	0.00	0.65	0.00	0.47	0.00	0.61	0.00	0.93
Avail Cap (c_a), veh/h	0	1299	0	661	0	1293	0	731
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	49.0	0.0	37.0	0.0	48.5	0.0	41.2
Incr Delay (d2), s/veh	0.0	2.5	0.0	0.6	0.0	2.2	0.0	19.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	51.6	0.0	37.5	0.0	50.7	0.0	60.2
1st-Term Q (Q1), veh/ln	0.0	10.4	0.0	9.2	0.0	9.7	0.0	26.8

2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.1	0.0	0.3	0.0	3.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	10.7	0.0	9.3	0.0	10.0	0.0	30.6
%ile Storage Ratio (RQ%)	0.00	0.06	0.00	0.25	0.00	0.09	0.00	0.61
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		T+R
Lanes in Grp	0	2	0	1	0	1	0	1
Grp Vol (v), veh/h	0	141	0	284	0	122	0	686
Grp Sat Flow (s), veh/h/ln	0	1328	0	1642	0	1509	0	1707
Q Serve Time (g_s), s	0.0	6.2	0.0	20.2	0.0	9.7	0.0	58.1
Cycle Q Clear Time (g_c), s	0.0	6.2	0.0	20.2	0.0	9.7	0.0	58.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.46	0.00	1.00	0.00	0.23
Lane Grp Cap (c), veh/h	0	712	0	596	0	403	0	729
V/C Ratio (X)	0.00	0.20	0.00	0.48	0.00	0.30	0.00	0.94
Avail Cap (c_a), veh/h	0	712	0	644	0	403	0	739
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	42.7	0.0	37.0	0.0	44.2	0.0	41.4
Incr Delay (d2), s/veh	0.0	0.6	0.0	0.6	0.0	1.9	0.0	19.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	43.4	0.0	37.6	0.0	46.1	0.0	61.2
1st-Term Q (Q1), veh/ln	0.0	2.3	0.0	9.2	0.0	4.1	0.0	27.2
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.0	0.2	0.0	4.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.3	0.0	9.3	0.0	4.3	0.0	31.2
%ile Storage Ratio (RQ%)	0.00	0.09	0.00	0.25	0.00	0.27	0.00	0.62
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	113.3
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	464	1367	0	0	1888	689	0	0	960	0	0	0
Future Volume (veh/h)	464	1367	0	0	1888	689	0	0	960	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q, veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1845	1845	0	0	1845	1845	0	0	1845			
Adj Flow Rate, veh/h	478	1409	0	0	1946	0	0	0	990			
Adj No. of Lanes	2	3	0	0	3	1	0	0	2			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97			
Percent Heavy Veh, %	3	3	0	0	3	3	0	0	3			
Opposing Right Turn Influence	Yes			No			No					
Cap, veh/h	527	4811	0	0	3807	1185	0	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Prop Arrive On Green	0.15	0.96	0.00	0.00	0.76	0.00	0.00	0.00	0.00			
Ln Grp Delay, s/veh	77.3	0.4	0.0	0.0	7.4	0.0	0.0	0.0	0.0			
Ln Grp LOS	E	A			A							

Approach Vol, veh/h		1887			1946			0				Timer:
Approach Delay, s/veh		19.8			7.4			0.0				Assigned Phs
Approach LOS		B			A							Case No
Phs Duration (G+Y+Rc), s					143.0			28.5	114.5			
Change Period (Y+Rc), s					6.4			6.4	6.4			
Max Green (Gmax), s					76.6			23.6	46.6			
Max Allow Headway (MAH), s					5.2			3.8	5.2			
Max Q Clear (g_c+I1), s					4.5			21.7	24.0			
Green Ext Time (g_e), s					59.5			0.4	21.1			
Prob of Phs Call (p_c)					1.00			1.00	1.00			
Prob of Max Out (p_x)					0.00			1.00	0.00			

Left-Turn Movement Data												
Assigned Mvmt								7	3			
Mvmt Sat Flow, veh/h								3408	0			

Through Movement Data												
Assigned Mvmt					4				8			
Mvmt Sat Flow, veh/h					5202				5202			

Right-Turn Movement Data												
Assigned Mvmt					14				18			
Mvmt Sat Flow, veh/h					0				1568			

Left Lane Group Data												
Assigned Mvmt		0	0	0	0	0	0	7	3			
Lane Assignment								(Prot)				
Lanes in Grp		0	0	0	0	0	0	2	0			
Grp Vol (v), veh/h		0	0	0	0	0	0	478	0			
Grp Sat Flow (s), veh/h/ln		0	0	0	0	0	0	1704	0			

Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	19.7	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	19.7	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	108.1
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	527	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.91	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	562	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	59.4	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	17.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	77.3	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	9.3	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	10.6	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	3	0	0	0	3
Grp Vol (v), veh/h	0	0	0	1409	0	0	0	1946
Grp Sat Flow (s), veh/h/ln	0	0	0	1679	0	0	0	1679
Q Serve Time (g_s), s	0.0	0.0	0.0	2.5	0.0	0.0	0.0	22.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	2.5	0.0	0.0	0.0	22.0
Lane Grp Cap (c), veh/h	0	0	0	4811	0	0	0	3807
V/C Ratio (X)	0.00	0.00	0.00	0.29	0.00	0.00	0.00	0.51
Avail Cap (c_a), veh/h	0	0	0	4811	0	0	0	3807
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	6.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.4	0.0	0.0	0.0	7.4
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.0	0.0	0.0	0.0	10.1
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00

%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	1.1	0.0	0.0	0.0	10.3
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.76
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	0	0	18
Lane Assignment								R
Lanes in Grp	0	0	0	0	0	0	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	1568
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	1185
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	1185
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		13.5						
HCM 2010 LOS		B						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1188	754	1109	1688	0	0	0	0	0	0	246
Future Volume (veh/h)	0	1188	754	1109	1688	0	0	0	0	0	0	246
Number	7	4	14	3	8	18				1	6	16
Initial Q, veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1845	1845	1845	1845	0				0	0	1845
Adj Flow Rate, veh/h	0	1225	0	1143	1740	0				0	0	254
Adj No. of Lanes	0	3	1	2	3	0				0	0	2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97				0.97	0.97	0.97
Percent Heavy Veh, %	0	3	3	3	3	0				0	0	3
Opposing Right Turn Influence	No			Yes						No		
Cap, veh/h	0	2235	696	1224	4540	0				0	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Prop Arrive On Green	0.00	0.44	0.00	0.36	0.90	0.00				0.00	0.00	0.00
Ln Grp Delay, s/veh	0.0	14.3	0.0	32.8	0.7	0.0				0.0	0.0	0.0
Ln Grp LOS		B		C	A							
Approach Vol, veh/h		1225			2883						0	
Approach Delay, s/veh		14.3			13.4						0.0	
Approach LOS		B			B							

Timer:	1	2	3	4	5	6	7	8
Assigned Phs			3	4				8
Case No			2.0	7.0				4.0
Phs Duration (G+Y+Rc), s			29.8	35.2				65.0
Change Period (Y+Rc), s			6.4	6.4				6.4
Max Green (Gmax), s			23.6	18.0				48.0
Max Allow Headway (MAH), s			3.8	5.2				5.2
Max Q Clear (g_c+I1), s			23.0	13.6				5.4
Green Ext Time (g_e), s			0.3	4.2				34.8
Prob of Phs Call (p_c)			1.00	1.00				1.00
Prob of Max Out (p_x)			1.00	0.00				0.00

Left-Turn Movement Data		
Assigned Mvmt	3	7
Mvmt Sat Flow, veh/h	3408	0

Through Movement Data		
Assigned Mvmt	4	8
Mvmt Sat Flow, veh/h	5202	5202

Right-Turn Movement Data		
Assigned Mvmt	14	18
Mvmt Sat Flow, veh/h	1568	0

Left Lane Group Data								
Assigned Mvmt	0	0	3	7	0	0	0	0
Lane Assignment			(Prot)					

Lanes in Grp	0	0	2	0	0	0	0	0
Grp Vol (v), veh/h	0	0	1143	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1704	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	21.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	21.0	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	28.8	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	1224	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.93	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	1237	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	20.1	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	12.7	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	32.8	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	9.8	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	2.2	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	12.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.42	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	3	0	0	0	3
Grp Vol (v), veh/h	0	0	0	1225	0	0	0	1740
Grp Sat Flow (s), veh/h/ln	0	0	0	1679	0	0	0	1679
Q Serve Time (g_s), s	0.0	0.0	0.0	11.6	0.0	0.0	0.0	3.4
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	11.6	0.0	0.0	0.0	3.4
Lane Grp Cap (c), veh/h	0	0	0	2235	0	0	0	4540
V/C Ratio (X)	0.00	0.00	0.00	0.55	0.00	0.00	0.00	0.38
Avail Cap (c_a), veh/h	0	0	0	2235	0	0	0	4540
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	13.3	0.0	0.0	0.0	0.5
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	14.3	0.0	0.0	0.0	0.7
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	5.3	0.0	0.0	0.0	1.5

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	5.5	0.0	0.0	0.0	1.6
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.10
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	0	0	18
Lane Assignment				R				
Lanes in Grp	0	0	0	1	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1568	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	696	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	696	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		13.7						
HCM 2010 LOS		B						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	740	2597	0	0	2182	615	0	0	371	0	0	276
Future Volume (veh/h)	740	2597	0	0	2182	615	0	0	371	0	0	276
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	0	0	1863	0	0	1863
Adj Flow Rate, veh/h	813	2854	0	0	2398	676	0	0	408	0	0	303
Adj No. of Lanes	2	3	0	0	3	2	0	0	3	0	0	3
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	0	0	2	2	0	0	2	0	0	2
Opposing Right Turn Influence	Yes			No			No			No		
Cap, veh/h	817	4795	0	0	3296	1806	0	0	0	0	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.24	0.94	0.00	0.00	0.65	0.65	0.00	0.00	0.00	0.00	0.00	0.00
Ln Grp Delay, s/veh	58.6	0.6	0.0	0.0	14.6	9.7	0.0	0.0	0.0	0.0	0.0	0.0
Ln Grp LOS	E	A			B	A						
Approach Vol, veh/h		3667			3074			0			0	
Approach Delay, s/veh		13.4			13.5			0.0			0.0	
Approach LOS		B			B							

Timer:	1	2	3	4	5	6	7	8
Assigned Phs				4			7	8
Case No				4.0			2.0	7.0
Phs Duration (G+Y+Rc), s				112.0			33.0	79.0
Change Period (Y+Rc), s				6.4			6.4	6.4
Max Green (Gmax), s				81.6			26.6	48.6
Max Allow Headway (MAH), s				5.1			3.8	5.1
Max Q Clear (g_c+I1), s				10.2			28.4	37.2
Green Ext Time (g_e), s				71.0			0.0	11.4
Prob of Phs Call (p_c)				1.00			1.00	1.00
Prob of Max Out (p_x)				0.00			1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt							7	3
Mvmt Sat Flow, veh/h							3442	0

Through Movement Data								
Assigned Mvmt				4				8
Mvmt Sat Flow, veh/h				5253				5253

Right-Turn Movement Data								
Assigned Mvmt				14				18
Mvmt Sat Flow, veh/h				0				2787

Left Lane Group Data								
Assigned Mvmt	0	0	0	0	0	0	7	3
Lane Assignment							(Prot)	

Lanes in Grp	0	0	0	0	0	0	2	0
Grp Vol (v), veh/h	0	0	0	0	0	0	813	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	1721	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	26.4	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	26.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	72.6
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	817	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.99	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	817	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	42.6	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	16.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	58.6	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	12.5	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	14.3	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.69	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	3	0	0	0	3
Grp Vol (v), veh/h	0	0	0	2854	0	0	0	2398
Grp Sat Flow (s), veh/h/ln	0	0	0	1695	0	0	0	1695
Q Serve Time (g_s), s	0.0	0.0	0.0	8.2	0.0	0.0	0.0	35.2
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	8.2	0.0	0.0	0.0	35.2
Lane Grp Cap (c), veh/h	0	0	0	4795	0	0	0	3296
V/C Ratio (X)	0.00	0.00	0.00	0.60	0.00	0.00	0.00	0.73
Avail Cap (c_a), veh/h	0	0	0	4795	0	0	0	3296
Upstream Filter (I)	0.00	0.00	0.00	0.30	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.4	0.0	0.0	0.0	13.1
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	1.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.6	0.0	0.0	0.0	14.6
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.4	0.0	0.0	0.0	16.2

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	3.5	0.0	0.0	0.0	16.6
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.27
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	0	0	18
Lane Assignment								R
Lanes in Grp	0	0	0	0	0	0	0	2
Grp Vol (v), veh/h	0	0	0	0	0	0	0	676
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	1393
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.6
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	1806
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	1806
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.1
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.7
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.1
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.3
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.54
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		13.5						
HCM 2010 LOS		B						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2482	539	922	1492	0	0	0	757	0	0	196
Future Volume (veh/h)	0	2482	539	922	1492	0	0	0	757	0	0	196
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	0	0	0	1863	0	0	1863
Adj Flow Rate, veh/h	0	2559	556	951	1538	0	0	0	780	0	0	202
Adj No. of Lanes	0	3	2	2	3	0	0	0	3	0	0	3
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	2	2	2	2	0	0	0	2	0	0	2
Opposing Right Turn Influence	No			Yes			No			No		
Cap, veh/h	0	3320	1819	942	4898	0	0	0	0	0	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.00	0.65	0.65	0.27	0.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ln Grp Delay, s/veh	0.0	22.9	13.5	76.6	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ln Grp LOS		C	B	F	A							
Approach Vol, veh/h		3115			2489			0			0	
Approach Delay, s/veh		21.2			29.4			0.0			0.0	
Approach LOS		C			C							

Timer:	1	2	3	4	5	6	7	8
Assigned Phs			3	4				8
Case No			2.0	7.0				4.0
Phs Duration (G+Y+Rc), s			54.0	120.0				174.0
Change Period (Y+Rc), s			6.4	6.4				6.4
Max Green (Gmax), s			47.6	93.6				147.6
Max Allow Headway (MAH), s			3.8	5.1				5.1
Max Q Clear (g_c+I1), s			49.6	63.2				4.8
Green Ext Time (g_e), s			0.0	29.9				133.0
Prob of Phs Call (p_c)			1.00	1.00				1.00
Prob of Max Out (p_x)			1.00	0.00				0.00

Left-Turn Movement Data								
Assigned Mvmt			3	7				
Mvmt Sat Flow, veh/h			3442	0				

Through Movement Data								
Assigned Mvmt				4				8
Mvmt Sat Flow, veh/h				5253				5253

Right-Turn Movement Data								
Assigned Mvmt				14				18
Mvmt Sat Flow, veh/h				2787				0

Left Lane Group Data								
Assigned Mvmt	0	0	3	7	0	0	0	0
Lane Assignment			(Prot)					

Lanes in Grp	0	0	2	0	0	0	0	0
Grp Vol (v), veh/h	0	0	951	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1721	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	47.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	47.6	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	113.6	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	942	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	1.01	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	942	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	63.2	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	13.4	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	76.6	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	22.6	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	24.4	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	1.05	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	2.4	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	3	0	0	0	3
Grp Vol (v), veh/h	0	0	0	2559	0	0	0	1538
Grp Sat Flow (s), veh/h/ln	0	0	0	1695	0	0	0	1695
Q Serve Time (g_s), s	0.0	0.0	0.0	61.2	0.0	0.0	0.0	2.8
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	61.2	0.0	0.0	0.0	2.8
Lane Grp Cap (c), veh/h	0	0	0	3320	0	0	0	4898
V/C Ratio (X)	0.00	0.00	0.00	0.77	0.00	0.00	0.00	0.31
Avail Cap (c_a), veh/h	0	0	0	3320	0	0	0	4898
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.14
Uniform Delay (d1), s/veh	0.0	0.0	0.0	21.1	0.0	0.0	0.0	0.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	22.9	0.0	0.0	0.0	0.2
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	28.4	0.0	0.0	0.0	1.1

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	29.0	0.0	0.0	0.0	1.1
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.48	0.00	0.00	0.00	0.02
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	0	0	18
Lane Assignment				R				
Lanes in Grp	0	0	0	2	0	0	0	0
Grp Vol (v), veh/h	0	0	0	556	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1393	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	15.1	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	15.1	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	1819	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.31	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	1819	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	13.1	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	13.5	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	5.7	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	5.9	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		24.8						
HCM 2010 LOS		C						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	257	196	285	285	237	95	565	264	153	1084	9
Future Volume (veh/h)	20	257	196	285	285	237	95	565	264	153	1084	9
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	23	292	223	324	324	269	108	642	300	174	1232	10
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	30	393	292	72	421	342	90	1093	511	90	1678	14
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.02	0.20	0.20	0.04	0.23	0.23	0.05	0.49	0.49	0.05	0.49	0.49
Ln Grp Delay, s/veh	72.9	38.0	40.1	1637.6	39.4	41.7	201.0	18.6	18.8	502.8	23.1	22.8
Ln Grp LOS	E	D	D	F	D	D	F	B	B	F	C	C
Approach Vol, veh/h		538			917			1050			1416	
Approach Delay, s/veh		40.5			604.8			37.5			81.9	
Approach LOS		D			F			D			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	4.0
Phs Duration (G+Y+Rc), s	9.0	46.1	8.0	21.9	9.0	46.1	6.0	24.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green (Gmax), s	4.5	39.5	3.5	19.5	4.5	39.5	3.5	19.5
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.4	3.8	5.3	3.8	5.4
Max Q Clear (g_c+I1), s	6.5	19.5	5.5	14.5	6.5	26.3	3.1	16.4
Green Ext Time (g_e), s	0.0	14.6	0.0	2.9	0.0	10.4	0.0	1.9
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.92	1.00	0.42	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1691		1757		1691		1757	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2234		1920		3430		1839

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1044		1426		28		1495

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	174	0	324	0	108	0	23	0
Grp Sat Flow (s), veh/h/ln	1691	0	1757	0	1691	0	1757	0
Q Serve Time (g_s), s	4.5	0.0	3.5	0.0	4.5	0.0	1.1	0.0
Cycle Q Clear Time (g_c), s	4.5	0.0	3.5	0.0	4.5	0.0	1.1	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	90	0	72	0	90	0	30	0
V/C Ratio (X)	1.94	0.00	4.48	0.00	1.21	0.00	0.76	0.00
Avail Cap (c_a), veh/h	90	0	72	0	90	0	72	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	40.3	0.0	40.8	0.0	40.3	0.0	41.6	0.0
Incr Delay (d2), s/veh	462.6	0.0	1596.9	0.0	160.7	0.0	31.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	502.8	0.0	1637.6	0.0	201.0	0.0	72.9	0.0
1st-Term Q (Q1), veh/ln	2.1	0.0	1.7	0.0	2.1	0.0	0.5	0.0
2nd-Term Q (Q2), veh/ln	11.5	0.0	32.1	0.0	4.0	0.0	0.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	13.6	0.0	33.8	0.0	6.1	0.0	0.8	0.0
%ile Storage Ratio (RQ%)	1.10	0.00	3.68	0.00	0.97	0.00	0.16	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	21.1	0.0	62.9	0.0	4.6	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.5	0.0	1.1	0.0	0.3	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	485	0	266	0	606	0	308
Grp Sat Flow (s), veh/h/ln	0	1687	0	1752	0	1687	0	1752
Q Serve Time (g_s), s	0.0	17.5	0.0	12.1	0.0	24.3	0.0	14.0
Cycle Q Clear Time (g_c), s	0.0	17.5	0.0	12.1	0.0	24.3	0.0	14.0
Lane Grp Cap (c), veh/h	0	825	0	359	0	825	0	401
V/C Ratio (X)	0.00	0.59	0.00	0.74	0.00	0.73	0.00	0.77
Avail Cap (c_a), veh/h	0	825	0	402	0	825	0	402
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	15.6	0.0	31.7	0.0	17.3	0.0	30.7
Incr Delay (d2), s/veh	0.0	3.1	0.0	6.3	0.0	5.7	0.0	8.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	18.6	0.0	38.0	0.0	23.1	0.0	39.4
1st-Term Q (Q1), veh/ln	0.0	8.1	0.0	5.8	0.0	11.3	0.0	6.8

2nd-Term Q (Q2), veh/ln	0.0	0.7	0.0	0.6	0.0	1.3	0.0	1.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	8.8	0.0	6.5	0.0	12.6	0.0	7.7
%ile Storage Ratio (RQ%)	0.00	0.69	0.00	0.15	0.00	0.97	0.00	0.16
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	457	0	249	0	636	0	285
Grp Sat Flow (s), veh/h/ln	0	1591	0	1593	0	1771	0	1581
Q Serve Time (g_s), s	0.0	17.5	0.0	12.5	0.0	24.3	0.0	14.4
Cycle Q Clear Time (g_c), s	0.0	17.5	0.0	12.5	0.0	24.3	0.0	14.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.66	0.00	0.89	0.00	0.02	0.00	0.95
Lane Grp Cap (c), veh/h	0	779	0	326	0	866	0	362
V/C Ratio (X)	0.00	0.59	0.00	0.76	0.00	0.73	0.00	0.79
Avail Cap (c_a), veh/h	0	779	0	365	0	866	0	363
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	15.6	0.0	31.8	0.0	17.3	0.0	30.8
Incr Delay (d2), s/veh	0.0	3.2	0.0	8.3	0.0	5.5	0.0	10.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	18.8	0.0	40.1	0.0	22.8	0.0	41.7
1st-Term Q (Q1), veh/ln	0.0	7.6	0.0	5.5	0.0	11.8	0.0	6.2
2nd-Term Q (Q2), veh/ln	0.0	0.7	0.0	0.7	0.0	1.3	0.0	1.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	8.3	0.0	6.2	0.0	13.2	0.0	7.3
%ile Storage Ratio (RQ%)	0.00	0.66	0.00	0.14	0.00	1.01	0.00	0.15
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		186.6						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	169	272	330	61	186	68	408	289	100	434	7
Future Volume (veh/h)	36	169	272	330	61	186	68	408	289	100	434	7
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1900	1712	1712	1712	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	38	178	286	347	64	196	72	429	304	105	457	7
Adj No. of Lanes	1	1	0	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	11	11	11	11	11	11	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	55	153	245	101	489	416	74	700	493	74	1257	19
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.26	0.26	0.06	0.29	0.29	0.04	0.37	0.37	0.04	0.37	0.37
Ln Grp Delay, s/veh	58.3	0.0	133.2	1163.8	24.5	27.9	141.5	28.1	28.6	298.4	22.8	22.7
Ln Grp LOS	E		F	F	C	C	F	C	C	F	C	C
Approach Vol, veh/h		502			607			805			569	
Approach Delay, s/veh		127.5			676.9			38.5			73.6	
Approach LOS		F			F			D			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	10.0	40.0	12.0	30.0	10.0	40.0	9.4	32.6
Change Period (Y+Rc), s	6.0	6.0	* 6.3	* 6.3	6.0	6.0	* 6.3	* 6.3
Max Green (Gmax), s	4.0	34.0	* 5.7	* 24	4.0	34.0	* 5.7	* 24
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.1	3.8	5.3	3.8	5.1
Max Q Clear (g_c+I1), s	6.0	19.1	7.7	25.7	5.9	11.0	4.1	12.2
Green Ext Time (g_e), s	0.0	6.7	0.0	0.0	0.0	8.3	0.0	3.3
Prob of Phs Call (p_c)	0.93	1.00	1.00	1.00	0.84	1.00	0.62	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.31

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1691		1630		1691		1630	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1895		592		3401		1712

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1333		952		52		1455

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	105	0	347	0	72	0	38	0
Grp Sat Flow (s), veh/h/ln	1691	0	1630	0	1691	0	1630	0
Q Serve Time (g_s), s	4.0	0.0	5.7	0.0	3.9	0.0	2.1	0.0
Cycle Q Clear Time (g_c), s	4.0	0.0	5.7	0.0	3.9	0.0	2.1	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	74	0	101	0	74	0	55	0
V/C Ratio (X)	1.43	0.00	3.44	0.00	0.98	0.00	0.69	0.00
Avail Cap (c_a), veh/h	74	0	101	0	74	0	101	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	44.0	0.0	43.2	0.0	44.0	0.0	44.0	0.0
Incr Delay (d2), s/veh	254.4	0.0	1120.6	0.0	97.6	0.0	14.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	298.4	0.0	1163.8	0.0	141.5	0.0	58.3	0.0
1st-Term Q (Q1), veh/ln	1.9	0.0	2.6	0.0	1.8	0.0	0.9	0.0
2nd-Term Q (Q2), veh/ln	5.2	0.0	31.4	0.0	2.0	0.0	0.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	7.1	0.0	34.0	0.0	3.8	0.0	1.2	0.0
%ile Storage Ratio (RQ%)	0.82	0.00	6.60	0.00	0.31	0.00	0.21	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	7.9	0.0	61.5	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.4	0.0	0.9	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	382	0	0	0	226	0	64
Grp Sat Flow (s), veh/h/ln	0	1687	0	0	0	1687	0	1712
Q Serve Time (g_s), s	0.0	17.0	0.0	0.0	0.0	9.0	0.0	2.6
Cycle Q Clear Time (g_c), s	0.0	17.0	0.0	0.0	0.0	9.0	0.0	2.6
Lane Grp Cap (c), veh/h	0	623	0	0	0	623	0	489
V/C Ratio (X)	0.00	0.61	0.00	0.00	0.00	0.36	0.00	0.13
Avail Cap (c_a), veh/h	0	623	0	0	0	623	0	489
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	23.6	0.0	0.0	0.0	21.1	0.0	24.4
Incr Delay (d2), s/veh	0.0	4.4	0.0	0.0	0.0	1.6	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	28.1	0.0	0.0	0.0	22.8	0.0	24.5
1st-Term Q (Q1), veh/ln	0.0	7.8	0.0	0.0	0.0	4.2	0.0	1.2

2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	0.0	0.0	0.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	8.6	0.0	0.0	0.0	4.4	0.0	1.2
%ile Storage Ratio (RQ%)	0.00	0.28	0.00	0.00	0.00	0.13	0.00	0.04
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	351	0	464	0	238	0	196
Grp Sat Flow (s), veh/h/ln	0	1540	0	1544	0	1767	0	1455
Q Serve Time (g_s), s	0.0	17.1	0.0	23.7	0.0	9.0	0.0	10.2
Cycle Q Clear Time (g_c), s	0.0	17.1	0.0	23.7	0.0	9.0	0.0	10.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.87	0.00	0.62	0.00	0.03	0.00	1.00
Lane Grp Cap (c), veh/h	0	569	0	398	0	653	0	416
V/C Ratio (X)	0.00	0.62	0.00	1.17	0.00	0.36	0.00	0.47
Avail Cap (c_a), veh/h	0	569	0	398	0	653	0	416
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	23.7	0.0	34.2	0.0	21.1	0.0	27.1
Incr Delay (d2), s/veh	0.0	5.0	0.0	99.0	0.0	1.6	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	28.6	0.0	133.2	0.0	22.7	0.0	27.9
1st-Term Q (Q1), veh/ln	0.0	7.2	0.0	10.1	0.0	4.4	0.0	4.1
2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	10.9	0.0	0.3	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	8.0	0.0	21.0	0.0	4.6	0.0	4.2
%ile Storage Ratio (RQ%)	0.00	0.26	0.00	0.51	0.00	0.14	0.00	0.74
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	16.6	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	220.6
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	111	231	45	194	150	139	70	616	136	257	943	43
Future Volume (veh/h)	111	231	45	194	150	139	70	616	136	257	943	43
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	113	236	46	198	153	142	71	629	139	262	962	44
Adj No. of Lanes	1	1	0	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	61	294	57	61	362	308	39	1283	283	39	1533	70
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.20	0.20	0.03	0.20	0.20	0.02	0.47	0.47	0.02	0.47	0.47
Ln Grp Delay, s/veh	477.2	0.0	39.8	1086.2	31.1	31.6	487.8	18.0	18.1	2630.0	20.2	20.1
Ln Grp LOS	F		D	F	C	C	F	B	B	F	C	C
Approach Vol, veh/h		395			493			839			1268	
Approach Delay, s/veh		164.9			455.0			57.8			559.4	
Approach LOS		F			F			E			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	8.0	46.1	9.0	22.9	8.0	46.1	9.0	22.9
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green (Gmax), s	2.0	34.0	3.0	23.0	2.0	34.0	3.0	23.0
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.0	3.8	5.3	3.8	5.0
Max Q Clear (g_c+I1), s	4.0	15.6	5.0	14.9	4.0	21.0	5.0	8.9
Green Ext Time (g_e), s	0.0	11.2	0.0	2.0	0.0	8.8	0.0	2.7
Prob of Phs Call (p_c)	1.00	1.00	0.99	1.00	0.82	1.00	0.93	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.46	1.00	0.00	1.00	0.10

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1691		1757		1691		1757	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2749		1501		3286		1845

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		607		292		150		1568

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	262	0	198	0	71	0	113	0
Grp Sat Flow (s), veh/h/ln	1691	0	1757	0	1691	0	1757	0
Q Serve Time (g_s), s	2.0	0.0	3.0	0.0	2.0	0.0	3.0	0.0
Cycle Q Clear Time (g_c), s	2.0	0.0	3.0	0.0	2.0	0.0	3.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	39	0	61	0	39	0	61	0
V/C Ratio (X)	6.66	0.00	3.23	0.00	1.81	0.00	1.84	0.00
Avail Cap (c_a), veh/h	39	0	61	0	39	0	61	0
Upstream Filter (I)	0.76	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	42.0	0.0	41.5	0.0	42.0	0.0	41.5	0.0
Incr Delay (d2), s/veh	2588.0	0.0	1044.7	0.0	445.8	0.0	435.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	2630.0	0.0	1086.2	0.0	487.8	0.0	477.2	0.0
1st-Term Q (Q1), veh/ln	0.9	0.0	1.4	0.0	0.9	0.0	1.4	0.0
2nd-Term Q (Q2), veh/ln	28.3	0.0	17.8	0.0	4.9	0.0	7.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	29.2	0.0	19.2	0.0	5.8	0.0	8.9	0.0
%ile Storage Ratio (RQ%)	3.08	0.00	3.65	0.00	0.71	0.00	1.38	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	55.7	0.0	34.2	0.0	7.9	0.0	12.9	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	1.7	0.0	0.8	0.0	0.5	0.0	0.5	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	386	0	0	0	494	0	153
Grp Sat Flow (s), veh/h/ln	0	1687	0	0	0	1687	0	1845
Q Serve Time (g_s), s	0.0	13.6	0.0	0.0	0.0	19.0	0.0	6.3
Cycle Q Clear Time (g_c), s	0.0	13.6	0.0	0.0	0.0	19.0	0.0	6.3
Lane Grp Cap (c), veh/h	0	787	0	0	0	787	0	362
V/C Ratio (X)	0.00	0.49	0.00	0.00	0.00	0.63	0.00	0.42
Avail Cap (c_a), veh/h	0	787	0	0	0	787	0	493
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.76	0.00	1.00
Uniform Delay (d1), s/veh	0.0	15.9	0.0	0.0	0.0	17.3	0.0	30.3
Incr Delay (d2), s/veh	0.0	2.2	0.0	0.0	0.0	2.9	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	18.0	0.0	0.0	0.0	20.2	0.0	31.1
1st-Term Q (Q1), veh/ln	0.0	6.3	0.0	0.0	0.0	8.8	0.0	3.2

2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.0	0.0	0.6	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	6.8	0.0	0.0	0.0	9.4	0.0	3.3
%ile Storage Ratio (RQ%)	0.00	0.34	0.00	0.00	0.00	0.20	0.00	0.09
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	382	0	282	0	512	0	142
Grp Sat Flow (s), veh/h/ln	0	1669	0	1793	0	1749	0	1568
Q Serve Time (g_s), s	0.0	13.6	0.0	12.9	0.0	19.0	0.0	6.9
Cycle Q Clear Time (g_c), s	0.0	13.6	0.0	12.9	0.0	19.0	0.0	6.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.36	0.00	0.16	0.00	0.09	0.00	1.00
Lane Grp Cap (c), veh/h	0	779	0	352	0	816	0	308
V/C Ratio (X)	0.00	0.49	0.00	0.80	0.00	0.63	0.00	0.46
Avail Cap (c_a), veh/h	0	779	0	480	0	816	0	419
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.76	0.00	1.00
Uniform Delay (d1), s/veh	0.0	15.9	0.0	33.0	0.0	17.3	0.0	30.5
Incr Delay (d2), s/veh	0.0	2.2	0.0	6.8	0.0	2.8	0.0	1.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	18.1	0.0	39.8	0.0	20.1	0.0	31.6
1st-Term Q (Q1), veh/ln	0.0	6.3	0.0	6.3	0.0	9.1	0.0	3.0
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.7	0.0	0.6	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	6.7	0.0	7.0	0.0	9.7	0.0	3.1
%ile Storage Ratio (RQ%)	0.00	0.34	0.00	0.20	0.00	0.20	0.00	0.09
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		349.7						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	244	38	63	192	155	61	766	46	211	1089	47
Future Volume (veh/h)	99	244	38	63	192	155	61	766	46	211	1089	47
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	106	262	41	68	206	167	66	824	49	227	1171	51
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	227	451	383	205	451	383	84	1602	95	193	1843	80
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.05	0.49	0.49	0.11	0.56	0.56
Ln Grp Delay, s/veh	38.8	31.8	27.1	39.1	30.3	30.2	53.7	17.3	17.2	148.1	15.9	15.8
Ln Grp LOS	D	C	C	D	C	C	D	B	B	F	B	B
Approach Vol, veh/h		409			441			939			1449	
Approach Delay, s/veh		33.1			31.6			19.8			36.5	
Approach LOS		C			C			B			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Case No	2.0	4.0		5.0	2.0	4.0		5.0
Phs Duration (G+Y+Rc), s	15.0	50.0		27.0	9.1	56.0		27.0
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green (Gmax), s	10.5	41.5		26.5	10.5	41.5		26.5
Max Allow Headway (MAH), s	3.8	5.3		4.9	3.8	5.3		4.9
Max Q Clear (g_c+I1), s	12.5	17.9		20.1	5.6	24.4		19.1
Green Ext Time (g_e), s	0.0	15.7		2.4	0.0	12.4		2.7
Prob of Phs Call (p_c)	1.00	1.00		1.00	0.81	1.00		1.00
Prob of Max Out (p_x)	1.00	0.00		0.76	0.25	0.00		0.64

Left-Turn Movement Data								
Assigned Mvmt	1			7	5			3
Mvmt Sat Flow, veh/h	1691			996	1691			1062

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3236		1845		3294		1845

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		192		1568		143		1568

Left Lane Group Data								
Assigned Mvmt	1	0	0	7	5	0	0	3
Lane Assignment	(Prot)				(Prot)			

Lanes in Grp	1	0	0	1	1	0	0	1
Grp Vol (v), veh/h	227	0	0	106	66	0	0	68
Grp Sat Flow (s), veh/h/ln	1691	0	0	996	1691	0	0	1062
Q Serve Time (g_s), s	10.5	0.0	0.0	9.3	3.6	0.0	0.0	5.5
Cycle Q Clear Time (g_c), s	10.5	0.0	0.0	18.1	3.6	0.0	0.0	17.1
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	996	0	0	0	1062
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	22.5	0.0	0.0	0.0	22.5
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	13.7	0.0	0.0	0.0	11.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	9.3	0.0	0.0	0.0	5.5
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	193	0	0	227	84	0	0	205
V/C Ratio (X)	1.18	0.00	0.00	0.47	0.79	0.00	0.00	0.33
Avail Cap (c_a), veh/h	193	0	0	270	193	0	0	251
Upstream Filter (I)	0.61	0.00	0.00	1.00	0.67	0.00	0.00	1.00
Uniform Delay (d1), s/veh	40.8	0.0	0.0	37.3	43.2	0.0	0.0	38.1
Incr Delay (d2), s/veh	107.3	0.0	0.0	1.5	10.4	0.0	0.0	0.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	148.1	0.0	0.0	38.8	53.7	0.0	0.0	39.1
1st-Term Q (Q1), veh/ln	4.9	0.0	0.0	2.6	1.7	0.0	0.0	1.6
2nd-Term Q (Q2), veh/ln	5.8	0.0	0.0	0.1	0.2	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	10.6	0.0	0.0	2.7	1.9	0.0	0.0	1.7
%ile Storage Ratio (RQ%)	1.04	0.00	0.00	0.40	0.26	0.00	0.00	0.23
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	8.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	429	0	262	0	599	0	206
Grp Sat Flow (s), veh/h/ln	0	1687	0	1845	0	1687	0	1845
Q Serve Time (g_s), s	0.0	15.9	0.0	11.5	0.0	22.3	0.0	8.7
Cycle Q Clear Time (g_c), s	0.0	15.9	0.0	11.5	0.0	22.3	0.0	8.7
Lane Grp Cap (c), veh/h	0	835	0	451	0	944	0	451
V/C Ratio (X)	0.00	0.51	0.00	0.58	0.00	0.64	0.00	0.46
Avail Cap (c_a), veh/h	0	835	0	531	0	944	0	531
Upstream Filter (I)	0.00	0.67	0.00	1.00	0.00	0.61	0.00	1.00
Uniform Delay (d1), s/veh	0.0	15.7	0.0	30.6	0.0	13.8	0.0	29.6
Incr Delay (d2), s/veh	0.0	1.5	0.0	1.2	0.0	2.0	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	17.3	0.0	31.8	0.0	15.9	0.0	30.3
1st-Term Q (Q1), veh/ln	0.0	7.4	0.0	5.8	0.0	10.3	0.0	4.5

2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.1	0.0	0.5	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.8	0.0	6.0	0.0	10.8	0.0	4.6
%ile Storage Ratio (RQ%)	0.00	0.16	0.00	0.18	0.00	0.48	0.00	0.11
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	444	0	41	0	623	0	167
Grp Sat Flow (s), veh/h/ln	0	1742	0	1568	0	1750	0	1568
Q Serve Time (g_s), s	0.0	15.9	0.0	1.9	0.0	22.4	0.0	8.3
Cycle Q Clear Time (g_c), s	0.0	15.9	0.0	1.9	0.0	22.4	0.0	8.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.11	0.00	1.00	0.00	0.08	0.00	1.00
Lane Grp Cap (c), veh/h	0	862	0	383	0	979	0	383
V/C Ratio (X)	0.00	0.51	0.00	0.11	0.00	0.64	0.00	0.44
Avail Cap (c_a), veh/h	0	862	0	452	0	979	0	452
Upstream Filter (I)	0.00	0.67	0.00	1.00	0.00	0.61	0.00	1.00
Uniform Delay (d1), s/veh	0.0	15.7	0.0	27.0	0.0	13.9	0.0	29.4
Incr Delay (d2), s/veh	0.0	1.5	0.0	0.1	0.0	1.9	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	17.2	0.0	27.1	0.0	15.8	0.0	30.2
1st-Term Q (Q1), veh/ln	0.0	7.6	0.0	0.8	0.0	10.7	0.0	3.6
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.0	0.5	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	8.0	0.0	0.8	0.0	11.2	0.0	3.7
%ile Storage Ratio (RQ%)	0.00	0.17	0.00	0.14	0.00	0.49	0.00	0.52
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		30.6						
HCM 2010 LOS		C						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	118	41	22	75	12	484	16	1040	30	455	1280	48
Future Volume (veh/h)	118	41	22	75	12	484	16	1040	30	455	1280	48
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	123	43	23	78	12	504	17	1083	31	474	1333	50
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	97	258	138	100	13	532	154	995	28	293	1763	66
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.23	0.23	0.23	0.06	0.35	0.35	0.30	0.30	0.30	0.17	0.53	0.53
Ln Grp Delay, s/veh	229.5	0.0	30.6	61.5	0.0	56.5	32.7	97.2	96.6	319.0	18.5	18.5
Ln Grp LOS	F		C	E		E	C	F	F	F	B	B
Approach Vol, veh/h		189			594			1131			1857	
Approach Delay, s/veh		160.0			57.2			95.9			95.2	
Approach LOS		F			E			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4		6		8
Case No	2.0	6.0	2.0	6.0		4.0		4.0
Phs Duration (G+Y+Rc), s	23.0	35.1	11.6	28.3		58.1		39.9
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0		6.0		6.0
Max Green (Gmax), s	17.0	28.0	8.0	15.0		51.0		35.0
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.5		5.3		5.5
Max Q Clear (g_c+I1), s	19.0	31.1	6.3	24.3		32.9		33.3
Green Ext Time (g_e), s	0.0	0.0	0.0	0.0		15.0		0.6
Prob of Phs Call (p_c)	1.00	1.00	0.88	1.00		1.00		1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00		0.00		1.00

Left-Turn Movement Data				
Assigned Mvmt	1	5	3	7
Mvmt Sat Flow, veh/h	1691	372	1757	873

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	3350	1132	3316	37

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	96	606	124	1537

Left Lane Group Data								
Assigned Mvmt	1	5	3	7	0	0	0	0
Lane Assignment	(Prot)		(Prot)					

Lanes in Grp	1	1	1	1	0	0	0	0
Grp Vol (v), veh/h	474	17	78	123	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1691	372	1757	873	0	0	0	0
Q Serve Time (g_s), s	17.0	3.7	4.3	2.6	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	17.0	11.6	4.3	22.3	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	372	0	873	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	29.1	0.0	22.3	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	21.2	0.0	2.6	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	3.7	0.0	2.6	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	293	154	100	97	0	0	0	0
V/C Ratio (X)	1.62	0.11	0.78	1.27	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	293	154	143	97	0	0	0	0
Upstream Filter (I)	0.09	0.82	1.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	40.5	31.5	45.6	48.7	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	278.5	1.2	15.9	180.8	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	319.0	32.7	61.5	229.5	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	7.9	0.4	2.1	2.6	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	22.7	0.1	0.4	4.9	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	30.6	0.4	2.5	7.5	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	3.23	0.05	0.29	2.39	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	45.2	0.0	0.0	6.6	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.4	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	545	0	0	0	677	0	0
Grp Sat Flow (s), veh/h/ln	0	1687	0	0	0	1687	0	0
Q Serve Time (g_s), s	0.0	29.1	0.0	0.0	0.0	30.8	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	29.1	0.0	0.0	0.0	30.8	0.0	0.0
Lane Grp Cap (c), veh/h	0	501	0	0	0	897	0	0
V/C Ratio (X)	0.00	1.09	0.00	0.00	0.00	0.76	0.00	0.00
Avail Cap (c_a), veh/h	0	501	0	0	0	897	0	0
Upstream Filter (I)	0.00	0.82	0.00	0.00	0.00	0.09	0.00	0.00
Uniform Delay (d1), s/veh	0.0	34.4	0.0	0.0	0.0	18.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	62.8	0.0	0.0	0.0	0.6	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	97.2	0.0	0.0	0.0	18.5	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	13.5	0.0	0.0	0.0	14.3	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	8.7	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	22.2	0.0	0.0	0.0	14.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.97	0.00	0.00	0.00	0.74	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	11.1	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	569	0	66	0	706	0	516
Grp Sat Flow (s), veh/h/ln	0	1759	0	1738	0	1754	0	1573
Q Serve Time (g_s), s	0.0	29.1	0.0	3.0	0.0	30.9	0.0	31.3
Cycle Q Clear Time (g_c), s	0.0	29.1	0.0	3.0	0.0	30.9	0.0	31.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.05	0.00	0.35	0.00	0.07	0.00	0.98
Lane Grp Cap (c), veh/h	0	522	0	396	0	932	0	544
V/C Ratio (X)	0.00	1.09	0.00	0.17	0.00	0.76	0.00	0.95
Avail Cap (c_a), veh/h	0	522	0	396	0	932	0	562
Upstream Filter (I)	0.00	0.82	0.00	1.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	34.4	0.0	30.4	0.0	18.0	0.0	31.2
Incr Delay (d2), s/veh	0.0	62.1	0.0	0.2	0.0	0.5	0.0	25.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	96.6	0.0	30.6	0.0	18.5	0.0	56.5
1st-Term Q (Q1), veh/ln	0.0	14.1	0.0	1.4	0.0	14.9	0.0	13.6
2nd-Term Q (Q2), veh/ln	0.0	9.0	0.0	0.0	0.0	0.1	0.0	3.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	23.1	0.0	1.5	0.0	15.0	0.0	17.4
%ile Storage Ratio (RQ%)	0.00	1.01	0.00	0.19	0.00	0.77	0.00	1.86
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	11.6	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	92.7
HCM 2010 LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	254	485	228	479	631	4	191	876	2	2	1000	307
Future Volume (veh/h)	254	485	228	479	631	4	191	876	2	2	1000	307
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1759	1759	1759	1900	1776	1776	1776	1900	1776	1776
Adj Flow Rate, veh/h	262	500	235	494	651	4	197	903	0	2	1031	0
Adj No. of Lanes	2	2	1	2	2	0	1	2	1	0	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	8	8	8	8	8	8	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	346	489	219	600	765	5	165	1576	705	40	1005	459
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.11	0.15	0.15	0.18	0.22	0.22	0.10	0.47	0.00	0.30	0.30	0.00
Ln Grp Delay, s/veh	43.4	85.8	121.2	39.0	48.8	48.2	133.1	18.0	0.0	60.7	80.8	0.0
Ln Grp LOS	D	F	F	D	D	D	F	B		E	F	
Approach Vol, veh/h		997			1149			1100			1033	
Approach Delay, s/veh		83.0			44.4			38.6			70.0	
Approach LOS		F			D			D			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Case No		3.0	2.0	3.0	2.0	7.0	2.0	4.0
Phs Duration (G+Y+Rc), s		49.3	23.0	19.8	15.0	34.3	15.8	27.0
Change Period (Y+Rc), s		6.3	6.0	6.3	6.0	6.3	6.0	6.3
Max Green (Gmax), s		32.7	28.0	12.7	9.0	17.7	18.0	22.7
Max Allow Headway (MAH), s		5.3	3.8	5.1	3.8	5.3	3.8	5.1
Max Q Clear (g_c+I1), s		19.9	15.4	15.5	11.0	30.0	9.2	18.9
Green Ext Time (g_e), s		9.5	1.5	0.0	0.0	0.0	0.6	1.8
Prob of Phs Call (p_c)		1.00	1.00	1.00	0.99	1.00	1.00	1.00
Prob of Max Out (p_x)		0.00	0.01	1.00	1.00	0.00	0.03	1.00

Left-Turn Movement Data								
Assigned Mvmt			3		5	1	7	
Mvmt Sat Flow, veh/h			3250		1691	1	3250	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3374		3343		3307		3406

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1509		1495		1509		21

Left Lane Group Data								
Assigned Mvmt	0	0	3	0	5	1	7	0
Lane Assignment			(Prot)		(Prot)	L+T	(Prot)	

Lanes in Grp	0	0	2	0	1	1	2	0
Grp Vol (v), veh/h	0	0	494	0	197	554	262	0
Grp Sat Flow (s), veh/h/ln	0	0	1625	0	1691	1773	1625	0
Q Serve Time (g_s), s	0.0	0.0	13.4	0.0	9.0	4.8	7.2	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	13.4	0.0	9.0	28.0	7.2	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	627	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	28.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	4.8	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	23.2	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	23.2	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	600	0	165	578	346	0
V/C Ratio (X)	0.00	0.00	0.82	0.00	1.19	0.96	0.76	0.00
Avail Cap (c_a), veh/h	0	0	989	0	165	578	636	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.09	1.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	36.1	0.0	41.5	32.4	40.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	2.9	0.0	91.6	28.3	3.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	39.0	0.0	133.1	60.7	43.4	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	6.0	0.0	4.2	14.0	3.2	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.2	0.0	4.2	4.5	0.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	6.3	0.0	8.4	18.5	3.4	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.42	0.00	0.94	0.62	0.32	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	7.9	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	1	0	1
Grp Vol (v), veh/h	0	903	0	500	0	479	0	319
Grp Sat Flow (s), veh/h/ln	0	1687	0	1671	0	1535	0	1671
Q Serve Time (g_s), s	0.0	17.9	0.0	13.5	0.0	28.0	0.0	16.9
Cycle Q Clear Time (g_c), s	0.0	17.9	0.0	13.5	0.0	28.0	0.0	16.9
Lane Grp Cap (c), veh/h	0	1576	0	489	0	467	0	375
V/C Ratio (X)	0.00	0.57	0.00	1.02	0.00	1.03	0.00	0.85
Avail Cap (c_a), veh/h	0	1576	0	489	0	467	0	412
Upstream Filter (I)	0.00	0.09	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	17.8	0.0	39.3	0.0	32.0	0.0	34.2
Incr Delay (d2), s/veh	0.0	0.1	0.0	46.5	0.0	48.7	0.0	14.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	18.0	0.0	85.8	0.0	80.8	0.0	48.8
1st-Term Q (Q1), veh/ln	0.0	8.3	0.0	6.2	0.0	11.8	0.0	7.8

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	3.2	0.0	6.3	0.0	1.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	8.3	0.0	9.3	0.0	18.1	0.0	9.3
%ile Storage Ratio (RQ%)	0.00	0.43	0.00	0.32	0.00	0.61	0.00	0.28
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	2.7	0.0	3.2	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.3	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	235	0	0	0	336
Grp Sat Flow (s), veh/h/ln	0	1509	0	1495	0	1509	0	1756
Q Serve Time (g_s), s	0.0	0.0	0.0	13.5	0.0	0.0	0.0	16.9
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	13.5	0.0	0.0	0.0	16.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.01
Lane Grp Cap (c), veh/h	0	705	0	219	0	459	0	394
V/C Ratio (X)	0.00	0.00	0.00	1.07	0.00	0.00	0.00	0.85
Avail Cap (c_a), veh/h	0	705	0	219	0	459	0	433
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	39.3	0.0	0.0	0.0	34.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	81.9	0.0	0.0	0.0	14.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	121.2	0.0	0.0	0.0	48.2
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	5.6	0.0	0.0	0.0	8.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	5.0	0.0	0.0	0.0	1.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	10.5	0.0	0.0	0.0	9.7
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.36	0.00	0.00	0.00	0.29
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	58.1
HCM 2010 LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

APPENDIX I-D2:
Existing Intersection LOS PM Analysis

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	593	1083	574	190	605	74	293	270	185	150	181	193
Future Volume (veh/h)	593	1083	574	190	605	74	293	270	185	150	181	193
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1743	1743	1900	1743	1743	1900
Adj Flow Rate, veh/h	631	1152	611	202	644	79	312	287	197	160	193	205
Adj No. of Lanes	2	2	1	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	9	9	9	9	9	9
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	698	1615	723	193	1666	202	109	471	314	33	334	299
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.20	0.45	0.45	0.11	0.36	0.36	0.07	0.25	0.25	0.02	0.20	0.20
Ln Grp Delay, s/veh	71.6	36.8	49.1	146.1	37.6	38.6	936.1	57.8	59.3	1845.5	62.6	69.0
Ln Grp LOS	E	D	D	F	D	D	F	E	E	F	E	E
Approach Vol, veh/h		2394			925			796			558	
Approach Delay, s/veh		49.1			61.6			402.5			576.2	
Approach LOS		D			E			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	3.0	2.0	4.0	2.0	4.0
Phs Duration (G+Y+Rc), s	10.0	45.0	23.0	76.0	17.0	38.0	37.3	61.7
Change Period (Y+Rc), s	6.9	6.9	6.4	6.4	6.9	6.9	6.4	6.4
Max Green (Gmax), s	3.1	38.1	16.6	69.6	10.1	31.1	37.6	48.6
Max Allow Headway (MAH), s	3.8	5.4	3.7	4.8	3.8	5.4	3.8	4.8
Max Q Clear (g_c+I1), s	5.1	23.3	18.6	54.2	12.1	21.7	29.3	18.1
Green Ext Time (g_e), s	0.0	5.0	0.0	12.0	0.0	3.8	1.6	20.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	0.16	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1660		1792		1660		3476	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1905		3574		1656		4642

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1270		1599		1482		564

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	2	0
Grp Vol (v), veh/h	160	0	202	0	312	0	631	0
Grp Sat Flow (s), veh/h/ln	1660	0	1792	0	1660	0	1738	0
Q Serve Time (g_s), s	3.1	0.0	16.6	0.0	10.1	0.0	27.3	0.0
Cycle Q Clear Time (g_c), s	3.1	0.0	16.6	0.0	10.1	0.0	27.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	33	0	193	0	109	0	698	0
V/C Ratio (X)	4.79	0.00	1.05	0.00	2.87	0.00	0.90	0.00
Avail Cap (c_a), veh/h	33	0	193	0	109	0	849	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	75.4	0.0	68.7	0.0	72.0	0.0	60.1	0.0
Incr Delay (d2), s/veh	1770.1	0.0	77.4	0.0	864.2	0.0	11.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	1845.5	0.0	146.1	0.0	936.1	0.0	71.6	0.0
1st-Term Q (Q1), veh/ln	1.4	0.0	8.2	0.0	4.6	0.0	13.1	0.0
2nd-Term Q (Q2), veh/ln	16.4	0.0	4.2	0.0	26.1	0.0	1.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	17.9	0.0	12.4	0.0	30.8	0.0	14.3	0.0
%ile Storage Ratio (RQ%)	1.50	0.00	0.97	0.00	2.58	0.00	0.58	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	31.6	0.0	2.2	0.0	50.8	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	1.2	0.0	0.3	0.0	0.7	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	1	0	2
Grp Vol (v), veh/h	0	248	0	1152	0	193	0	473
Grp Sat Flow (s), veh/h/ln	0	1656	0	1787	0	1656	0	1712
Q Serve Time (g_s), s	0.0	20.5	0.0	40.1	0.0	16.2	0.0	15.8
Cycle Q Clear Time (g_c), s	0.0	20.5	0.0	40.1	0.0	16.2	0.0	15.8
Lane Grp Cap (c), veh/h	0	410	0	1615	0	334	0	1229
V/C Ratio (X)	0.00	0.61	0.00	0.71	0.00	0.58	0.00	0.39
Avail Cap (c_a), veh/h	0	410	0	1615	0	334	0	1229
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	51.3	0.0	34.1	0.0	55.5	0.0	36.7
Incr Delay (d2), s/veh	0.0	6.5	0.0	2.7	0.0	7.1	0.0	0.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	57.8	0.0	36.8	0.0	62.6	0.0	37.6
1st-Term Q (Q1), veh/ln	0.0	9.4	0.0	19.8	0.0	7.4	0.0	7.5

2nd-Term Q (Q2), veh/ln	0.0	0.7	0.0	0.6	0.0	0.7	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	10.1	0.0	20.4	0.0	8.1	0.0	7.7
%ile Storage Ratio (RQ%)	0.00	0.36	0.00	0.45	0.00	0.31	0.00	0.35
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	236	0	611	0	205	0	250
Grp Sat Flow (s), veh/h/ln	0	1519	0	1599	0	1482	0	1782
Q Serve Time (g_s), s	0.0	21.3	0.0	52.2	0.0	19.7	0.0	16.1
Cycle Q Clear Time (g_c), s	0.0	21.3	0.0	52.2	0.0	19.7	0.0	16.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.84	0.00	1.00	0.00	1.00	0.00	0.32
Lane Grp Cap (c), veh/h	0	376	0	723	0	299	0	640
V/C Ratio (X)	0.00	0.63	0.00	0.85	0.00	0.69	0.00	0.39
Avail Cap (c_a), veh/h	0	376	0	723	0	299	0	640
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	51.6	0.0	37.4	0.0	56.9	0.0	36.8
Incr Delay (d2), s/veh	0.0	7.7	0.0	11.7	0.0	12.1	0.0	1.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	59.3	0.0	49.1	0.0	69.0	0.0	38.6
1st-Term Q (Q1), veh/ln	0.0	8.9	0.0	23.0	0.0	8.1	0.0	7.9
2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	2.3	0.0	1.0	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	9.7	0.0	25.3	0.0	9.1	0.0	8.2
%ile Storage Ratio (RQ%)	0.00	0.35	0.00	2.66	0.00	0.35	0.00	0.38
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		174.7						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	134	1234	152	125	734	120	174	110	170	132	59	57
Future Volume (veh/h)	134	1234	152	125	734	120	174	110	170	132	59	57
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	143	1313	162	133	781	128	185	117	181	140	63	61
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	99	1579	194	99	1515	248	210	121	187	164	292	248
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.50	0.50	0.06	0.50	0.50	0.12	0.18	0.18	0.09	0.16	0.16
Ln Grp Delay, s/veh	320.0	41.9	42.4	268.9	27.8	27.8	78.2	0.0	106.7	80.5	58.1	59.1
Ln Grp LOS	F	D	D	F	C	C	E		F	F	E	E
Approach Vol, veh/h		1618			1042			483			264	
Approach Delay, s/veh		66.7			58.5			95.8			70.2	
Approach LOS		E			E			F			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	21.0	35.0	15.0	83.0	25.0	31.0	15.0	83.0
Change Period (Y+Rc), s	6.6	6.6	6.4	6.4	6.6	6.6	6.4	6.4
Max Green (Gmax), s	32.4	24.4	8.6	62.6	32.4	24.4	8.6	62.6
Max Allow Headway (MAH), s	3.8	5.2	3.7	5.0	3.8	5.2	3.7	5.0
Max Q Clear (g_c+I1), s	14.1	29.4	10.6	57.1	18.0	7.2	10.6	28.7
Green Ext Time (g_e), s	0.3	0.0	0.0	4.9	0.4	2.3	0.0	21.9
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1757		1774		1757		1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		654		3174		1845		3045

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1012		389		1568		499

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	140	0	133	0	185	0	143	0
Grp Sat Flow (s), veh/h/ln	1757	0	1774	0	1757	0	1774	0
Q Serve Time (g_s), s	12.1	0.0	8.6	0.0	16.0	0.0	8.6	0.0
Cycle Q Clear Time (g_c), s	12.1	0.0	8.6	0.0	16.0	0.0	8.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	164	0	99	0	210	0	99	0
V/C Ratio (X)	0.85	0.00	1.34	0.00	0.88	0.00	1.44	0.00
Avail Cap (c_a), veh/h	370	0	99	0	370	0	99	0
Upstream Filter (I)	1.00	0.00	0.75	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	68.8	0.0	72.7	0.0	66.8	0.0	72.7	0.0
Incr Delay (d2), s/veh	11.7	0.0	196.2	0.0	11.5	0.0	247.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	80.5	0.0	268.9	0.0	78.2	0.0	320.0	0.0
1st-Term Q (Q1), veh/ln	5.9	0.0	4.2	0.0	7.8	0.0	4.2	0.0
2nd-Term Q (Q2), veh/ln	0.5	0.0	5.4	0.0	0.7	0.0	6.8	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	6.4	0.0	9.6	0.0	8.4	0.0	11.0	0.0
%ile Storage Ratio (RQ%)	1.21	0.00	0.90	0.00	1.60	0.00	0.87	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	8.5	0.0	0.0	0.0	11.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.4	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T		T		T
Lanes in Grp	0	0	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	729	0	63	0	454
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	1845	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	54.2	0.0	4.6	0.0	26.7
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	54.2	0.0	4.6	0.0	26.7
Lane Grp Cap (c), veh/h	0	0	0	881	0	292	0	881
V/C Ratio (X)	0.00	0.00	0.00	0.83	0.00	0.22	0.00	0.52
Avail Cap (c_a), veh/h	0	0	0	881	0	292	0	881
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.75
Uniform Delay (d1), s/veh	0.0	0.0	0.0	33.0	0.0	56.5	0.0	26.1
Incr Delay (d2), s/veh	0.0	0.0	0.0	8.8	0.0	1.7	0.0	1.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	41.9	0.0	58.1	0.0	27.8
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	26.3	0.0	2.3	0.0	13.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	2.2	0.0	0.1	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	28.5	0.0	2.5	0.0	13.4
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.30	0.00	0.09	0.00	0.25
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	298	0	746	0	61	0	455
Grp Sat Flow (s), veh/h/ln	0	1666	0	1794	0	1568	0	1775
Q Serve Time (g_s), s	0.0	27.4	0.0	55.1	0.0	5.2	0.0	26.7
Cycle Q Clear Time (g_c), s	0.0	27.4	0.0	55.1	0.0	5.2	0.0	26.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.61	0.00	0.22	0.00	1.00	0.00	0.28
Lane Grp Cap (c), veh/h	0	307	0	893	0	248	0	883
V/C Ratio (X)	0.00	0.97	0.00	0.84	0.00	0.25	0.00	0.52
Avail Cap (c_a), veh/h	0	307	0	893	0	248	0	883
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.75
Uniform Delay (d1), s/veh	0.0	62.4	0.0	33.3	0.0	56.7	0.0	26.1
Incr Delay (d2), s/veh	0.0	44.3	0.0	9.1	0.0	2.3	0.0	1.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	106.7	0.0	42.4	0.0	59.1	0.0	27.8
1st-Term Q (Q1), veh/ln	0.0	12.6	0.0	27.2	0.0	2.3	0.0	13.0
2nd-Term Q (Q2), veh/ln	0.0	3.8	0.0	2.3	0.0	0.2	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	16.4	0.0	29.4	0.0	2.4	0.0	13.4
%ile Storage Ratio (RQ%)	0.00	0.54	0.00	0.31	0.00	0.09	0.00	0.25
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		68.6						
HCM 2010 LOS		E						

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	159	1359	871	262	206	38
Future Volume (veh/h)	159	1359	871	262	206	38
Number	7	4	8	18	1	16
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00			1.00	1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1676	1676	1676	1710	1660	1660
Adj Flow Rate, veh/h	164	1401	898	270	212	39
Adj No. of Lanes	1	2	2	0	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	3	3
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	140	2300	1441	432	317	283
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.09	0.72	0.60	0.60	0.20	0.20
Ln Grp Delay, s/veh	162.1	11.6	24.4	24.5	72.3	55.9
Ln Grp LOS	F	B	C	C	E	E
Approach Vol, veh/h		1565	1168		251	
Approach Delay, s/veh		27.4	24.4		69.7	
Approach LOS		C	C		E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	6			4			7	8
Case No	9.0			4.0			2.0	8.0
Phs Duration (G+Y+Rc), s	40.0			127.0			21.0	106.0
Change Period (Y+Rc), s	6.5			6.4			6.4	6.4
Max Green (Gmax), s	33.5			120.6			14.6	99.6
Max Allow Headway (MAH), s	3.8			5.0			3.7	5.0
Max Q Clear (g_c+I1), s	22.7			38.4			16.6	42.0
Green Ext Time (g_e), s	0.5			41.2			0.0	34.5
Prob of Phs Call (p_c)	1.00			1.00			1.00	1.00
Prob of Max Out (p_x)	0.00			0.00			1.00	0.00
Left-Turn Movement Data								
Assigned Mvmt	1						7	3
Mvmt Sat Flow, veh/h	1581						1597	0
Through Movement Data								
Assigned Mvmt	6			4				8
Mvmt Sat Flow, veh/h	0			3269				2500
Right-Turn Movement Data								
Assigned Mvmt	16			14				18
Mvmt Sat Flow, veh/h	1411			0				725
Left Lane Group Data								
Assigned Mvmt	1	0	0	0	0	0	7	3
Lane Assignment							(Prot)	

Lanes in Grp	1	0	0	0	0	0	1	0
Grp Vol (v), veh/h	212	0	0	0	0	0	164	0
Grp Sat Flow (s), veh/h/ln	1581	0	0	0	0	0	1597	0
Q Serve Time (g_s), s	20.7	0.0	0.0	0.0	0.0	0.0	14.6	0.0
Cycle Q Clear Time (g_c), s	20.7	0.0	0.0	0.0	0.0	0.0	14.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1581	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	99.6
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	317	0	0	0	0	0	140	0
V/C Ratio (X)	0.67	0.00	0.00	0.00	0.00	0.00	1.17	0.00
Avail Cap (c_a), veh/h	317	0	0	0	0	0	140	0
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00
Uniform Delay (d1), s/veh	61.6	0.0	0.0	0.0	0.0	0.0	76.2	0.0
Incr Delay (d2), s/veh	10.7	0.0	0.0	0.0	0.0	0.0	85.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	72.3	0.0	0.0	0.0	0.0	0.0	162.1	0.0
1st-Term Q (Q1), veh/ln	9.1	0.0	0.0	0.0	0.0	0.0	6.4	0.0
2nd-Term Q (Q2), veh/ln	0.9	0.0	0.0	0.0	0.0	0.0	3.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	10.0	0.0	0.0	0.0	0.0	0.0	9.8	0.0
%ile Storage Ratio (RQ%)	0.49	0.00	0.00	0.00	0.00	0.00	1.13	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	6.1	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	6	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	1
Grp Vol (v), veh/h	0	0	0	1401	0	0	0	591
Grp Sat Flow (s), veh/h/ln	0	0	0	1593	0	0	0	1593
Q Serve Time (g_s), s	0.0	0.0	0.0	36.4	0.0	0.0	0.0	39.8
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	36.4	0.0	0.0	0.0	39.8
Lane Grp Cap (c), veh/h	0	0	0	2300	0	0	0	950
V/C Ratio (X)	0.00	0.00	0.00	0.61	0.00	0.00	0.00	0.62
Avail Cap (c_a), veh/h	0	0	0	2300	0	0	0	950
Upstream Filter (I)	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.89
Uniform Delay (d1), s/veh	0.0	0.0	0.0	11.5	0.0	0.0	0.0	21.6
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.0	0.0	2.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	11.6	0.0	0.0	0.0	24.4
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	16.0	0.0	0.0	0.0	17.4

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	16.0	0.0	0.0	0.0	18.1
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.29	0.00	0.00	0.00	0.27
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	16	0	0	14	0	0	0	18
Lane Assignment	R							T+R
Lanes in Grp	1	0	0	0	0	0	0	1
Grp Vol (v), veh/h	39	0	0	0	0	0	0	577
Grp Sat Flow (s), veh/h/ln	1411	0	0	0	0	0	0	1549
Q Serve Time (g_s), s	3.8	0.0	0.0	0.0	0.0	0.0	0.0	40.0
Cycle Q Clear Time (g_c), s	3.8	0.0	0.0	0.0	0.0	0.0	0.0	40.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.47
Lane Grp Cap (c), veh/h	283	0	0	0	0	0	0	924
V/C Ratio (X)	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.62
Avail Cap (c_a), veh/h	283	0	0	0	0	0	0	924
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.89
Uniform Delay (d1), s/veh	54.9	0.0	0.0	0.0	0.0	0.0	0.0	21.7
Incr Delay (d2), s/veh	1.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	55.9	0.0	0.0	0.0	0.0	0.0	0.0	24.5
1st-Term Q (Q1), veh/ln	3.2	0.0	0.0	0.0	0.0	0.0	0.0	17.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	3.3	0.0	0.0	0.0	0.0	0.0	0.0	17.7
%ile Storage Ratio (RQ%)	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.27
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		29.8						
HCM 2010 LOS		C						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	1397	42	70	1051	85	63	16	65	58	6	29
Future Volume (veh/h)	34	1397	42	70	1051	85	63	16	65	58	6	29
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1845	1845	1900	1845	1845
Adj Flow Rate, veh/h	35	1426	46	71	1072	87	64	16	66	59	6	30
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.98	0.98	0.92	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	45	2480	80	77	2408	195	47	12	52	66	7	65
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.71	0.71	0.04	0.73	0.73	0.03	0.03	0.03	0.04	0.04	0.04
Ln Grp Delay, s/veh	93.3	12.4	12.4	146.1	9.5	9.4	311.0	0.0	285.0	151.9	0.0	93.9
Ln Grp LOS	F	B	B	F	A	A	F		F	F		F
Approach Vol, veh/h		1507			1230			146			95	
Approach Delay, s/veh		14.3			17.3			299.2			133.6	
Approach LOS		B			B			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	6	2	3	4			7	8
Case No	11.0	11.0	2.0	4.0			2.0	4.0
Phs Duration (G+Y+Rc), s	13.0	12.0	13.0	115.0			10.3	117.7
Change Period (Y+Rc), s	6.7	6.9	6.4	* 6.6			6.4	* 6.6
Max Green (Gmax), s	6.3	5.1	6.6	* 1.1E2			6.6	* 1.1E2
Max Allow Headway (MAH), s	4.9	4.7	3.8	5.1			3.7	5.1
Max Q Clear (g_c+I1), s	7.6	7.1	8.1	32.7			5.0	22.0
Green Ext Time (g_e), s	0.0	0.0	0.0	40.9			0.0	43.5
Prob of Phs Call (p_c)	1.00	1.00	0.95	1.00			0.77	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.00			1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1	5	3				7	
Mvmt Sat Flow, veh/h	1602	1419	1774				1774	
Through Movement Data								
Assigned Mvmt	6	2		4				8
Mvmt Sat Flow, veh/h	163	355		3500				3316
Right-Turn Movement Data								
Assigned Mvmt	16	12		14				18
Mvmt Sat Flow, veh/h	1568	1568		113				269
Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	7	0
Lane Assignment	L+T	L+T	(Prot)				(Prot)	

Lanes in Grp	1	1	1	0	0	0	1	0
Grp Vol (v), veh/h	65	80	71	0	0	0	35	0
Grp Sat Flow (s), veh/h/ln	1765	1774	1774	0	0	0	1774	0
Q Serve Time (g_s), s	5.6	5.1	6.1	0.0	0.0	0.0	3.0	0.0
Cycle Q Clear Time (g_c), s	5.6	5.1	6.1	0.0	0.0	0.0	3.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.91	0.80	1.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	73	59	77	0	0	0	45	0
V/C Ratio (X)	0.89	1.35	0.93	0.00	0.00	0.00	0.78	0.00
Avail Cap (c_a), veh/h	73	59	77	0	0	0	77	0
Upstream Filter (I)	1.00	1.00	0.89	0.00	0.00	0.00	0.75	0.00
Uniform Delay (d1), s/veh	73.0	74.0	73.0	0.0	0.0	0.0	74.1	0.0
Incr Delay (d2), s/veh	78.9	237.1	73.1	0.0	0.0	0.0	19.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	151.9	311.0	146.1	0.0	0.0	0.0	93.3	0.0
1st-Term Q (Q1), veh/ln	2.7	2.5	3.0	0.0	0.0	0.0	1.5	0.0
2nd-Term Q (Q2), veh/ln	1.6	3.9	1.6	0.0	0.0	0.0	0.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	4.3	6.4	4.6	0.0	0.0	0.0	1.7	0.0
%ile Storage Ratio (RQ%)	0.22	0.35	0.34	0.00	0.00	0.00	0.24	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	5.2	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	6	2	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	720	0	0	0	572
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	30.6	0.0	0.0	0.0	20.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	30.6	0.0	0.0	0.0	20.0
Lane Grp Cap (c), veh/h	0	0	0	1254	0	0	0	1285
V/C Ratio (X)	0.00	0.00	0.00	0.57	0.00	0.00	0.00	0.44
Avail Cap (c_a), veh/h	0	0	0	1254	0	0	0	1285
Upstream Filter (I)	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.89
Uniform Delay (d1), s/veh	0.0	0.0	0.0	11.0	0.0	0.0	0.0	8.5
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.4	0.0	0.0	0.0	1.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	12.4	0.0	0.0	0.0	9.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	14.8	0.0	0.0	0.0	9.7

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	15.3	0.0	0.0	0.0	10.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.22	0.00	0.00	0.00	0.59
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	16	12	0	14	0	0	0	18
Lane Assignment	R	R		T+R				T+R
Lanes in Grp	1	1	0	1	0	0	0	1
Grp Vol (v), veh/h	30	66	0	752	0	0	0	587
Grp Sat Flow (s), veh/h/ln	1568	1568	0	1843	0	0	0	1815
Q Serve Time (g_s), s	2.9	5.1	0.0	30.7	0.0	0.0	0.0	20.0
Cycle Q Clear Time (g_c), s	2.9	5.1	0.0	30.7	0.0	0.0	0.0	20.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	1.00	0.00	0.06	0.00	0.00	0.00	0.15
Lane Grp Cap (c), veh/h	65	52	0	1306	0	0	0	1318
V/C Ratio (X)	0.46	1.26	0.00	0.58	0.00	0.00	0.00	0.45
Avail Cap (c_a), veh/h	65	52	0	1306	0	0	0	1318
Upstream Filter (I)	1.00	1.00	0.00	0.75	0.00	0.00	0.00	0.89
Uniform Delay (d1), s/veh	71.7	73.9	0.0	11.0	0.0	0.0	0.0	8.5
Incr Delay (d2), s/veh	22.2	211.0	0.0	1.4	0.0	0.0	0.0	1.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	93.9	285.0	0.0	12.4	0.0	0.0	0.0	9.4
1st-Term Q (Q1), veh/ln	1.2	2.2	0.0	15.5	0.0	0.0	0.0	9.9
2nd-Term Q (Q2), veh/ln	0.4	3.1	0.0	0.5	0.0	0.0	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	1.6	5.3	0.0	16.0	0.0	0.0	0.0	10.3
%ile Storage Ratio (RQ%)	1.05	1.23	0.00	0.23	0.00	0.00	0.00	0.61
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	3.4	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	33.3
HCM 2010 LOS	C

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1306	200	248	960	233	250
Future Volume (veh/h)	1306	200	248	960	233	250
Number	4	14	3	8	5	12
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)		1.00	1.00		1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1845	1845
Adj Flow Rate, veh/h	1360	208	258	1000	243	260
Adj No. of Lanes	2	0	1	2	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	3	3
Opposing Right Turn Influence			Yes		Yes	
Cap, veh/h	1802	273	219	2641	310	277
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.58	0.58	0.12	0.75	0.18	0.18
Ln Grp Delay, s/veh	29.6	30.2	186.6	7.9	83.4	108.2
Ln Grp LOS	C	C	F	A	F	F
Approach Vol, veh/h	1568			1258	503	
Approach Delay, s/veh	29.9			44.5	96.2	
Approach LOS	C			D	F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Case No		9.0	2.0	8.0				4.0
Phs Duration (G+Y+Rc), s		36.0	27.0	104.0				131.0
Change Period (Y+Rc), s		6.5	6.4	6.4				6.4
Max Green (Gmax), s		29.5	20.6	97.6				124.6
Max Allow Headway (MAH), s		3.9	3.8	5.3				5.3
Max Q Clear (g_c+I1), s		29.3	22.6	57.7				18.7
Green Ext Time (g_e), s		0.0	0.0	29.3				52.3
Prob of Phs Call (p_c)		1.00	1.00	1.00				1.00
Prob of Max Out (p_x)		0.00	1.00	0.00				0.00

Left-Turn Movement Data			
Assigned Mvmt	5	3	7
Mvmt Sat Flow, veh/h	1757	1774	0

Through Movement Data			
Assigned Mvmt	2	4	8
Mvmt Sat Flow, veh/h	0	3176	3632

Right-Turn Movement Data			
Assigned Mvmt	12	14	18
Mvmt Sat Flow, veh/h	1568	467	0

Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	0	0	0
Lane Assignment			(Prot)					

Lanes in Grp	0	1	1	0	0	0	0	0
Grp Vol (v), veh/h	0	243	258	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1757	1774	0	0	0	0	0
Q Serve Time (g_s), s	0.0	22.1	20.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	22.1	20.6	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1757	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	97.6	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	310	219	0	0	0	0	0
V/C Ratio (X)	0.00	0.78	1.18	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	310	219	0	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.85	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	65.7	73.2	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	17.7	113.4	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	83.4	186.6	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	10.7	10.1	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.5	6.9	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	12.3	17.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.51	1.88	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	9.8	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	2
Grp Vol (v), veh/h	0	0	0	775	0	0	0	1000
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	54.1	0.0	0.0	0.0	16.7
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	54.1	0.0	0.0	0.0	16.7
Lane Grp Cap (c), veh/h	0	0	0	1034	0	0	0	2641
V/C Ratio (X)	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.38
Avail Cap (c_a), veh/h	0	0	0	1034	0	0	0	2641
Upstream Filter (I)	0.00	0.00	0.00	0.79	0.00	0.00	0.00	0.85
Uniform Delay (d1), s/veh	0.0	0.0	0.0	25.7	0.0	0.0	0.0	7.5
Incr Delay (d2), s/veh	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	29.6	0.0	0.0	0.0	7.9
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	26.3	0.0	0.0	0.0	8.1

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	27.4	0.0	0.0	0.0	8.2
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	1.61	0.00	0.00	0.00	0.21
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	0	0	18
Lane Assignment		R		T+R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	260	0	793	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1568	0	1780	0	0	0	0
Q Serve Time (g_s), s	0.0	27.3	0.0	55.7	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	27.3	0.0	55.7	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.26	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	277	0	1040	0	0	0	0
V/C Ratio (X)	0.00	0.94	0.00	0.76	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	277	0	1040	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.79	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	67.9	0.0	26.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	40.4	0.0	4.2	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	108.2	0.0	30.2	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	11.9	0.0	27.3	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	3.1	0.0	1.2	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	15.0	0.0	28.5	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.62	0.00	1.68	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		45.4						
HCM 2010 LOS		D						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	1382	255	84	1131	18	101	3	68	11	3	20
Future Volume (veh/h)	39	1382	255	84	1131	18	101	3	68	11	3	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1900	1900	1845	1900
Adj Flow Rate, veh/h	41	1455	268	88	1191	19	106	3	72	12	3	21
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	53	2199	398	55	2622	42	311	13	303	109	37	163
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.73	0.73	0.03	0.74	0.74	0.20	0.20	0.20	0.20	0.20	0.20
Ln Grp Delay, s/veh	109.7	12.5	12.9	408.9	9.5	9.4	59.4	0.0	55.9	53.4	0.0	0.0
Ln Grp LOS	F	B	B	F	A	A	E		E	D		
Approach Vol, veh/h		1764			1298			181			36	
Approach Delay, s/veh		15.0			36.5			57.9			53.4	
Approach LOS		B			D			E			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		6.0	2.0	4.0		8.0	2.0	4.0
Phs Duration (G+Y+Rc), s		39.0	11.4	125.0		39.0	11.2	125.2
Change Period (Y+Rc), s		* 6.8	6.4	6.4		* 6.8	6.4	6.4
Max Green (Gmax), s		* 32	5.0	104.6		* 32	5.0	104.6
Max Allow Headway (MAH), s		4.7	3.8	5.3		4.7	3.8	5.3
Max Q Clear (g_c+I1), s		13.8	7.0	43.9		8.5	5.7	23.4
Green Ext Time (g_e), s		0.9	0.0	45.4		0.9	0.0	55.8
Prob of Phs Call (p_c)		1.00	0.98	1.00		1.00	0.84	1.00
Prob of Max Out (p_x)		0.00	1.00	0.00		0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		1368	1774			397	1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		63		2995		186		3565

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1514		542		815		57

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0
Lane Assignment			(Prot)			L+T+R	(Prot)	

Lanes in Grp	0	1	1	0	0	1	1	0
Grp Vol (v), veh/h	0	106	88	0	0	36	41	0
Grp Sat Flow (s), veh/h/ln	0	1368	1774	0	0	1398	1774	0
Q Serve Time (g_s), s	0.0	5.3	5.0	0.0	0.0	0.1	3.7	0.0
Cycle Q Clear Time (g_c), s	0.0	11.8	5.0	0.0	0.0	6.5	3.7	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1368	0	0	0	1346	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	1186	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	32.2	0.0	0.0	0.0	32.2	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	25.7	0.0	0.0	0.0	25.8	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	5.3	0.0	0.0	0.0	0.1	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	2.8	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	0.00	0.33	1.00	0.00
Lane Grp Cap (c), veh/h	0	311	55	0	0	309	53	0
V/C Ratio (X)	0.00	0.34	1.60	0.00	0.00	0.12	0.78	0.00
Avail Cap (c_a), veh/h	0	311	55	0	0	309	55	0
Upstream Filter (I)	0.00	1.00	0.88	0.00	0.00	1.00	0.59	0.00
Uniform Delay (d1), s/veh	0.0	56.4	78.0	0.0	0.0	52.7	77.6	0.0
Incr Delay (d2), s/veh	0.0	3.0	330.9	0.0	0.0	0.8	32.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	59.4	408.9	0.0	0.0	53.4	109.7	0.0
1st-Term Q (Q1), veh/ln	0.0	4.1	2.4	0.0	0.0	1.3	1.8	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	5.1	0.0	0.0	0.1	0.5	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	4.4	7.5	0.0	0.0	1.4	2.3	0.0
%ile Storage Ratio (RQ%)	0.00	0.51	0.80	0.00	0.00	0.11	0.30	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	8.2	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	849	0	0	0	591
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	39.4	0.0	0.0	0.0	21.4
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	39.4	0.0	0.0	0.0	21.4
Lane Grp Cap (c), veh/h	0	0	0	1299	0	0	0	1302
V/C Ratio (X)	0.00	0.00	0.00	0.65	0.00	0.00	0.00	0.45
Avail Cap (c_a), veh/h	0	0	0	1299	0	0	0	1302
Upstream Filter (I)	0.00	0.00	0.00	0.59	0.00	0.00	0.00	0.88
Uniform Delay (d1), s/veh	0.0	0.0	0.0	10.9	0.0	0.0	0.0	8.5
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.5	0.0	0.0	0.0	1.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	12.5	0.0	0.0	0.0	9.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	19.1	0.0	0.0	0.0	10.3

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	19.7	0.0	0.0	0.0	10.7
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.63	0.00	0.00	0.00	0.15
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R				T+R
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	75	0	874	0	0	0	619
Grp Sat Flow (s), veh/h/ln	0	1577	0	1767	0	0	0	1853
Q Serve Time (g_s), s	0.0	6.4	0.0	41.9	0.0	0.0	0.0	21.4
Cycle Q Clear Time (g_c), s	0.0	6.4	0.0	41.9	0.0	0.0	0.0	21.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.96	0.00	0.31	0.00	0.58	0.00	0.03
Lane Grp Cap (c), veh/h	0	315	0	1297	0	0	0	1363
V/C Ratio (X)	0.00	0.24	0.00	0.67	0.00	0.00	0.00	0.45
Avail Cap (c_a), veh/h	0	315	0	1297	0	0	0	1363
Upstream Filter (I)	0.00	1.00	0.00	0.59	0.00	0.00	0.00	0.88
Uniform Delay (d1), s/veh	0.0	54.1	0.0	11.3	0.0	0.0	0.0	8.5
Incr Delay (d2), s/veh	0.0	1.8	0.0	1.7	0.0	0.0	0.0	1.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	55.9	0.0	12.9	0.0	0.0	0.0	9.4
1st-Term Q (Q1), veh/ln	0.0	2.8	0.0	20.2	0.0	0.0	0.0	10.8
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.6	0.0	0.0	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	3.0	0.0	20.8	0.0	0.0	0.0	11.2
%ile Storage Ratio (RQ%)	0.00	0.26	0.00	0.67	0.00	0.00	0.00	0.16
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	26.3
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	1268	216	247	1153	5	164	0	180	3	4	4
Future Volume (veh/h)	6	1268	216	247	1153	5	164	0	180	3	4	4
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1845	1900	1845	1900
Adj Flow Rate, veh/h	6	1321	225	257	1201	5	171	0	188	3	4	4
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	0	1	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	345	2079	351	290	2781	12	290	326	277	87	115	100
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.69	0.69	0.69	0.06	0.77	0.77	0.18	0.00	0.18	0.18	0.18	0.18
Ln Grp Delay, s/veh	10.1	15.9	16.2	27.7	6.7	6.7	72.8	0.0	76.9	57.2	0.0	0.0
Ln Grp LOS	B	B	B	C	A	A	E		E	E		
Approach Vol, veh/h		1552			1463			359			11	
Approach Delay, s/veh		16.0			10.4			75.0			57.2	
Approach LOS		B			B			E			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Case No		5.0	1.2	6.0		8.0		4.0
Phs Duration (G+Y+Rc), s		34.0	14.0	119.0		34.0		133.0
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5		4.5
Max Green (Gmax), s		29.5	18.5	105.5		29.5		128.5
Max Allow Headway (MAH), s		4.0	3.8	5.3		4.0		5.3
Max Q Clear (g_c+I1), s		21.1	8.9	43.2		2.9		21.2
Green Ext Time (g_e), s		0.8	0.5	42.2		1.2		57.6
Prob of Phs Call (p_c)		1.00	1.00	1.00		1.00		1.00
Prob of Max Out (p_x)		0.00	0.02	0.00		0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3	7		1		
Mvmt Sat Flow, veh/h		1388	1774	462		339		

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1845		3031		650		3615

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		511		565		15

Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	1	0	0
Lane Assignment			(Pr/Pm)			L+T+R		

Lanes in Grp	0	1	1	1	0	1	0	0
Grp Vol (v), veh/h	0	171	257	6	0	11	0	0
Grp Sat Flow (s), veh/h/ln	0	1388	1774	462	0	1554	0	0
Q Serve Time (g_s), s	0.0	18.2	6.9	0.8	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	19.1	6.9	6.0	0.0	0.9	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1388	333	462	0	1214	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	1757	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	29.5	116.5	114.5	0.0	29.5	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	28.6	73.3	109.3	0.0	29.5	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	18.2	73.3	0.8	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	5.3	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	1.00	0.00	0.27	0.00	0.00
Lane Grp Cap (c), veh/h	0	290	290	345	0	302	0	0
V/C Ratio (X)	0.00	0.59	0.89	0.02	0.00	0.04	0.00	0.00
Avail Cap (c_a), veh/h	0	290	386	345	0	302	0	0
Upstream Filter (I)	0.00	1.00	0.09	0.55	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	64.3	25.7	10.1	0.0	57.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	8.5	2.0	0.1	0.0	0.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	72.8	27.7	10.1	0.0	57.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	7.4	8.3	0.1	0.0	0.4	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.7	0.2	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	8.1	8.4	0.1	0.0	0.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.48	0.67	0.01	0.00	0.04	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T				T
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	766	0	0	0	588
Grp Sat Flow (s), veh/h/ln	0	1845	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	40.0	0.0	0.0	0.0	19.2
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	40.0	0.0	0.0	0.0	19.2
Lane Grp Cap (c), veh/h	0	326	0	1214	0	0	0	1362
V/C Ratio (X)	0.00	0.00	0.00	0.63	0.00	0.00	0.00	0.43
Avail Cap (c_a), veh/h	0	326	0	1214	0	0	0	1362
Upstream Filter (I)	0.00	0.00	0.00	0.55	0.00	0.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	0.0	0.0	14.5	0.0	0.0	0.0	6.6
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	15.9	0.0	0.0	0.0	6.7
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	19.4	0.0	0.0	0.0	9.3

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	19.8	0.0	0.0	0.0	9.3
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.28	0.00	0.00	0.00	0.24
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R				T+R
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	188	0	780	0	0	0	618
Grp Sat Flow (s), veh/h/ln	0	1568	0	1773	0	0	0	1860
Q Serve Time (g_s), s	0.0	18.7	0.0	41.2	0.0	0.0	0.0	19.2
Cycle Q Clear Time (g_c), s	0.0	18.7	0.0	41.2	0.0	0.0	0.0	19.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.29	0.00	0.36	0.00	0.01
Lane Grp Cap (c), veh/h	0	277	0	1216	0	0	0	1431
V/C Ratio (X)	0.00	0.68	0.00	0.64	0.00	0.00	0.00	0.43
Avail Cap (c_a), veh/h	0	277	0	1216	0	0	0	1431
Upstream Filter (I)	0.00	1.00	0.00	0.55	0.00	0.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	64.3	0.0	14.7	0.0	0.0	0.0	6.6
Incr Delay (d2), s/veh	0.0	12.6	0.0	1.5	0.0	0.0	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	76.9	0.0	16.2	0.0	0.0	0.0	6.7
1st-Term Q (Q1), veh/ln	0.0	8.1	0.0	19.9	0.0	0.0	0.0	9.8
2nd-Term Q (Q2), veh/ln	0.0	1.0	0.0	0.5	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	9.1	0.0	20.4	0.0	0.0	0.0	9.8
%ile Storage Ratio (RQ%)	0.00	0.74	0.00	0.29	0.00	0.00	0.00	0.26
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		20.0						
HCM 2010 LOS		B						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	1471	0	22	1452	147	0	0	27	102	0	32
Future Volume (veh/h)	50	1471	0	22	1452	147	0	0	27	102	0	32
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	0	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	51	1501	0	22	1482	150	0	0	28	104	0	33
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	1	1	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	0	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			No			Yes		
Cap, veh/h	85	1278	0	45	1101	111	0	0	470	512	0	470
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.36	0.00	0.03	0.34	0.34	0.00	0.00	0.30	0.30	0.00	0.30
Ln Grp Delay, s/veh	32.8	103.9	0.0	36.6	182.7	190.7	0.0	0.0	15.2	17.4	0.0	15.3
Ln Grp LOS	C	F		D	F	F			B	B		B
Approach Vol, veh/h		1552			1654			28			137	
Approach Delay, s/veh		101.5			184.8			15.2			16.9	
Approach LOS		F			F			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		8.0	2.0	4.0		6.0	2.0	4.0
Phs Duration (G+Y+Rc), s		24.0	7.9	28.1		24.0	9.3	26.7
Change Period (Y+Rc), s		6.0	6.4	6.4		6.0	6.4	6.4
Max Green (Gmax), s		18.0	5.0	18.6		18.0	5.0	18.6
Max Allow Headway (MAH), s		4.5	3.8	5.3		4.5	3.8	5.3
Max Q Clear (g_c+I1), s		2.8	2.7	23.7		6.3	3.7	22.3
Green Ext Time (g_e), s		0.5	0.0	0.0		0.4	0.0	0.0
Prob of Phs Call (p_c)		1.00	0.31	1.00		1.00	0.57	1.00
Prob of Max Out (p_x)		0.00	1.00	0.00		0.00	1.00	0.00

Left-Turn Movement Data							
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		0	1774			1363	1774	

Through Movement Data							
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		0		3632		0		3249

Right-Turn Movement Data							
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		0		1568		326

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0
Lane Assignment			(Prot)				(Prot)	

Lanes in Grp	0	0	1	0	0	1	1	0
Grp Vol (v), veh/h	0	0	22	0	0	104	51	0
Grp Sat Flow (s), veh/h/ln	0	0	1774	0	0	1363	1774	0
Q Serve Time (g_s), s	0.0	0.0	0.7	0.0	0.0	3.5	1.7	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.7	0.0	0.0	4.3	1.7	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	1363	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	18.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	17.2	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	3.5	0.0	0.0
Time to First Blk (g_f), s	0.0	18.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	45	0	0	512	85	0
V/C Ratio (X)	0.00	0.00	0.48	0.00	0.00	0.20	0.60	0.00
Avail Cap (c_a), veh/h	0	0	148	0	0	512	148	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	1.00	0.70	0.00
Uniform Delay (d1), s/veh	0.0	0.0	28.8	0.0	0.0	16.5	28.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	7.8	0.0	0.0	0.9	4.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	36.6	0.0	0.0	17.4	32.8	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.4	0.0	0.0	1.3	0.8	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.5	0.0	0.0	1.5	0.9	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.06	0.00	0.00	0.25	0.13	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	1
Grp Vol (v), veh/h	0	0	0	1501	0	0	0	802
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	21.7	0.0	0.0	0.0	20.3
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	21.7	0.0	0.0	0.0	20.3
Lane Grp Cap (c), veh/h	0	0	0	1278	0	0	0	600
V/C Ratio (X)	0.00	0.00	0.00	1.17	0.00	0.00	0.00	1.34
Avail Cap (c_a), veh/h	0	0	0	1278	0	0	0	600
Upstream Filter (I)	0.00	0.00	0.00	0.70	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	19.2	0.0	0.0	0.0	19.8
Incr Delay (d2), s/veh	0.0	0.0	0.0	84.7	0.0	0.0	0.0	162.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	103.9	0.0	0.0	0.0	182.7
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	10.5	0.0	0.0	0.0	9.8

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	15.0	0.0	0.0	0.0	27.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	25.5	0.0	0.0	0.0	37.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.66	0.00	0.00	0.00	3.05
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	55.8	0.0	0.0	0.0	50.6
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R				T+R		T+R
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	28	0	0	0	33	0	830
Grp Sat Flow (s), veh/h/ln	0	1568	0	0	0	1568	0	1805
Q Serve Time (g_s), s	0.0	0.8	0.0	0.0	0.0	0.9	0.0	20.3
Cycle Q Clear Time (g_c), s	0.0	0.8	0.0	0.0	0.0	0.9	0.0	20.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.18
Lane Grp Cap (c), veh/h	0	470	0	0	0	470	0	612
V/C Ratio (X)	0.00	0.06	0.00	0.00	0.00	0.07	0.00	1.36
Avail Cap (c_a), veh/h	0	470	0	0	0	470	0	612
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	15.0	0.0	0.0	0.0	15.0	0.0	19.8
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.0	0.3	0.0	170.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	15.2	0.0	0.0	0.0	15.3	0.0	190.7
1st-Term Q (Q1), veh/ln	0.0	0.3	0.0	0.0	0.0	0.4	0.0	10.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.4	0.0	0.0	0.0	0.4	0.0	39.1
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.00	0.00	0.03	0.00	3.22
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.5
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Intersection Summary								
HCM 2010 Ctrl Delay		138.2						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	445	899	208	333	781	110	302	965	294	236	924	442
Future Volume (veh/h)	445	899	208	333	781	110	302	965	294	236	924	442
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	473	956	221	354	831	117	321	1027	313	251	983	470
Adj No. of Lanes	2	3	0	2	3	0	2	3	0	2	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	522	1148	265	414	1112	156	353	1134	345	313	955	446
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.15	0.28	0.28	0.12	0.25	0.25	0.10	0.30	0.30	0.09	0.28	0.28
Ln Grp Delay, s/veh	67.8	47.8	55.3	63.4	46.4	51.8	78.3	52.5	62.5	59.9	78.3	99.0
Ln Grp LOS	E	D	E	E	D	D	E	D	E	E	F	F
Approach Vol, veh/h		1650			1302			1661			1704	
Approach Delay, s/veh		55.3			52.4			60.1			81.3	
Approach LOS		E			D			E			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	4.0
Phs Duration (G+Y+Rc), s	16.7	40.3	20.4	38.6	18.0	39.0	24.0	35.0
Change Period (Y+Rc), s	6.0	6.0	6.4	6.4	6.0	6.0	6.4	6.4
Max Green (Gmax), s	14.0	31.0	15.6	30.6	12.0	33.0	17.6	28.6
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.3	3.8	5.3	3.8	5.3
Max Q Clear (g_c+I1), s	10.4	32.0	13.7	27.3	12.8	35.0	17.7	21.9
Green Ext Time (g_e), s	0.3	0.0	0.3	2.9	0.0	0.0	0.0	5.7
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3408		3442		3408		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3830		4132		3357		4510

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1166		953		1568		631

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	251	0	354	0	321	0	473	0
Grp Sat Flow (s), veh/h/ln	1704	0	1721	0	1704	0	1721	0
Q Serve Time (g_s), s	8.4	0.0	11.7	0.0	10.8	0.0	15.7	0.0
Cycle Q Clear Time (g_c), s	8.4	0.0	11.7	0.0	10.8	0.0	15.7	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	313	0	414	0	353	0	522	0
V/C Ratio (X)	0.80	0.00	0.85	0.00	0.91	0.00	0.91	0.00
Avail Cap (c_a), veh/h	411	0	463	0	353	0	522	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	51.6	0.0	50.0	0.0	51.5	0.0	48.4	0.0
Incr Delay (d2), s/veh	8.2	0.0	13.4	0.0	26.8	0.0	19.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	59.9	0.0	63.4	0.0	78.3	0.0	67.8	0.0
1st-Term Q (Q1), veh/ln	3.9	0.0	5.6	0.0	5.1	0.0	7.4	0.0
2nd-Term Q (Q2), veh/ln	0.4	0.0	0.8	0.0	1.3	0.0	1.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	4.3	0.0	6.3	0.0	6.4	0.0	8.8	0.0
%ile Storage Ratio (RQ%)	0.34	0.00	0.95	0.00	0.51	0.00	0.75	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	2	0	2
Grp Vol (v), veh/h	0	900	0	784	0	983	0	624
Grp Sat Flow (s), veh/h/ln	0	1679	0	1695	0	1679	0	1695
Q Serve Time (g_s), s	0.0	29.9	0.0	25.2	0.0	33.0	0.0	19.7
Cycle Q Clear Time (g_c), s	0.0	29.9	0.0	25.2	0.0	33.0	0.0	19.7
Lane Grp Cap (c), veh/h	0	994	0	942	0	955	0	836
V/C Ratio (X)	0.00	0.91	0.00	0.83	0.00	1.03	0.00	0.75
Avail Cap (c_a), veh/h	0	994	0	942	0	955	0	836
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	39.3	0.0	39.3	0.0	41.5	0.0	40.3
Incr Delay (d2), s/veh	0.0	13.3	0.0	8.5	0.0	36.8	0.0	6.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	52.5	0.0	47.8	0.0	78.3	0.0	46.4
1st-Term Q (Q1), veh/ln	0.0	13.9	0.0	11.8	0.0	15.3	0.0	9.2

2nd-Term Q (Q2), veh/ln	0.0	1.8	0.0	1.1	0.0	4.9	0.0	0.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	15.7	0.0	12.9	0.0	20.1	0.0	9.9
%ile Storage Ratio (RQ%)	0.00	0.88	0.00	0.52	0.00	0.77	0.00	1.57
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	7.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	440	0	393	0	470	0	324
Grp Sat Flow (s), veh/h/ln	0	1639	0	1695	0	1568	0	1751
Q Serve Time (g_s), s	0.0	30.0	0.0	25.3	0.0	33.0	0.0	19.9
Cycle Q Clear Time (g_c), s	0.0	30.0	0.0	25.3	0.0	33.0	0.0	19.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.71	0.00	0.56	0.00	1.00	0.00	0.36
Lane Grp Cap (c), veh/h	0	485	0	471	0	446	0	432
V/C Ratio (X)	0.00	0.91	0.00	0.83	0.00	1.05	0.00	0.75
Avail Cap (c_a), veh/h	0	485	0	471	0	446	0	432
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	39.3	0.0	39.4	0.0	41.5	0.0	40.4
Incr Delay (d2), s/veh	0.0	23.2	0.0	15.9	0.0	57.5	0.0	11.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	62.5	0.0	55.3	0.0	99.0	0.0	51.8
1st-Term Q (Q1), veh/ln	0.0	13.6	0.0	11.8	0.0	14.2	0.0	9.6
2nd-Term Q (Q2), veh/ln	0.0	3.1	0.0	2.1	0.0	7.1	0.0	1.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	16.7	0.0	13.9	0.0	21.4	0.0	11.0
%ile Storage Ratio (RQ%)	0.00	0.93	0.00	0.56	0.00	0.82	0.00	1.75
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	6.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		63.0						
HCM 2010 LOS		E						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	1210	41	0	1119	128	119	45	3	88	34	55
Future Volume (veh/h)	155	1210	41	0	1119	128	119	45	3	88	34	55
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	0	1863	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	160	1247	42	0	1154	132	123	46	3	91	35	57
Adj No. of Lanes	1	2	0	0	2	0	1	1	1	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	0	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			No			Yes			Yes		
Cap, veh/h	96	2393	81	0	1905	217	49	337	286	49	337	286
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.68	0.68	0.00	0.59	0.59	0.03	0.18	0.18	0.03	0.18	0.18
Ln Grp Delay, s/veh	427.9	15.3	15.3	0.0	25.4	25.4	814.3	61.8	59.6	533.9	61.2	63.3
Ln Grp LOS	F	B	B		C	C	F	E	E	F	E	E
Approach Vol, veh/h		1449			1286			172			183	
Approach Delay, s/veh		60.9			25.4			599.9			296.9	
Approach LOS		E			C			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6	7	8
Case No	2.0	3.0		4.0	2.0	3.0	2.0	8.0
Phs Duration (G+Y+Rc), s	10.7	39.0		128.3	10.7	39.0	16.0	112.3
Change Period (Y+Rc), s	* 5.7	6.5		6.4	* 5.7	6.5	6.4	6.4
Max Green (Gmax), s	* 5	32.5		121.6	* 5	32.5	9.6	105.6
Max Allow Headway (MAH), s	3.8	4.7		5.3	3.8	4.7	3.8	5.3
Max Q Clear (g_c+I1), s	7.0	5.7		33.2	7.0	7.5	11.6	42.7
Green Ext Time (g_e), s	0.0	0.6		44.8	0.0	0.6	0.0	37.7
Prob of Phs Call (p_c)	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	0.00	0.00		0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1				5		7	3
Mvmt Sat Flow, veh/h	1757				1757		1774	0

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1845		3494		1845		3295

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		118		1568		366

Left Lane Group Data								
Assigned Mvmt	1	0	0	0	5	0	7	3
Lane Assignment	(Prot)				(Prot)		(Prot)	

Lanes in Grp	1	0	0	0	1	0	1	0
Grp Vol (v), veh/h	91	0	0	0	123	0	160	0
Grp Sat Flow (s), veh/h/ln	1757	0	0	0	1757	0	1774	0
Q Serve Time (g_s), s	5.0	0.0	0.0	0.0	5.0	0.0	9.6	0.0
Cycle Q Clear Time (g_c), s	5.0	0.0	0.0	0.0	5.0	0.0	9.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	105.9
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	49	0	0	0	49	0	96	0
V/C Ratio (X)	1.84	0.00	0.00	0.00	2.49	0.00	1.67	0.00
Avail Cap (c_a), veh/h	49	0	0	0	49	0	96	0
Upstream Filter (I)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	86.5	0.0	0.0	0.0	86.5	0.0	84.2	0.0
Incr Delay (d2), s/veh	447.4	0.0	0.0	0.0	727.8	0.0	343.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	533.9	0.0	0.0	0.0	814.3	0.0	427.9	0.0
1st-Term Q (Q1), veh/ln	2.4	0.0	0.0	0.0	2.4	0.0	4.7	0.0
2nd-Term Q (Q2), veh/ln	6.1	0.0	0.0	0.0	10.0	0.0	9.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	8.6	0.0	0.0	0.0	12.4	0.0	13.8	0.0
%ile Storage Ratio (RQ%)	2.19	0.00	0.00	0.00	2.27	0.00	0.84	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	10.4	0.0	0.0	0.0	18.4	0.0	16.1	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.5	0.0	0.0	0.0	0.6	0.0	0.4	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	46	0	631	0	35	0	637
Grp Sat Flow (s), veh/h/ln	0	1845	0	1770	0	1845	0	1770
Q Serve Time (g_s), s	0.0	3.7	0.0	31.1	0.0	2.8	0.0	40.5
Cycle Q Clear Time (g_c), s	0.0	3.7	0.0	31.1	0.0	2.8	0.0	40.5
Lane Grp Cap (c), veh/h	0	337	0	1212	0	337	0	1053
V/C Ratio (X)	0.00	0.14	0.00	0.52	0.00	0.10	0.00	0.60
Avail Cap (c_a), veh/h	0	337	0	1212	0	337	0	1053
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	61.0	0.0	13.7	0.0	60.6	0.0	22.8
Incr Delay (d2), s/veh	0.0	0.8	0.0	1.6	0.0	0.6	0.0	2.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	61.8	0.0	15.3	0.0	61.2	0.0	25.4
1st-Term Q (Q1), veh/ln	0.0	1.9	0.0	15.1	0.0	1.4	0.0	19.8

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.5	0.0	0.1	0.0	0.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.0	0.0	15.6	0.0	1.5	0.0	20.6
%ile Storage Ratio (RQ%)	0.00	0.22	0.00	0.18	0.00	0.08	0.00	0.40
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	3	0	658	0	57	0	649
Grp Sat Flow (s), veh/h/ln	0	1568	0	1842	0	1568	0	1798
Q Serve Time (g_s), s	0.0	0.3	0.0	31.2	0.0	5.5	0.0	40.7
Cycle Q Clear Time (g_c), s	0.0	0.3	0.0	31.2	0.0	5.5	0.0	40.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.06	0.00	1.00	0.00	0.20
Lane Grp Cap (c), veh/h	0	286	0	1261	0	286	0	1070
V/C Ratio (X)	0.00	0.01	0.00	0.52	0.00	0.20	0.00	0.61
Avail Cap (c_a), veh/h	0	286	0	1261	0	286	0	1070
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	59.6	0.0	13.8	0.0	61.7	0.0	22.9
Incr Delay (d2), s/veh	0.0	0.1	0.0	1.5	0.0	1.6	0.0	2.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	59.6	0.0	15.3	0.0	63.3	0.0	25.4
1st-Term Q (Q1), veh/ln	0.0	0.1	0.0	15.7	0.0	5.1	0.0	20.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.5	0.0	0.1	0.0	0.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.1	0.0	16.3	0.0	5.2	0.0	21.0
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.19	0.00	0.27	0.00	0.41
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	90.1
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	384	754	143	228	643	217	391	1575	209	350	981	205
Future Volume (veh/h)	384	754	143	228	643	217	391	1575	209	350	981	205
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	392	769	146	233	656	221	399	1607	213	357	1001	209
Adj No. of Lanes	2	3	1	2	3	1	2	3	0	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	327	1154	359	159	905	282	449	2008	265	409	1814	378
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.10	0.23	0.23	0.05	0.18	0.18	0.13	0.45	0.45	0.12	0.43	0.43
Ln Grp Delay, s/veh	188.9	60.8	57.4	316.7	68.6	83.7	84.5	43.7	47.8	82.6	36.0	37.5
Ln Grp LOS	F	E	E	F	E	F	F	D	D	F	D	D
Approach Vol, veh/h		1307			1110			2219			1567	
Approach Delay, s/veh		98.8			123.7			52.2			47.0	
Approach LOS		F			F			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	3.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	26.5	79.9	14.0	43.6	28.4	78.0	22.0	35.6
Change Period (Y+Rc), s	6.8	6.8	6.4	6.4	6.8	6.8	6.4	6.4
Max Green (Gmax), s	26.2	71.2	7.6	32.6	26.2	71.2	15.6	24.6
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.0	3.8	5.3	3.8	5.0
Max Q Clear (g_c+I1), s	18.9	52.6	9.6	24.6	20.9	31.3	17.6	23.9
Green Ext Time (g_e), s	0.8	16.8	0.0	5.9	0.7	32.8	0.0	0.6
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	0.12	0.00	1.00	0.00	0.42	0.00	1.00	0.00

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	3408	3442	3408	3442

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	4502	5085	4178	5085

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	595	1583	871	1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	357	0	233	0	399	0	392	0
Grp Sat Flow (s), veh/h/ln	1704	0	1721	0	1704	0	1721	0
Q Serve Time (g_s), s	16.9	0.0	7.6	0.0	18.9	0.0	15.6	0.0
Cycle Q Clear Time (g_c), s	16.9	0.0	7.6	0.0	18.9	0.0	15.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	409	0	159	0	449	0	327	0
V/C Ratio (X)	0.87	0.00	1.46	0.00	0.89	0.00	1.20	0.00
Avail Cap (c_a), veh/h	544	0	159	0	544	0	327	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	70.9	0.0	78.2	0.0	70.0	0.0	74.2	0.0
Incr Delay (d2), s/veh	11.6	0.0	238.5	0.0	14.5	0.0	114.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	82.6	0.0	316.7	0.0	84.5	0.0	188.9	0.0
1st-Term Q (Q1), veh/ln	8.0	0.0	3.6	0.0	8.9	0.0	7.4	0.0
2nd-Term Q (Q2), veh/ln	0.7	0.0	5.3	0.0	0.9	0.0	5.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	8.6	0.0	8.9	0.0	9.8	0.0	12.6	0.0
%ile Storage Ratio (RQ%)	0.38	0.00	0.46	0.00	0.63	0.00	0.64	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	18.4	0.0	0.0	0.0	16.2	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.4	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	3	0	2	0	3
Grp Vol (v), veh/h	0	1197	0	769	0	804	0	656
Grp Sat Flow (s), veh/h/ln	0	1679	0	1695	0	1679	0	1695
Q Serve Time (g_s), s	0.0	50.4	0.0	22.6	0.0	29.2	0.0	20.0
Cycle Q Clear Time (g_c), s	0.0	50.4	0.0	22.6	0.0	29.2	0.0	20.0
Lane Grp Cap (c), veh/h	0	1497	0	1154	0	1458	0	905
V/C Ratio (X)	0.00	0.80	0.00	0.67	0.00	0.55	0.00	0.72
Avail Cap (c_a), veh/h	0	1497	0	1154	0	1458	0	905
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	39.1	0.0	57.8	0.0	34.5	0.0	63.6
Incr Delay (d2), s/veh	0.0	4.6	0.0	3.1	0.0	1.5	0.0	5.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	43.7	0.0	60.8	0.0	36.0	0.0	68.6
1st-Term Q (Q1), veh/ln	0.0	23.3	0.0	10.6	0.0	13.5	0.0	9.4

2nd-Term Q (Q2), veh/ln	0.0	1.0	0.0	0.3	0.0	0.3	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	24.2	0.0	10.9	0.0	13.8	0.0	9.8
%ile Storage Ratio (RQ%)	0.00	1.12	0.00	0.51	0.00	0.53	0.00	0.16
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	623	0	146	0	406	0	221
Grp Sat Flow (s), veh/h/ln	0	1740	0	1583	0	1691	0	1583
Q Serve Time (g_s), s	0.0	50.6	0.0	12.9	0.0	29.3	0.0	21.9
Cycle Q Clear Time (g_c), s	0.0	50.6	0.0	12.9	0.0	29.3	0.0	21.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.34	0.00	1.00	0.00	0.51	0.00	1.00
Lane Grp Cap (c), veh/h	0	776	0	359	0	734	0	282
V/C Ratio (X)	0.00	0.80	0.00	0.41	0.00	0.55	0.00	0.78
Avail Cap (c_a), veh/h	0	776	0	359	0	734	0	282
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	39.2	0.0	54.0	0.0	34.6	0.0	64.4
Incr Delay (d2), s/veh	0.0	8.6	0.0	3.4	0.0	3.0	0.0	19.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	47.8	0.0	57.4	0.0	37.5	0.0	83.7
1st-Term Q (Q1), veh/ln	0.0	24.4	0.0	5.6	0.0	13.6	0.0	9.6
2nd-Term Q (Q2), veh/ln	0.0	1.9	0.0	0.3	0.0	0.6	0.0	1.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	26.2	0.0	6.0	0.0	14.3	0.0	11.1
%ile Storage Ratio (RQ%)	0.00	1.21	0.00	0.28	0.00	0.55	0.00	0.39
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		73.5						
HCM 2010 LOS		E						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	949	175	251	782	96	57	46	113	126	54	45
Future Volume (veh/h)	42	949	175	251	782	96	57	46	113	126	54	45
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1900	1712	1712	1712	1776	1776	1900	1776	1776	1776
Adj Flow Rate, veh/h	44	999	184	264	823	101	60	48	119	133	57	47
Adj No. of Lanes	2	3	0	2	3	1	1	2	0	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	11	11	11	11	11	11	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	73	1308	240	90	1566	487	77	756	677	187	1551	694
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.02	0.33	0.33	0.03	0.34	0.34	0.05	0.45	0.45	0.06	0.46	0.46
Ln Grp Delay, s/veh	76.1	45.2	48.0	972.0	38.1	33.7	81.9	22.3	23.9	70.3	21.0	21.4
Ln Grp LOS	E	D	D	F	D	C	F	C	C	E	C	C
Approach Vol, veh/h		1227			1188			227			237	
Approach Delay, s/veh		47.2			245.3			38.9			48.8	
Approach LOS		D			F			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	12.0	68.5	8.0	52.5	10.4	70.1	7.2	53.2
Change Period (Y+Rc), s	4.0	5.3	4.0	* 6	4.0	5.3	4.0	* 6
Max Green (Gmax), s	42.0	24.7	4.0	* 51	42.0	24.7	4.0	* 51
Max Allow Headway (MAH), s	3.8	5.2	3.8	5.2	3.8	5.2	3.8	5.2
Max Q Clear (g_c+I1), s	7.6	8.7	6.0	33.9	7.0	4.4	3.9	22.0
Green Ext Time (g_e), s	0.4	1.3	0.0	12.6	0.1	1.4	0.0	18.3
Prob of Phs Call (p_c)	0.99	1.00	1.00	1.00	0.90	1.00	0.82	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.72	0.00	0.00	1.00	0.51

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3281		3163		1691		3163	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1687		3969		3374		4673

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1509		729		1509		1455

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	1	0	2	0
Grp Vol (v), veh/h	133	0	264	0	60	0	44	0
Grp Sat Flow (s), veh/h/ln	1640	0	1581	0	1691	0	1581	0
Q Serve Time (g_s), s	5.6	0.0	4.0	0.0	5.0	0.0	1.9	0.0
Cycle Q Clear Time (g_c), s	5.6	0.0	4.0	0.0	5.0	0.0	1.9	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	187	0	90	0	77	0	73	0
V/C Ratio (X)	0.71	0.00	2.94	0.00	0.78	0.00	0.61	0.00
Avail Cap (c_a), veh/h	977	0	90	0	504	0	90	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.99	0.00	1.00	0.00
Uniform Delay (d1), s/veh	65.4	0.0	68.5	0.0	66.6	0.0	68.2	0.0
Incr Delay (d2), s/veh	5.0	0.0	903.5	0.0	15.3	0.0	7.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	70.3	0.0	972.0	0.0	81.9	0.0	76.1	0.0
1st-Term Q (Q1), veh/ln	2.5	0.0	1.7	0.0	2.3	0.0	0.8	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	11.3	0.0	0.3	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	2.7	0.0	13.0	0.0	2.6	0.0	0.9	0.0
%ile Storage Ratio (RQ%)	0.36	0.00	1.81	0.00	0.44	0.00	0.07	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	43.6	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	2	0	3
Grp Vol (v), veh/h	0	48	0	784	0	57	0	823
Grp Sat Flow (s), veh/h/ln	0	1687	0	1558	0	1687	0	1558
Q Serve Time (g_s), s	0.0	2.3	0.0	31.8	0.0	1.3	0.0	20.0
Cycle Q Clear Time (g_c), s	0.0	2.3	0.0	31.8	0.0	1.3	0.0	20.0
Lane Grp Cap (c), veh/h	0	756	0	1027	0	1551	0	1566
V/C Ratio (X)	0.00	0.06	0.00	0.76	0.00	0.04	0.00	0.53
Avail Cap (c_a), veh/h	0	756	0	1127	0	1551	0	1690
Upstream Filter (I)	0.00	0.99	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	22.1	0.0	42.3	0.0	20.9	0.0	37.8
Incr Delay (d2), s/veh	0.0	0.2	0.0	2.9	0.0	0.0	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	22.3	0.0	45.2	0.0	21.0	0.0	38.1
1st-Term Q (Q1), veh/ln	0.0	1.1	0.0	13.7	0.0	0.6	0.0	8.6

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.1	0.0	14.1	0.0	0.6	0.0	8.7
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.15	0.00	0.01	0.00	0.15
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	119	0	399	0	47	0	101
Grp Sat Flow (s), veh/h/ln	0	1509	0	1583	0	1509	0	1455
Q Serve Time (g_s), s	0.0	6.7	0.0	31.9	0.0	2.4	0.0	7.0
Cycle Q Clear Time (g_c), s	0.0	6.7	0.0	31.9	0.0	2.4	0.0	7.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.46	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	677	0	522	0	694	0	487
V/C Ratio (X)	0.00	0.18	0.00	0.77	0.00	0.07	0.00	0.21
Avail Cap (c_a), veh/h	0	677	0	573	0	694	0	526
Upstream Filter (I)	0.00	0.99	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	23.3	0.0	42.4	0.0	21.2	0.0	33.5
Incr Delay (d2), s/veh	0.0	0.6	0.0	5.6	0.0	0.2	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	23.9	0.0	48.0	0.0	21.4	0.0	33.7
1st-Term Q (Q1), veh/ln	0.0	2.8	0.0	14.0	0.0	1.0	0.0	2.8
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.8	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.9	0.0	14.8	0.0	1.1	0.0	2.8
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.16	0.00	0.17	0.00	0.42
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	128.4
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	295	42	38	279	123	29	68	20	118	63	79
Future Volume (veh/h)	70	295	42	38	279	123	29	68	20	118	63	79
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1900	1900	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	74	314	45	40	297	131	31	72	21	126	67	84
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	150	422	55	129	596	557	615	588	171	670	319	400
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.44	0.44	0.44	0.44	0.44	0.44
Ln Grp Delay, s/veh	15.6	0.0	0.0	11.9	0.0	10.4	8.8	0.0	7.7	8.7	0.0	7.7
Ln Grp LOS	B			B		B	A		A	A		A
Approach Vol, veh/h		433			468			124			277	
Approach Delay, s/veh		15.6			11.5			8.0			8.2	
Approach LOS		B			B			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		8.0		6.0		7.0
Phs Duration (G+Y+Rc), s		24.5		20.5		24.5		20.5
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green (Gmax), s		18.0		18.0		18.0		18.0
Max Allow Headway (MAH), s		4.9		5.2		4.9		5.2
Max Q Clear (g_c+I1), s		5.3		14.0		6.4		8.5
Green Ext Time (g_e), s		1.6		2.0		1.5		3.8
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		1.00		0.00		0.57
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		1174		159		1237		112
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1322		1187		717		1676
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		386		156		900		1568
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment				L+T+R				L+T

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	31	0	433	0	126	0	337
Grp Sat Flow (s), veh/h/ln	0	1174	0	1501	0	1237	0	1788
Q Serve Time (g_s), s	0.0	0.7	0.0	5.5	0.0	3.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	3.3	0.0	12.0	0.0	4.4	0.0	6.5
Perm LT Sat Flow (s_l), veh/h/ln	0	1174	0	975	0	1237	0	1039
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	1791
Perm LT Eff Green (g_p), s	0.0	20.0	0.0	16.0	0.0	20.0	0.0	16.0
Perm LT Serve Time (g_u), s	0.0	17.4	0.0	9.5	0.0	18.6	0.0	4.0
Perm LT Q Serve Time (g_ps), s	0.0	0.7	0.0	5.5	0.0	3.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	5.1	0.0	0.0	0.0	7.4
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	5.1	0.0	0.0	0.0	6.5
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	0.17	0.00	1.00	0.00	0.12
Lane Grp Cap (c), veh/h	0	615	0	627	0	670	0	725
V/C Ratio (X)	0.00	0.05	0.00	0.69	0.00	0.19	0.00	0.46
Avail Cap (c_a), veh/h	0	615	0	697	0	670	0	800
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	8.7	0.0	13.0	0.0	8.6	0.0	11.4
Incr Delay (d2), s/veh	0.0	0.2	0.0	2.5	0.0	0.1	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.8	0.0	15.6	0.0	8.7	0.0	11.9
1st-Term Q (Q1), veh/ln	0.0	0.2	0.0	4.8	0.0	1.0	0.0	3.3
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.3	0.0	5.3	0.0	1.0	0.0	3.4
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.23	0.00	0.01	0.00	0.13
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment								
Lanes in Grp	0	0	0	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R				T+R		R
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	93	0	0	0	151	0	131
Grp Sat Flow (s), veh/h/ln	0	1708	0	0	0	1617	0	1568
Q Serve Time (g_s), s	0.0	1.4	0.0	0.0	0.0	2.6	0.0	2.6
Cycle Q Clear Time (g_c), s	0.0	1.4	0.0	0.0	0.0	2.6	0.0	2.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.23	0.00	0.10	0.00	0.56	0.00	1.00
Lane Grp Cap (c), veh/h	0	759	0	0	0	719	0	557
V/C Ratio (X)	0.00	0.12	0.00	0.00	0.00	0.21	0.00	0.24
Avail Cap (c_a), veh/h	0	759	0	0	0	719	0	627
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	7.3	0.0	0.0	0.0	7.7	0.0	10.2
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	7.7	0.0	0.0	0.0	7.7	0.0	10.4
1st-Term Q (Q1), veh/ln	0.0	0.7	0.0	0.0	0.0	1.1	0.0	1.1
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.7	0.0	0.0	0.0	1.1	0.0	1.2
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.00	0.00	0.01	0.00	0.04
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		11.8						
HCM 2010 LOS		B						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	135	596	3	16	1208	443	2	12	21	195	1	82
Future Volume (veh/h)	135	596	3	16	1208	443	2	12	21	195	1	82
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1696	1696	1696	1696	1696	1696	1900	1696	1900	1696	1696	1696
Adj Flow Rate, veh/h	142	627	3	17	1272	0	2	13	22	205	1	0
Adj No. of Lanes	1	2	1	1	2	1	0	1	0	2	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	12	12	12	12	12	12	12	12	12	12	12	12
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	168	2290	1024	19	1993	892	0	16	28	132	202	172
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.10	0.71	0.71	0.01	0.62	0.00	0.00	0.03	0.03	0.04	0.12	0.00
Ln Grp Delay, s/veh	69.4	7.2	5.6	76.5	16.1	0.0	0.0	0.0	90.8	346.4	51.6	0.0
Ln Grp LOS	E	A	A	E	B				F	F	D	
Approach Vol, veh/h		772			1289			35			206	
Approach Delay, s/veh		18.7			16.9			90.8			345.0	
Approach LOS		B			B			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	4.0	2.0	3.0	0.0	3.0
Phs Duration (G+Y+Rc), s	20.9	89.3	12.0	10.7	8.7	101.6	0.0	22.7
Change Period (Y+Rc), s	7.1	7.1	6.4	6.9	7.1	7.1	6.9	* 6.9
Max Green (Gmax), s	67.9	18.9	5.6	13.1	30.9	55.9	13.1	* 5.6
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.5	3.8	5.3	0.0	5.5
Max Q Clear (g_c+I1), s	13.5	35.1	7.6	5.0	3.4	11.3	0.0	2.1
Green Ext Time (g_e), s	0.4	0.0	0.0	0.1	0.0	22.4	0.0	0.0
Prob of Phs Call (p_c)	0.99	1.00	1.00	0.75	0.47	1.00	0.00	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.08	0.00	0.00	0.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1616		3134		1616		0	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3223		567		3223		1696

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1442		960		1442		1442

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)			

Lanes in Grp	1	0	2	0	1	0	0	0
Grp Vol (v), veh/h	142	0	205	0	17	0	0	0
Grp Sat Flow (s), veh/h/ln	1616	0	1567	0	1616	0	0	0
Q Serve Time (g_s), s	11.5	0.0	5.6	0.0	1.4	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	11.5	0.0	5.6	0.0	1.4	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	168	0	132	0	19	0	0	0
V/C Ratio (X)	0.84	0.00	1.55	0.00	0.88	0.00	0.00	0.00
Avail Cap (c_a), veh/h	825	0	132	0	375	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.09	0.00	0.00	0.00
Uniform Delay (d1), s/veh	58.5	0.0	63.7	0.0	65.6	0.0	0.0	0.0
Incr Delay (d2), s/veh	10.9	0.0	282.7	0.0	10.8	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	69.4	0.0	346.4	0.0	76.5	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	5.1	0.0	2.4	0.0	0.6	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.5	0.0	5.2	0.0	0.1	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	5.6	0.0	7.6	0.0	0.7	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.18	0.00	0.33	0.00	0.05	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	18.3	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	2	0	0	0	2	0	1
Grp Vol (v), veh/h	0	1272	0	0	0	627	0	1
Grp Sat Flow (s), veh/h/ln	0	1612	0	0	0	1612	0	1696
Q Serve Time (g_s), s	0.0	33.1	0.0	0.0	0.0	9.3	0.0	0.1
Cycle Q Clear Time (g_c), s	0.0	33.1	0.0	0.0	0.0	9.3	0.0	0.1
Lane Grp Cap (c), veh/h	0	1993	0	0	0	2290	0	202
V/C Ratio (X)	0.00	0.64	0.00	0.00	0.00	0.27	0.00	0.00
Avail Cap (c_a), veh/h	0	1993	0	0	0	2290	0	202
Upstream Filter (I)	0.00	0.09	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	16.0	0.0	0.0	0.0	6.9	0.0	51.6
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	16.1	0.0	0.0	0.0	7.2	0.0	51.6
1st-Term Q (Q1), veh/ln	0.0	14.7	0.0	0.0	0.0	4.1	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	14.7	0.0	0.0	0.0	4.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.20	0.00	0.00	0.00	0.04	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	35	0	3	0	0
Grp Sat Flow (s), veh/h/ln	0	1442	0	1527	0	1442	0	1442
Q Serve Time (g_s), s	0.0	0.0	0.0	3.0	0.0	0.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	3.0	0.0	0.1	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.63	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	892	0	44	0	1024	0	172
V/C Ratio (X)	0.00	0.00	0.00	0.80	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	892	0	150	0	1024	0	172
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	64.2	0.0	5.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	26.6	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	90.8	0.0	5.6	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	48.0
HCM 2010 LOS	D

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	93	734	1542	272	444	254
Future Volume (veh/h)	93	734	1542	272	444	254
Number	1	6	2	12	3	18
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00			1.00	1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1696	1696	1696	1696	1696	1696
Adj Flow Rate, veh/h	98	773	1623	0	467	0
Adj No. of Lanes	1	2	2	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	12	12	12	12	12	12
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	122	2101	1572	703	578	266
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.65	0.49	0.00	0.18	0.00
Ln Grp Delay, s/veh	52.2	6.8	45.4	0.0	34.0	0.0
Ln Grp LOS	D	A	F		C	
Approach Vol, veh/h		871	1623		467	
Approach Delay, s/veh		11.9	45.4		34.0	
Approach LOS		B	D		C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8			6		
Case No	2.0	7.0	9.0			4.0		
Phs Duration (G+Y+Rc), s	13.1	46.1	20.8			59.2		
Change Period (Y+Rc), s	7.1	7.1	6.0			7.1		
Max Green (Gmax), s	7.9	27.9	24.0			42.9		
Max Allow Headway (MAH), s	3.8	5.3	3.8			5.3		
Max Q Clear (g_c+I1), s	6.8	41.0	13.4			10.8		
Green Ext Time (g_e), s	0.0	0.0	1.3			24.2		
Prob of Phs Call (p_c)	0.89	1.00	1.00			1.00		
Prob of Max Out (p_x)	1.00	0.00	0.03			0.00		

Left-Turn Movement Data			
Assigned Mvmt	1	5	3
Mvmt Sat Flow, veh/h	1616	0	3134

Through Movement Data			
Assigned Mvmt		2	8			6		
Mvmt Sat Flow, veh/h		3308	0			3308		

Right-Turn Movement Data			
Assigned Mvmt		12	18			16		
Mvmt Sat Flow, veh/h		1442	1442			0		

Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	0	0
Lane Assignment	(Prot)							

Lanes in Grp	1	0	2	0	0	0	0	0
Grp Vol (v), veh/h	98	0	467	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1616	0	1567	0	0	0	0	0
Q Serve Time (g_s), s	4.8	0.0	11.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	4.8	0.0	11.4	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1567	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	39.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	122	0	578	0	0	0	0	0
V/C Ratio (X)	0.81	0.00	0.81	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	160	0	940	0	0	0	0	0
Upstream Filter (I)	0.77	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	36.4	0.0	31.3	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	15.8	0.0	2.7	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	52.2	0.0	34.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	2.1	0.0	4.9	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.5	0.0	0.2	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	2.7	0.0	5.1	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.15	0.00	0.32	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1623	0	0	0	773	0	0
Grp Sat Flow (s), veh/h/ln	0	1612	0	0	0	1612	0	0
Q Serve Time (g_s), s	0.0	39.0	0.0	0.0	0.0	8.8	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	39.0	0.0	0.0	0.0	8.8	0.0	0.0
Lane Grp Cap (c), veh/h	0	1572	0	0	0	2101	0	0
V/C Ratio (X)	0.00	1.03	0.00	0.00	0.00	0.37	0.00	0.00
Avail Cap (c_a), veh/h	0	1572	0	0	0	2101	0	0
Upstream Filter (I)	0.00	0.48	0.00	0.00	0.00	0.77	0.00	0.00
Uniform Delay (d1), s/veh	0.0	20.5	0.0	0.0	0.0	6.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	24.9	0.0	0.0	0.0	0.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	45.4	0.0	0.0	0.0	6.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	17.2	0.0	0.0	0.0	3.9	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	5.4	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	22.7	0.0	0.0	0.0	4.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.18	0.00	0.00	0.00	0.05	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	12.8	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lane Assignment		R	R					
Lanes in Grp	0	1	1	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1442	1442	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	703	266	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	703	433	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		33.7						
HCM 2010 LOS		C						

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	347	211	228	1195	1672	578
Future Volume (veh/h)	347	211	228	1195	1672	578
Number	7	14	5	2	6	16
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00	1.00			1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1827	1827	1827	1827
Adj Flow Rate, veh/h	381	0	251	1313	1837	0
Adj No. of Lanes	2	1	2	3	3	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	4	4	4	4
Opposing Right Turn Influence	Yes		Yes			
Cap, veh/h	438	201	315	3921	3246	1011
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.13	0.00	0.09	0.79	0.65	0.00
Ln Grp Delay, s/veh	73.4	0.0	68.1	4.7	14.2	0.0
Ln Grp LOS	E		E	A	B	
Approach Vol, veh/h	381			1564	1837	
Approach Delay, s/veh	73.4			14.9	14.2	
Approach LOS	E			B	B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Case No		4.0		9.0	2.0	7.0		
Phs Duration (G+Y+Rc), s		118.4		24.6	19.3	99.1		
Change Period (Y+Rc), s		6.0		6.4	6.0	6.0		
Max Green (Gmax), s		108.0		22.6	84.0	18.0		
Max Allow Headway (MAH), s		5.2		3.8	3.8	5.2		
Max Q Clear (g_c+I1), s		12.9		17.5	12.4	31.1		
Green Ext Time (g_e), s		68.6		0.7	0.9	0.0		
Prob of Phs Call (p_c)		1.00		1.00	1.00	1.00		
Prob of Max Out (p_x)		0.00		0.48	0.00	0.00		
Left-Turn Movement Data								
Assigned Mvmt				7	5	1		
Mvmt Sat Flow, veh/h				3442	3375	0		
Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		5152		0		5152		
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		0		1583		1553		
Left Lane Group Data								
Assigned Mvmt	0	0	0	7	5	1	0	0
Lane Assignment					(Prot)			

Lanes in Grp	0	0	0	2	2	0	0	0
Grp Vol (v), veh/h	0	0	0	381	251	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1721	1688	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	15.5	10.4	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	15.5	10.4	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1721	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	93.1	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	438	315	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.87	0.80	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	544	1983	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	61.2	63.5	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	12.1	4.6	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	73.4	68.1	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	7.4	4.9	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.7	0.2	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	8.1	5.1	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.63	0.30	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	3	0	0	0	3	0	0
Grp Vol (v), veh/h	0	1313	0	0	0	1837	0	0
Grp Sat Flow (s), veh/h/ln	0	1663	0	0	0	1663	0	0
Q Serve Time (g_s), s	0.0	10.9	0.0	0.0	0.0	29.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	10.9	0.0	0.0	0.0	29.1	0.0	0.0
Lane Grp Cap (c), veh/h	0	3921	0	0	0	3246	0	0
V/C Ratio (X)	0.00	0.33	0.00	0.00	0.00	0.57	0.00	0.00
Avail Cap (c_a), veh/h	0	3921	0	0	0	3246	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.58	0.00	0.00
Uniform Delay (d1), s/veh	0.0	4.4	0.0	0.0	0.0	13.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.0	0.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	4.7	0.0	0.0	0.0	14.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	5.0	0.0	0.0	0.0	13.3	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	5.1	0.0	0.0	0.0	13.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.16	0.00	0.00	0.00	0.23	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment				R		R		
Lanes in Grp	0	0	0	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1583	0	1553	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	201	0	1011	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	250	0	1011	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		20.4						
HCM 2010 LOS		C						

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	506	1052	1424	60	355	2130
Future Volume (veh/h)	506	1052	1424	60	355	2130
Number	3	18	2	12	1	6
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1845	1845	1845	1845
Adj Flow Rate, veh/h	533	1107	1499	0	374	2242
Adj No. of Lanes	2	2	3	1	2	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	4	3	3	3	3
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	881	713	2674	832	492	3839
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.26	0.26	0.53	0.00	0.14	0.76
Ln Grp Delay, s/veh	23.6	281.1	11.6	0.0	30.9	4.2
Ln Grp LOS	C	F	B		C	A
Approach Vol, veh/h	1640		1499			2616
Approach Delay, s/veh	197.4		11.6			8.0
Approach LOS	F		B			A

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8			6		
Case No	2.0	7.0	9.0			4.0		
Phs Duration (G+Y+Rc), s	16.0	43.0	24.4			59.0		
Change Period (Y+Rc), s	6.0	6.0	6.4			6.0		
Max Green (Gmax), s	15.0	18.0	18.0			39.0		
Max Allow Headway (MAH), s	3.8	5.2	4.0			5.2		
Max Q Clear (g_c+I1), s	9.3	15.7	20.0			15.2		
Green Ext Time (g_e), s	0.7	2.3	0.0			22.9		
Prob of Phs Call (p_c)	1.00	1.00	1.00			1.00		
Prob of Max Out (p_x)	0.32	0.00	1.00			0.00		

Left-Turn Movement Data			
Assigned Mvmt	1	5	3
Mvmt Sat Flow, veh/h	3408	0	3375

Through Movement Data			
Assigned Mvmt		2	8	6
Mvmt Sat Flow, veh/h		5202	0	5202

Right-Turn Movement Data			
Assigned Mvmt		12	18	16
Mvmt Sat Flow, veh/h		1568	2733	0

Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	0	0
Lane Assignment	(Prot)							

Lanes in Grp	2	0	2	0	0	0	0	0
Grp Vol (v), veh/h	374	0	533	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1704	0	1688	0	0	0	0	0
Q Serve Time (g_s), s	7.3	0.0	9.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	7.3	0.0	9.6	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1688	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	36.6	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	492	0	881	0	0	0	0	0
V/C Ratio (X)	0.76	0.00	0.61	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	741	0	881	0	0	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	28.4	0.0	22.4	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	2.5	0.0	1.2	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	30.9	0.0	23.6	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	3.4	0.0	4.4	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	3.6	0.0	4.6	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.29	0.00	0.25	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	3	0	0	0	3	0	0
Grp Vol (v), veh/h	0	1499	0	0	0	2242	0	0
Grp Sat Flow (s), veh/h/ln	0	1679	0	0	0	1679	0	0
Q Serve Time (g_s), s	0.0	13.7	0.0	0.0	0.0	13.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	13.7	0.0	0.0	0.0	13.2	0.0	0.0
Lane Grp Cap (c), veh/h	0	2674	0	0	0	3839	0	0
V/C Ratio (X)	0.00	0.56	0.00	0.00	0.00	0.58	0.00	0.00
Avail Cap (c_a), veh/h	0	2674	0	0	0	3839	0	0
Upstream Filter (I)	0.00	0.90	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	10.8	0.0	0.0	0.0	3.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.8	0.0	0.0	0.0	0.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	11.6	0.0	0.0	0.0	4.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	6.2	0.0	0.0	0.0	5.8	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	6.4	0.0	0.0	0.0	6.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.10	0.00	0.00	0.00	0.14	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lane Assignment		R	R					
Lanes in Grp	0	1	2	0	0	0	0	0
Grp Vol (v), veh/h	0	0	1107	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1568	1367	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	18.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	18.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	832	713	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	1.55	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	832	713	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	25.5	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	255.6	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	281.1	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	6.7	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	25.3	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	32.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	3.44	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	98.5	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		62.9						
HCM 2010 LOS		E						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	564	527	41	38	760	228	306	275	175	131	55	722
Future Volume (veh/h)	564	527	41	38	760	228	306	275	175	131	55	722
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1712	1712	1712	1712	1712	1712	1900	1900	1712	1712
Adj Flow Rate, veh/h	570	532	41	38	768	0	309	278	177	132	56	729
Adj No. of Lanes	1	3	1	1	3	1	1	2	0	0	1	2
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	11	11	11	11	11	11	11	11	11	11	11	11
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	433	2307	718	48	1203	375	227	693	428	0	293	439
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.27	0.49	0.49	0.03	0.26	0.00	0.14	0.36	0.36	0.00	0.17	0.17
Ln Grp Delay, s/veh	214.7	23.3	21.2	101.4	55.4	0.0	256.7	38.8	39.1	0.0	57.1	374.3
Ln Grp LOS	F	C	C	F	E		F	D	D		E	F
Approach Vol, veh/h		1143			806			764			785	
Approach Delay, s/veh		118.7			57.5			127.0			351.7	
Approach LOS		F			E			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	0.0	4.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	50.0	48.4	0.0	65.1	12.2	86.2	30.0	35.1
Change Period (Y+Rc), s	7.5	7.1	7.6	* 7.7	7.5	7.1	* 7.7	* 7.7
Max Green (Gmax), s	42.5	37.9	27.4	* 22	42.5	37.9	* 22	* 27
Max Allow Headway (MAH), s	3.8	5.2	0.0	4.6	3.8	5.2	3.8	4.6
Max Q Clear (g_c+I1), s	44.5	25.4	0.0	19.8	5.7	12.4	24.3	29.4
Green Ext Time (g_e), s	0.0	7.1	0.0	1.5	0.1	10.6	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	0.00	1.00	0.82	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1630		0		1630		1630	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		4673		1933		4673		1712

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1455		1194		1455		2561

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)				(Prot)		(Prot)	

Lanes in Grp	1	0	0	0	1	0	1	0
Grp Vol (v), veh/h	570	0	0	0	38	0	309	0
Grp Sat Flow (s), veh/h/ln	1630	0	0	0	1630	0	1630	0
Q Serve Time (g_s), s	42.5	0.0	0.0	0.0	3.7	0.0	22.3	0.0
Cycle Q Clear Time (g_c), s	42.5	0.0	0.0	0.0	3.7	0.0	22.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	433	0	0	0	48	0	227	0
V/C Ratio (X)	1.32	0.00	0.00	0.00	0.79	0.00	1.36	0.00
Avail Cap (c_a), veh/h	433	0	0	0	433	0	227	0
Upstream Filter (I)	0.86	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	58.8	0.0	0.0	0.0	77.1	0.0	68.8	0.0
Incr Delay (d2), s/veh	155.9	0.0	0.0	0.0	24.3	0.0	187.8	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	214.7	0.0	0.0	0.0	101.4	0.0	256.7	0.0
1st-Term Q (Q1), veh/ln	19.1	0.0	0.0	0.0	1.7	0.0	10.0	0.0
2nd-Term Q (Q2), veh/ln	18.8	0.0	0.0	0.0	0.3	0.0	11.9	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	37.9	0.0	0.0	0.0	2.0	0.0	21.9	0.0
%ile Storage Ratio (RQ%)	1.40	0.00	0.00	0.00	0.13	0.00	1.20	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	34.2	0.0	0.0	0.0	0.0	0.0	20.4	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	1	0	3	0	1
Grp Vol (v), veh/h	0	768	0	233	0	532	0	56
Grp Sat Flow (s), veh/h/ln	0	1558	0	1626	0	1558	0	1712
Q Serve Time (g_s), s	0.0	23.4	0.0	17.1	0.0	10.4	0.0	4.5
Cycle Q Clear Time (g_c), s	0.0	23.4	0.0	17.1	0.0	10.4	0.0	4.5
Lane Grp Cap (c), veh/h	0	1203	0	583	0	2307	0	293
V/C Ratio (X)	0.00	0.64	0.00	0.40	0.00	0.23	0.00	0.19
Avail Cap (c_a), veh/h	0	1203	0	583	0	2307	0	293
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.86	0.00	1.00
Uniform Delay (d1), s/veh	0.0	52.8	0.0	38.4	0.0	23.1	0.0	56.8
Incr Delay (d2), s/veh	0.0	2.6	0.0	0.4	0.0	0.2	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	55.4	0.0	38.8	0.0	23.3	0.0	57.1
1st-Term Q (Q1), veh/ln	0.0	10.0	0.0	7.7	0.0	4.5	0.0	2.1

2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	10.3	0.0	7.8	0.0	4.5	0.0	2.2
%ile Storage Ratio (RQ%)	0.00	0.12	0.00	0.42	0.00	0.04	0.00	0.06
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	2
Grp Vol (v), veh/h	0	0	0	222	0	41	0	729
Grp Sat Flow (s), veh/h/ln	0	1455	0	1501	0	1455	0	1280
Q Serve Time (g_s), s	0.0	0.0	0.0	17.8	0.0	2.3	0.0	27.4
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	17.8	0.0	2.3	0.0	27.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.80	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	375	0	538	0	718	0	439
V/C Ratio (X)	0.00	0.00	0.00	0.41	0.00	0.06	0.00	1.66
Avail Cap (c_a), veh/h	0	375	0	538	0	718	0	439
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.86	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	38.6	0.0	21.1	0.0	66.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.5	0.0	0.1	0.0	308.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	39.1	0.0	21.2	0.0	374.3
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	7.4	0.0	0.9	0.0	9.7
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	18.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	7.5	0.0	1.0	0.0	28.5
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.41	0.00	0.05	0.00	0.85
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	72.6
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	158.7
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	396	763	46	192	655	655	133	1033	221	217	579	169
Future Volume (veh/h)	396	763	46	192	655	655	133	1033	221	217	579	169
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1776	1776	1776	1776	1776	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	400	771	46	194	662	662	134	1043	223	219	585	171
Adj No. of Lanes	2	3	1	2	3	2	2	2	0	2	2	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	7	7	7	7	7	7	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	80	1503	468	80	1503	824	204	614	131	299	622	181
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.02	0.31	0.31	0.02	0.31	0.31	0.06	0.22	0.22	0.09	0.24	0.24
Ln Grp Delay, s/veh	1867.1	24.5	20.6	717.2	23.5	34.2	41.2	355.5	359.6	40.6	60.2	61.5
Ln Grp LOS	F	C	C	F	C	C	D	F	F	D	E	E
Approach Vol, veh/h		1217			1518			1400			975	
Approach Delay, s/veh		630.0			116.8			327.2			56.3	
Approach LOS		F			F			F			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	4.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	9.2	32.7	14.3	25.8	9.2	32.7	12.7	27.4
Change Period (Y+Rc), s	7.2	* 7.3	6.8	* 7.6	7.2	* 7.3	* 7.6	* 7.6
Max Green (Gmax), s	2.0	* 24	10.2	* 18	2.0	* 24	* 7.4	* 19
Max Allow Headway (MAH), s	3.8	4.9	3.8	5.3	3.8	4.9	3.8	5.3
Max Q Clear (g_c+I1), s	4.0	20.8	7.3	20.2	4.0	12.7	5.3	20.3
Green Ext Time (g_e), s	0.0	2.5	0.2	0.0	0.0	8.4	0.1	0.0
Prob of Phs Call (p_c)	1.00	1.00	0.99	1.00	0.99	1.00	0.95	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3281		3281		3281		3281	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		4848		2768		4848		2578

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		2656		590		1509		752

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	400	0	219	0	194	0	134	0
Grp Sat Flow (s), veh/h/ln	1640	0	1640	0	1640	0	1640	0
Q Serve Time (g_s), s	2.0	0.0	5.3	0.0	2.0	0.0	3.3	0.0
Cycle Q Clear Time (g_c), s	2.0	0.0	5.3	0.0	2.0	0.0	3.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	80	0	299	0	80	0	204	0
V/C Ratio (X)	5.00	0.00	0.73	0.00	2.42	0.00	0.66	0.00
Avail Cap (c_a), veh/h	80	0	408	0	80	0	296	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	40.0	0.0	36.3	0.0	40.0	0.0	37.6	0.0
Incr Delay (d2), s/veh	1827.1	0.0	4.3	0.0	677.2	0.0	3.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	1867.1	0.0	40.6	0.0	717.2	0.0	41.2	0.0
1st-Term Q (Q1), veh/ln	0.9	0.0	2.4	0.0	0.9	0.0	1.5	0.0
2nd-Term Q (Q2), veh/ln	20.3	0.0	0.2	0.0	7.5	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	21.2	0.0	2.6	0.0	8.4	0.0	1.6	0.0
%ile Storage Ratio (RQ%)	1.22	0.00	0.05	0.00	0.43	0.00	0.04	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	80.0	0.0	0.0	0.0	28.5	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	1.2	0.0	0.0	0.0	0.6	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	1	0	3	0	1
Grp Vol (v), veh/h	0	662	0	634	0	771	0	382
Grp Sat Flow (s), veh/h/ln	0	1616	0	1687	0	1616	0	1687
Q Serve Time (g_s), s	0.0	8.9	0.0	18.2	0.0	10.7	0.0	18.2
Cycle Q Clear Time (g_c), s	0.0	8.9	0.0	18.2	0.0	10.7	0.0	18.2
Lane Grp Cap (c), veh/h	0	1503	0	374	0	1503	0	407
V/C Ratio (X)	0.00	0.44	0.00	1.69	0.00	0.51	0.00	0.94
Avail Cap (c_a), veh/h	0	1503	0	374	0	1503	0	407
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	22.6	0.0	31.9	0.0	23.2	0.0	30.5
Incr Delay (d2), s/veh	0.0	0.9	0.0	323.6	0.0	1.3	0.0	29.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	23.5	0.0	355.5	0.0	24.5	0.0	60.2
1st-Term Q (Q1), veh/ln	0.0	4.0	0.0	8.4	0.0	4.8	0.0	8.5

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	33.7	0.0	0.2	0.0	3.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	4.1	0.0	42.1	0.0	5.0	0.0	11.9
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	1.12	0.00	0.06	0.00	0.23
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	64.9	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		T+R
Lanes in Grp	0	2	0	1	0	1	0	1
Grp Vol (v), veh/h	0	662	0	632	0	46	0	374
Grp Sat Flow (s), veh/h/ln	0	1328	0	1672	0	1509	0	1643
Q Serve Time (g_s), s	0.0	18.8	0.0	18.2	0.0	1.8	0.0	18.3
Cycle Q Clear Time (g_c), s	0.0	18.8	0.0	18.2	0.0	1.8	0.0	18.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.35	0.00	1.00	0.00	0.46
Lane Grp Cap (c), veh/h	0	824	0	371	0	468	0	396
V/C Ratio (X)	0.00	0.80	0.00	1.70	0.00	0.10	0.00	0.94
Avail Cap (c_a), veh/h	0	824	0	371	0	468	0	396
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	26.0	0.0	31.9	0.0	20.1	0.0	30.6
Incr Delay (d2), s/veh	0.0	8.2	0.0	327.7	0.0	0.4	0.0	31.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	34.2	0.0	359.6	0.0	20.6	0.0	61.5
1st-Term Q (Q1), veh/ln	0.0	6.9	0.0	8.3	0.0	0.7	0.0	8.3
2nd-Term Q (Q2), veh/ln	0.0	0.9	0.0	33.8	0.0	0.1	0.0	3.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.8	0.0	42.1	0.0	0.8	0.0	11.7
%ile Storage Ratio (RQ%)	0.00	0.30	0.00	1.12	0.00	0.05	0.00	0.23
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	65.2	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	285.1
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	428	1488	0	0	1985	743	0	0	868	0	0	0
Future Volume (veh/h)	428	1488	0	0	1985	743	0	0	868	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q, veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1845	1845	0	0	1845	1845	0	0	1845			
Adj Flow Rate, veh/h	437	1518	0	0	2026	0	0	0	886			
Adj No. of Lanes	2	3	0	0	3	1	0	0	2			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98			
Percent Heavy Veh, %	3	3	0	0	3	3	0	0	3			
Opposing Right Turn Influence	Yes			No			No					
Cap, veh/h	491	4811	0	0	3860	1202	0	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Prop Arrive On Green	0.14	0.96	0.00	0.00	0.77	0.00	0.00	0.00	0.00			
Ln Grp Delay, s/veh	74.9	0.4	0.0	0.0	7.0	0.0	0.0	0.0	0.0			
Ln Grp LOS	E	A			A							

Approach Vol, veh/h		1955			2026			0				Timer:
Approach Delay, s/veh		17.0			7.0			0.0				Assigned Phs
Approach LOS		B			A							Case No
Phs Duration (G+Y+Rc), s					143.0			27.0	116.0			
Change Period (Y+Rc), s					6.4			6.4	6.4			
Max Green (Gmax), s					76.6			23.6	46.6			
Max Allow Headway (MAH), s					5.2			3.8	5.2			
Max Q Clear (g_c+I1), s					4.8			20.0	24.5			
Green Ext Time (g_e), s					62.0			0.6	21.0			
Prob of Phs Call (p_c)					1.00			1.00	1.00			
Prob of Max Out (p_x)					0.00			1.00	0.00			

Left-Turn Movement Data												
Assigned Mvmt								7	3			
Mvmt Sat Flow, veh/h								3408	0			

Through Movement Data												
Assigned Mvmt					4				8			
Mvmt Sat Flow, veh/h					5202				5202			

Right-Turn Movement Data												
Assigned Mvmt					14				18			
Mvmt Sat Flow, veh/h					0				1568			

Left Lane Group Data												
Assigned Mvmt		0	0	0	0	0	0	7	3			
Lane Assignment								(Prot)				
Lanes in Grp		0	0	0	0	0	0	2	0			
Grp Vol (v), veh/h		0	0	0	0	0	0	437	0			
Grp Sat Flow (s), veh/h/ln		0	0	0	0	0	0	1704	0			

Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	18.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	18.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	109.6
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	491	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.89	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	562	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	60.1	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	14.8	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	74.9	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	8.5	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	9.5	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	1.62	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	3	0	0	0	3
Grp Vol (v), veh/h	0	0	0	1518	0	0	0	2026
Grp Sat Flow (s), veh/h/ln	0	0	0	1679	0	0	0	1679
Q Serve Time (g_s), s	0.0	0.0	0.0	2.8	0.0	0.0	0.0	22.5
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	2.8	0.0	0.0	0.0	22.5
Lane Grp Cap (c), veh/h	0	0	0	4811	0	0	0	3860
V/C Ratio (X)	0.00	0.00	0.00	0.32	0.00	0.00	0.00	0.52
Avail Cap (c_a), veh/h	0	0	0	4811	0	0	0	3860
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	6.5
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.4	0.0	0.0	0.0	7.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.1	0.0	0.0	0.0	10.3
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00

%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	1.2	0.0	0.0	0.0	10.5
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.78
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	0	0	18
Lane Assignment								R
Lanes in Grp	0	0	0	0	0	0	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	1568
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	1202
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	1202
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		12.0						
HCM 2010 LOS		B						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1290	658	812	2241	0	0	0	0	0	0	582
Future Volume (veh/h)	0	1290	658	812	2241	0	0	0	0	0	0	582
Number	7	4	14	3	8	18				1	6	16
Initial Q, veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1845	1845	1845	1845	0				0	0	1845
Adj Flow Rate, veh/h	0	1316	0	829	2287	0				0	0	594
Adj No. of Lanes	0	3	1	2	3	0				0	0	2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98				0.98	0.98	0.98
Percent Heavy Veh, %	0	3	3	3	3	0				0	0	3
Opposing Right Turn Influence	No			Yes						No		
Cap, veh/h	0	2585	805	988	4540	0				0	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Prop Arrive On Green	0.00	0.51	0.00	0.29	0.90	0.00				0.00	0.00	0.00
Ln Grp Delay, s/veh	0.0	11.1	0.0	26.0	1.0	0.0				0.0	0.0	0.0
Ln Grp LOS		B		C	A							
Approach Vol, veh/h		1316			3116						0	
Approach Delay, s/veh		11.1			7.6						0.0	
Approach LOS		B			A							

Timer:	1	2	3	4	5	6	7	8
Assigned Phs			3	4				8
Case No			2.0	7.0				4.0
Phs Duration (G+Y+Rc), s			25.2	39.8				65.0
Change Period (Y+Rc), s			6.4	6.4				6.4
Max Green (Gmax), s			23.6	18.0				48.0
Max Allow Headway (MAH), s			3.8	5.2				5.2
Max Q Clear (g_c+I1), s			16.8	13.2				7.3
Green Ext Time (g_e), s			2.0	4.7				37.7
Prob of Phs Call (p_c)			1.00	1.00				1.00
Prob of Max Out (p_x)			0.41	0.00				0.00

Left-Turn Movement Data		
Assigned Mvmt	3	7
Mvmt Sat Flow, veh/h	3408	0

Through Movement Data		
Assigned Mvmt	4	8
Mvmt Sat Flow, veh/h	5202	5202

Right-Turn Movement Data		
Assigned Mvmt	14	18
Mvmt Sat Flow, veh/h	1568	0

Left Lane Group Data								
Assigned Mvmt	0	0	3	7	0	0	0	0
Lane Assignment			(Prot)					

Lanes in Grp	0	0	2	0	0	0	0	0
Grp Vol (v), veh/h	0	0	829	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1704	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	14.8	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	14.8	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	33.4	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	988	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.84	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	1237	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	21.7	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	4.3	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	26.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	6.9	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	7.5	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.60	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	3	0	0	0	3
Grp Vol (v), veh/h	0	0	0	1316	0	0	0	2287
Grp Sat Flow (s), veh/h/ln	0	0	0	1679	0	0	0	1679
Q Serve Time (g_s), s	0.0	0.0	0.0	11.2	0.0	0.0	0.0	5.3
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	11.2	0.0	0.0	0.0	5.3
Lane Grp Cap (c), veh/h	0	0	0	2585	0	0	0	4540
V/C Ratio (X)	0.00	0.00	0.00	0.51	0.00	0.00	0.00	0.50
Avail Cap (c_a), veh/h	0	0	0	2585	0	0	0	4540
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	10.4	0.0	0.0	0.0	0.6
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	11.1	0.0	0.0	0.0	1.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	5.1	0.0	0.0	0.0	2.3

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	5.3	0.0	0.0	0.0	2.5
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.16
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	0	0	18
Lane Assignment				R				
Lanes in Grp	0	0	0	1	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1568	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	805	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	805	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		8.7						
HCM 2010 LOS		A						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	428	2426	0	0	2248	614	0	0	729	0	0	743
Future Volume (veh/h)	428	2426	0	0	2248	614	0	0	729	0	0	743
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	0	0	1863	0	0	1863
Adj Flow Rate, veh/h	446	2527	0	0	2342	640	0	0	759	0	0	774
Adj No. of Lanes	2	3	0	0	3	2	0	0	3	0	0	3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	0	0	2	2	0	0	2	0	0	2
Opposing Right Turn Influence	Yes			No			No			No		
Cap, veh/h	533	4795	0	0	3717	2037	0	0	0	0	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.15	0.94	0.00	0.00	0.73	0.73	0.00	0.00	0.00	0.00	0.00	0.00
Ln Grp Delay, s/veh	49.0	0.6	0.0	0.0	8.3	5.7	0.0	0.0	0.0	0.0	0.0	0.0
Ln Grp LOS	D	A			A	A						
Approach Vol, veh/h		2973			2982			0			0	
Approach Delay, s/veh		7.9			7.8			0.0			0.0	
Approach LOS		A			A							

Timer:	1	2	3	4	5	6	7	8
Assigned Phs				4			7	8
Case No				4.0			2.0	7.0
Phs Duration (G+Y+Rc), s				112.0			23.7	88.3
Change Period (Y+Rc), s				6.4			6.4	6.4
Max Green (Gmax), s				81.6			26.6	48.6
Max Allow Headway (MAH), s				5.1			3.8	5.1
Max Q Clear (g_c+I1), s				8.3			16.1	27.7
Green Ext Time (g_e), s				72.5			1.2	20.8
Prob of Phs Call (p_c)				1.00			1.00	1.00
Prob of Max Out (p_x)				0.00			0.03	0.00
Left-Turn Movement Data								
Assigned Mvmt							7	3
Mvmt Sat Flow, veh/h							3442	0
Through Movement Data								
Assigned Mvmt				4				8
Mvmt Sat Flow, veh/h				5253				5253
Right-Turn Movement Data								
Assigned Mvmt				14				18
Mvmt Sat Flow, veh/h				0				2787
Left Lane Group Data								
Assigned Mvmt	0	0	0	0	0	0	7	3
Lane Assignment							(Prot)	

Lanes in Grp	0	0	0	0	0	0	2	0
Grp Vol (v), veh/h	0	0	0	0	0	0	446	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	1721	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	14.1	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	14.1	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	81.9
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	533	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.84	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	817	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.64	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	46.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	3.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	49.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	6.7	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	6.9	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	3	0	0	0	3
Grp Vol (v), veh/h	0	0	0	2527	0	0	0	2342
Grp Sat Flow (s), veh/h/ln	0	0	0	1695	0	0	0	1695
Q Serve Time (g_s), s	0.0	0.0	0.0	6.3	0.0	0.0	0.0	25.7
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	6.3	0.0	0.0	0.0	25.7
Lane Grp Cap (c), veh/h	0	0	0	4795	0	0	0	3717
V/C Ratio (X)	0.00	0.00	0.00	0.53	0.00	0.00	0.00	0.63
Avail Cap (c_a), veh/h	0	0	0	4795	0	0	0	3717
Upstream Filter (I)	0.00	0.00	0.00	0.64	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.4	0.0	0.0	0.0	7.5
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.6	0.0	0.0	0.0	8.3
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	2.6	0.0	0.0	0.0	11.9

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	2.7	0.0	0.0	0.0	12.2
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.20
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	0	0	18
Lane Assignment								R
Lanes in Grp	0	0	0	0	0	0	0	2
Grp Vol (v), veh/h	0	0	0	0	0	0	0	640
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	1393
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	2037
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	2037
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.7
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.7
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		7.8						
HCM 2010 LOS		A						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1959	280	539	2358	10	0	0	773	0	0	472
Future Volume (veh/h)	0	1959	280	539	2358	10	0	0	773	0	0	472
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	1900	0	0	1863	0	0	1863
Adj Flow Rate, veh/h	0	2106	301	580	2535	11	0	0	831	0	0	508
Adj No. of Lanes	0	3	2	2	3	0	0	0	3	0	0	3
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	2	2	2	2	2	0	0	2	0	0	2
Opposing Right Turn Influence	No			Yes			No			No		
Cap, veh/h	0	3756	2058	646	5034	22	0	0	0	0	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.00	0.74	0.74	0.19	0.96	0.96	0.00	0.00	0.00	0.00	0.00	0.00
Ln Grp Delay, s/veh	0.0	10.7	6.8	72.8	0.5	0.7	0.0	0.0	0.0	0.0	0.0	0.0
Ln Grp LOS		B	A	E	A	A						
Approach Vol, veh/h		2407			3126			0			0	
Approach Delay, s/veh		10.3			13.9			0.0			0.0	
Approach LOS		B			B							

Timer:	1	2	3	4	5	6	7	8
Assigned Phs			3	4				8
Case No			2.0	7.0				4.0
Phs Duration (G+Y+Rc), s			39.1	134.9				174.0
Change Period (Y+Rc), s			6.4	6.4				6.4
Max Green (Gmax), s			47.6	93.6				147.6
Max Allow Headway (MAH), s			3.8	5.2				5.2
Max Q Clear (g_c+I1), s			30.6	34.1				8.0
Green Ext Time (g_e), s			2.0	58.3				133.6
Prob of Phs Call (p_c)			1.00	1.00				1.00
Prob of Max Out (p_x)			0.00	0.00				0.00

Left-Turn Movement Data		
Assigned Mvmt	3	7
Mvmt Sat Flow, veh/h	3442	0

Through Movement Data		
Assigned Mvmt	4	8
Mvmt Sat Flow, veh/h	5253	5226

Right-Turn Movement Data		
Assigned Mvmt	14	18
Mvmt Sat Flow, veh/h	2787	23

Left Lane Group Data								
Assigned Mvmt	0	0	3	7	0	0	0	0
Lane Assignment			(Prot)					

Lanes in Grp	0	0	2	0	0	0	0	0
Grp Vol (v), veh/h	0	0	580	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1721	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	28.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	28.6	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	128.5	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	646	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.90	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	942	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.42	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	69.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	3.8	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	72.8	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	13.6	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	14.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	1.11	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	3	0	0	0	2
Grp Vol (v), veh/h	0	0	0	2106	0	0	0	1644
Grp Sat Flow (s), veh/h/ln	0	0	0	1695	0	0	0	1695
Q Serve Time (g_s), s	0.0	0.0	0.0	32.1	0.0	0.0	0.0	6.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	32.1	0.0	0.0	0.0	6.0
Lane Grp Cap (c), veh/h	0	0	0	3756	0	0	0	3265
V/C Ratio (X)	0.00	0.00	0.00	0.56	0.00	0.00	0.00	0.50
Avail Cap (c_a), veh/h	0	0	0	3756	0	0	0	3265
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.42
Uniform Delay (d1), s/veh	0.0	0.0	0.0	10.1	0.0	0.0	0.0	0.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	10.7	0.0	0.0	0.0	0.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	14.8	0.0	0.0	0.0	2.5

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	15.0	0.0	0.0	0.0	2.6
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.05
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	0	0	18
Lane Assignment				R				T+R
Lanes in Grp	0	0	0	2	0	0	0	1
Grp Vol (v), veh/h	0	0	0	301	0	0	0	902
Grp Sat Flow (s), veh/h/ln	0	0	0	1393	0	0	0	1859
Q Serve Time (g_s), s	0.0	0.0	0.0	5.5	0.0	0.0	0.0	6.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	5.5	0.0	0.0	0.0	6.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.01
Lane Grp Cap (c), veh/h	0	0	0	2058	0	0	0	1790
V/C Ratio (X)	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.50
Avail Cap (c_a), veh/h	0	0	0	2058	0	0	0	1790
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.42
Uniform Delay (d1), s/veh	0.0	0.0	0.0	6.7	0.0	0.0	0.0	0.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	6.8	0.0	0.0	0.0	0.7
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	2.1	0.0	0.0	0.0	2.8
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	2.2	0.0	0.0	0.0	3.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.05
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		12.3						
HCM 2010 LOS		B						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	349	122	235	320	207	163	1030	325	301	746	44
Future Volume (veh/h)	41	349	122	235	320	207	163	1030	325	301	746	44
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	42	360	126	242	330	213	168	1062	335	310	769	45
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	54	322	111	187	416	263	188	1135	355	344	1751	102
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.13	0.13	0.11	0.20	0.20	0.11	0.45	0.45	0.20	0.54	0.54
Ln Grp Delay, s/veh	95.2	161.2	170.5	235.3	70.3	73.4	102.4	60.1	63.1	89.3	23.0	23.0
Ln Grp LOS	F	F	F	F	E	E	F	E	E	F	C	C
Approach Vol, veh/h		528			785			1565			1124	
Approach Delay, s/veh		160.2			122.2			65.9			41.3	
Approach LOS		F			F			E			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	4.0
Phs Duration (G+Y+Rc), s	36.0	74.0	21.0	24.0	21.7	88.3	9.3	35.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green (Gmax), s	31.5	69.5	16.5	19.5	18.5	82.5	13.5	22.5
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.4	3.8	5.3	3.8	5.4
Max Q Clear (g_c+I1), s	29.7	64.8	18.5	21.5	17.2	24.2	5.7	26.2
Green Ext Time (g_e), s	0.2	4.2	0.0	0.0	0.1	29.3	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	0.84	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1691		1757		1691		1757	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2532		2559		3240		2063

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		791		883		190		1304

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	310	0	242	0	168	0	42	0
Grp Sat Flow (s), veh/h/ln	1691	0	1757	0	1691	0	1757	0
Q Serve Time (g_s), s	27.7	0.0	16.5	0.0	15.2	0.0	3.7	0.0
Cycle Q Clear Time (g_c), s	27.7	0.0	16.5	0.0	15.2	0.0	3.7	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	344	0	187	0	188	0	54	0
V/C Ratio (X)	0.90	0.00	1.29	0.00	0.89	0.00	0.78	0.00
Avail Cap (c_a), veh/h	344	0	187	0	202	0	153	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	60.2	0.0	69.3	0.0	68.0	0.0	74.6	0.0
Incr Delay (d2), s/veh	29.1	0.0	166.1	0.0	34.4	0.0	20.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	89.3	0.0	235.3	0.0	102.4	0.0	95.2	0.0
1st-Term Q (Q1), veh/ln	12.9	0.0	8.0	0.0	7.1	0.0	1.8	0.0
2nd-Term Q (Q2), veh/ln	2.8	0.0	8.6	0.0	1.8	0.0	0.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	15.7	0.0	16.6	0.0	8.9	0.0	2.1	0.0
%ile Storage Ratio (RQ%)	1.27	0.00	1.81	0.00	1.42	0.00	0.43	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	13.7	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	704	0	245	0	400	0	279
Grp Sat Flow (s), veh/h/ln	0	1687	0	1752	0	1687	0	1752
Q Serve Time (g_s), s	0.0	61.2	0.0	19.5	0.0	22.2	0.0	23.5
Cycle Q Clear Time (g_c), s	0.0	61.2	0.0	19.5	0.0	22.2	0.0	23.5
Lane Grp Cap (c), veh/h	0	756	0	220	0	912	0	353
V/C Ratio (X)	0.00	0.93	0.00	1.11	0.00	0.44	0.00	0.79
Avail Cap (c_a), veh/h	0	756	0	220	0	912	0	353
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	40.5	0.0	67.8	0.0	21.5	0.0	58.8
Incr Delay (d2), s/veh	0.0	19.6	0.0	93.5	0.0	1.5	0.0	11.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	60.1	0.0	161.2	0.0	23.0	0.0	70.3
1st-Term Q (Q1), veh/ln	0.0	28.5	0.0	9.4	0.0	10.3	0.0	11.4

2nd-Term Q (Q2), veh/ln	0.0	4.1	0.0	5.7	0.0	0.4	0.0	1.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	32.7	0.0	15.2	0.0	10.7	0.0	12.5
%ile Storage Ratio (RQ%)	0.00	2.57	0.00	0.35	0.00	0.82	0.00	0.28
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	6.1	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	693	0	241	0	414	0	264
Grp Sat Flow (s), veh/h/ln	0	1636	0	1689	0	1742	0	1615
Q Serve Time (g_s), s	0.0	62.8	0.0	19.5	0.0	22.2	0.0	24.2
Cycle Q Clear Time (g_c), s	0.0	62.8	0.0	19.5	0.0	22.2	0.0	24.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.48	0.00	0.52	0.00	0.11	0.00	0.81
Lane Grp Cap (c), veh/h	0	734	0	212	0	942	0	325
V/C Ratio (X)	0.00	0.94	0.00	1.13	0.00	0.44	0.00	0.81
Avail Cap (c_a), veh/h	0	734	0	212	0	942	0	325
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	40.9	0.0	67.8	0.0	21.5	0.0	59.1
Incr Delay (d2), s/veh	0.0	22.2	0.0	102.7	0.0	1.5	0.0	14.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	63.1	0.0	170.5	0.0	23.0	0.0	73.4
1st-Term Q (Q1), veh/ln	0.0	28.3	0.0	9.1	0.0	10.7	0.0	10.8
2nd-Term Q (Q2), veh/ln	0.0	4.5	0.0	6.1	0.0	0.4	0.0	1.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	32.8	0.0	15.2	0.0	11.1	0.0	12.1
%ile Storage Ratio (RQ%)	0.00	2.59	0.00	0.35	0.00	0.85	0.00	0.27
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	7.2	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		82.5						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	33	65	77	33	51	71	481	158	135	406	7
Future Volume (veh/h)	3	33	65	77	33	51	71	481	158	135	406	7
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1900	1712	1712	1712	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	3	35	69	82	35	54	76	512	168	144	432	7
Adj No. of Lanes	1	1	0	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	11	11	11	11	11	11	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	7	49	97	101	263	223	74	1330	434	74	1806	29
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.00	0.10	0.10	0.06	0.15	0.15	0.04	0.53	0.53	0.04	0.53	0.53
Ln Grp Delay, s/veh	88.6	0.0	46.6	80.2	33.9	34.8	159.1	13.9	14.0	520.6	12.2	12.2
Ln Grp LOS	F		D	F	C	C	F	B	B	F	B	B
Approach Vol, veh/h		107			171			756			583	
Approach Delay, s/veh		47.8			56.4			28.6			137.7	
Approach LOS		D			E			C			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	10.0	54.9	12.0	15.1	10.0	54.9	6.7	20.4
Change Period (Y+Rc), s	6.0	6.0	* 6.3	* 6.3	6.0	6.0	* 6.3	* 6.3
Max Green (Gmax), s	4.0	34.0	* 5.7	* 24	4.0	34.0	* 5.7	* 24
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.1	3.8	5.3	3.8	5.1
Max Q Clear (g_c+I1), s	6.0	13.2	6.6	8.1	6.0	8.3	2.2	5.0
Green Ext Time (g_e), s	0.0	7.3	0.0	0.8	0.0	7.9	0.0	0.9
Prob of Phs Call (p_c)	0.97	1.00	0.88	0.99	0.86	1.00	0.07	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		1		3		5		7
Mvmt Sat Flow, veh/h		1691		1630		1691		1630

Through Movement Data								
Assigned Mvmt			2		4		6		8
Mvmt Sat Flow, veh/h			2502		516		3398		1712

Right-Turn Movement Data								
Assigned Mvmt			12		14		16		18
Mvmt Sat Flow, veh/h			817		1017		55		1455

Left Lane Group Data								
Assigned Mvmt		1	0	3	0	5	0	7	0
Lane Assignment		(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	144	0	82	0	76	0	3	0
Grp Sat Flow (s), veh/h/ln	1691	0	1630	0	1691	0	1630	0
Q Serve Time (g_s), s	4.0	0.0	4.6	0.0	4.0	0.0	0.2	0.0
Cycle Q Clear Time (g_c), s	4.0	0.0	4.6	0.0	4.0	0.0	0.2	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	74	0	101	0	74	0	7	0
V/C Ratio (X)	1.96	0.00	0.81	0.00	1.03	0.00	0.46	0.00
Avail Cap (c_a), veh/h	74	0	101	0	74	0	101	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	44.0	0.0	42.6	0.0	44.0	0.0	45.7	0.0
Incr Delay (d2), s/veh	476.6	0.0	37.6	0.0	114.5	0.0	42.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0
Control Delay (d), s/veh	520.6	0.0	80.2	0.0	159.1	0.0	88.6	0.0
1st-Term Q (Q1), veh/ln	1.9	0.0	2.0	0.0	1.9	0.0	0.1	0.0
2nd-Term Q (Q2), veh/ln	9.7	0.0	1.1	0.0	2.3	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	11.6	0.0	3.1	0.0	4.2	0.0	0.2	0.0
%ile Storage Ratio (RQ%)	1.35	0.00	0.60	0.00	0.35	0.00	0.03	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	17.6	0.0	0.0	0.0	0.6	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.5	0.0	0.0	0.0	0.3	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	344	0	0	0	214	0	35
Grp Sat Flow (s), veh/h/ln	0	1687	0	0	0	1687	0	1712
Q Serve Time (g_s), s	0.0	11.1	0.0	0.0	0.0	6.3	0.0	1.6
Cycle Q Clear Time (g_c), s	0.0	11.1	0.0	0.0	0.0	6.3	0.0	1.6
Lane Grp Cap (c), veh/h	0	897	0	0	0	897	0	263
V/C Ratio (X)	0.00	0.38	0.00	0.00	0.00	0.24	0.00	0.13
Avail Cap (c_a), veh/h	0	897	0	0	0	897	0	441
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	12.7	0.0	0.0	0.0	11.6	0.0	33.6
Incr Delay (d2), s/veh	0.0	1.2	0.0	0.0	0.0	0.6	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	13.9	0.0	0.0	0.0	12.2	0.0	33.9
1st-Term Q (Q1), veh/ln	0.0	5.1	0.0	0.0	0.0	2.9	0.0	0.8

2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	5.4	0.0	0.0	0.0	3.1	0.0	0.8
%ile Storage Ratio (RQ%)	0.00	0.17	0.00	0.00	0.00	0.09	0.00	0.02
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	336	0	104	0	225	0	54
Grp Sat Flow (s), veh/h/ln	0	1632	0	1532	0	1766	0	1455
Q Serve Time (g_s), s	0.0	11.2	0.0	6.1	0.0	6.3	0.0	3.0
Cycle Q Clear Time (g_c), s	0.0	11.2	0.0	6.1	0.0	6.3	0.0	3.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.50	0.00	0.66	0.00	0.03	0.00	1.00
Lane Grp Cap (c), veh/h	0	867	0	146	0	939	0	223
V/C Ratio (X)	0.00	0.39	0.00	0.71	0.00	0.24	0.00	0.24
Avail Cap (c_a), veh/h	0	867	0	395	0	939	0	375
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	12.7	0.0	40.4	0.0	11.6	0.0	34.2
Incr Delay (d2), s/veh	0.0	1.3	0.0	6.2	0.0	0.6	0.0	0.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	14.0	0.0	46.6	0.0	12.2	0.0	34.8
1st-Term Q (Q1), veh/ln	0.0	5.0	0.0	2.6	0.0	3.1	0.0	1.2
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.3	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	5.3	0.0	2.8	0.0	3.2	0.0	1.2
%ile Storage Ratio (RQ%)	0.00	0.17	0.00	0.07	0.00	0.09	0.00	0.22
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	72.1
HCM 2010 LOS	E

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	82	235	37	134	202	97	78	914	166	293	921	61
Future Volume (veh/h)	82	235	37	134	202	97	78	914	166	293	921	61
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	84	240	38	137	206	99	80	933	169	299	940	62
Adj No. of Lanes	1	1	0	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	96	289	46	96	343	291	99	1386	251	185	1725	114
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.19	0.19	0.05	0.19	0.19	0.06	0.49	0.49	0.11	0.54	0.54
Ln Grp Delay, s/veh	121.7	0.0	62.6	309.3	56.2	52.3	93.2	33.1	33.1	359.2	23.9	23.9
Ln Grp LOS	F		E	F	E	D	F	C	C	F	C	C
Approach Vol, veh/h		362			442			1182			1301	
Approach Delay, s/veh		76.3			133.8			37.2			101.0	
Approach LOS		E			F			D			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	22.0	76.9	14.0	33.1	14.5	84.4	14.0	33.1
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green (Gmax), s	16.0	46.0	8.0	52.0	11.0	51.0	8.0	52.0
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.1	3.8	5.3	3.8	5.1
Max Q Clear (g_c+I1), s	18.0	38.5	10.0	23.7	8.8	30.0	8.9	16.9
Green Ext Time (g_e), s	0.0	6.2	0.0	3.4	0.0	14.6	0.0	3.5
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.96	1.00	0.97	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1691		1757		1691		1757	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2855		1555		3213		1845

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		517		246		212		1568

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	299	0	137	0	80	0	84	0
Grp Sat Flow (s), veh/h/ln	1691	0	1757	0	1691	0	1757	0
Q Serve Time (g_s), s	16.0	0.0	8.0	0.0	6.8	0.0	6.9	0.0
Cycle Q Clear Time (g_c), s	16.0	0.0	8.0	0.0	6.8	0.0	6.9	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	185	0	96	0	99	0	96	0
V/C Ratio (X)	1.61	0.00	1.42	0.00	0.81	0.00	0.87	0.00
Avail Cap (c_a), veh/h	185	0	96	0	127	0	96	0
Upstream Filter (I)	0.76	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	65.0	0.0	69.0	0.0	68.0	0.0	68.5	0.0
Incr Delay (d2), s/veh	294.2	0.0	240.3	0.0	25.2	0.0	53.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	359.2	0.0	309.3	0.0	93.2	0.0	121.7	0.0
1st-Term Q (Q1), veh/ln	7.5	0.0	3.9	0.0	3.2	0.0	3.4	0.0
2nd-Term Q (Q2), veh/ln	15.1	0.0	6.4	0.0	0.7	0.0	1.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	22.6	0.0	10.3	0.0	3.9	0.0	4.8	0.0
%ile Storage Ratio (RQ%)	2.39	0.00	1.95	0.00	0.48	0.00	0.74	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	28.4	0.0	10.2	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.4	0.0	0.4	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	551	0	0	0	493	0	206
Grp Sat Flow (s), veh/h/ln	0	1687	0	0	0	1687	0	1845
Q Serve Time (g_s), s	0.0	36.5	0.0	0.0	0.0	28.0	0.0	14.9
Cycle Q Clear Time (g_c), s	0.0	36.5	0.0	0.0	0.0	28.0	0.0	14.9
Lane Grp Cap (c), veh/h	0	819	0	0	0	905	0	343
V/C Ratio (X)	0.00	0.67	0.00	0.00	0.00	0.55	0.00	0.60
Avail Cap (c_a), veh/h	0	819	0	0	0	905	0	657
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.76	0.00	1.00
Uniform Delay (d1), s/veh	0.0	28.7	0.0	0.0	0.0	22.1	0.0	54.5
Incr Delay (d2), s/veh	0.0	4.4	0.0	0.0	0.0	1.8	0.0	1.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	33.1	0.0	0.0	0.0	23.9	0.0	56.2
1st-Term Q (Q1), veh/ln	0.0	17.0	0.0	0.0	0.0	13.0	0.0	7.6

2nd-Term Q (Q2), veh/ln	0.0	1.0	0.0	0.0	0.0	0.4	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	18.0	0.0	0.0	0.0	13.5	0.0	7.8
%ile Storage Ratio (RQ%)	0.00	0.91	0.00	0.00	0.00	0.28	0.00	0.22
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	551	0	278	0	509	0	99
Grp Sat Flow (s), veh/h/ln	0	1685	0	1801	0	1738	0	1568
Q Serve Time (g_s), s	0.0	36.5	0.0	21.7	0.0	28.0	0.0	8.0
Cycle Q Clear Time (g_c), s	0.0	36.5	0.0	21.7	0.0	28.0	0.0	8.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.31	0.00	0.14	0.00	0.12	0.00	1.00
Lane Grp Cap (c), veh/h	0	818	0	335	0	933	0	291
V/C Ratio (X)	0.00	0.67	0.00	0.83	0.00	0.55	0.00	0.34
Avail Cap (c_a), veh/h	0	818	0	642	0	933	0	558
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.76	0.00	1.00
Uniform Delay (d1), s/veh	0.0	28.7	0.0	57.2	0.0	22.1	0.0	51.7
Incr Delay (d2), s/veh	0.0	4.4	0.0	5.3	0.0	1.7	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	33.1	0.0	62.6	0.0	23.9	0.0	52.3
1st-Term Q (Q1), veh/ln	0.0	17.0	0.0	10.8	0.0	13.4	0.0	3.5
2nd-Term Q (Q2), veh/ln	0.0	1.0	0.0	0.5	0.0	0.5	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	18.0	0.0	11.3	0.0	13.9	0.0	3.5
%ile Storage Ratio (RQ%)	0.00	0.91	0.00	0.32	0.00	0.29	0.00	0.10
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		79.7						
HCM 2010 LOS		E						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	121	213	35	119	280	113	98	835	68	228	1033	95
Future Volume (veh/h)	121	213	35	119	280	113	98	835	68	228	1033	95
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	129	227	37	127	298	120	104	888	72	243	1099	101
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	206	555	471	270	555	471	125	1524	124	217	1677	154
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.07	0.48	0.48	0.13	0.54	0.54
Ln Grp Delay, s/veh	65.0	42.9	38.1	55.9	45.1	40.5	71.6	28.8	28.8	154.7	27.8	27.8
Ln Grp LOS	E	D	D	E	D	D	E	C	C	F	C	C
Approach Vol, veh/h		393			545			1064			1443	
Approach Delay, s/veh		49.7			46.6			33.0			49.2	
Approach LOS		D			D			C			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Case No	2.0	4.0		5.0	2.0	4.0		5.0
Phs Duration (G+Y+Rc), s	24.0	77.8		50.2	15.7	86.1		50.2
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green (Gmax), s	19.5	67.5		51.5	19.5	67.5		51.5
Max Allow Headway (MAH), s	3.8	5.3		4.9	3.8	5.3		4.9
Max Q Clear (g_c+I1), s	21.5	32.7		42.3	11.2	40.2		32.7
Green Ext Time (g_e), s	0.0	20.9		3.4	0.1	17.9		4.8
Prob of Phs Call (p_c)	1.00	1.00		1.00	0.99	1.00		1.00
Prob of Max Out (p_x)	1.00	0.00		0.52	0.01	0.00		0.12

Left-Turn Movement Data								
Assigned Mvmt	1			7	5			3
Mvmt Sat Flow, veh/h	1691			955	1691			1100

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3161		1845		3125		1845

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		256		1568		287		1568

Left Lane Group Data								
Assigned Mvmt	1	0	0	7	5	0	0	3
Lane Assignment	(Prot)				(Prot)			

Lanes in Grp	1	0	0	1	1	0	0	1
Grp Vol (v), veh/h	243	0	0	129	104	0	0	127
Grp Sat Flow (s), veh/h/ln	1691	0	0	955	1691	0	0	1100
Q Serve Time (g_s), s	19.5	0.0	0.0	19.8	9.2	0.0	0.0	15.8
Cycle Q Clear Time (g_c), s	19.5	0.0	0.0	40.3	9.2	0.0	0.0	30.7
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	955	0	0	0	1100
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	45.7	0.0	0.0	0.0	45.7
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	25.2	0.0	0.0	0.0	30.8
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	19.8	0.0	0.0	0.0	15.8
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	217	0	0	206	125	0	0	270
V/C Ratio (X)	1.12	0.00	0.00	0.63	0.83	0.00	0.00	0.47
Avail Cap (c_a), veh/h	217	0	0	242	217	0	0	312
Upstream Filter (I)	0.73	0.00	0.00	1.00	0.14	0.00	0.00	1.00
Uniform Delay (d1), s/veh	66.3	0.0	0.0	61.1	69.5	0.0	0.0	54.6
Incr Delay (d2), s/veh	88.4	0.0	0.0	3.8	2.1	0.0	0.0	1.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	154.7	0.0	0.0	65.0	71.6	0.0	0.0	55.9
1st-Term Q (Q1), veh/ln	9.1	0.0	0.0	5.2	4.3	0.0	0.0	4.8
2nd-Term Q (Q2), veh/ln	5.3	0.0	0.0	0.2	0.1	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	14.4	0.0	0.0	5.5	4.4	0.0	0.0	4.9
%ile Storage Ratio (RQ%)	1.41	0.00	0.00	0.82	0.59	0.00	0.00	0.68
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	6.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	474	0	227	0	593	0	298
Grp Sat Flow (s), veh/h/ln	0	1687	0	1845	0	1687	0	1845
Q Serve Time (g_s), s	0.0	30.7	0.0	14.9	0.0	38.2	0.0	20.5
Cycle Q Clear Time (g_c), s	0.0	30.7	0.0	14.9	0.0	38.2	0.0	20.5
Lane Grp Cap (c), veh/h	0	813	0	555	0	905	0	555
V/C Ratio (X)	0.00	0.58	0.00	0.41	0.00	0.65	0.00	0.54
Avail Cap (c_a), veh/h	0	813	0	625	0	905	0	625
Upstream Filter (I)	0.00	0.14	0.00	1.00	0.00	0.73	0.00	1.00
Uniform Delay (d1), s/veh	0.0	28.3	0.0	42.4	0.0	25.2	0.0	44.3
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.5	0.0	2.7	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	28.8	0.0	42.9	0.0	27.8	0.0	45.1
1st-Term Q (Q1), veh/ln	0.0	14.3	0.0	7.6	0.0	17.8	0.0	10.4

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.0	0.7	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	14.4	0.0	7.7	0.0	18.5	0.0	10.6
%ile Storage Ratio (RQ%)	0.00	0.30	0.00	0.23	0.00	0.81	0.00	0.25
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	486	0	37	0	607	0	120
Grp Sat Flow (s), veh/h/ln	0	1730	0	1568	0	1725	0	1568
Q Serve Time (g_s), s	0.0	30.7	0.0	2.6	0.0	38.2	0.0	8.8
Cycle Q Clear Time (g_c), s	0.0	30.7	0.0	2.6	0.0	38.2	0.0	8.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.15	0.00	1.00	0.00	0.17	0.00	1.00
Lane Grp Cap (c), veh/h	0	834	0	471	0	926	0	471
V/C Ratio (X)	0.00	0.58	0.00	0.08	0.00	0.66	0.00	0.25
Avail Cap (c_a), veh/h	0	834	0	531	0	926	0	531
Upstream Filter (I)	0.00	0.14	0.00	1.00	0.00	0.73	0.00	1.00
Uniform Delay (d1), s/veh	0.0	28.3	0.0	38.1	0.0	25.2	0.0	40.2
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.1	0.0	2.7	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	28.8	0.0	38.1	0.0	27.8	0.0	40.5
1st-Term Q (Q1), veh/ln	0.0	14.7	0.0	1.1	0.0	18.2	0.0	3.8
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.7	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	14.8	0.0	1.1	0.0	18.9	0.0	3.8
%ile Storage Ratio (RQ%)	0.00	0.31	0.00	0.20	0.00	0.83	0.00	0.55
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		43.8						
HCM 2010 LOS		D						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	42	36	105	35	471	39	1075	71	408	1258	81
Future Volume (veh/h)	60	42	36	105	35	471	39	1075	71	408	1258	81
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	64	45	38	112	37	501	41	1144	76	434	1338	86
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	46	129	109	133	28	374	201	1464	97	300	2160	139
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.14	0.14	0.14	0.08	0.25	0.25	0.46	0.46	0.46	0.18	0.67	0.67
Ln Grp Delay, s/veh	352.3	0.0	62.4	87.5	0.0	228.6	30.0	42.1	42.0	277.6	16.1	16.2
Ln Grp LOS	F		E	F		F	C	D	D	F	B	B
Approach Vol, veh/h		147			650			1261			1858	
Approach Delay, s/veh		188.6			204.3			41.6			77.2	
Approach LOS		F			F			D			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4		6		8
Case No	2.0	6.0	2.0	6.0		4.0		4.0
Phs Duration (G+Y+Rc), s	34.0	78.0	18.0	28.0		112.0		46.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0		6.0		6.0
Max Green (Gmax), s	28.0	72.0	19.0	15.0		106.0		40.0
Max Allow Headway (MAH), s	3.8	5.4	3.8	5.5		5.4		5.5
Max Q Clear (g_c+I1), s	30.0	49.6	11.9	24.0		39.1		42.0
Green Ext Time (g_e), s	0.0	18.8	0.1	0.0		43.2		0.0
Prob of Phs Call (p_c)	1.00	1.00	0.99	1.00		1.00		1.00
Prob of Max Out (p_x)	1.00	0.00	0.04	1.00		0.00		1.00

Left-Turn Movement Data				
Assigned Mvmt	1	5	3	7
Mvmt Sat Flow, veh/h	1691	357	1757	855

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	3212	925	3220	109

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	213	781	206	1475

Left Lane Group Data								
Assigned Mvmt	1	5	3	7	0	0	0	0
Lane Assignment	(Prot)		(Prot)					

Lanes in Grp	1	1	1	1	0	0	0	0
Grp Vol (v), veh/h	434	41	112	64	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1691	357	1757	855	0	0	0	0
Q Serve Time (g_s), s	28.0	11.5	9.9	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	28.0	14.7	9.9	22.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	357	0	855	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	72.0	0.0	22.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	68.9	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	11.5	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	300	201	133	46	0	0	0	0
V/C Ratio (X)	1.45	0.20	0.84	1.40	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	300	201	211	46	0	0	0	0
Upstream Filter (I)	0.59	0.73	1.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	65.0	28.4	72.1	79.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	212.6	1.7	15.4	273.3	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	277.6	30.0	87.5	352.3	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	13.1	1.1	4.8	2.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	17.7	0.1	0.6	3.5	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	30.8	1.2	5.4	5.4	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	3.25	0.15	0.61	1.74	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	33.6	0.0	0.0	4.6	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.4	0.0	0.0	0.4	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	600	0	0	0	700	0	0
Grp Sat Flow (s), veh/h/ln	0	1687	0	0	0	1687	0	0
Q Serve Time (g_s), s	0.0	47.5	0.0	0.0	0.0	36.8	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	47.5	0.0	0.0	0.0	36.8	0.0	0.0
Lane Grp Cap (c), veh/h	0	769	0	0	0	1132	0	0
V/C Ratio (X)	0.00	0.78	0.00	0.00	0.00	0.62	0.00	0.00
Avail Cap (c_a), veh/h	0	769	0	0	0	1132	0	0
Upstream Filter (I)	0.00	0.73	0.00	0.00	0.00	0.59	0.00	0.00
Uniform Delay (d1), s/veh	0.0	36.3	0.0	0.0	0.0	14.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	5.7	0.0	0.0	0.0	1.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	42.1	0.0	0.0	0.0	16.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	22.0	0.0	0.0	0.0	17.1	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	1.2	0.0	0.0	0.0	0.5	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	23.2	0.0	0.0	0.0	17.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.02	0.00	0.00	0.00	0.90	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	620	0	83	0	724	0	538
Grp Sat Flow (s), veh/h/ln	0	1738	0	1707	0	1739	0	1584
Q Serve Time (g_s), s	0.0	47.6	0.0	7.0	0.0	37.1	0.0	40.0
Cycle Q Clear Time (g_c), s	0.0	47.6	0.0	7.0	0.0	37.1	0.0	40.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.12	0.00	0.46	0.00	0.12	0.00	0.93
Lane Grp Cap (c), veh/h	0	792	0	238	0	1167	0	401
V/C Ratio (X)	0.00	0.78	0.00	0.35	0.00	0.62	0.00	1.34
Avail Cap (c_a), veh/h	0	792	0	238	0	1167	0	401
Upstream Filter (I)	0.00	0.73	0.00	1.00	0.00	0.59	0.00	1.00
Uniform Delay (d1), s/veh	0.0	36.4	0.0	61.5	0.0	14.7	0.0	59.0
Incr Delay (d2), s/veh	0.0	5.6	0.0	0.9	0.0	1.5	0.0	169.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	42.0	0.0	62.4	0.0	16.2	0.0	228.6
1st-Term Q (Q1), veh/ln	0.0	22.9	0.0	3.3	0.0	17.7	0.0	17.5
2nd-Term Q (Q2), veh/ln	0.0	1.2	0.0	0.1	0.0	0.5	0.0	18.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	24.1	0.0	3.3	0.0	18.2	0.0	36.4
%ile Storage Ratio (RQ%)	0.00	1.06	0.00	0.44	0.00	0.93	0.00	3.88
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.2
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	91.0
HCM 2010 LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	427	588	258	632	711	7	219	880	1	0	750	170
Future Volume (veh/h)	427	588	258	632	711	7	219	880	1	0	750	170
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1759	1759	1759	1900	1776	1776	1776	0	1776	1776
Adj Flow Rate, veh/h	445	612	269	658	741	7	228	917	0	0	781	0
Adj No. of Lanes	2	2	1	2	2	0	1	2	1	0	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	8	8	8	8	8	8	7	7	7	0	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			No		
Cap, veh/h	510	455	204	721	683	6	134	1753	784	0	1353	605
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.16	0.14	0.14	0.22	0.20	0.20	0.08	0.52	0.00	0.00	0.40	0.00
Ln Grp Delay, s/veh	68.1	234.8	240.2	70.2	134.6	133.5	402.5	24.6	0.0	0.0	37.3	0.0
Ln Grp LOS	E	F	F	E	F	F	F	C			D	
Approach Vol, veh/h		1326			1406			1145			781	
Approach Delay, s/veh		179.9			104.2			99.8			37.3	
Approach LOS		F			F			F			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Case No		3.0	2.0	3.0	2.0	7.0	2.0	4.0
Phs Duration (G+Y+Rc), s		85.3	39.7	27.0	18.0	67.3	29.9	36.9
Change Period (Y+Rc), s		6.3	6.0	6.3	6.0	6.3	6.0	6.3
Max Green (Gmax), s		72.7	40.0	20.7	12.0	54.7	40.0	20.7
Max Allow Headway (MAH), s		5.3	3.8	5.1	3.8	5.3	3.8	5.1
Max Q Clear (g_c+I1), s		29.3	32.0	22.7	14.0	29.4	22.3	32.6
Green Ext Time (g_e), s		18.3	1.7	0.0	0.0	14.1	1.5	0.0
Prob of Phs Call (p_c)		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)		0.00	0.21	1.00	1.00	0.00	0.00	1.00

Left-Turn Movement Data								
Assigned Mvmt			3		5	1	7	
Mvmt Sat Flow, veh/h			3250		1691	0	3250	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3374		3343		3463		3393

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1509		1495		1509		32

Left Lane Group Data								
Assigned Mvmt	0	0	3	0	5	1	7	0
Lane Assignment			(Prot)		(Prot)		(Prot)	

Lanes in Grp	0	0	2	0	1	0	2	0
Grp Vol (v), veh/h	0	0	658	0	228	0	445	0
Grp Sat Flow (s), veh/h/ln	0	0	1625	0	1691	0	1625	0
Q Serve Time (g_s), s	0.0	0.0	30.0	0.0	12.0	0.0	20.3	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	30.0	0.0	12.0	0.0	20.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	61.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	721	0	134	0	510	0
V/C Ratio (X)	0.00	0.00	0.91	0.00	1.71	0.00	0.87	0.00
Avail Cap (c_a), veh/h	0	0	855	0	134	0	855	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.45	0.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	57.7	0.0	70.0	0.0	62.6	0.0
Incr Delay (d2), s/veh	0.0	0.0	12.6	0.0	332.5	0.0	5.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	70.2	0.0	402.5	0.0	68.1	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	13.5	0.0	5.6	0.0	9.1	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	1.3	0.0	12.3	0.0	0.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	14.8	0.0	17.9	0.0	9.5	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.98	0.00	2.01	0.00	0.91	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	23.6	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	2	0	1
Grp Vol (v), veh/h	0	917	0	612	0	781	0	365
Grp Sat Flow (s), veh/h/ln	0	1687	0	1671	0	1687	0	1671
Q Serve Time (g_s), s	0.0	27.3	0.0	20.7	0.0	27.4	0.0	30.6
Cycle Q Clear Time (g_c), s	0.0	27.3	0.0	20.7	0.0	27.4	0.0	30.6
Lane Grp Cap (c), veh/h	0	1753	0	455	0	1353	0	336
V/C Ratio (X)	0.00	0.52	0.00	1.34	0.00	0.58	0.00	1.09
Avail Cap (c_a), veh/h	0	1753	0	455	0	1353	0	336
Upstream Filter (I)	0.00	0.45	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	24.1	0.0	65.7	0.0	35.5	0.0	60.7
Incr Delay (d2), s/veh	0.0	0.5	0.0	169.1	0.0	1.8	0.0	73.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	24.6	0.0	234.8	0.0	37.3	0.0	134.6
1st-Term Q (Q1), veh/ln	0.0	12.7	0.0	9.5	0.0	12.8	0.0	14.1

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	10.7	0.0	0.3	0.0	6.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	12.9	0.0	20.2	0.0	13.1	0.0	21.0
%ile Storage Ratio (RQ%)	0.00	0.66	0.00	0.70	0.00	0.44	0.00	0.64
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	39.2	0.0	0.0	0.0	7.2
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	269	0	0	0	383
Grp Sat Flow (s), veh/h/ln	0	1509	0	1495	0	1509	0	1754
Q Serve Time (g_s), s	0.0	0.0	0.0	20.7	0.0	0.0	0.0	30.6
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	20.7	0.0	0.0	0.0	30.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.02
Lane Grp Cap (c), veh/h	0	784	0	204	0	605	0	353
V/C Ratio (X)	0.00	0.00	0.00	1.32	0.00	0.00	0.00	1.09
Avail Cap (c_a), veh/h	0	784	0	204	0	605	0	353
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	65.7	0.0	0.0	0.0	60.7
Incr Delay (d2), s/veh	0.0	0.0	0.0	174.5	0.0	0.0	0.0	72.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	240.2	0.0	0.0	0.0	133.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	8.6	0.0	0.0	0.0	14.8
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	9.9	0.0	0.0	0.0	7.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	18.4	0.0	0.0	0.0	21.9
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.64	0.00	0.00	0.00	0.66
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	16.3	0.0	0.0	0.0	7.6
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3
Intersection Summary								
HCM 2010 Ctrl Delay		113.5						
HCM 2010 LOS		F						

APPENDIX I-E:
LOS SERVICE VOLUME DEVELOPMENT

APPENDIX E-1:
2012 FDOT LOS Handbook Tables

TABLE 4

Generalized **Peak Hour Two-Way** Volumes for Florida's **Urbanized Areas**[1]

12/18/12

INTERRUPTED FLOW FACILITIES

STATE SIGNALIZED ARTERIALS

Class I (40 mph or higher posted speed limit)

Lanes	Median	B	C	D	E
2	Undivided	*	1,510	1,600	**
4	Divided	*	3,420	3,580	**
6	Divided	*	5,250	5,390	**
8	Divided	*	7,090	7,210	**

Class II (35 mph or slower posted speed limit)

Lanes	Median	B	C	D	E
2	Undivided	*	660	1,330	1,410
4	Divided	*	1,310	2,920	3,040
6	Divided	*	2,090	4,500	4,590
8	Divided	*	2,880	6,060	6,130

Non-State Signalized Roadway Adjustments

(Alter corresponding state volumes by the indicated percent.)

Non-State Signalized Roadways - 10%

Median & Turn Lane Adjustments

Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors
2	Divided	Yes	No	+5%
2	Undivided	No	No	-20%
Multi	Undivided	Yes	No	-5%
Multi	Undivided	No	No	-25%
–	–	–	Yes	+ 5%

One-Way Facility Adjustment

Multiply the corresponding two-directional volumes in this table by 0.6

BICYCLE MODE[2]

(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Paved Shoulder/Bicycle Lane Coverage	B	C	D	E
0-49%	*	260	680	1,770
50-84%	190	600	1,770	>1,770
85-100%	830	1,770	>1,770	**

PEDESTRIAN MODE[2]

(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Sidewalk Coverage	B	C	D	E
0-49%	*	*	250	850
50-84%	*	150	780	1,420
85-100%	340	960	1,560	>1,770

BUS MODE (Scheduled Fixed Route)[3]

(Buses in peak hour in peak direction)

Sidewalk Coverage	B	C	D	E
0-84%	> 5	≥ 4	≥ 3	≥ 2
85-100%	> 4	≥ 3	≥ 2	≥ 1

UNINTERRUPTED FLOW FACILITIES

FREEWAYS

Lanes	B	C	D	E
4	4,120	5,540	6,700	7,190
6	6,130	8,370	10,060	11,100
8	8,230	11,100	13,390	15,010
10	10,330	14,040	16,840	18,930
12	14,450	18,880	22,030	22,860

Freeway Adjustments

Auxiliary Lanes Present in Both Directions	Ramp Metering
+ 1,800	+ 5%

UNINTERRUPTED FLOW HIGHWAYS

Lanes	Median	B	C	D	E
2	Undivided	770	1,530	2,170	2,990
4	Divided	3,300	4,660	5,900	6,530
6	Divided	4,950	6,990	8,840	9,790

Uninterrupted Flow Highway Adjustments

Lanes	Median	Exclusive left lanes	Adjustment factors
2	Divided	Yes	+5%
Multi	Undivided	Yes	-5%
Multi	Undivided	No	-25%

[1] Values shown are presented as peak hour two-way volumes for levels of service and are for the automobile/truck modes unless specifically stated. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the Highway Capacity Manual and the Transit Capacity and Quality of Service Manual.

[2] Level of service for the bicycle and pedestrian modes in this table is based on number of motorized vehicles, not number of bicyclists or pedestrians using the facility.

[3] Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.

* Cannot be achieved using table input value defaults.

** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.

Source:
Florida Department of Transportation
Systems Planning Office
www.dot.state.fl.us/planning/systems/sm/los/default.shtm

TABLE 4
(continued)

Generalized **Peak Hour Two-Way** Volumes for Florida's **Urbanized Areas**

12/18/12

INPUT VALUE ASSUMPTIONS	Uninterrupted Flow Facilities			Interrupted Flow Facilities					
				State Arterials				Class I	
	Freeways	Highways		Class I		Class II		Bicycle	Pedestrian
ROADWAY CHARACTERISTICS									
Area type (lu, u)	lu	u	u	u	u	u	u	u	u
Number of through lanes (both dir.)	4-12	2	4-6	2	4-8	2	4-8	4	4
Posted speed (mph)	70	50	50	45	50	30	30	45	45
Free flow speed (mph)	75	55	55	50	55	35	35	50	50
Auxiliary lanes (n,y)	n								
Median (n, nr, r)		n	r	n	r	n	r	r	r
Terrain (l,r)	l	l	l	l	l	l	l	l	l
% no passing zone		80							
Exclusive left turn lane impact (n, y)		[n]	y	y	y	y	y	y	y
Exclusive right turn lanes (n, y)				n	n	n	n	n	n
Facility length (mi)	4	5	5	2	2	1.9	1.8	2	2
Number of basic segments	4								
TRAFFIC CHARACTERISTICS									
Planning analysis hour factor (K)	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090
Directional distribution factor (D)	0.547	0.550	0.550	0.550	0.560	0.565	0.560	0.565	0.565
Peak hour factor (PHF)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Base saturation flow rate (pcphpl)		1,700	2,100	1,950	1,950	1,950	1,950	1,950	1,950
Heavy vehicle percent	4.0	2.0	2.0	1.0	1.0	1.0	1.0	2.5	2.0
Local adjustment factor	0.91	0.97	0.98						
% left turns				12	12	12	12	12	12
% right turns				12	12	12	12	12	12
CONTROL CHARACTERISTICS									
Number of signals				4	4	10	10	4	6
Arrival type (1-6)				3	3	4	4	4	4
Signal type (a, c, p)				c	c	c	c	c	c
Cycle length (C)				120	150	120	120	120	120
Effective green ratio (g/C)				0.44	0.45	0.44	0.44	0.44	0.44
MULTIMODAL CHARACTERISTICS									
Paved shoulder/bicycle lane (n, y)								n, 50%, y	n
Outside lane width (n, t, w)								t	t
Pavement condition (d, t, u)								t	
On-street parking (n, y)								n	n
Sidewalk (n, y)									n, 50%, y
Sidewalk/roadway separation (a, t, w)									t
Sidewalk protective barrier (n, y)									n

LEVEL OF SERVICE THRESHOLDS

Level of Service	Freeways	Highways		Arterials		Bicycle	Ped	Bus
	Density	Two-Lane %ffs	Multilane Density	Class I ats	Class II ats	Score	Score	Buses/hr.
B	≤ 17	> 83.3	≤ 17	> 31 mph	> 22 mph	≤ 2.75	≤ 2.75	≤ 6
C	≤ 24	> 75.0	≤ 24	> 23 mph	> 17 mph	≤ 3.50	≤ 3.50	≤ 4
D	≤ 31	> 66.7	≤ 31	> 18 mph	> 13 mph	≤ 4.25	≤ 4.25	< 3
E	≤ 39	> 58.3	≤ 35	> 15 mph	> 10 mph	≤ 5.00	≤ 5.00	< 2

% ffs = Percent free flow speed ats = Average travel speed

TABLE 7

Generalized **Peak Hour Directional** Volumes for Florida's **Urbanized Areas**[1]

12/18/12

INTERRUPTED FLOW FACILITIES

STATE SIGNALIZED ARTERIALS

Class I (40 mph or higher posted speed limit)

Lanes	Median	B	C	D	E
1	Undivided	*	830	880	**
2	Divided	*	1,910	2,000	**
3	Divided	*	2,940	3,020	**
4	Divided	*	3,970	4,040	**

Class II (35 mph or slower posted speed limit)

Lanes	Median	B	C	D	E
1	Undivided	*	370	750	800
2	Divided	*	730	1,630	1,700
3	Divided	*	1,170	2,520	2,560
4	Divided	*	1,610	3,390	3,420

Non-State Signalized Roadway Adjustments

(Alter corresponding state volumes by the indicated percent.)

Non-State Signalized Roadways - 10%

Median & Turn Lane Adjustments

Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors
1	Divided	Yes	No	+5%
1	Undivided	No	No	-20%
Multi	Undivided	Yes	No	-5%
Multi	Undivided	No	No	-25%
–	–	–	Yes	+ 5%

One-Way Facility Adjustment

Multiply the corresponding directional volumes in this table by 1.2

BICYCLE MODE[2]

(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Paved Shoulder/Bicycle Lane Coverage	B	C	D	E
0-49%	*	150	390	1,000
50-84%	110	340	1,000	>1,000
85-100%	470	1,000	>1,000	**

PEDESTRIAN MODE[2]

(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Sidewalk Coverage	B	C	D	E
0-49%	*	*	140	480
50-84%	*	80	440	800
85-100%	200	540	880	>1,000

BUS MODE (Scheduled Fixed Route)[3]

(Buses in peak hour in peak direction)

Sidewalk Coverage	B	C	D	E
0-84%	> 5	≥ 4	≥ 3	≥ 2
85-100%	> 4	≥ 3	≥ 2	≥ 1

UNINTERRUPTED FLOW FACILITIES

FREEWAYS

Lanes	B	C	D	E
2	2,260	3,020	3,660	3,940
3	3,360	4,580	5,500	6,080
4	4,500	6,080	7,320	8,220
5	5,660	7,680	9,220	10,360
6	7,900	10,320	12,060	12,500

Freeway Adjustments

Auxiliary Lane	Ramp Metering
+ 1,000	+ 5%

UNINTERRUPTED FLOW HIGHWAYS

Lanes	Median	B	C	D	E
1	Undivided	420	840	1,190	1,640
2	Divided	1,810	2,560	3,240	3,590
3	Divided	2,720	3,840	4,860	5,380

Uninterrupted Flow Highway Adjustments

Lanes	Median	Exclusive left lanes	Adjustment factors
1	Divided	Yes	+5%
Multi	Undivided	Yes	-5%
Multi	Undivided	No	-25%

[1] Values shown are presented as peak hour directional volumes for levels of service and are for the automobile/truck modes unless specifically stated. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the Highway Capacity Manual and the Transit Capacity and Quality of Service Manual.

[2] Level of service for the bicycle and pedestrian modes in this table is based on number of motorized vehicles, not number of bicyclists or pedestrians using the facility.

[3] Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.

* Cannot be achieved using table input value defaults.

** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.

Source:
Florida Department of Transportation
Systems Planning Office
www.dot.state.fl.us/planning/systems/sm/los/default.shtm

TABLE 7
(continued)

Generalized **Peak Hour Directional** Volumes for Florida's **Urbanized Areas**

12/18/12

INPUT VALUE ASSUMPTIONS	Uninterrupted Flow Facilities			Interrupted Flow Facilities					
				State Arterials				Class I	
	Freeways	Highways		Class I		Class II		Bicycle	Pedestrian
ROADWAY CHARACTERISTICS									
Area type (lu, u)	lu	u	u	u	u	u	u	u	u
Number of through lanes (both dir.)	4-12	2	4-6	2	4-8	2	4-8	4	4
Posted speed (mph)	70	50	50	45	50	30	30	45	45
Free flow speed (mph)	75	55	55	50	55	35	35	50	50
Auxiliary lanes (n,y)	n								
Median (n, nr, r)		n	r	n	r	n	r	r	r
Terrain (l,r)	l	l	l	l	l	l	l	l	l
% no passing zone		80							
Exclusive left turn lane impact (n, y)		[n]	y	y	y	y	y	y	y
Exclusive right turn lanes (n, y)				n	n	n	n	n	n
Facility length (mi)	4	5	5	2	2	1.9	1.8	2	2
Number of basic segments	4								
TRAFFIC CHARACTERISTICS									
Planning analysis hour factor (K)	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090
Directional distribution factor (D)	0.547	0.550	0.550	0.550	0.560	0.565	0.560	0.565	0.565
Peak hour factor (PHF)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Base saturation flow rate (pcphpl)		1,700	2,100	1,950	1,950	1,950	1,950	1,950	1,950
Heavy vehicle percent	4.0	2.0	2.0	1.0	1.0	1.0	1.0	2.5	2.0
Local adjustment factor	0.91	0.97	0.98						
% left turns				12	12	12	12	12	12
% right turns				12	12	12	12	12	12
CONTROL CHARACTERISTICS									
Number of signals				4	4	10	10	4	6
Arrival type (1-6)				3	3	4	4	4	4
Signal type (a, c, p)				c	c	c	c	c	c
Cycle length (C)				120	150	120	120	120	120
Effective green ratio (g/C)				0.44	0.45	0.44	0.44	0.44	0.44
MULTIMODAL CHARACTERISTICS									
Paved shoulder/bicycle lane (n, y)								n, 50%, y	n
Outside lane width (n, t, w)								t	t
Pavement condition (d, t, w)								t	
On-street parking (n, y)								n	n
Sidewalk (n, y)									n, 50%, y
Sidewalk/roadway separation (a, t, w)									t
Sidewalk protective barrier (n, y)									n

LEVEL OF SERVICE THRESHOLDS

Level of Service	Freeways	Highways		Arterials		Bicycle	Ped	Bus
	Density	Two-Lane %ffs	Multilane Density	Class I ats	Class II ats	Score	Score	Buses/hr.
B	≤ 17	> 83.3	≤ 17	> 31 mph	> 22 mph	≤ 2.75	≤ 2.75	≤ 6
C	≤ 24	> 75.0	≤ 24	> 23 mph	> 17 mph	≤ 3.50	≤ 3.50	≤ 4
D	≤ 31	> 66.7	≤ 31	> 18 mph	> 13 mph	≤ 4.25	≤ 4.25	< 3
E	≤ 39	> 58.3	≤ 35	> 15 mph	> 10 mph	≤ 5.00	≤ 5.00	< 2

% ffs = Percent free flow speed ats = Average travel speed

APPENDIX E-2:
Miami-Dade County Transportation Element LOS Standard Tables

TRAFFIC CIRCULATION SUBELEMENT

Introduction

The purpose of the Traffic Circulation Subelement is to provide an overview of the current and future transportation needs of Miami-Dade County, and to advocate for a transportation system that efficiently supports mass transit, non-motorized transportation modes and economic growth while reducing dependence on the use of personal automobiles. The Subelement analyzes current roadway capacity and deficiencies in Miami-Dade County, provides recommendations for improving future highway capacity, and establishes a goal, objectives, and policies aimed at meeting the future mobility needs of the County.

Miami-Dade County, since 1957, has been a home rule charter county. The Department of Regulatory and Economic Resources Planning Division therefore serves as a metropolitan agency, and the traffic circulation needs and the goal in this Subelement are presented for the entire County, including the 34 municipalities.

The *Adopted Components* of this Subelement include the Traffic Circulation goal, objectives and policies; maps of future conditions; and a monitoring program for evaluating progress toward Subelement implementation.

The Miami-Dade 2035 Long Range Transportation Plan (LRTP), was adopted in October 2009 to guide transportation investment in the County for the next 25 years. The LRTP includes improvements for roadways, transit, bicycle and pedestrian facilities, greenways and trails. It contains a “Cost-Feasible Plan” that categorizes projects into priority groupings based upon future funding availability. Priority I contains those projects scheduled to be funded through by 2014; Priority II contains projects scheduled to be funded between 2015 and 2020; Priority III contains projects scheduled to be funded between 2021 and 2025; and Priority IV contains projects scheduled to be funded between 2026 and 2035. It should be pointed out that the Comprehensive Development Master Plan (CDMP) has a planning horizon year of 2030 which does not coincide with the planning horizon of the Priority IV projects in the “Cost-Feasible Plan.” Since the Priority IV grouping encompasses the CDMP horizon year, the required four-year updates to the “Cost-Feasible Plan” will continually adjust the funding availability for the Priority IV projects as the horizon year advances.

GOAL

DEVELOP, OPERATE AND MAINTAIN A SAFE, EFFICIENT AND ECONOMICAL TRAFFIC CIRCULATION SYSTEM IN MIAMI-DADE COUNTY THAT PROVIDES EASE OF MOBILITY TO ALL PEOPLE AND FOR ALL GOODS, IS CONSISTENT WITH DESIRED LAND USE PATTERNS, CONSERVES ENERGY, PROTECTS THE NATURAL ENVIRONMENT, ENHANCES NON-MOTORIZED TRANSPORTATION FACILITIES, SUPPORTS THE USAGE OF TRANSIT, AND STIMULATES ECONOMIC GROWTH.

Objective TC-1

It is desirable that all roadways in Miami-Dade County operate at the adopted level of service (LOS) standards or better. Miami-Dade County should strive to operate its roadway network at a level of service better than the base level of service standards contained herein.

Policies

TC-1A. Miami-Dade County will continue to update and readopt a Long Range Transportation Plan, as periodically required, that will achieve Traffic Circulation Objective TC-1 above, in a manner consistent with the other objectives of the Comprehensive Development Master Plan (CDMP). Upon completion of each update of the Long Range Transportation Plan, Miami-Dade County shall prepare for submittal, pursuant to Chapter 163, Part II, F.S., proposals to enhance and revise the Traffic Circulation and Mass Transit Subelements of the Transportation Element as warranted by said technical findings and policy proposals, consistent with the goals, objectives and policies of the CDMP.

TC-1B. The minimum acceptable peak period* operating level of service for all State and County roads in Miami-Dade County outside of the Urban Development Boundary (UDB) identified in the Land Use Element shall be LOS C. The minimum acceptable peak-period LOS for all State and County roads inside the UDB shall be the following:

1) Within the Urban Infill Area (UIA)[2]

   (a) Where no public mass transit service exists, roadways shall operate at or above LOS E.

   (b) Where mass transit service having headways of 20 minutes or less is provided within 1/2-mile distance, roadways shall operate at no greater than 120 percent of their capacity.

   (c) Where extraordinary transit service such as rapid transit (e.g., commuter rail, Metrorail and People Mover), or premium bus service (e.g., bus rapid transit, express bus and enhanced bus systems) exists, parallel roadways within 1/2 mile shall operate at no greater than 150 percent of their capacity.

2) Between the UIA and the UDB

   (a) Roadways shall operate at no worse than LOS D (90 percent of their capacity) except that State Urban Minor Arterials (SUMAs) may operate at LOS E (100 percent of their capacity);

   (b) Where public mass transit service exists having headways of 20 minutes or less within 1/2-mile distance, roadways shall operate at or above LOS E;

   (c) Where extraordinary transit service such as rapid transit (e.g., commuter rail, Metrorail and People Mover), or premium bus service (e.g., bus rapid transit, express bus and enhanced bus systems) exists, parallel roadways within 1/2 mile shall operate at no greater than 120 percent of roadway capacity.

3) Notwithstanding the foregoing, the following standards established by the Florida Department of Transportation (FDOT), are adopted by Miami-Dade County as

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* Peak period means the average of the two highest consecutive hours of traffic volume during a weekday.
Note: LOS will be measured based on the latest edition of the Highway Capacity Manual.

[2] UIA is defined as that part of Miami-Dade County located east of, and including, SR 826 (Palmetto Expressway) and NW/SW 77 Avenue, excluding the area north of SR 826 and west of I-95.

its minimum LOS standards for Florida Strategic Intermodal System (SIS) highway corridors in Miami-Dade County:

(a) Outside the UDB

1. Limited access State highways shall operate at LOS C or better;
2. Controlled access State highways shall operate at LOS C or better; and
3. Constrained or backlogged limited and controlled access state highways operating below LOS C, must be managed to not cause significant degradation.

(a) Inside the UDB

1. Limited access State highways shall operate at LOS D or better, except where exclusive through lanes exist, roadways may operate at LOS E.
2. Controlled access State highways shall operate at LOS D or better, except where such roadways are parallel to exclusive transit facilities or are located inside designated transportation concurrency management areas (TCMA's), roadways may operate at LOS E.
3. Constrained or backlogged limited and controlled access State highways operating below the foregoing minimums must be managed to not cause significant deterioration.

TC-1C. The County shall continue to maintain and enhance as necessary, a comprehensive traffic counting system for annually monitoring the level of service on, at a minimum, the County roadway system.

TC-1D. Issuance of all development orders for new development or significant expansions of existing development shall be contingent upon compliance with the Level of Service standards contained in Policy TC-1B, except as otherwise provided in the "Concurrency Management Program" section of the Capital Improvements Element.

TC-1E. The County shall, to the maximum extent feasible, improve the operating efficiency of the existing thoroughfare system and reduce peak hour congestion by encouraging the application of low-cost transportation system management techniques including, but not limited to, improved signal timing, and intersection signing, marking, channelization, and on-street parking restrictions.

NOTES: Constrained SIS facilities are roadways that FDOT has determined will not be expanded by the addition of two or more through lanes because of physical, environmental or policy constraints.

Backlogged SIS facilities are roadways operating below the minimum LOS standards, not constrained, and not programmed for addition of lanes in the first three years of FDOT's adopted work program or the five-year CIE.

For roadways outside the UDB significant degradation means an average annual daily traffic increase in two-way traffic volume of 5 percent, or a 5 percent reduction in operating speed for the peak direction in the 100th highest hour. For roadways inside the UDB, roadways parallel to exclusive transit facilities or roadways in transportation concurrency management areas, significant degradation means an average annual daily traffic increase in two-way traffic volume of 10 percent, or a 10 percent reduction in operating speed for the peak direction in the 100th highest hour.

SUMMARY
MIAMI-DADE COUNTY
TRAFFIC CIRCULATION LEVEL OF SERVICE STANDARDS

Peak Period* LOS Standards
Non-SIS Roadways

Location	Transit Availability		
	No Transit Service	20 Min. Headway Transit Service Within 1/2 Mile	Extraordinary Transit Service (Commuter Rail, Metrorail, People Mover, Bus Rapid Transit, Express Bus, or Enhanced Bus Service)
Outside UDB	LOS C-State Minor Arterials LOS C-County Roads and State Principal Arterials		
Between UIA and UDB	LOS D (90% of Capacity); or LOS E (100% Capacity) on SUMAs	LOS E (100% of Capacity)	120% of Capacity
Inside UIA	LOS E (100% of Capacity)	120% of Capacity	150% of Capacity

SIS Roadways

SIS Facility	Location				
	Outside UDB	Inside UDB	Roadways Parallel to Exclusive Transit Facilities	Inside Transportation Concurrency Management Areas	Constrained or Backlogged Roadways
Limited Access Facilities	C	D [E]	D [E]	D [E]	Manage
Controlled Access Facilities	C	D	E	E	Manage

NOTES: LOS inside of [brackets] applies to general use lanes only when exclusive thru lanes exist.
SIS= Strategic Intermodal System
UIA= Urban Infill Area--Area east of, and including NW/SW 77 Avenue and SR 826 (Palmetto Expressway), and excluding the area north of SR 826 and west of I-95.
UDB=Urban Development Boundary
SUMA=State Urban Minor Arterial

*Peak-period means the average of the two highest consecutive hours of traffic volume during a weekday.

TC-1F. The County shall implement a transportation demand management (TDM) program to reduce overall peak-hour demand and use of single occupant vehicles (SOV). This program will include such TDM strategies as the following:

1) van pooling and employer-based carpooling;
2) employer-based staggered and/or flexible work hours;
3) parking management;
4) telecommunicating;
5) congestion pricing;
6) park and ride lots;
7) managed lanes;
8) trip reduction ordinances;
9) transportation management associations (TMA's); and
10) subsidies for transit riders.

TC-1G. Miami-Dade County shall continue to implement procedures and requirements for all development, regardless of size, to contribute its proportionate share of transportation facilities, or funds or land therefore, necessary to accommodate the impact of the proposed development. The County shall periodically review and update impact fee schedules to ensure that all public and marginal costs are appropriately recognized, and that fee structures reflect pertinent geographic (i.e., core vs. fringe area) variability in facility usage.

TC-1H. In highway and transit planning activities of the County and the Metropolitan Planning Organization (MPO), Miami-Dade County will give highest priority to the funding of necessary capacity improvements to roadways on the Strategic Intermodal System (SIS) as defined in Section 339.61, F.S., and to proximate facilities and services that would serve to relieve congestion on SIS facilities which are operating above their capacity. Further, the County and the Miami-Dade County MPO shall coordinate with FDOT to develop feasible strategies and mechanisms to minimize local traffic impact on SIS facilities.

TC-1I. The County will continue to investigate, develop and implement parking management strategies to promote the land use and transportation objectives of the CDMP to reduce the use of Single Occupant Vehicles (SOVs) and highway congestion and encourage the use of transit and ridesharing. Additionally, parking requirements in the County's zoning regulations will be reviewed to encourage shared and possibly on-street parking in planned Urban Centers, and to moderate parking requirements where transit service exists, and where developments contain complementary use mixes.

TC-1J. The County will continue to implement the recommendations of the Countywide Parking Policy Study, Park and Ride Lot Plan Study and Consolidated Park and Ride Facilities Plan conducted by the Miami-Dade County MPO.

TC-1K. The County shall utilize the Miami-Dade County MPO transportation planning and project review processes to evaluate and implement roadway and transit

improvements that will improve access to, and connections between, the County's major aviation, rail and port facilities.

Objective TC-2

Rights-of-way and corridors needed for existing and future transportation facilities will be designated and reserved.

Policies

TC-2A. The County shall continue to maintain and enforce the minimum right-of-way requirements as established in the *Public Works Manual* and in Chapter 33, Zoning, *Code of Miami-Dade County*, to ensure Countywide continuity of the thoroughfare system. The County shall review roadway design standards and right-of-way reservations and shall propose changes as may be necessary to better accommodate projected vehicular and non-vehicular movement in the corridors and design features recommended in the Transportation and Land Use Elements.

TC-2B. The County shall require the dedication of the appropriate share of all necessary rights-of-way from all developments at the time of development.

TC-2C. Except for those section, half-section and quarter-section line rights-of-way within the portion of the Northwest Wellfield Protection Area located west of the Homestead Extension of the Florida Turnpike, advance rights-of-way shall be reserved or acquired, where necessary, for future transportation improvements identified in the Traffic Circulation and Mass Transit Subelements.

TC-2D. The section line, half-section line, and quarter-section line road system should form a continuous network within developed areas, interrupted only when it would destroy the integrity of a neighborhood or development. The County shall not approve vacation of zoned rights-of-way unless it is determined that the right-of-way is not required for present or future public use, or unless the zoned right-of-way is within that portion of the Northwest Wellfield Protection Area located west of the Homestead Extension of the Florida Turnpike, and the CDMP Guidelines for Urban Form will be reflected.

Objective TC-3

The County's transportation system will emphasize safe and efficient management of traffic flow, the safety of pedestrians and bicyclists, and enhance and encourage the use of transit.

Policies

TC-3A. The County shall continue to assure provision of an adequate, properly designed and safe system for controlling vehicular accessibility to major thoroughfares through adopted design standards and procedures, which at a minimum address:

1) Adequate storage and turning bays;
2) Spacing and design of median openings and curb cuts;
3) Provision of service roads;

4) Driveway access and spacing and;
5) Traffic operations.

TC-3B. The County will continue to monitor high accident-frequency locations on the County highway system to identify any design improvements, which may alleviate hazardous conditions and incorporate such improvements into the Transportation Improvement Program (TIP).

TC-3C. By 2015, Miami-Dade County shall develop a “Complete Streets” program which will be sensitive to the needs of the users of all modes of transportation including bicyclists and pedestrians and include the following components: street typology based on land use context due to how a roadway passing through different land uses will vary in character; hierarchy of street types and designs; provision of sidewalks and bicycle facilities; adequate landscaping and street furniture; bus lanes and transit facilities; and improve aesthetics and design for the safety of all users, including vulnerable populations such as children and seniors.

TC-3D. The County shall design new roadways in a way that supports transit usage and incorporates planned rapid transit corridors, dedicated bus lanes and other transit improvements to further incentivize and facilitate the use of transit, wherever feasible.

Objective TC-4

The Traffic Circulation Subelement will continue to be coordinated with the goals, objectives and policies of the Land Use Element, including the land uses, Urban Development Boundary and Urban Expansion Area designated on the Land Use Plan map, and with the goals, objectives and policies of all other Elements of the CDMP.

Policies

TC-4A. The County shall maintain the Traffic Circulation Subelement consistent with the objectives and policies of the CDMP Land Use Element.

TC-4B. The adopted Land Use Plan map shall be used to guide the planning of future transportation corridors and facilities to ensure the proper coordination between transportation planning and future development patterns.

TC-4C. Miami-Dade County's priority in construction, maintenance, and reconstruction of roadways, and the allocation of financial resources, shall be given first to serve the area within the Urban Infill Area and Transportation Concurrency Exception Areas. Second priority shall be given to serve the area within the Urban Development Boundary and the Urban Infill Area. And third priority in transportation allocations shall support the staged development of the urbanizing portions of the County within the Urban Expansion Area. Transportation improvements which encourage development in Agriculture and Open Land areas shall be avoided, except for those improvements which are necessary for public safety and which serve the localized needs of these non-urban areas. Areas designated Environmental Protection shall be particularly avoided.

TC-4D. Miami-Dade County shall set as a priority in its transportation planning program the provision of facilities and services to accomplish the timely evacuation of Miami-Dade County's barrier islands in advance of approaching hurricanes.

TC-4E. Notwithstanding the designation of Krome Avenue as a Major Roadway on the CDMP Land Use Plan Map or as a four-lane roadway in the Traffic Circulation Subelement, no construction associated with the four-laning, or other capacity improvement, of Krome Avenue outside the Urban Development Boundary shall occur until FDOT has prepared, and the Board of County Commissioners has adopted, a detailed binding access control plan for the Krome Avenue corridor. This plan should emphasize access to properties fronting Krome Avenue primarily through alternative street locations.

TC-4F. The County shall consistently improve strategies to facilitate a Countywide shift in travel modes from personal automobile use to pedestrian, bicycle and transit modes. The priority for transportation infrastructure expenditures shall be to insure that pedestrian, bicycle and transit features are incorporated into roadway design.

Objective TC-5

The traffic circulation system will protect and enhance community and neighborhood integrity.

Policies

TC-5A. The County will conserve, protect and enhance the character of neighborhoods from the avoidable intrusion of major thoroughfares and expressways.

TC-5B. Major thoroughfares and intersections should be located and designed in a manner which would not tend to sever or fragment land which is, or could otherwise be, developed as a well-defined neighborhood.

TC-5C. The County shall discourage through traffic in neighborhoods by adequately accommodating through traffic demands on arterial roadways.

TC-5D. The County shall encourage interconnectivity between neighborhoods, local services, schools, parks, employment centers, and transit stops and stations; discourage cul-de-sac and walled-in subdivision designs; and facilitate pedestrian-oriented urban design that connects neighborhoods and provides accessibility for non-drivers.

Objective TC-6

Plan and develop a transportation system that preserves environmentally sensitive areas, conserves energy and natural resources, addresses climate change impacts, and promotes community aesthetic values.

Policies

TC-6A. The County shall avoid transportation improvements which encourage or subsidize increased development in coastal high hazard areas, environmentally sensitive areas

identified in the Coastal Management and Conservation, Aquifer Recharge and Drainage Elements, and areas of high risk of significant inland flooding.

TC-6B. Land access interchanges shall not be placed or constructed in a manner that would provide access to environmental protection areas or other areas to be conserved in order to prevent undue pressure for development of such areas.

TC-6C. If no feasible alternative exists, needed transportation facilities may traverse environmental protection or conservation areas, however such access should be limited and design techniques should be used to minimize the negative impact upon the natural systems.

TC-6D. New roadways shall be designed to prevent and control soil erosion, minimize clearing and grubbing operations, minimize storm runoff, minimize exposure and risk of climate change impacts such as increased flood conditions, and avoid unnecessary changes in drainage patterns.

TC-6E. The County shall pursue and support transportation programs (e.g., rapid transit, premium bus service, managed lanes, and bikeways) that will help to maintain or provide necessary improvement in air quality and which help conserve energy.

TC-6F. Design new roadways in such a manner as to make them compatible with the surrounding environment, complement adjacent development and provide aesthetically pleasing visual experience to the user and the adjacent areas.

TC-6G. Require adequate arterial road dedications to allow for linear landscaped open space adjacent to two-lane roads and for medians as well as adjacent landscaped margins for four-lane roads.

Objective TC-7

Miami-Dade County's Traffic Circulation Subelement, and the plans and programs of the State, region and local jurisdictions, will continue to be coordinated.

Policies

TC-7A. Miami-Dade County shall annually review subsequent Florida Department of Transportation (FDOT) Five-Year work programs to ensure that they remain consistent with and further the Traffic Circulation Subelement and other Elements of Miami-Dade County's CDMP.

TC-7B. Miami-Dade County shall continue to coordinate local transportation planning of the Metropolitan Planning Organization (MPO) for the Miami Urbanized Area, and specifically the MPO's development of the Long Range Transportation Plan Update, with the CDMP transportation planning process.

TC-7C. The County shall review the compatibility of the Traffic Circulation Subelement and coordinate it with the traffic circulation plans and programs of the municipalities in Miami-Dade County, adjacent counties, the South Florida Regional Transportation Authority, and the South Florida Regional Planning Council and shall cooperate in maintaining adequate inter-regional mobility.

TC-7D. The County shall promote areawide coordination with local governments and regional and state agencies in the implementation of the Transportation Element, through mechanisms such as established by the Miami-Dade County MPO, FDOT Districts 4 and 6, the South Florida Regional Transportation Authority, and the South Florida Regional Planning Council.

TC-7E. The County shall promote coordination with all relevant transportation agencies to address climate change impacts.

Future Traffic Circulation Map Series

Figures 1, 3, 4 and 5 in the future traffic circulation map series present the planned highway network as adopted in the MPO's Long Range Transportation Cost Feasible Plan. The following is a series of future traffic circulation maps, which present the long-term transportation network proposed for the Year 2030. Figure 1, Planned Year 2030 Roadway Network, depicts the lane requirements for the Year 2030. It is the purpose of the map to identify generally, where future throughways will be located to serve future travel demand.

Figure 2, Roadway Functional Classification - 2012 indicates the existing role that various roadways serve. The classification is established by the Florida Department of Transportation in accordance with State criteria and formulae. The classification of all State and County roadways is periodically updated by the State to reflect changing conditions. Accordingly, Figure 2 will be subject to amendment from time to time to reflect those updates.

Figure 3, Roadway Functional Classification - 2030, indicates the roadway classification for State and County facilities on the 2030 network. The classification of roadways indicate the role of the various roadways in meeting the future mobility needs and serving land uses as well as the jurisdictional responsibility. The functional classification of most arterial highways and expressways is not projected to change through time. Only in certain instances are existing roadways anticipated for reclassification. This occurs where growth is planned and travel demand is projected to increase, thus causing these roads to function differently. All roads on the State highway system have been classified as arterials, and all roads on the County highway system have been classified as minor arterials or collectors.

Figure 3.1, Temporary Roadways and Roadway Improvements in Connection with the Construction of Turkey Point Units 6 & 7, illustrates the roadway improvements necessary to accommodate the increased traffic associated with the construction of the Turkey Point Units 6 & 7. This nuclear expansion project is projected to occur between 2013 and 2020 and has been determined by the Board of County Commissioners to be a public necessity. All roadway improvements associated with the construction of Turkey Point Units 6 & 7 as shown in Figure 3.1 are to be temporary and must satisfy the following criteria.

1. The temporary roadway improvement serves to accommodate traffic during the construction of Turkey Point Units 6 & 7;
2. The temporary roadway improvements are designed in a manner that provide no more than what is required for safe roadway conditions and secure access to the construction site;

3. Construction of the temporary roadways and roadway improvements will commence no sooner than two (2) years prior to commencement of construction of Turkey Point Units 6 & 7;

4. Within 2 years following the construction of Turkey Point Units 6 & 7 (a) all temporary roadway improvements on publicly owned rights-of-way will be returned to the status of the roadway(s) prior to the commencement of construction of the temporary roadways and roadway improvements, and, (b) any privately owned roadway will be returned to the minimum roadway width required to provide maintenance to FPL facilities and shall not be more than two lanes;

5. FPL shall pay all costs associated with construction and removal of temporary roadway improvements;

6. Temporary roadways and roadway improvements shall be designed to meet the substantive requirements of Chapter 24, Miami-Dade County Code, as interpreted by DERM. In addition, the design of the temporary roadways and roadway improvements shall also be consistent with the goals, objectives and policies of the CDMP, the objectives of the Comprehensive Everglades Restoration Plan, County land use approvals, and other applicable County approved environmental management plans for publicly owned lands, as may be amended from time to time, and appropriate mechanisms shall be provided to enhance protection for wildlife in the area, and the Miami-Dade County Department of Regulatory and Economic Resources, Division of Environmental Resources Management, shall enforce the environmental regulations within its jurisdiction, to the extent allowable by law;

7. Temporary roadway improvements on privately owned property shall not be open to the general public. Miami-Dade County and other agencies with needed access shall, after providing proper notification to FPL, be granted access to this private roadway; and,

8. At FPL's expense, all temporary roadway improvements south of SW 344th Street shall be patrolled by security personnel when in active use and shall maintain security gates or other appropriate security measures during inactive periods. To the greatest extent possible, FPL shall deter access by the general public on temporary roadways south of SW 344th Street.

Any roadway designated as a temporary roadway on Figure 3.1 need not be indicated as a Minor Roadway or Major Roadway on the LUP map and a temporary roadway improvement need not be identified on any other map in the Future Traffic Circulation Map Series. All limited access facilities for the year 2030 are shown in Figure 4. Limited access facilities include all freeways and expressways in Miami-Dade County.

Figure 5, Planned Roadway Network Level of Service - 2030, illustrates the projected levels of service for the Planned Year 2030 roadway network. Figure 6, Planned Non-Motorized Transportation Network - 2030, depicts the planned non-motorized network consisting of on- and off-road bicycle facilities and multi-use trails; Figure 6 reflects the recommended facilities and improvements of the adopted Miami-Dade Bicycle Facilities Plan. Figure 7, Designated Evacuation Routes - 2030, identifies the County's designated local and regional transportation facilities critical to the evacuation of the coastal population. Figure 8, Freight Lines - 2030, depicts future freight lines throughout the County.

The Metropolitan Planning Organization (MPO), which coordinates all transportation planning for Miami-Dade County, is responsible for periodically updating the MPO's Long Range Transportation Plan. It is anticipated that the future traffic circulation network included in the Transportation Element will be adjusted during future plan amendment cycles to reflect the findings of that planning activity, in keeping with the goals, objectives and policies of the CDMP.

With regard to the following transportation improvements necessary to serve Application No. 5 in the April 2005-2006 CDMP Cycle, in no event shall a Building Permit for development within that area be issued until the MPO Miami-Dade Long Range Transportation Plan has been amended to reflect the following changes in priority of the construction phasing of the roadway network:

- I-75 between Miami-Dade/Broward County Line and SR 826/Palmetto Expressway: from 8 lanes to 10 lanes, advance to Priority 3 (2021-2025);
- SR 826/Palmetto Expressway between NW 103 Street and NW 154 Street: from 8 lanes to 10 lanes, advance to Priority 3 (2021-2025);
- SR 826/Palmetto Expressway from NW 154 Street to I-95: from 6 lanes to 8 lanes, advance to Priority 3 (2021-2025),
- HEFT from SR 836 to Okeechobee Road: 8 lanes + auxiliary lanes, advance to Priority 3 (2021 to 2025),
- HEFT from Okeechobee Road to I-75: 8 lanes + auxiliary lanes, advance to Priority 3 (2021 to 2025), and
- HEFT from I-75 to Turnpike Mainline: from 4 lanes to 6 lanes, advance to Priority 3 (2021 to 2025).

The proposed transportation network is expected to evolve incrementally over the next twenty years. The first five-year components are based on the current adopted Transportation Improvement Program. Improvements that are the County's responsibility are listed in the Capital Improvements Element. The remainder of improvements is projected for construction between 2017 and 2035; the phasing of all improvement projects is listed in the adopted MPO’s Long Range Transportation Plan.

Roadway alignments shown in the traffic circulation map series are general indicators of facility location. Specific alignments will be determined through detailed transportation planning, development review processes, subdivision platting, and highway design and engineering studies.

APPENDIX E-3:
Service Volume Determination for 2015, 2020, and 2040

Appendix: Service Volume Determination for Years 2015, 2020, and 2040

				NOT UPDATED/FOR REF ONLY: MDC RER Database (1)				SIS/Limited Acess Faclty (2)		Non-Sis Ref for MDC LOS Std (2)			Adopt LOS		Refenced FDOT 2012 LOS Handbook								Committed 2020 SV							Cost Feasible 2040 SV						
																			2015 Peak Hour 2-Way Max SV		2015 Peak Hour Peak Dir Max SV			General Use Lns		Express Lanes		Total			General Use Lns		Express Lanes		Total	
STA ID	Roadway	From	To	Agency	Adopt LOS Std	Pk Hr 2-Way Max SV (Capacity)	Estm. Eqvlt NL	SIS	Limit Access Facility ?	UIA ?	UDB ?	Transit?	MDC SV Adopt LOS (2)	Ref Adopt LOS (3)	Exist NL (4)	Area Type	SV Description / Facility Type	LOS D	LOS E	LOS D	LOS E	NL	LOS D	LOS E	LOS D	LOS E	LOS D	LOS E	NL	LOS D	LOS E	LOS D	LOS E	LOS D	LOS E
972250	Florida's Turnpike/ HEFT/SR 821	SW 8th St	SR 836	FDOT	D	10,060	6	Y	Y		Y	N	D	D	8	Urban	Uninterrupted Fwy	13,390	15,010	7,320	8,220	6+4	5,500	6,080	3,660	3,940	9,160	10,020	6+4	5,500	6,080	3,660	3,940	9,160	10,020
972526		SR 836	NW 12th Street	n/a	n/a	n/a	n/a	Y	Y		Y	N	D	D	8	Urban	Uninterrupted Fwy	13,390	15,010	7,320	8,220	6+4	5,500	6,080	3,660	3,940	9,160	10,020	6+4	5,500	6,080	3,660	3,940	9,160	10,020
972230		NW 12th Street	NW 41th Street	n/a	n/a	n/a	n/a	Y	Y		Y	N	D	D	8	Urban	Uninterrupted Fwy	13,390	15,010	7,320	8,220	6+4	5,500	6,080	3,660	3,940	9,160	10,020	6+4	5,500	6,080	3,660	3,940	9,160	10,020
972269		NW 41th Street	NW 74th Street	n/a	n/a	n/a	n/a	Y	Y		Y	N	D	D	8	Urban	Uninterrupted Fwy	13,390	15,010	7,320	8,220	6+4	5,500	6,080	3,660	3,940	9,160	10,020	6+4	5,500	6,080	3,660	3,940	9,160	10,020
972268		NW 74th Street	NW 106th Street	n/a	n/a	n/a	n/a	Y	Y		Y	N	D	D	8	Urban	Uninterrupted Fwy	13,390	15,010	7,320	8,220	6+4	5,500	6,080	3,660	3,940	9,160	10,020	6+4	5,500	6,080	3,660	3,940	9,160	10,020
972272		NW 106th Street	US 27/ Okeechobee Rd	FDOT	D	10,060	6	Y	Y		Y	N	D	D	6	Urban	Uninterrupted Fwy	10,060	11,100	5,500	6,080	6+4	5,500	6,080	3,660	3,940	9,160	10,020	6+4	5,500	6,080	3,660	3,940	9,160	10,020
972248		US 27/ Okeechobee Rd	NW 170th St	FDOT	D	10,060	6	Y	Y		Y	N	D	D	6	Urban	Uninterrupted Fwy	10,060	11,100	5,500	6,080	6+4	5,500	6,080	3,660	3,940	9,160	10,020	6+4	5,500	6,080	3,660	3,940	9,160	10,020
972248		NW 170th St	Interstate 75	FDOT	D	10,060	6	Y	Y		Y	N	D	D	6	Urban	Uninterrupted Fwy	10,060	11,100	5,500	6,080	6+4	5,500	6,080	3,660	3,940	9,160	10,020	6+4	5,500	6,080	3,660	3,940	9,160	10,020
972285		Interstate 75	CR 823/Red Rd	n/a	n/a	n/a	n/a	Y	Y		Y	N	D	D	4	Urban	Uninterrupted Fwy	6,700	7,190	3,660	3,940	6+2	5,500	6,080	1,830	1,970	7,330	8,050	6+2	5,500	6,080	1,830	1,970	7,330	8,050
971996		CR 823/Red Rd	CR 817/NW 27th Ave	n/a	n/a	n/a	n/a	Y	Y		Y	N	D	D	4	Urban	Uninterrupted Fwy	6,700	7,190	3,660	3,940	6+2	5,500	6,080	1,830	1,970	7,330	8,050	6+2	5,500	6,080	1,830	1,970	7,330	8,050
971998		CR 817/NW 27th Ave	Florida's Turnpike/SR 91	n/a	n/a	n/a	n/a	Y	Y		Y	N	D	D	6	Urban	Uninterrupted Fwy	10,060	11,100	5,500	6,080	6+2	5,500	6,080	1,830	1,970	7,330	8,050	6+2	5,500	6,080	1,830	1,970	7,330	8,050
971904	Florida's Turnpike/ SR 91	I-595	Griffin Rd	n/a	n/a	n/a	n/a	Y	Y		Broward		n/a	D	8	Urban	Uninterrupted Fwy	13,390	15,010	7,320	8,220	8	7,320	8,220			7,320	8,220	8	7,320	8,220			7,320	8,220
971902		Griffin Rd	Pines Blvd	n/a	n/a	n/a	n/a	Y	Y		Broward		n/a	D	6	Urban	Uninterrupted Fwy	10,060	11,100	5,500	6,080	6	5,500	6,080			5,500	6,080	6	5,500	6,080			5,500	6,080
971900		Pines Blvd	Florida's Turnpike/HEFT/SR 821	n/a	n/a	n/a	n/a	Y	Y		Broward		n/a	D	8	Urban	Uninterrupted Fwy	13,390	15,010	7,320	8,220	8	7,320	8,220			7,320	8,220	8	7,320	8,220			7,320	8,220
970502		Florida's Turnpike/HEFT/SR 821	NW 203rd St	n/a	n/a	n/a	n/a	Y	Y		Y	N	D	D	8	Urban	Uninterrupted Fwy	13,390	15,010	7,320	8,220	8	7,320	8,220			7,320	8,220	8	7,320	8,220			7,320	8,220
862005	Interstate 75	I-595	Royal Palm Blvd	n/a	n/a	n/a	n/a	Y	Y		Broward		n/a	D	8	Urban	Uninterrupted Fwy	13,390	15,010	7,320	8,220	8+4	7,320	8,220	3,660	3,940	10,980	12,160	8+4	7,320	8,220	3,660	3,940	10,980	12,160
862004		Royal Palm Blvd	Griffin Rd	n/a	n/a	n/a	n/a	Y	Y		Broward		n/a	D	8	Urban	Uninterrupted Fwy	13,390	15,010	7,320	8,220	8+4	7,320	8,220	3,660	3,940	10,980	12,160	8+4	7,320	8,220	3,660	3,940	10,980	12,160
862003		Griffin Rd	Sheridan St	n/a	n/a	n/a	n/a	Y	Y		Broward		n/a	D	8	Urban	Uninterrupted Fwy	13,390	15,010	7,320	8,220	8+4	7,320	8,220	3,660	3,940	10,980	12,160	8+4	7,320	8,220	3,660	3,940	10,980	12,160
862002		Sheridan St	Pines Blvd	n/a	n/a	n/a	n/a	Y	Y		Broward		n/a	D	8	Urban	Uninterrupted Fwy	13,390	15,010	7,320	8,220	10+4	9,220	10,360	3,660	3,940	12,880	14,300	10+4	9,220	10,360	3,660	3,940	12,880	14,300
862001		Pines Blvd	Miramar Pkwy/ S 33rd St	n/a	n/a	n/a	n/a	Y	Y		Broward		n/a	D	8	Urban	Uninterrupted Fwy	13,390	15,010	7,320	8,220	10+4	9,220	10,360	3,660	3,940	12,880	14,300	10+4	9,220	10,360	3,660	3,940	12,880	14,300
860362		Miramar Pkwy/ S 33rd St	Florida's Turnpike	n/a	n/a	n/a	n/a	Y	Y		Broward		n/a	D	12	Urban	Uninterrupted Fwy	16,840	18,930	12,060	12,500	12+4	12,060	12,500	3,660	3,940	15,720	16,440	12+4	12,060	12,500	3,660	3,940	15,720	16,440
872503		Florida's Turnpike	Miami Gardens Dr/NW 186 St	FDOT	D	13,390	8	Y	Y		Y	N	D	D	10	Urban	Uninterrupted Fwy	22,030	22,860	9,220	10,360	10+4	9,220	10,360	3,660	3,940	12,880	14,300	10+4	9,220	10,360	3,660	3,940	12,880	14,300
872501		Miami Gardens Dr/NW 186 St	NW 178th St	FDOT	D	13,390	8	Y	Y		Y	N	D	D	8	Urban	Uninterrupted Fwy	16,840	18,930	7,320	8,220	8+4	7,320	8,220	3,660	3,940	10,980	12,160	8+4	7,320	8,220	3,660	3,940	10,980	12,160
872501		NW 178th St	NW 138th Street	FDOT	D	13,390	8	Y	Y		Y	N	D	D	8	Urban	Uninterrupted Fwy	13,390	15,010	7,320	8,220	8+4	7,320	8,220	3,660	3,940	10,980	12,160	8+4	7,320	8,220	3,660	3,940	10,980	12,160
872500		NW 138th Street	SR 826	FDOT	D	13,390	8	Y	Y		Y	N	D	D	8	Urban	Uninterrupted Fwy	13,390	15,010	7,320	8,220	8+4	7,320	8,220	3,660	3,940	10,980	12,160	8+4	7,320	8,220	3,660	3,940	10,980	12,160
872511	SR 924/Gratigny Pkwy	SR 826	NW 57th Ave (Red Road)	n/a	n/a	n/a	n/a	Y	Y	Y	Y	N	D	D	6	Urban	Uninterrupted Fwy	10,060	11,100	5,500	6,080	6	5,500	6,080			5,500	6,080	6	5,500	6,080			5,500	6,080
872512		NW 57th Ave (Red Road)	Douglas(Le Jeune Connector)	n/a	n/a	n/a	n/a	Y	Y	Y	Y	N	D	D	6	Urban	Uninterrupted Fwy	10,060	11,100	5,500	6,080	6	5,500	6,080			5,500	6,080	6	5,500	6,080			5,500	6,080
872510		Douglas(Le Jeune Connector)	NW 32nd Ave	n/a	n/a	n/a	n/a	Y	Y	Y	Y	N	D	D	6	Urban	Uninterrupted Fwy	10,060	11,100	5,500	6,080	6	5,500	6,080			5,500	6,080	6	5,500	6,080			5,500	6,080
n/a	NW 107th Ave	US 27/ Okeechobee Rd	NW 138th St	n/a	n/a	n/a	n/a				Y	N	D90%	D	4	Urban	State Signal Art Class I Div	3,078	3,222	1,800	1,800	4	1,800	1,800			1,800	1,800	4	1,800	1,800			1,800	1,800
n/a		NW 138th St	NW 170th St	n/a	n/a	n/a	n/a				Y	N	D90%	D	-	Urban	State Signal Art Class I Div					NOT 2020 ROADWAY LINK							New 2L	792	792			792	792
n/a	NW 102nd Ave	NW 170th St	NW 178th St	n/a	n/a	n/a	n/a				Y	N	D90%	D	-	Urban	State Signal Art Class I Div					NOT 2020 ROADWAY LINK							New 4	1,800	1,800			1,800	1,800
n/a		NW 178th St	ADM Project Access Rd	n/a	n/a	n/a	n/a				Y	N	D90%	D	-	Urban	State Signal Art Class I Div					New 4	1,800	1,800			1,800	1,800	New 4	1,800	1,800			1,800	1,800
n/a	Miami Gardens Dr	ADM Project Access Rd	Interstate 75 Western Ramps	n/a	n/a	n/a	n/a				Y	Express	E120%	E	-	Urban	State Signal Art Class I Div					New 6	3,624	3,624			3,624	3,624	New 6	3,624	3,624			3,624	3,624
n/a		Interstate 75 Western Ramps	Interstate 75 Eastern Ramps	n/a	n/a	n/a	n/a				Y	Express	E120%	E	-	Urban	State Signal Art Class I Div					New 6	3,624	3,624			3,624	3,624	New 6	3,624	3,624			3,624	3,624
872518		Interstate 75 Eastern Ramps	NW 87th Ave	FDOT	EE	4,296	4				Y	Express	E120%	E	4	Urban	State Signal Art Class I Div	4,296	4,296	2,400	2,400	4	2,400	2,400			2,400	2,400	4	2,400	2,400			2,400	2,400
872518		NW 87th Ave	NW 82nd Ave	FDOT	EE	4,296	4				Y	Express	E120%	E	4	Urban	State Signal Art Class I Div	4,296	4,296	2,400	2,400	4	2,400	2,400			2,400	2,400	4	2,400	2,400			2,400	2,400
872517		NW 82nd Ave	NW 77nd Ave	FDOT	EE	4,296	4				Y	Express	E120%	E	4	Urban	State Signal Art Class I Div	4,296	4,296	2,400	2,400	4	2,400	2,400			2,400	2,400	4	2,400	2,400			2,400	2,400
872517		NW 77nd Ave	NW 67nd Ave	FDOT	EE	4,296	4				Y	Express	E120%	E	4	Urban	State Signal Art Class I Div	4,296	4,296	2,400	2,400	4	2,400	2,400			2,400	2,400	4	2,400	2,400			2,400	2,400
872516		NW 67nd Ave	NW 57nd Ave	FDOT	EE	4,296	4				Y	Express	E120%	E	4	Urban	State Signal Art Class I Div	4,296	4,296	2,400	2,400	4	2,400	2,400			2,400	2,400	4	2,400	2,400			2,400	2,400
871233		NW 57th Ave	NW 47th Ave	FDOT	EE	6,468	6				Y	Express	E120%	E	6	Urban	State Signal Art Class I Div	6,468	6,468	3,624	3,624	6	3,624	3,624			3,624	3,624	6	3,624	3,624			3,624	3,624
n.a	NW 170th St	Florida Turnpike	NW 102 Ave/NW 107 Ave	n/a	n/a	n/a	n/a				Y	N	D90%	D	-	Urban	State Signal Art Class I Div					New 6	2,718	2,718			2,718	2,718	New 6	2,718	2,718			2,718	2,718
n./a		NW 102 Ave/NW 107 Ave	NW 97th Ave	n/a	n/a	n/a	n/a				Y	N	D90%	D	-	Urban	State Signal Art Class I Div					New 6	2,718	2,718			2,718	2,718	New 6	2,718	2,718			2,718	2,718
878177		NW 87th Ave	NW 82nd Ave	n/a	n/a	n/a	n/a				Y	N	D90%	D	2	Urban	State Signal Art Class II UnDiv	1,197	1,269	675	720	2	675	720			675	720	2	675	720			675	720
9552		NW 82nd Ave	NW 78th Ave	MDC	D	1,130	2				Y	N	D90%	D	2	Urban	State Signal Art Class II UnDiv	1,197	1,269	675	720	2	675	720			675	720	2	675	720			675	720
9550	NW 169th St	NW 77th Ct	NW 67th Ave	MDC	D	2,510	4				Y	N	D90%	D	4	Urban	State Signal Art Class I Div	3,078	3,222	1,800	1,800	4	1,800	1,800			1,800	1,800	4	1,800	1,800			1,800	1,800
877037	NW 154th St	NW 87th Ave	NW 82nd Ave	MDC	D	2,540	4				Y	N	D90%	D	4	Urban	State Signal Art Class I Div	3,078	3,222	1,800	1,800	4	1,800	1,800			1,800	1,800	4	1,800	1,800			1,800	1,800
877037		NW 82nd Ave	SR 826	n/a	n/a	n/a	n/a				Y	N	D90%	D	4	Urban	State Signal Art Class I Div	3,078	3,222	1,800	1,800	4	1,800	1,800			1,800	1,800	4	1,800	1,800			1,800	1,800
878673		SR 826	NW 67th Ave	MDC	E	3,160	4			Y	Y	N	E100%	E	4	Urban	State Signal Art Class II Div	2,920	3,040	1,630	1,700	4	1,630	1,700			1,630	1,700	4	1,630	1,700			1,630	1,700
9256		NW 67th Ave	NW 57th Ave (Red Road)	MDC	E+20	3,360	4			Y	Y	N	E100%	E	4	Urban	State Signal Art Class II Div	2,920	3,040	1,630	1,700	4	1,630	1,700			1,630	1,700	4	1,630	1,700			1,630	1,700
878684	NW 138th St	US 27/ Okeechobee Rd	NW 107th Ave	n/a	n/a	n/a	n/a				Y	N	E100%	E	4	Urban	State Signal Art Class I Div	3,580	3,580	2,000	2,000	4	2,000	2,000			2,000	2,000	6	5,500	6,080			5,500	6,080
877048		NW 107th Ave	NW 97th Ave	n/a	n/a	n/a	n/a				Y	N	E100%	E	6	Urban	State Signal Art Class I Div	5,390	5,390	3,020	3,020	6	3,020	3,020			3,020	3,020	6	5,500	6,080			5,500	6,080
877048		NW 97th Ave	Hialeah Gardens Blvd	n/a	n/a	n/a	n/a				Y	N	E100%	E	6	Urban	State Signal Art Class I Div	5,390	5,390	3,020	3,020	6	3,020	3,020			3,020	3,020	6	5,500	6,080			5,500	6,080
877065	Hialeah Gardens Blvd	NW 106th Terrace	US 27/ Okeechobee Rd	n/a	n/a	n/a	n/a				Y	N	E100%	E	6	Urban	State Signal Art Class I Div	5,390	5,390	3,020	3,020	6	3,020	3,020			3,020	3,020	6	3,020	3,020			3,020	3,020
878620		US 27/ Okeechobee Rd	NW 138th St	n/a	n/a	n/a	n/a				Y	N	E100%	E	4	Urban	State Signal Art Class I Div	3,580	3,580	2,000	2,000	4	2,000	2,000			2,000	2,000	4	2,000	2,000			2,000	2,000
878243	NW 97th Ave	NW 122nd St	NW 130th St	n/a	n/a	n/a	n/a				Y	N	D90%	D	2	Urban	State Signal Art Class I UnDiv	1,440	1,440	792	792	2	792	792			792	792	2	792	792			792	792
878243		NW 130th St	NW 138th St	n/a	n/a	n/a	n/a				Y	N	D90%	D	2	Urban	State Signal Art Class I UnDiv	1,440	1,440	792	792	2	792	792			792	792	2	792	792			792	792
878243		NW 138th St	NW 154th St	n/a	n/a	n/a	n/a				Y	N	D90%	D	4	Urban	State Signal Art Class I Div	3,078	3,222	1,800	1,800	4	1,800	1,800			1,800	1,800	4	1,800	1,800			1,800	1,800
878243		NW 154th St	NW 170th St	n/a	n/a	n/a	n/a				Y	N	D90%	D	2	Urban	State Signal Art Class I UnDiv	1,440	1,440	792	792	2	792	792			792	792	2	792	792			792	792
n/a		NW 170th St	Graham Access	n/a	n/a	n/a	n/a				Y	N	D90%	D	-	Urban	State Signal Art Class I Div					New 4	1,800	1,800			1,800	1,800	New 4	1,800	1,800			1,800	1,800
n/a		Graham Access	NW 178th St	n/a	n/a	n/a	n/a				Y	N	D90%	D	-	Urban	State Signal Art Class I Div					New 4	1,800	1,800			1,800	1,800	New 4	1,800	1,800			1,800	1,800
878176	NW 87th Ave	Miami Gardens Dr/NW 186 St	NW 170th St	n/a	n/a	n/a	n/a				Y	N	D90%	D	4	Urban	State Signal Art Class I Div	3,078	3,222	1,800	1,800	4	1,800	1,800			1,800	1,800	4	1,800	1,800			1,800	1,800
878112		NW 170th St	NW 154th St	n/a	n/a	n/a	n/a				Y	N	D90%	D	4	Urban	State Signal Art Class I Div	3,078	3,222	1,800	1,800	4	1,800	1,800			1,800	1,800	4	1,800	1,800			1,800	1,800
n/a	NW178th St	Graham Access	NW 97th Ave	n/a	n/a	n/a	n/a				Y	N	D90%	D	-	Urban	State Signal Art Class I Div					New 4	1,800	1,800			1,800	1,800	New 4	1,800	1,800			1,800	1,800
n/a		NW 97th Ave	Iinterstate 75	n/a	n/a	n/a	n/a				Y	N	D90%	D	-	Urban	State Signal Art Class I Div					New 4	1,800	1,800			1,800	1,800	New 4	1,800	1,800			1,800	1,800
869688	Miramar Pkwy	SW 172nd Ave	SW 160th Ave	n/a	n/a	n/a	n/a				Broward		n/a	D	6	Urban	State Signal Art Class I Div	5,390	5,390	3,020	3,020	6	3,020	3,020			3,020	3,020	6	3,020	3,020			3,020	3,020
n/a		SW 160th Ave	Interstate 75	n/a	n/a	n/a	n/a				Broward		n/a	D	6	Urban	State Signal Art Class I Div	5,390	5,390	3,020	3,020	6	3,020	3,020			3,020	3,020	6	3,020	3,020			3,020	3,020
n/a		Interstate 75	SW 148th Ave	n/a	n/a	n/a	n/a				Broward		n/a	D	6	Urban	State Signal Art Class I Div	5,390	5,390	3,020	3,020	8	4,040	4,040			4,040	4,040	8	4,040	4,040			4,040	4,040
867326		SW 148th Ave	Flamingo Rd	n/a	n/a	n/a	n/a				Broward		n/a	D	6	Urban	State Signal Art Class I Div	5,390	5,390	3,020	3,020	6	3,020	3,020			3,020	3,020	6	3,020	3,020			3,020	3,020
877076	NW 122nd St	NW 97th Ave	Hialeah Gardens Blvd	FDOT	D	2,920	4				Y	N	D90%	D	4	Urban	State Signal Art Class II Div	2,628	2,736	1,467	1,530	4	1,467	1,530			1,467	1,530	4	1,467	1,530			1,467	1,530
877076		Hialeah Gardens Blvd	NW 89th Ave	FDOT	D	2,920	4				Y	N	D90%	D	4	Urban	State Signal Art Class II Div	2,628	2,736	1,467	1,530	4	1,467	1,530			1,467	1,530	4	1,467	1,530			1,467	1,530
878193		NW 89th Ave	NW 87th Ave	n/a	n/a	n/a	n/a				Y	N	D90%	D	4	Urban	State Signal Art Class II Div	2,628	2,736	1,467	1,530	4	1,467	1,530			1,467	1,530	4	1,467	1,530			1,467	1,530
877041		NW 87th Ave	SR 826	FDOT	D	2,920	4				Y	N	D90%	D	4	Urban	State Signal Art Class II Div	2,628	2,736	1,467	1,530	4	1,467	1,530			1,467	1,530	4	1,467	1,530			1,467	1,530
877076		N Okeechobee Rd	NW 97th Ave	FDOT	D	2,920	4				Y	N	D90%	D	2	Urban	State Signal Art Class II UnDiv	1,440	1,440	792	792	2	792	792			792	792	2	792	792			792	792

Appendix: Service Volume Determination for Years 2015, 2020, and 2040

STA ID	Roadway	From	To	NOT UPDATED/FOR REF ONLY: MDC RER Database (1)				SIS/Limited Acess Faclty (2)		Non-Sis Ref for MDC LOS Std (2)			Adopt LOS		Refenced FDOT 2012 LOS Handbook								Committed 2020 SV							Cost Feasible 2040 SV						
				Agency	Adopt LOS Std	Pk Hr 2-Way Max SV (Capacity)	Estm. Eqvlt NL	SIS	Limit Access Facility ?	UIA ?	UDB ?	Transit?	MDC SV Adopt LOS (2)	Ref Adopt LOS (3)	Exist NL (4)	Area Type	SV Description / Facility Type	2015 Peak Hour 2-Way Max SV LOS D	2015 Peak Hour 2-Way Max SV LOS E	2015 Peak Hour Peak Dir Max SV LOS D	2015 Peak Hour Peak Dir Max SV LOS E	NL	General Use Lns LOS D	General Use Lns LOS E	Express Lanes LOS D	Express Lanes LOS E	Total LOS D	Total LOS E	NL	General Use Lns LOS D	General Use Lns LOS E	Express Lanes LOS D	Express Lanes LOS E	Total LOS D	Total LOS E
870575	SR 826	I-75	NW 122nd St	FDOT	D	13,390	8	Y	Y	Y	Y	N	D	D	8	Urban	Uninterrupted Fwy	13,390	15,010	7,320	8,220	6+4	5,500	6,080	3,660	3,940	9,160	10,020	6+4	5,500	6,080	3,660	3,940	9,160	10,020
870574		NW 122nd St	NW 103rd St	FDOT	D	13,390	8	Y	Y	Y	Y	N	D	D	10	Urban	Uninterrupted Fwy	16,840	18,930	9,220	10,360	6+4	5,500	6,080	3,660	3,940	9,160	10,020	6+4	5,500	6,080	3,660	3,940	9,160	10,020
870553		NW 103rd St	N Okeechobee Rd	FDOT	D	16,840	10	Y	Y	Y	Y	N	D	D	10	Urban	Uninterrupted Fwy	16,840	18,930	9,220	10,360	8+4	7,320	8,220	3,660	3,940	10,980	12,160	8+4	7,320	8,220	3,660	3,940	10,980	12,160
860088	Pines Blvd	I-75	SW 160th Ave	n/a	n/a	n/a	n/a				Broward		n/a	D	6	Urban	State Signal Art Class I Div	5,390	5,390	3,020	3,020	6	3,020	3,020			3,020	3,020	6	3,020	3,020			3,020	3,020
860087		SW 160th Ave	SW 172th Ave	n/a	n/a	n/a	n/a				Broward		n/a	D	6	Urban	State Signal Art Class I Div	5,390	5,390	3,020	3,020	6	3,020	3,020			3,020	3,020	6	3,020	3,020			3,020	3,020
870585	Okeechobee Rd	NW 154th St	Florida's Turnpike	n/a	n/a	n/a	n/a	Y			N	N	C	C	4	Rural	State Signal Art	2,890	2,890	1,580	1,580	4	1,580	1,580			1,580	1,580	4	1,580	1,580			1,580	1,580
872536		Florida's Turnpike	NW 138th St	n/a	n/a	n/a	n/a	Y			Y	N	D	D	6	Urban	State Signal Art Class I Div	5,390	5,390	3,020	3,020	6	3,020	3,020			3,020	3,020	6	3,020	3,020			3,020	3,020
872536		NW 138th St	NW 107th Ave	n/a	n/a	n/a	n/a	Y			Y	N	D	D	6	Urban	State Signal Art Class I Div	5,390	5,390	3,020	3,020	6	3,020	3,020			3,020	3,020	6	3,020	3,020			3,020	3,020
872536		NW 107th Ave	Hialeah Gardens Blvd	n/a	n/a	n/a	n/a	Y			Y	N	D	D	6	Urban	State Signal Art Class I Div	5,390	5,390	3,020	3,020	6	3,020	3,020			3,020	3,020	6	3,020	3,020			3,020	3,020
870109		Hialeah Gardens Blvd	NW 103rd St	FDOT	D	5,390	6	Y			Y	N	D	D	6	Urban	State Signal Art Class I Div	5,390	5,390	3,020	3,020	6	3,020	3,020			3,020	3,020	6	3,020	3,020			3,020	3,020
870109		NW 103rd St	SR 826	FDOT	D	5,390	6	Y			Y	N	D	D	6	Urban	State Signal Art Class I Div	5,390	5,390	3,020	3,020	6	3,020	3,020			3,020	3,020	6	3,020	3,020			3,020	3,020
870528		SR 826	W 16th Ave (Milam Dairy Rd)	FDOT	E	5,080	6			Y	Y	N	E100%	E	6	Urban	State Signal Art Class I Div	5,390	5,390	3,020	3,020	6	3,020	3,020			3,020	3,020	6	3,020	3,020			3,020	3,020
875252		W 16th Ave (Milam Dairy Rd)	Hialeah Expy	n/a	n/a	n/a	n/a			Y	Y	N	E100%	E	6	Urban	State Signal Art Class I Div	5,390	5,390	3,020	3,020	6	3,020	3,020			3,020	3,020	6	3,020	3,020			3,020	3,020
875252		Hialeah Expy	NW 57th Ave (Red Road)	n/a	n/a	n/a	n/a			Y	Y	N	E100%	E	6	Urban	State Signal Art Class I Div	5,390	5,390	3,020	3,020	6	3,020	3,020			3,020	3,020	6	3,020	3,020			3,020	3,020
875252		NW 57th Ave (Red Road)	Hialeah Dr	n/a	n/a	n/a	n/a			Y	Y	N	E100%	E	6	Urban	State Signal Art Class I Div	5,390	5,390	3,020	3,020	6	3,020	3,020			3,020	3,020	6	3,020	3,020			3,020	3,020
870200		Hialeah Dr	SW 42nd Ave (Le Jeune Rd)	n/a	n/a	n/a	n/a			Y	Y	N	E100%	E	6	Urban	State Signal Art Class I Div	5,390	5,390	3,020	3,020	6	3,020	3,020			3,020	3,020	6	3,020	3,020			3,020	3,020
860494	SW 67th Ave/Flamingo	NW 191st St	Miami Gardens Dr/NW 186 St	n/a	n/a	n/a	n/a				Y	Y>20	D90%	D	6	Urban	State Signal Art Class I Div	4,851	4,851	2,718	2,718	6	2,718	2,718			2,718	2,718	6	2,718	2,718			2,718	2,718
877036		Miami Gardens Dr/NW 186 St	NW 173rd Dr	n/a	n/a	n/a	n/a				Y	Express	E120%	E	6	Urban	State Signal Art Class I Div	6,468	6,468	3,624	3,624	6	3,624	3,624			3,624	3,624	6	3,624	3,624			3,624	3,624
865216	SW 57th Ave/Red Rd	Miramar Pkwy/ S 33rd St	Florida's Turnpike/HEFT/SR 821	n/a	n/a	n/a	n/a				Y	N	E100%	E	6	Urban	State Signal Art Class I Div	5,390	5,390	3,020	3,020	6	3,020	3,020			3,020	3,020	6	3,020	3,020			3,020	3,020
872515		Florida's Turnpike/HEFT/SR 821	NW 202nd St	FDOT	D	5,080	6				Y	N	E100%	E	6	Urban	State Signal Art Class I Div	5,390	5,390	3,020	3,020	6	3,020	3,020			3,020	3,020	6	3,020	3,020			3,020	3,020
872514		NW 202nd St	Miami Gardens Dr/NW 186 St	FDOT	D	5,080	6				Y	Y>20	D90%	D	6	Urban	State Signal Art Class I Div	4,851	4,851	2,718	2,718	6	2,718	2,718			2,718	2,718	6	2,718	2,718			2,718	2,718
871190		Miami Gardens Dr/NW 186 St	NW 177th St	FDOT	EE	6,468	8				Y	Y>20	D90%	D	6	Urban	State Signal Art Class I Div	4,851	4,851	2,718	2,718	6	2,718	2,718			2,718	2,718	6	2,718	2,718			2,718	2,718

Notes:

(1) Source: MDC RER Vested DOS Trip Database Dated April 2016. Staff indicated that only the DOS trips were up-to-date. All other information such as capacity and number of lanes may be out-dated.

(2) MDC Comprehensive Plan Transportation Element uses Strategic Intermodal System (SIS, Urban Infil Area (UIA), Urband Development Boundary Area (UDB), and Transit to identify LOS standard. For SIS facilities, the UIA, UDB, and Transit are not applicable. SIS criteria are FDOT statewide standards.

(3) Adopted LOS standard referenced for roadway link LOS analysis tables.

(4) Existing number of lanes based on review of aerial maps, along with comments received from agencies on June 22, 2016 CDMP TIA report.

-Based on 2012 FDOT LOS Handbook directly.

-Represent MDC adopted LOS standards that require adjustments to 2012 FDOT LOS Handbook Tables service volumes (reference "MDC SV Adopt LOS" column description).

-By 2040, SW 138th St will become a freeway and therefore has freeway service volumes and LOS D capacity

-Other information

APPENDIX I-F:
Mall of America Count Reports

Kimley»Horn

MEMORANDUM

To: Lori Hartglass, Esq.
Arnstein & Lehr, LLP

From: Douglas Arnold, P.E.
Kimley-Horn and Associates, Inc.

Date: September 9, 2015

Re: Trip Generation Study
Mall of America, Bloomington, Minnesota

Introduction

Kimley-Horn and Associates, Inc., (Kimley-Horn) was retained by Arnstein and Lehr to the vehicle trip generation characteristic of the Mall of America (MOA) in Bloomington, Minnesota. The MOA is a unique land use as it provides shopping, hotels, and an indoor amusement park, which differs from a typical shopping mall. As such, published trip generation data is not available.

The purpose of this study is to establish trip generation characteristics for the MOA which can be used to project trips that may be generated by a similar development. Trip generation rates will be calculated for weekday (daily, AM peak hour, and PM peak hour) and Saturday (daily and peak hour).

Existing Conditions

The MOA is a 4,600,000 square feet mall in Bloomington, Minnesota, which includes 2,581,582 square feet of leasable area in addition to attractions, hotel, and common areas. The MOA is located near two major highways, TH 77 and I-494, and the Minneapolis-St. Paul International Airport, offering easy access from all directions. Vehicular traffic to the MOA is served by eight access points for parking facilities along Lindau Lane, Killebrew Drive, 24th Avenue South, and two overflow lots.

- Lindau Lane is an E-W six-lane divided road that runs along the north side of MOA. To the east, Lindau Lane connects to 24th Avenue South, and to the west, Lindau Lane merges with TH 77.

- Killebrew Drive is an E-W six-lane divided road that runs along the south side of MOA. To the east, Killebrew Drive connects to 24th Avenue South, and to the west, Killebrew Lane merges with TH 77.

- 24th Avenue South is a six-lane N-S road that runs along the east side of the MOA. In addition to its intersections with Lindau Lane and Killebrew Drive, this road connects to I-494 in the north and TH 77 in the south.

- The east overflow lot is located east of 24th Ave. South, directly across from the MOA, and the north overflow lot is located north of Lindau Lane, directly north of the MOA.

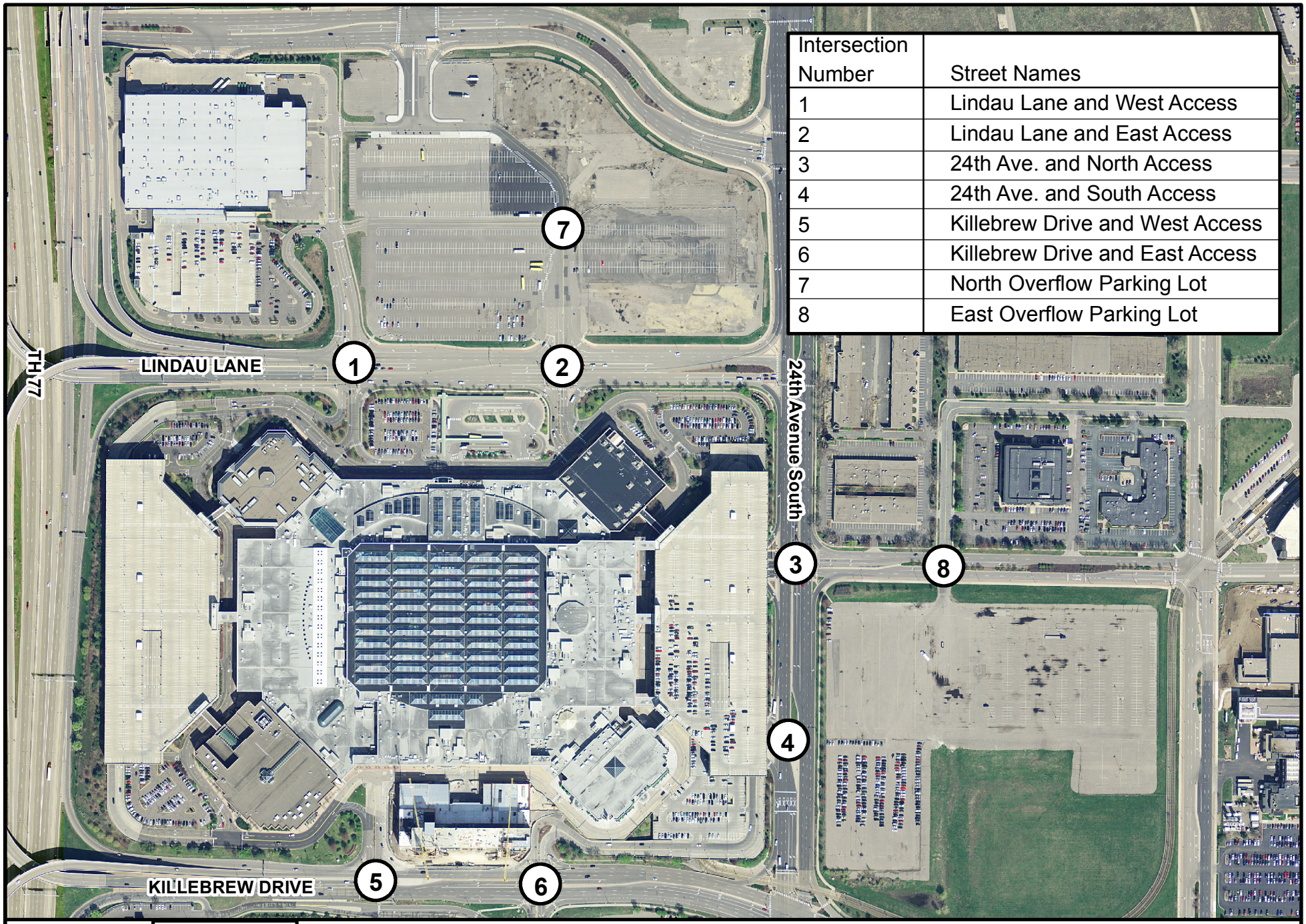
Data Collection

To understand the total number of vehicles travelling to and from the MOA, traffic volumes were collected in 15-minute increments at all ingress/egress points of the MOA for a 4-day period from Wednesday, August 12th, 2015 to Sunday, August 16th, 2015. The locations of the counts can be seen in **Exhibit 1** and are listed below.

- Lindau Lane and West Access
- Lindau Lane and East Access
- 24th Avenue South and North Access
- 24th Avenue South and South Access
- Killebrew Drive and West Access
- Killebrew Drive and East Access
- North Overflow Parking Lot
- East Overflow Parking Lot

It should be noted that the 24th Avenue South and South Access intersection is gate controlled with a security guard, and only serves buses, taxis, hotel shuttles, and other authorized vehicles. All other access locations provide access to/from the MOA parking garages and overflow lots.

In addition to the traffic counts collected in August 2015, the MOA recorded entering traffic throughout the year in 2014. The data was summarized on a monthly basis in order to determine the variation in traffic throughout the year.



Intersection Number	Street Names
1	Lindau Lane and West Access
2	Lindau Lane and East Access
3	24th Ave. and North Access
4	24th Ave. and South Access
5	Killebrew Drive and West Access
6	Killebrew Drive and East Access
7	North Overflow Parking Lot
8	East Overflow Parking Lot

Kimley»Horn

AUGUST 2015

EXHIBIT 1
Parking Ingress/Egress Locations
Mall of America

Trip Generation Analysis

Site-generated trip projections are typically calculated with the use of data in the Institute of Transportation Engineers (ITE) manual, Trip Generation, 9th Edition (often referred to as the Trip Generation Manual). In situations where information is not available in the manual for the specified land use, or the size of the proposed development is beyond the applicable range for the rates/equations in the manual, rates are typically developed by surveying an existing land use of similar size. The ITE land use code (LUC) Shopping Center (820), which is defined by ITE as *an integrated group of commercial establishments that is planned, developed, owned and managed as a unit*, is most similar to the MOA.

The sites used to develop the data for ITE LUC 820 were surveyed from the 1960s to the 2000s, and range in size from 1,700 square feet to 2,200,000 square feet, with an average size of +/- 350,000 square feet. Due to the unique nature of the MOA, the ITE land use code would not be considered a comparable land use. Therefore, the count data described previously was used to calculate trip generation characteristics of the MOA.

Trip Generation based on Observed Volumes

The traffic count data was summarized for the weekday (Wednesday, Thursday, and Friday) and Saturday time periods. Trip generation rates were calculated for the following scenarios:

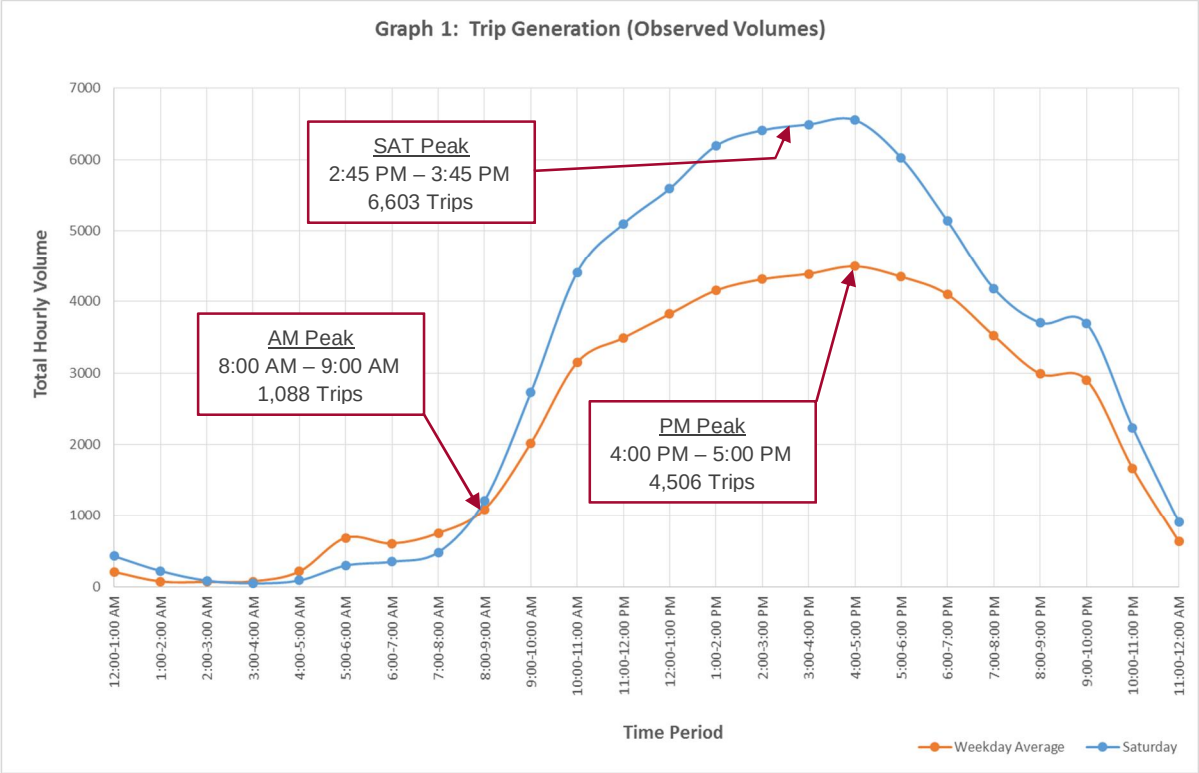
- Weekday Daily
- Weekday AM Peak Hour (Adjacent Street Traffic)
- Weekday AM Peak Hour (Generator)
- Weekday PM Peak Hour (Adjacent Street Traffic)
- Weekday PM Peak Hour (Generator)
- Saturday Daily
- Saturday Peak Hour (Peak Hour of Generator)

Consistent with the ITE Trip Generation Manual, the AM peak hour of the adjacent street traffic was calculated between 7:00 AM and 9:00 AM, and the PM peak hour of the adjacent street was calculated between 4:00 PM and 6:00 PM. The weekday data was averaged across all study locations in 15-minute increments to determine a weekday trip generation rate. For Saturday, the peak hour of the entire day was calculated.

Table 1 provides a summary of the trip generation for the MOA. The trip generation rates are based on 2,581,582 square feet of gross leasable area that currently exists as part of the MOA. Volume information for each of the study intersections is included as an attachment to this memorandum.

Table 1: Trip Generation Summary (Observed Volumes)								
Analysis Period	Scenario	Hour	Raw Data (August 2015)			Trip Rate	Percent Entering	Percent Exiting
			Entering	Exiting	Total			
Weekday	Daily		26,276	27,501	53,777	20.83	49%	51%
	AM Peak Hour (Adjacent Street Traffic)	8:00 AM - 9:00 AM	550	538	1,088	0.42	51%	49%
	AM Peak Hour (Generator)	11:00 AM - 12:00 PM	1,608	1,881	3,489	1.35	46%	54%
	PM Peak Hour (Adjacent Street Traffic)	4:00 PM - 5:00 PM	2,205	2,301	4,506	1.75	49%	51%
	PM Peak Hour (Generator)	3:45 PM - 4:45 PM	2,233	2,285	4,518	1.75	49%	51%
Saturday	Daily		35,231	37,355	72,586	28.12	49%	51%
	Saturday Peak Hour (Generator)	2:45 PM - 3:45 PM	3,296	3,307	6,603	2.56	50%	50%

Graph 1 provides the raw hourly volumes for the average weekday and Saturday.



Trip Generation based on Average Annual Volumes

Because of the unique characteristics of the MOA being a national/international destination, there are seasonal variations in traffic generated by the MOA. Year 2014 weekly entering volume counts were provided and used to determine the annual average trips generated by the MOA during the weekday and Saturday. The adjustment factor to convert the observed volumes to average annual volumes was calculated using **Equation 1** below.

Equation 1: $$Percent\ of\ Traffic = \frac{Average\ Daily\ Trips\ Generated\ in\ One\ Month}{Average\ Trips\ Generated\ across\ the\ Year} * 100$$

If the percent of traffic is less than 100 percent, then the traffic generated by the MOA during a given month is less than the annual average traffic generated, and the observed traffic should be increased to account for the seasonal traffic variations. Similarly, if the percent of traffic is greater than 100percent, then the observed traffic should be decreased to account for seasonal variations. By applying these corrections, the measured trips generated can be adjusted to represent the average annual daily trips generated. Based on the seasonal traffic distribution and the month of data collection, the weekday observed volumes were 108% (or 8% higher) of the average annual weekday trips generated and the Saturday observed volumes were 96% (or 4% lower) of the average annual trips generated for a Saturday.

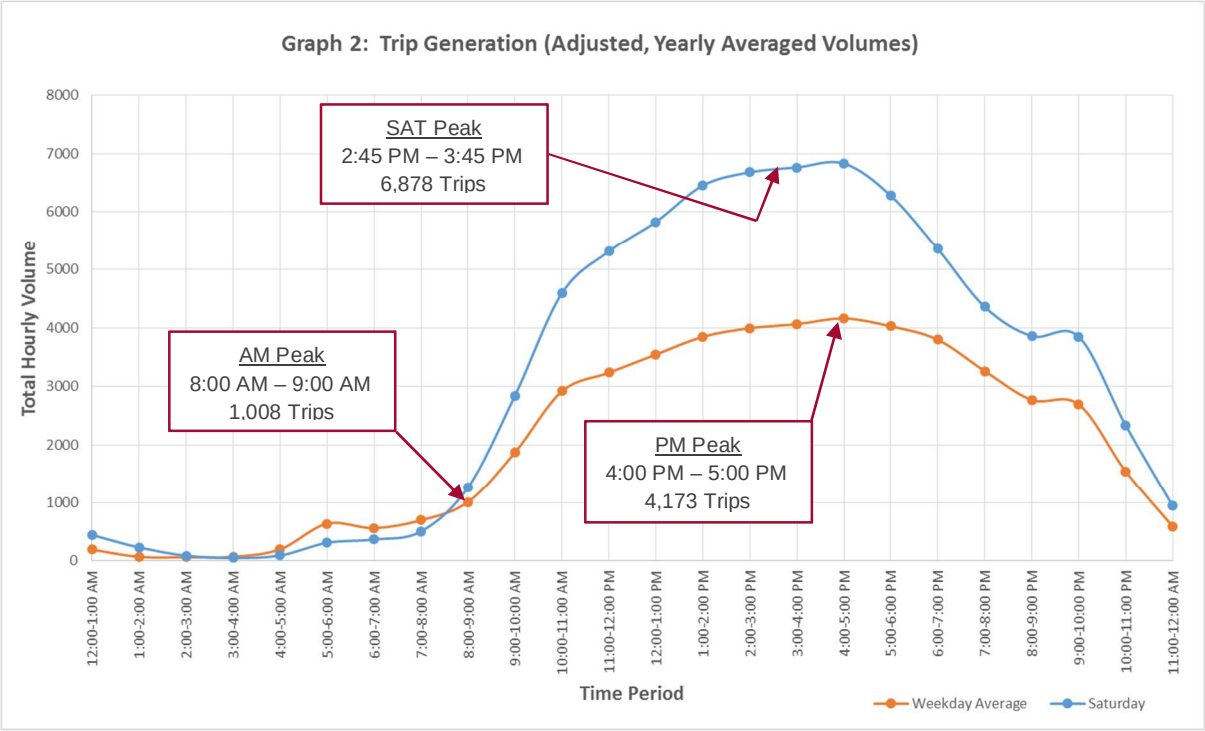
Based on the percent of traffic, the observed volumes were adjusted to reflect the annual average trip generation for a typical weekday and Saturday using the following equation (**Equation 2**).

Equation 2: $$Annual\ Average\ Traffic\ Volume = \frac{Observed\ Traffic\ Volume}{Percent\ of\ Traffic * 100}$$

Table 2 provides a summary of the trip generation for the MOA, adjusted to an annual average volume. The trip generation rates are based on 2,581,582 square feet of gross leasable area that currently exists as part of the MOA.

Table 2: Trip Generation Summary (Average Annual Volumes)								
Analysis Period	Scenario	Hour	Adjusted (Yearly Average)			Trip Rate	Percent Entering	Percent Exiting
			Entering	Exiting	Total			
Weekday	Daily		24,332	25,468	49,800	19.29	49%	51%
	AM Peak Hour (Adjacent Street Traffic)	8:00 AM - 9:00 AM	510	498	1,008	0.39	51%	49%
	AM Peak Hour (Generator)	11:00 AM - 12:00 PM	1,489	1,742	3,231	1.25	46%	54%
	PM Peak Hour (Adjacent Street Traffic)	4:00 PM - 5:00 PM	2,042	2,131	4,173	1.62	49%	51%
	PM Peak Hour (Generator)	3:45 PM - 4:45 PM	2,068	2,115	4,183	1.62	49%	51%
Saturday	Daily		36,702	38,911	75,613	29.29	49%	51%
	Saturday Peak Hour (Generator)	2:45 PM - 3:45 PM	3,433	3,445	6,878	2.66	50%	50%

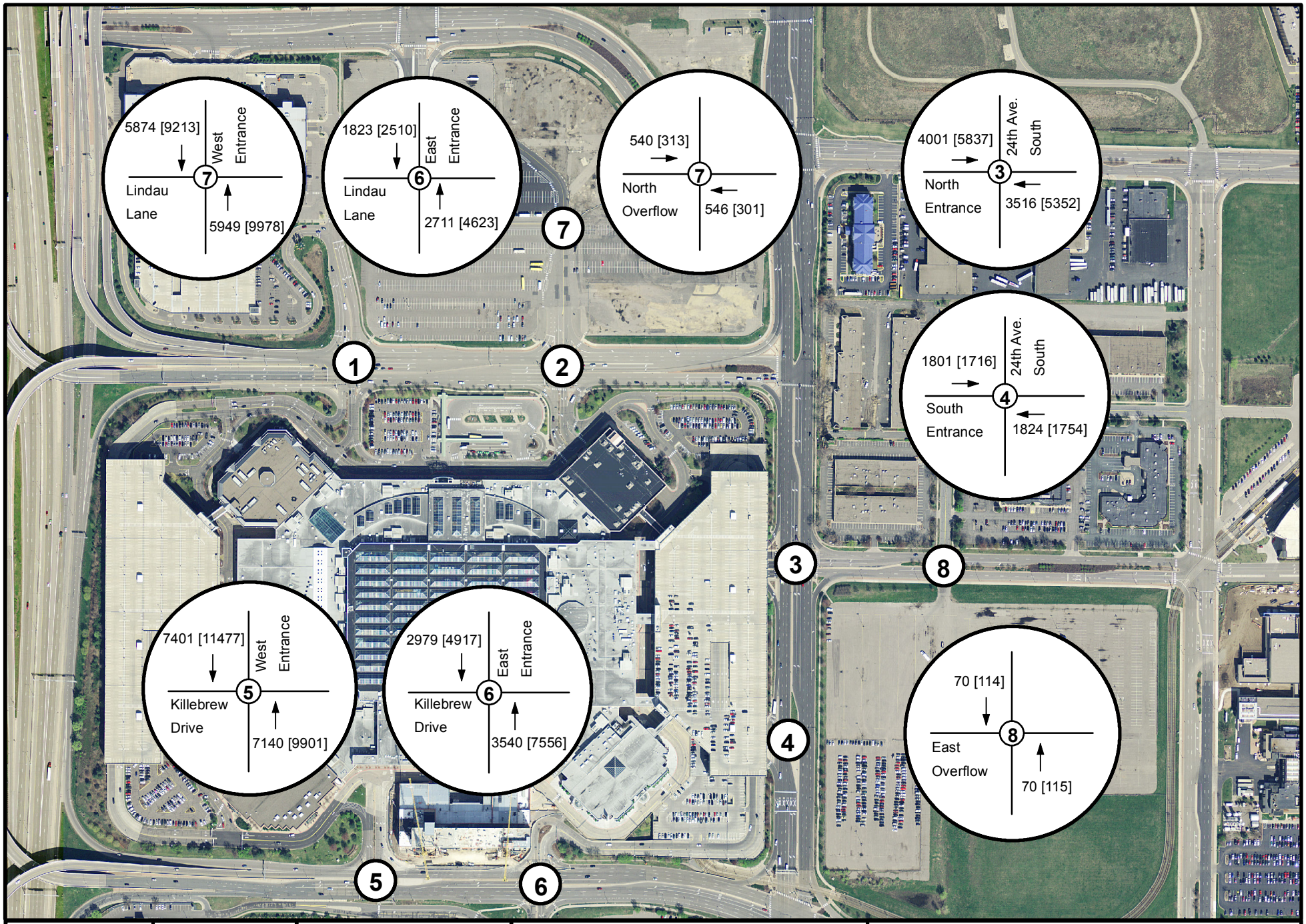
Graph 2 provides the average annual hourly volumes for the weekday and Saturday.



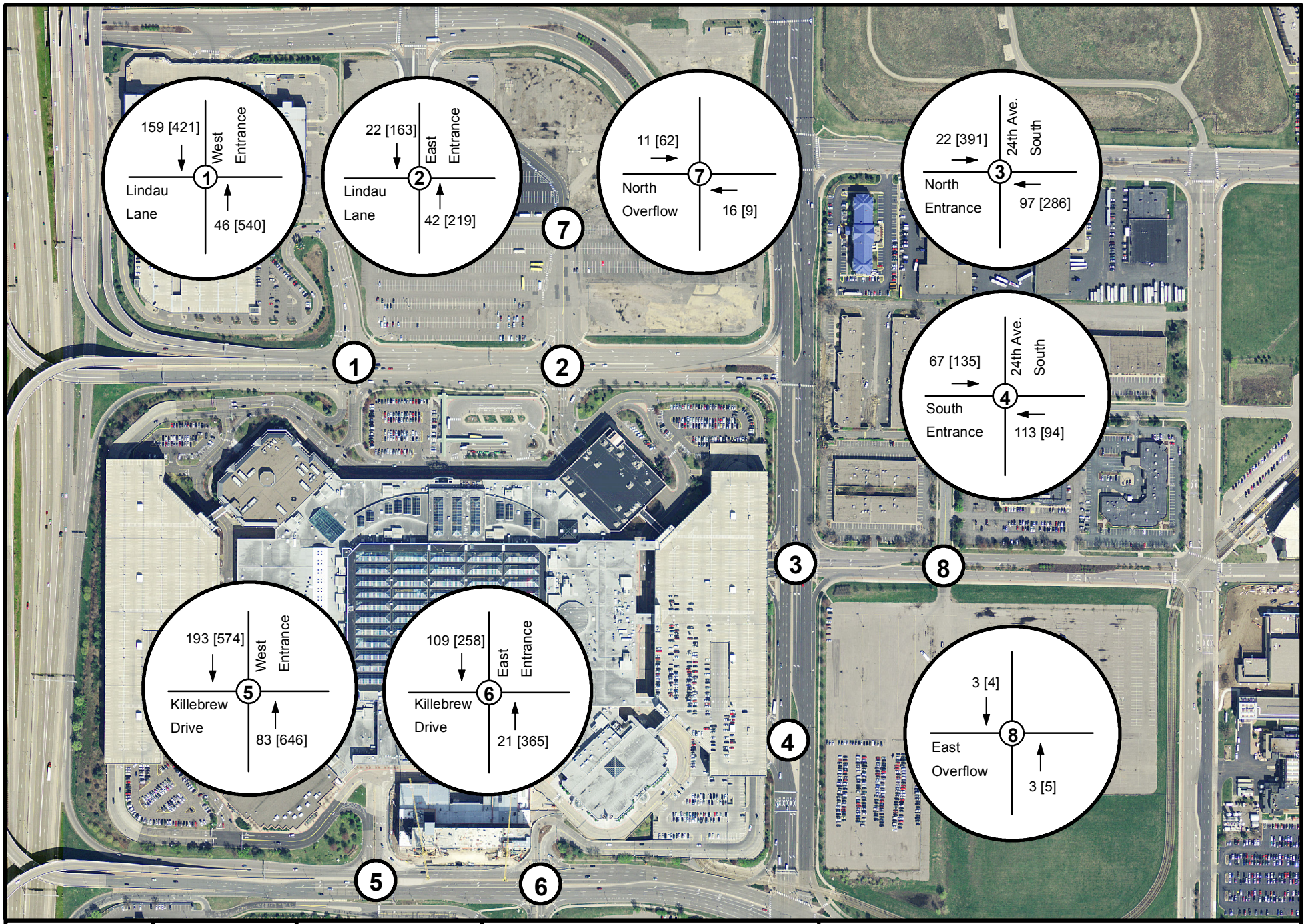
Summary

Based upon the data provided in the ITE manual for LUC 820, it does not appear to be an applicable land use. The traffic steadily increases until the PM peak and then declines. The Saturday peak hour is generally higher throughout the day as comparted to the average weekday data; however the adjacent street traffic is likely lower during the Saturday peak hour.

Exhibit 2 provides the entering and exiting annual average daily volumes at each of the study intersections for the weekday and Saturday. **Exhibit 3** provides the annual average weekday AM and PM peak hour (of adjacent street) volumes at the study intersection. **Exhibit 4** provides the annual average Saturday peak hour (of adjacent street) volumes at the study intersections.



Kimley»Horn	AUGUST 2015	Legend xx = Weekday [xx] = Saturday		EXHIBIT 2 Adjusted Daily Trip Generation Mall of America

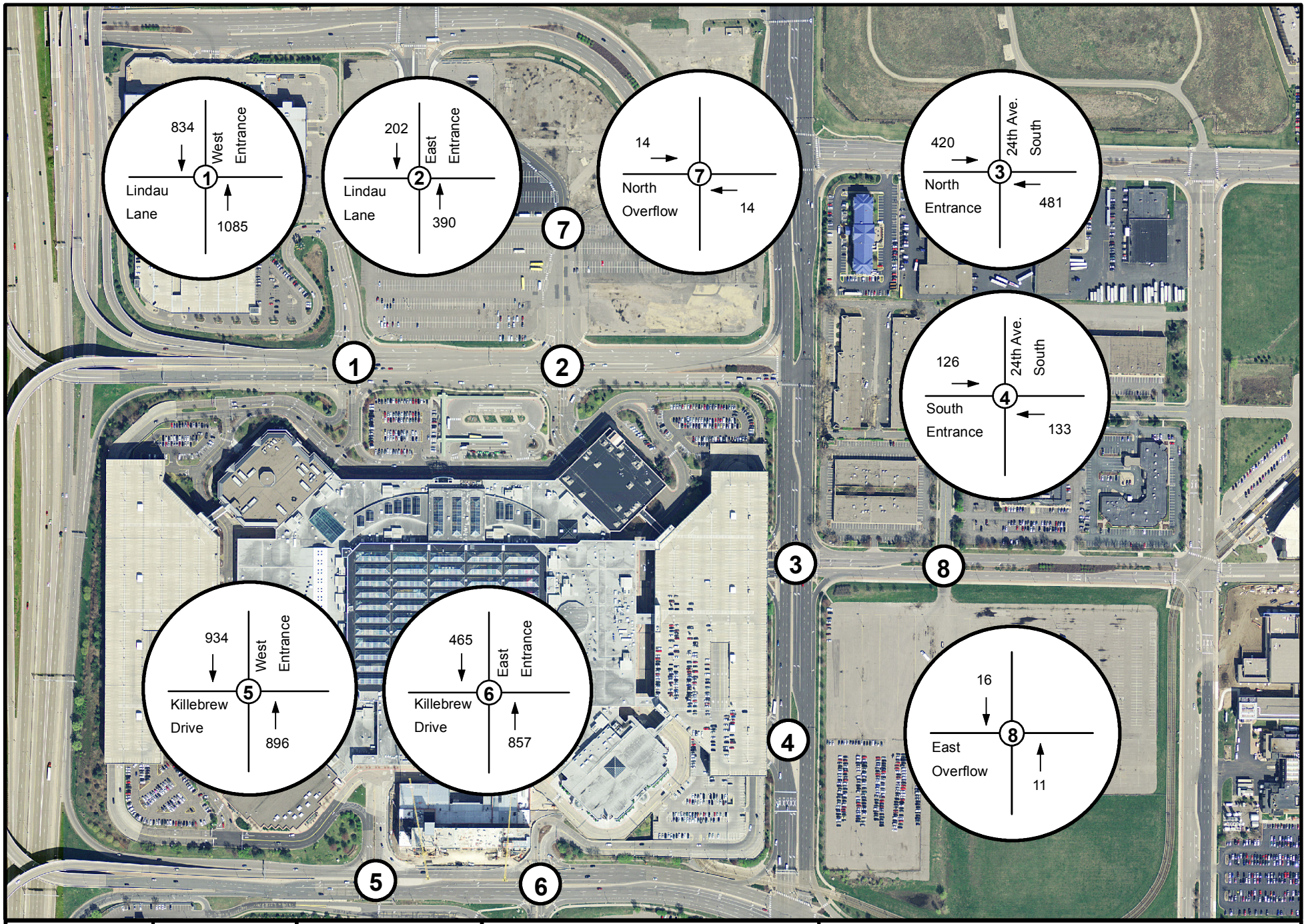


Kimley»Horn

AUGUST 2015

Legend
xx = AM Peak
[xx] = PM Peak

EXHIBIT 3
Adjusted Weekday Peak Hour Trip Generation
Mall of America



Kimley»Horn	AUGUST 2015	Legend xx = Sat. Peak		**EXHIBIT 4** **Adjusted Saturday Peak Hour Trip Generation** **Mall of America**

Other Modes of Transportation to MOA

It is important to note that a customer has a wide variety of mode choices when travelling to/from the MOA, which would reduce the overall trip generation. There is currently a transit transfer station located at the east end of the MOA, which serves light rail transit (LRT) that terminates at the MOA, in addition to bus routes. The METRO Blue Line LRT serves the airport and downtown Minneapolis, and the METRO Green Line LRT provides service between downtown Minneapolis and downtown Saint Paul. There are many hotels in the area that offer free shuttles to the MOA for their guests. The Minneapolis-Saint Paul International Airport located on the other side of I-494 from the MOA, and provides transportation to the MOA through the LRT and taxis.

Conclusions and Recommendations

Based on a review of existing year traffic counts at the ingress and egress access points of the MOA, the MOA is generating the following trips (and associated trip rate) based on the annual average volumes:

- Weekly Daily: 49,800 trips (19.29 trips per 1,000 SF)
- Weekday AM Peak Hour of Adjacent Street: 1,008 trips (0.39 trips per 1,000 SF)
- Weekday PM Peak Hour of Adjacent Street: 4,173 trips (1.62 trips per 1,000 SF)
- Saturday Daily: 75,613 trips (29.29 trips per 1,000 SF)
- Saturday Peak Hour of Generator: 6,878 trips (2.66 trips per 1,000 SF)

ATTACHMENTS

- RAW DATA COLLECTION
- SEASONAL VOLUME INFORMATION

Lindau Lane at West Access									
Start Time	End Time	Wednesday (8/12/2015)		Thursday (08/13/2015)		Friday (08/14/2015)		Saturday (08/15/2015)	
		In Total	Out Total	In Total	Out Total	In Total	Out Total	In Total	Out Total
12:00 AM	12:15 AM	1	2	1	2	2	10	3	11
12:15 AM	12:30 AM	0	5	0	2	1	6	5	10
12:30 AM	12:45 AM	1	2	1	6	3	9	3	7
12:45 AM	1:00 AM	1	5	0	2	0	2	0	5
1:00 AM	1:15 AM	0	4	0	4	0	1	1	7
1:15 AM	1:30 AM	0	4	1	2	0	0	0	15
1:30 AM	1:45 AM	1	1	0	0	1	1	4	3
1:45 AM	2:00 AM	1	0	1	0	1	1	0	5
2:00 AM	2:15 AM	1	1	0	4	1	7	0	7
2:15 AM	2:30 AM	0	1	0	0	2	3	0	1
2:30 AM	2:45 AM	0	3	0	0	0	0	0	0
2:45 AM	3:00 AM	0	0	0	1	0	4	0	0
3:00 AM	3:15 AM	0	1	0	0	1	0	0	0
3:15 AM	3:30 AM	1	0	0	0	0	1	0	0
3:30 AM	3:45 AM	0	0	1	1	2	0	1	0
3:45 AM	4:00 AM	1	1	1	0	1	1	0	0
4:00 AM	4:15 AM	0	1	1	1	1	1	0	0
4:15 AM	4:30 AM	1	1	0	1	0	0	0	0
4:30 AM	4:45 AM	0	0	1	3	0	0	0	0
4:45 AM	5:00 AM	0	3	1	0	2	0	1	0
5:00 AM	5:15 AM	1	2	2	1	4	1	1	0
5:15 AM	5:30 AM	8	2	10	3	4	1	7	1
5:30 AM	5:45 AM	14	2	13	2	15	4	8	1
5:45 AM	6:00 AM	45	5	32	1	23	4	14	1
6:00 AM	6:15 AM	12	4	15	2	12	2	4	4
6:15 AM	6:30 AM	5	1	6	4	3	4	9	3
6:30 AM	6:45 AM	5	3	12	4	10	1	10	2
6:45 AM	7:00 AM	43	8	32	9	32	9	19	5
7:00 AM	7:15 AM	16	6	14	3	14	3	16	2
7:15 AM	7:30 AM	19	4	18	7	18	2	15	4
7:30 AM	7:45 AM	25	9	19	5	20	7	25	4
7:45 AM	8:00 AM	41	3	30	8	41	14	52	11
8:00 AM	8:15 AM	36	12	35	8	40	12	26	8
8:15 AM	8:30 AM	34	8	39	9	29	7	46	6
8:30 AM	8:45 AM	46	15	39	17	39	21	56	11
8:45 AM	9:00 AM	60	13	56	12	62	14	100	19
9:00 AM	9:15 AM	54	20	58	15	60	18	69	22
9:15 AM	9:30 AM	79	17	90	12	75	14	110	15
9:30 AM	9:45 AM	87	28	86	20	107	16	154	26
9:45 AM	10:00 AM	146	16	154	33	190	24	197	27
10:00 AM	10:15 AM	131	29	150	31	175	36	179	41
10:15 AM	10:30 AM	122	45	120	48	170	37	190	56
10:30 AM	10:45 AM	145	47	140	44	180	50	221	67
10:45 AM	11:00 AM	138	43	188	38	180	63	255	55
11:00 AM	11:15 AM	128	44	143	52	184	70	236	78
11:15 AM	11:30 AM	134	61	133	68	174	84	210	65
11:30 AM	11:45 AM	123	61	109	79	169	99	225	99
11:45 AM	12:00 PM	148	67	154	69	202	72	247	109
12:00 PM	12:15 PM	155	74	171	72	173	98	215	125
12:15 PM	12:30 PM	115	85	147	94	169	105	257	128
12:30 PM	12:45 PM	118	88	138	97	190	105	243	145
12:45 PM	1:00 PM	134	86	127	106	177	124	242	149
1:00 PM	1:15 PM	149	111	136	95	176	136	242	199
1:15 PM	1:30 PM	162	103	141	107	211	148	259	163
1:30 PM	1:45 PM	128	121	131	120	173	123	232	200
1:45 PM	2:00 PM	140	130	146	127	172	144	238	210
2:00 PM	2:15 PM	128	120	113	149	148	177	213	219
2:15 PM	2:30 PM	106	119	90	127	141	148	224	211
2:30 PM	2:45 PM	117	145	104	119	156	182	188	241
2:45 PM	3:00 PM	86	137	160	121	135	192	201	214
3:00 PM	3:15 PM	96	145	101	157	147	159	206	261
3:15 PM	3:30 PM	92	119	113	155	156	167	214	264
3:30 PM	3:45 PM	118	145	120	167	138	185	180	303
3:45 PM	4:00 PM	112	135	133	135	151	160	179	254
4:00 PM	4:15 PM	79	145	112	147	147	157	185	287
4:15 PM	4:30 PM	88	138	97	145	115	198	196	241
4:30 PM	4:45 PM	124	124	95	125	128	179	192	216
4:45 PM	5:00 PM	108	113	111	122	160	156	176	204
5:00 PM	5:15 PM	117	128	106	126	140	172	139	264
5:15 PM	5:30 PM	114	134	121	152	155	159	163	247
5:30 PM	5:45 PM	124	128	111	125	122	174	148	209
5:45 PM	6:00 PM	98	102	105	100	135	159	116	235
6:00 PM	6:15 PM	103	122	115	132	156	166	139	221
6:15 PM	6:30 PM	123	123	118	115	126	159	113	221
6:30 PM	6:45 PM	98	107	128	122	130	155	128	186
6:45 PM	7:00 PM	109	115	118	107	154	132	142	205
7:00 PM	7:15 PM	93	103	99	115	110	163	108	188
7:15 PM	7:30 PM	89	125	89	122	126	151	99	161
7:30 PM	7:45 PM	79	112	93	108	130	143	84	187
7:45 PM	8:00 PM	68	122	71	126	87	130	69	174
8:00 PM	8:15 PM	51	127	47	125	84	170	63	155
8:15 PM	8:30 PM	48	102	48	131	67	144	65	182
8:30 PM	8:45 PM	30	133	32	113	46	151	40	163
8:45 PM	9:00 PM	35	135	30	129	36	152	39	198
9:00 PM	9:15 PM	28	136	20	136	38	159	35	183
9:15 PM	9:30 PM	13	118	20	133	28	192	28	169
9:30 PM	9:45 PM	13	183	14	170	13	204	24	225
9:45 PM	10:00 PM	12	109	15	120	24	202	28	223
10:00 PM	10:15 PM	13	117	11	80	25	158	17	168
10:15 PM	10:30 PM	6	66	9	73	24	116	12	99
10:30 PM	10:45 PM	6	50	6	59	24	63	15	80
10:45 PM	11:00 PM	7	27	5	47	14	66	10	63
11:00 PM	11:15 PM	1	15	4	20	0	41	7	41
11:15 PM	11:30 PM	3	16	0	20	0	25	6	38
11:30 PM	11:45 PM	1	23	1	7	0	23	3	23
11:45 PM	12:00 AM	3	9	3	17	0	27	4	23

Lindau Lane at East Access									
Start Time	End Time	Wednesday (8/12/2015)		Thursday (08/13/2015)		Friday (08/14/2015)		Saturday (08/15/2015)	
		In Total	Out Total	In Total	Out Total	In Total	Out Total	In Total	Out Total
12:00 AM	12:15 AM	5	2	5	0	4	2	10	4
12:15 AM	12:30 AM	3	1	2	2	7	2	2	4
12:30 AM	12:45 AM	2	0	3	1	1	2	4	0
12:45 AM	1:00 AM	1	0	2	1	0	4	10	1
1:00 AM	1:15 AM	3	1	2	0	3	1	1	1
1:15 AM	1:30 AM	0	1	1	3	0	0	6	4
1:30 AM	1:45 AM	1	1	0	1	0	0	1	1
1:45 AM	2:00 AM	0	0	0	0	0	1	0	2
2:00 AM	2:15 AM	0	1	0	0	1	2	1	0
2:15 AM	2:30 AM	1	2	1	1	1	0	3	0
2:30 AM	2:45 AM	0	0	0	0	3	1	0	0
2:45 AM	3:00 AM	0	0	0	0	0	0	2	2
3:00 AM	3:15 AM	0	0	0	0	2	0	1	1
3:15 AM	3:30 AM	0	1	0	0	0	0	1	0
3:30 AM	3:45 AM	0	0	1	1	0	0	0	0
3:45 AM	4:00 AM	0	1	0	0	1	1	0	0
4:00 AM	4:15 AM	0	0	0	0	0	0	0	2
4:15 AM	4:30 AM	3	1	0	1	1	0	1	1
4:30 AM	4:45 AM	1	1	1	0	0	0	0	1
4:45 AM	5:00 AM	1	0	0	0	0	0	0	0
5:00 AM	5:15 AM	2	3	2	1	1	0	0	2
5:15 AM	5:30 AM	1	1	0	2	0	0	3	2
5:30 AM	5:45 AM	1	4	2	6	0	4	1	3
5:45 AM	6:00 AM	2	9	2	9	1	10	2	7
6:00 AM	6:15 AM	1	3	1	3	0	3	1	5
6:15 AM	6:30 AM	0	5	2	6	3	5	1	2
6:30 AM	6:45 AM	5	7	3	3	2	4	3	5
6:45 AM	7:00 AM	8	13	6	12	4	5	3	8
7:00 AM	7:15 AM	3	7	3	5	3	4	2	6
7:15 AM	7:30 AM	3	10	5	8	1	6	0	1
7:30 AM	7:45 AM	3	7	0	8	2	7	3	3
7:45 AM	8:00 AM	5	9	5	16	8	16	2	8
8:00 AM	8:15 AM	4	11	4	3	9	7	4	4
8:15 AM	8:30 AM	1	7	6	6	8	12	1	9
8:30 AM	8:45 AM	3	16	6	10	6	11	4	15
8:45 AM	9:00 AM	15	19	6	14	4	19	7	33
9:00 AM	9:15 AM	10	24	6	32	8	18	7	47
9:15 AM	9:30 AM	10	32	4	23	15	51	13	69
9:30 AM	9:45 AM	13	28	9	39	13	54	17	67
9:45 AM	10:00 AM	16	57	15	53	11	69	14	81
10:00 AM	10:15 AM	18	56	12	60	15	55	16	107
10:15 AM	10:30 AM	22	55	24	71	18	77	19	102
10:30 AM	10:45 AM	10	57	17	69	22	78	27	94
10:45 AM	11:00 AM	15	62	14	52	30	86	33	151
11:00 AM	11:15 AM	21	71	21	82	20	66	29	104
11:15 AM	11:30 AM	33	54	22	45	27	77	33	95
11:30 AM	11:45 AM	19	63	23	59	30	87	41	136
11:45 AM	12:00 PM	27	56	22	80	35	80	39	119
12:00 PM	12:15 PM	26	54	29	61	25	87	35	103
12:15 PM	12:30 PM	22	63	30	58	39	83	50	104
12:30 PM	12:45 PM	24	47	31	65	28	73	40	114
12:45 PM	1:00 PM	29	49	26	76	40	68	37	101
1:00 PM	1:15 PM	30	45	29	57	41	72	41	112
1:15 PM	1:30 PM	42	56	22	67	38	71	33	98
1:30 PM	1:45 PM	22	53	35	51	38	67	55	110
1:45 PM	2:00 PM	21	45	31	60	38	65	45	102
2:00 PM	2:15 PM	52	66	36	55	42	78	32	112
2:15 PM	2:30 PM	33	39	37	50	44	92	57	108
2:30 PM	2:45 PM	39	52	32	44	46	67	65	116
2:45 PM	3:00 PM	42	42	37	58	38	64	44	93
3:00 PM	3:15 PM	40	47	38	56	41	70	54	86
3:15 PM	3:30 PM	31	58	48	60	51	63	46	93
3:30 PM	3:45 PM	34	44	35	31	35	46	50	102
3:45 PM	4:00 PM	45	54	40	48	49	57	48	86
4:00 PM	4:15 PM	34	46	54	65	49	60	48	111
4:15 PM	4:30 PM	38	53	44	56	46	76	60	100
4:30 PM	4:45 PM	39	64	47	59	53	66	59	105
4:45 PM	5:00 PM	42	49	43	53	40	63	77	86
5:00 PM	5:15 PM	43	40	33	68	53	52	43	83
5:15 PM	5:30 PM	39	50	45	83	42	72	44	76
5:30 PM	5:45 PM	41	42	35	62	44	67	47	98
5:45 PM	6:00 PM	38	56	40	70	52	72	40	75
6:00 PM	6:15 PM	42	55	40	62	42	84	39	69
6:15 PM	6:30 PM	42	58	50	39	45	64	50	70
6:30 PM	6:45 PM	37	52	31	47	30	66	47	68
6:45 PM	7:00 PM	22	40	43	48	39	75	36	56
7:00 PM	7:15 PM	24	42	42	40	53	61	41	53
7:15 PM	7:30 PM	28	40	45	62	44	56	44	48
7:30 PM	7:45 PM	30	38	25	27	40	58	39	43
7:45 PM	8:00 PM	34	36	30	37	35	56	38	43
8:00 PM	8:15 PM	45	41	40	28	34	34	38	45
8:15 PM	8:30 PM	31	28	26	32	42	48	37	29
8:30 PM	8:45 PM	35	25	51	23	41	34	45	23
8:45 PM	9:00 PM	34	20	28	15	44	38	46	25
9:00 PM	9:15 PM	41	18	36	14	49	24	42	26
9:15 PM	9:30 PM	28	11	41	18	74	22	58	32
9:30 PM	9:45 PM	42	10	40	12	71	27	57	16
9:45 PM	10:00 PM	18	17	38	17	51	19	47	15
10:00 PM	10:15 PM	34	16	25	14	48	20	39	25
10:15 PM	10:30 PM	23	4	23	11	31	21	34	14
10:30 PM	10:45 PM	11	12	18	8	25	23	46	11
10:45 PM	11:00 PM	22	9	17	6	19	12	17	13
11:00 PM	11:15 PM	6	7	9	6	22	7	15	8
11:15 PM	11:30 PM	32	4	7	6	13	7	19	10
11:30 PM	11:45 PM	13	3	5	4	5	3	9	5
11:45 PM	12:00 AM	5	3	4	2	11	4	10	6

East 24th Avenue at North Access									
Start Time	End Time	Wednesday (8/12/2015)		Thursday (08/13/2015)		Friday (08/14/2015)		Saturday (08/15/2015)	
		In Total	Out Total	In Total	Out Total	In Total	Out Total	In Total	Out Total
12:00 AM	12:15 AM	1	4	4	8	1	9	9	24
12:15 AM	12:30 AM	1	10	1	7	2	4	2	14
12:30 AM	12:45 AM	2	7	0	7	1	4	0	11
12:45 AM	1:00 AM	1	6	1	7	1	5	1	19
1:00 AM	1:15 AM	0	1	1	3	1	2	0	13
1:15 AM	1:30 AM	1	3	0	3	0	1	1	13
1:30 AM	1:45 AM	0	3	0	1	0	0	0	3
1:45 AM	2:00 AM	0	4	0	5	0	3	0	6
2:00 AM	2:15 AM	0	2	0	2	0	1	2	10
2:15 AM	2:30 AM	0	1	0	1	0	1	0	4
2:30 AM	2:45 AM	0	4	0	3	0	0	0	1
2:45 AM	3:00 AM	0	0	1	2	1	3	0	2
3:00 AM	3:15 AM	0	2	0	0	0	0	0	1
3:15 AM	3:30 AM	0	1	1	0	0	1	0	0
3:30 AM	3:45 AM	1	0	0	0	0	0	0	1
3:45 AM	4:00 AM	1	0	0	0	0	1	0	0
4:00 AM	4:15 AM	0	0	0	0	0	1	0	0
4:15 AM	4:30 AM	1	0	1	0	1	0	0	0
4:30 AM	4:45 AM	1	0	1	1	0	1	0	0
4:45 AM	5:00 AM	2	3	3	2	1	0	1	0
5:00 AM	5:15 AM	1	2	1	1	0	2	1	1
5:15 AM	5:30 AM	3	3	1	2	3	0	0	2
5:30 AM	5:45 AM	13	5	10	2	6	2	1	0
5:45 AM	6:00 AM	25	3	14	6	23	4	4	1
6:00 AM	6:15 AM	8	4	6	6	4	5	2	1
6:15 AM	6:30 AM	6	3	6	4	7	3	3	1
6:30 AM	6:45 AM	12	5	10	3	7	1	10	2
6:45 AM	7:00 AM	23	2	20	3	17	5	14	2
7:00 AM	7:15 AM	10	3	6	2	13	3	6	2
7:15 AM	7:30 AM	4	3	13	2	9	2	6	1
7:30 AM	7:45 AM	18	5	19	4	20	2	13	3
7:45 AM	8:00 AM	21	4	18	4	19	4	17	2
8:00 AM	8:15 AM	16	5	16	3	16	4	11	3
8:15 AM	8:30 AM	18	6	28	5	22	5	21	3
8:30 AM	8:45 AM	27	11	29	5	31	4	49	6
8:45 AM	9:00 AM	41	8	33	9	36	6	73	16
9:00 AM	9:15 AM	32	8	36	11	35	8	51	10
9:15 AM	9:30 AM	61	7	43	14	52	12	65	15
9:30 AM	9:45 AM	36	21	57	12	58	11	80	12
9:45 AM	10:00 AM	64	11	89	14	73	17	86	12
10:00 AM	10:15 AM	63	18	87	9	98	24	129	25
10:15 AM	10:30 AM	58	19	119	24	92	22	110	40
10:30 AM	10:45 AM	77	25	85	35	125	24	135	25
10:45 AM	11:00 AM	93	24	87	43	126	27	164	45
11:00 AM	11:15 AM	55	24	93	32	86	32	127	40
11:15 AM	11:30 AM	69	29	84	34	99	34	104	39
11:30 AM	11:45 AM	68	32	97	43	116	57	158	61
11:45 AM	12:00 PM	77	47	88	35	136	55	120	68
12:00 PM	12:15 PM	70	44	84	42	78	44	129	38
12:15 PM	12:30 PM	48	53	89	62	89	69	120	86
12:30 PM	12:45 PM	63	46	92	60	94	74	119	53
12:45 PM	1:00 PM	49	60	68	60	98	80	144	77
1:00 PM	1:15 PM	73	50	76	66	84	84	135	87
1:15 PM	1:30 PM	66	66	84	63	100	108	133	99
1:30 PM	1:45 PM	67	58	67	62	110	88	141	83
1:45 PM	2:00 PM	60	60	74	57	91	101	113	114
2:00 PM	2:15 PM	58	62	88	68	73	92	140	108
2:15 PM	2:30 PM	50	73	61	92	67	84	85	113
2:30 PM	2:45 PM	67	66	71	108	81	95	114	88
2:45 PM	3:00 PM	50	76	72	80	83	101	111	109
3:00 PM	3:15 PM	54	76	79	92	87	120	116	100
3:15 PM	3:30 PM	63	89	83	110	79	121	115	83
3:30 PM	3:45 PM	53	62	76	103	73	119	120	111
3:45 PM	4:00 PM	58	79	78	118	101	119	118	101
4:00 PM	4:15 PM	84	71	55	117	108	130	112	123
4:15 PM	4:30 PM	66	83	43	133	76	130	118	91
4:30 PM	4:45 PM	73	86	73	103	109	113	119	122
4:45 PM	5:00 PM	72	93	59	99	110	108	91	94
5:00 PM	5:15 PM	67	88	68	88	84	116	100	125
5:15 PM	5:30 PM	54	99	81	103	118	109	109	136
5:30 PM	5:45 PM	80	82	71	91	97	95	105	131
5:45 PM	6:00 PM	77	70	81	92	128	105	107	115
6:00 PM	6:15 PM	82	84	82	95	103	125	60	144
6:15 PM	6:30 PM	65	58	61	125	89	127	101	137
6:30 PM	6:45 PM	62	71	77	100	94	101	87	159
6:45 PM	7:00 PM	90	82	81	76	119	109	94	130
7:00 PM	7:15 PM	64	69	69	77	66	97	62	165
7:15 PM	7:30 PM	77	72	56	80	71	87	55	110
7:30 PM	7:45 PM	49	94	30	88	66	97	42	113
7:45 PM	8:00 PM	27	70	31	101	70	109	33	129
8:00 PM	8:15 PM	36	89	32	72	45	107	34	149
8:15 PM	8:30 PM	25	92	28	96	43	121	36	106
8:30 PM	8:45 PM	16	89	24	107	36	124	22	135
8:45 PM	9:00 PM	11	82	21	81	24	109	19	142
9:00 PM	9:15 PM	13	83	9	95	18	105	17	136
9:15 PM	9:30 PM	11	108	10	90	20	115	11	141
9:30 PM	9:45 PM	5	93	6	133	17	177	13	166
9:45 PM	10:00 PM	12	82	11	92	25	127	7	141
10:00 PM	10:15 PM	14	55	9	47	15	116	9	94
10:15 PM	10:30 PM	6	58	10	48	17	94	12	96
10:30 PM	10:45 PM	6	38	6	44	12	67	10	85
10:45 PM	11:00 PM	5	38	4	29	10	43	9	51
11:00 PM	11:15 PM	4	15	4	15	7	52	3	26
11:15 PM	11:30 PM	1	27	0	12	3	28	4	36
11:30 PM	11:45 PM	0	10	3	11	3	15	3	25
11:45 PM	12:00 AM	0	9	1	9	3	32	4	41

East 24th Avenue at South Access (Authorized Vehicle Entrance)									
Start Time	End Time	Wednesday (8/12/2015)		Thursday (08/13/2015)		Friday (08/14/2015)		Saturday (08/15/2015)	
		In Total	Out Total	In Total	Out Total	In Total	Out Total	In Total	Out Total
12:00 AM	12:15 AM	7	9	10	17	4	14	7	9
12:15 AM	12:30 AM	5	7	6	10	6	6	5	15
12:30 AM	12:45 AM	2	18	4	11	3	16	0	24
12:45 AM	1:00 AM	4	8	5	11	2	6	5	4
1:00 AM	1:15 AM	3	8	2	4	2	6	5	7
1:15 AM	1:30 AM	1	2	2	5	0	2	4	4
1:30 AM	1:45 AM	1	6	6	3	5	3	7	5
1:45 AM	2:00 AM	5	6	1	6	2	3	2	5
2:00 AM	2:15 AM	3	1	5	2	1	2	4	3
2:15 AM	2:30 AM	0	2	2	2	5	9	4	3
2:30 AM	2:45 AM	5	2	2	2	1	3	0	5
2:45 AM	3:00 AM	1	0	0	1	2	2	2	2
3:00 AM	3:15 AM	2	1	0	0	0	3	2	3
3:15 AM	3:30 AM	6	3	3	0	1	2	1	1
3:30 AM	3:45 AM	2	2	1	3	3	2	4	3
3:45 AM	4:00 AM	2	2	1	2	3	6	1	1
4:00 AM	4:15 AM	4	3	2	1	4	1	2	4
4:15 AM	4:30 AM	1	7	5	3	4	4	1	1
4:30 AM	4:45 AM	3	7	9	5	11	1	4	2
4:45 AM	5:00 AM	17	7	10	14	7	3	5	1
5:00 AM	5:15 AM	19	13	13	8	15	16	2	4
5:15 AM	5:30 AM	15	15	25	11	23	8	10	1
5:30 AM	5:45 AM	31	8	28	6	29	7	12	2
5:45 AM	6:00 AM	34	6	28	7	35	8	17	0
6:00 AM	6:15 AM	30	11	41	13	39	10	7	7
6:15 AM	6:30 AM	33	12	47	16	38	16	18	5
6:30 AM	6:45 AM	34	13	35	13	33	16	26	8
6:45 AM	7:00 AM	36	20	38	17	29	15	20	6
7:00 AM	7:15 AM	24	15	22	21	29	25	11	17
7:15 AM	7:30 AM	19	15	27	17	28	18	13	8
7:30 AM	7:45 AM	28	8	28	15	22	16	7	18
7:45 AM	8:00 AM	37	25	34	17	34	16	8	7
8:00 AM	8:15 AM	38	18	29	22	32	15	12	9
8:15 AM	8:30 AM	33	14	36	14	31	21	13	5
8:30 AM	8:45 AM	30	26	29	18	31	13	8	13
8:45 AM	9:00 AM	26	17	29	20	23	20	17	4
9:00 AM	9:15 AM	31	21	25	17	21	17	19	14
9:15 AM	9:30 AM	18	14	32	21	31	16	25	12
9:30 AM	9:45 AM	30	20	37	23	30	29	30	22
9:45 AM	10:00 AM	34	25	24	26	32	25	21	21
10:00 AM	10:15 AM	28	20	38	25	22	26	21	25
10:15 AM	10:30 AM	32	36	22	24	34	27	26	23
10:30 AM	10:45 AM	25	26	20	21	28	19	25	22
10:45 AM	11:00 AM	25	18	28	19	20	19	27	21
11:00 AM	11:15 AM	27	29	22	32	24	30	22	25
11:15 AM	11:30 AM	25	24	24	22	27	27	25	18
11:30 AM	11:45 AM	27	28	25	27	23	34	24	20
11:45 AM	12:00 PM	27	21	17	18	22	17	24	22
12:00 PM	12:15 PM	28	38	18	30	22	34	30	31
12:15 PM	12:30 PM	21	23	31	27	30	28	28	24
12:30 PM	12:45 PM	16	25	22	26	22	38	21	25
12:45 PM	1:00 PM	21	20	20	24	24	20	20	21
1:00 PM	1:15 PM	26	21	27	21	27	31	27	28
1:15 PM	1:30 PM	33	23	29	31	32	26	23	14
1:30 PM	1:45 PM	17	28	30	23	33	30	37	23
1:45 PM	2:00 PM	31	24	27	24	21	27	29	24
2:00 PM	2:15 PM	32	42	31	41	37	44	33	37
2:15 PM	2:30 PM	28	53	26	57	37	52	29	25
2:30 PM	2:45 PM	30	49	26	45	24	42	26	32
2:45 PM	3:00 PM	32	27	31	27	40	28	30	21
3:00 PM	3:15 PM	22	34	22	39	30	44	43	36
3:15 PM	3:30 PM	23	34	22	37	34	40	30	28
3:30 PM	3:45 PM	20	31	26	41	24	40	25	36
3:45 PM	4:00 PM	20	20	16	31	18	18	21	20
4:00 PM	4:15 PM	33	38	27	41	35	32	29	35
4:15 PM	4:30 PM	28	42	22	34	26	41	27	29
4:30 PM	4:45 PM	20	36	21	45	23	38	17	21
4:45 PM	5:00 PM	20	22	30	36	20	33	20	20
5:00 PM	5:15 PM	23	33	23	40	29	37	25	22
5:15 PM	5:30 PM	29	59	21	39	29	39	21	25
5:30 PM	5:45 PM	15	41	19	29	29	38	21	30
5:45 PM	6:00 PM	22	26	23	17	28	20	18	24
6:00 PM	6:15 PM	28	31	27	34	30	34	28	21
6:15 PM	6:30 PM	20	24	28	36	16	22	23	26
6:30 PM	6:45 PM	28	36	23	30	34	32	24	28
6:45 PM	7:00 PM	19	26	19	26	24	27	18	19
7:00 PM	7:15 PM	30	28	24	26	31	33	25	17
7:15 PM	7:30 PM	20	21	15	14	26	27	23	24
7:30 PM	7:45 PM	24	16	15	21	22	16	20	26
7:45 PM	8:00 PM	13	14	15	17	13	21	19	10
8:00 PM	8:15 PM	24	21	26	20	20	23	21	26
8:15 PM	8:30 PM	19	26	20	25	24	35	18	23
8:30 PM	8:45 PM	18	17	14	18	14	37	14	22
8:45 PM	9:00 PM	22	9	27	12	20	26	19	20
9:00 PM	9:15 PM	36	23	35	22	27	32	23	25
9:15 PM	9:30 PM	28	17	27	19	22	22	25	26
9:30 PM	9:45 PM	30	24	30	28	20	28	29	37
9:45 PM	10:00 PM	16	24	17	24	19	24	16	27
10:00 PM	10:15 PM	24	23	26	21	28	24	32	31
10:15 PM	10:30 PM	20	20	17	18	28	30	22	25
10:30 PM	10:45 PM	14	23	14	16	19	19	25	30
10:45 PM	11:00 PM	21	16	13	13	17	15	26	20
11:00 PM	11:15 PM	17	12	9	17	15	17	14	26
11:15 PM	11:30 PM	14	17	9	14	12	26	11	18
11:30 PM	11:45 PM	10	19	4	10	8	20	12	18
11:45 PM	12:00 AM	5	8	10	5	7	9	10	11

Killebrew Drive at West Access									
Start Time	End Time	Wednesday (8/12/2015)		Thursday (08/13/2015)		Friday (08/14/2015)		Saturday (08/15/2015)	
		In Total	Out Total	In Total	Out Total	In Total	Out Total	In Total	Out Total
12:00 AM	12:15 AM	13	8	13	4	21	4	32	11
12:15 AM	12:30 AM	10	4	6	4	19	12	20	7
12:30 AM	12:45 AM	9	0	12	5	6	1	11	4
12:45 AM	1:00 AM	11	3	5	1	6	4	17	8
1:00 AM	1:15 AM	4	5	2	1	4	2	6	4
1:15 AM	1:30 AM	0	1	0	1	1	1	11	6
1:30 AM	1:45 AM	3	5	0	0	0	2	5	2
1:45 AM	2:00 AM	5	4	3	4	3	1	6	2
2:00 AM	2:15 AM	4	2	1	0	6	3	4	0
2:15 AM	2:30 AM	1	1	0	3	5	1	2	5
2:30 AM	2:45 AM	0	1	1	0	1	1	0	1
2:45 AM	3:00 AM	0	0	1	0	2	1	1	1
3:00 AM	3:15 AM	0	0	1	2	2	2	2	3
3:15 AM	3:30 AM	1	1	2	0	2	3	1	0
3:30 AM	3:45 AM	0	1	0	2	1	0	1	1
3:45 AM	4:00 AM	1	0	0	2	0	3	1	2
4:00 AM	4:15 AM	0	0	0	1	3	0	2	1
4:15 AM	4:30 AM	0	0	1	0	0	1	1	1
4:30 AM	4:45 AM	0	1	4	1	1	3	2	5
4:45 AM	5:00 AM	1	4	1	4	2	2	5	0
5:00 AM	5:15 AM	4	7	3	2	0	2	1	1
5:15 AM	5:30 AM	3	11	2	8	1	3	1	9
5:30 AM	5:45 AM	8	21	8	18	4	14	3	10
5:45 AM	6:00 AM	3	31	6	22	10	17	6	19
6:00 AM	6:15 AM	8	7	7	7	8	10	4	11
6:15 AM	6:30 AM	10	10	5	14	7	14	4	9
6:30 AM	6:45 AM	16	21	17	29	13	21	10	25
6:45 AM	7:00 AM	15	41	21	35	14	42	9	22
7:00 AM	7:15 AM	20	25	24	13	9	21	7	14
7:15 AM	7:30 AM	18	20	19	37	21	26	11	24
7:30 AM	7:45 AM	23	31	25	32	9	32	7	23
7:45 AM	8:00 AM	24	46	21	45	14	52	14	41
8:00 AM	8:15 AM	23	33	23	40	16	41	11	44
8:15 AM	8:30 AM	15	44	23	32	14	56	19	48
8:30 AM	8:45 AM	28	51	33	64	22	50	17	60
8:45 AM	9:00 AM	20	61	17	77	36	76	26	113
9:00 AM	9:15 AM	23	52	21	60	36	84	29	107
9:15 AM	9:30 AM	21	72	35	119	19	96	42	180
9:30 AM	9:45 AM	21	116	25	121	29	119	37	166
9:45 AM	10:00 AM	24	140	38	198	43	184	53	254
10:00 AM	10:15 AM	47	156	28	156	36	209	46	243
10:15 AM	10:30 AM	38	163	43	169	53	190	70	271
10:30 AM	10:45 AM	59	138	44	180	57	206	61	266
10:45 AM	11:00 AM	57	177	55	195	75	255	93	278
11:00 AM	11:15 AM	60	156	56	181	83	209	75	269
11:15 AM	11:30 AM	55	186	78	169	72	216	101	265
11:30 AM	11:45 AM	65	166	77	177	90	227	112	296
11:45 AM	12:00 PM	69	186	87	193	102	222	123	290
12:00 PM	12:15 PM	93	167	89	170	116	217	108	281
12:15 PM	12:30 PM	100	173	88	190	121	235	142	276
12:30 PM	12:45 PM	104	156	116	167	136	240	125	293
12:45 PM	1:00 PM	114	145	101	170	128	223	138	276
1:00 PM	1:15 PM	101	127	122	162	114	244	150	271
1:15 PM	1:30 PM	123	159	110	193	154	164	143	275
1:30 PM	1:45 PM	103	136	138	166	190	195	142	265
1:45 PM	2:00 PM	137	130	137	149	168	231	151	267
2:00 PM	2:15 PM	120	154	120	154	169	178	156	263
2:15 PM	2:30 PM	137	148	185	145	176	177	197	265
2:30 PM	2:45 PM	134	124	147	159	181	176	162	258
2:45 PM	3:00 PM	146	128	179	150	181	186	227	220
3:00 PM	3:15 PM	168	128	184	117	230	179	205	222
3:15 PM	3:30 PM	148	121	146	142	192	184	231	216
3:30 PM	3:45 PM	142	117	153	162	192	175	197	239
3:45 PM	4:00 PM	169	157	187	138	188	152	174	212
4:00 PM	4:15 PM	159	106	168	149	209	185	212	228
4:15 PM	4:30 PM	149	128	170	145	187	183	198	189
4:30 PM	4:45 PM	168	127	174	134	206	190	281	261
4:45 PM	5:00 PM	144	160	169	166	189	187	261	192
5:00 PM	5:15 PM	162	131	177	133	196	185	201	223
5:15 PM	5:30 PM	158	139	160	145	187	175	240	192
5:30 PM	5:45 PM	160	136	172	153	186	173	278	191
5:45 PM	6:00 PM	139	137	180	171	142	201	237	195
6:00 PM	6:15 PM	159	159	164	165	162	169	233	154
6:15 PM	6:30 PM	139	127	165	133	184	199	205	159
6:30 PM	6:45 PM	110	125	130	160	183	186	182	176
6:45 PM	7:00 PM	139	136	131	115	188	173	188	145
7:00 PM	7:15 PM	154	119	161	143	179	158	181	164
7:15 PM	7:30 PM	145	132	164	102	168	150	200	133
7:30 PM	7:45 PM	95	104	144	96	180	139	153	126
7:45 PM	8:00 PM	142	84	152	80	156	113	172	98
8:00 PM	8:15 PM	139	77	150	72	189	101	179	69
8:15 PM	8:30 PM	139	66	159	59	173	79	190	90
8:30 PM	8:45 PM	108	54	141	56	188	80	210	83
8:45 PM	9:00 PM	157	50	126	43	173	70	168	59
9:00 PM	9:15 PM	168	36	142	46	220	57	215	48
9:15 PM	9:30 PM	174	29	151	30	192	38	193	43
9:30 PM	9:45 PM	186	36	213	39	215	55	246	50
9:45 PM	10:00 PM	134	15	171	24	231	37	198	38
10:00 PM	10:15 PM	121	23	128	13	213	38	177	28
10:15 PM	10:30 PM	107	25	105	12	135	30	160	35
10:30 PM	10:45 PM	80	18	95	20	116	32	118	33
10:45 PM	11:00 PM	53	18	42	13	78	24	69	28
11:00 PM	11:15 PM	44	12	36	11	68	17	61	14
11:15 PM	11:30 PM	47	7	26	13	35	14	56	28
11:30 PM	11:45 PM	35	9	24	9	32	9	33	13
11:45 PM	12:00 AM	12	4	18	11	47	12	41	13

Killebrew Drive at East Access									
Start Time	End Time	Wednesday (8/12/2015)		Thursday (08/13/2015)		Friday (08/14/2015)		Saturday (08/15/2015)	
		In Total	Out Total	In Total	Out Total	In Total	Out Total	In Total	Out Total
12:00 AM	12:15 AM	13	3	22	2	10	1	42	5
12:15 AM	12:30 AM	9	3	14	2	18	2	20	4
12:30 AM	12:45 AM	3	0	12	0	8	0	16	2
12:45 AM	1:00 AM	8	1	2	3	3	0	22	1
1:00 AM	1:15 AM	2	1	5	0	2	0	28	2
1:15 AM	1:30 AM	3	1	4	2	0	1	28	0
1:30 AM	1:45 AM	0	1	1	1	2	2	2	1
1:45 AM	2:00 AM	0	1	2	0	3	1	4	0
2:00 AM	2:15 AM	3	1	0	0	2	0	5	0
2:15 AM	2:30 AM	2	0	3	2	0	0	2	1
2:30 AM	2:45 AM	4	1	1	1	1	1	1	0
2:45 AM	3:00 AM	0	0	0	0	0	1	2	1
3:00 AM	3:15 AM	0	0	2	0	0	0	3	1
3:15 AM	3:30 AM	0	0	0	0	0	0	0	0
3:30 AM	3:45 AM	0	1	0	1	0	0	0	1
3:45 AM	4:00 AM	0	0	0	2	3	2	1	1
4:00 AM	4:15 AM	1	0	1	0	0	0	1	0
4:15 AM	4:30 AM	1	0	0	0	0	0	2	0
4:30 AM	4:45 AM	0	0	0	0	0	0	0	0
4:45 AM	5:00 AM	0	3	0	0	1	1	1	0
5:00 AM	5:15 AM	3	0	3	1	2	1	4	2
5:15 AM	5:30 AM	3	2	1	4	1	2	2	1
5:30 AM	5:45 AM	0	3	1	5	2	5	1	3
5:45 AM	6:00 AM	2	8	0	18	0	13	4	12
6:00 AM	6:15 AM	0	9	0	11	2	11	1	4
6:15 AM	6:30 AM	0	6	1	5	4	3	1	4
6:30 AM	6:45 AM	4	10	3	14	3	11	2	5
6:45 AM	7:00 AM	2	22	2	19	3	16	3	10
7:00 AM	7:15 AM	2	7	1	10	6	8	2	5
7:15 AM	7:30 AM	4	18	3	12	6	9	3	11
7:30 AM	7:45 AM	8	20	2	17	4	16	2	8
7:45 AM	8:00 AM	4	24	6	32	4	22	2	13
8:00 AM	8:15 AM	4	23	5	23	4	12	4	19
8:15 AM	8:30 AM	3	22	5	22	3	23	7	21
8:30 AM	8:45 AM	5	21	5	30	6	29	7	39
8:45 AM	9:00 AM	10	48	4	44	13	56	7	69
9:00 AM	9:15 AM	5	30	16	45	6	45	10	53
9:15 AM	9:30 AM	10	46	18	51	12	71	16	61
9:30 AM	9:45 AM	10	52	11	71	11	52	17	77
9:45 AM	10:00 AM	10	65	19	77	18	79	21	119
10:00 AM	10:15 AM	12	68	13	78	14	79	23	93
10:15 AM	10:30 AM	23	56	18	96	22	83	26	115
10:30 AM	10:45 AM	8	44	25	85	27	92	23	121
10:45 AM	11:00 AM	17	65	29	89	21	84	39	124
11:00 AM	11:15 AM	26	69	23	72	27	58	50	121
11:15 AM	11:30 AM	26	67	26	76	29	81	52	126
11:30 AM	11:45 AM	35	54	30	70	30	82	55	121
11:45 AM	12:00 PM	30	72	47	86	38	79	65	152
12:00 PM	12:15 PM	34	51	30	56	36	88	65	103
12:15 PM	12:30 PM	30	56	57	57	62	85	83	143
12:30 PM	12:45 PM	33	54	54	59	53	78	94	113
12:45 PM	1:00 PM	43	65	53	65	68	71	103	123
1:00 PM	1:15 PM	37	44	53	56	48	93	130	84
1:15 PM	1:30 PM	52	49	49	76	80	68	118	110
1:30 PM	1:45 PM	57	63	57	48	65	83	134	119
1:45 PM	2:00 PM	45	64	51	57	76	77	158	111
2:00 PM	2:15 PM	73	44	73	55	73	67	146	90
2:15 PM	2:30 PM	68	53	68	58	103	74	182	104
2:30 PM	2:45 PM	58	49	79	53	98	69	159	116
2:45 PM	3:00 PM	60	38	59	47	91	87	190	142
3:00 PM	3:15 PM	62	45	83	67	87	52	225	94
3:15 PM	3:30 PM	68	41	93	59	100	66	198	98
3:30 PM	3:45 PM	67	58	90	66	106	70	210	112
3:45 PM	4:00 PM	70	56	100	73	119	80	210	106
4:00 PM	4:15 PM	92	34	119	69	107	92	208	100
4:15 PM	4:30 PM	81	71	120	58	115	79	214	104
4:30 PM	4:45 PM	61	72	114	52	110	78	232	104
4:45 PM	5:00 PM	65	75	94	66	105	89	203	103
5:00 PM	5:15 PM	86	66	102	63	113	74	209	80
5:15 PM	5:30 PM	83	68	92	56	98	65	197	85
5:30 PM	5:45 PM	65	57	104	70	100	93	190	70
5:45 PM	6:00 PM	52	52	75	65	102	78	158	84
6:00 PM	6:15 PM	74	64	91	50	107	69	148	75
6:15 PM	6:30 PM	59	63	79	53	91	69	152	73
6:30 PM	6:45 PM	66	57	70	53	100	71	114	57
6:45 PM	7:00 PM	60	41	78	47	94	58	105	66
7:00 PM	7:15 PM	82	51	83	37	100	52	164	60
7:15 PM	7:30 PM	61	32	75	41	81	60	114	40
7:30 PM	7:45 PM	57	32	71	28	75	38	105	30
7:45 PM	8:00 PM	45	24	92	28	79	40	108	21
8:00 PM	8:15 PM	77	23	65	27	84	34	121	27
8:15 PM	8:30 PM	65	21	64	18	102	41	102	24
8:30 PM	8:45 PM	62	20	65	17	94	24	134	32
8:45 PM	9:00 PM	65	17	58	14	115	15	127	31
9:00 PM	9:15 PM	65	10	72	16	91	22	125	30
9:15 PM	9:30 PM	80	9	93	8	103	25	105	11
9:30 PM	9:45 PM	86	8	90	10	116	17	152	17
9:45 PM	10:00 PM	84	7	81	11	133	16	128	20
10:00 PM	10:15 PM	76	8	67	8	121	15	106	10
10:15 PM	10:30 PM	55	8	57	6	85	20	102	13
10:30 PM	10:45 PM	30	11	43	7	63	11	105	12
10:45 PM	11:00 PM	40	11	31	1	49	7	63	5
11:00 PM	11:15 PM	28	8	29	7	62	10	56	12
11:15 PM	11:30 PM	48	4	24	2	35	10	62	10
11:30 PM	11:45 PM	12	1	24	1	31	10	42	5
11:45 PM	12:00 AM	23	2	7	0	46	5	70	11

North Overflow Lot									
Start Time	End Time	Wednesday (8/12/2015)		Thursday (08/13/2015)		Friday (08/14/2015)		Saturday (08/15/2015)	
		In Total	Out Total	In Total	Out Total	In Total	Out Total	In Total	Out Total
12:00 AM	12:15 AM	0	0	0	0	0	0	0	0
12:15 AM	12:30 AM	0	0	0	0	0	0	1	2
12:30 AM	12:45 AM	1	0	0	0	0	0	0	0
12:45 AM	1:00 AM	0	0	0	0	0	0	2	0
1:00 AM	1:15 AM	0	0	0	0	0	0	0	0
1:15 AM	1:30 AM	0	0	0	0	0	0	0	0
1:30 AM	1:45 AM	0	0	0	0	0	0	0	0
1:45 AM	2:00 AM	0	0	1	0	0	0	0	0
2:00 AM	2:15 AM	2	0	0	0	0	0	2	0
2:15 AM	2:30 AM	8	0	9	0	5	0	6	0
2:30 AM	2:45 AM	0	0	1	0	1	0	0	0
2:45 AM	3:00 AM	0	0	0	0	3	0	0	0
3:00 AM	3:15 AM	0	0	0	0	1	1	1	0
3:15 AM	3:30 AM	0	0	0	1	1	2	0	0
3:30 AM	3:45 AM	0	3	0	0	1	1	0	0
3:45 AM	4:00 AM	1	1	1	0	1	8	0	0
4:00 AM	4:15 AM	0	1	1	3	0	8	0	2
4:15 AM	4:30 AM	2	9	1	7	1	11	0	2
4:30 AM	4:45 AM	0	9	1	10	1	12	1	2
4:45 AM	5:00 AM	2	25	2	20	1	15	1	3
5:00 AM	5:15 AM	3	14	3	10	3	7	0	4
5:15 AM	5:30 AM	1	36	2	37	3	44	1	11
5:30 AM	5:45 AM	1	120	3	98	1	110	1	17
5:45 AM	6:00 AM	2	82	5	92	6	88	0	23
6:00 AM	6:15 AM	2	20	2	18	1	14	4	2
6:15 AM	6:30 AM	2	5	0	9	1	14	1	2
6:30 AM	6:45 AM	5	17	2	14	1	14	2	2
6:45 AM	7:00 AM	4	20	3	19	10	14	1	2
7:00 AM	7:15 AM	5	6	2	10	2	6	0	3
7:15 AM	7:30 AM	2	9	4	2	0	1	1	0
7:30 AM	7:45 AM	3	6	2	7	3	5	1	0
7:45 AM	8:00 AM	3	2	5	8	4	5	0	0
8:00 AM	8:15 AM	4	7	4	6	4	6	0	3
8:15 AM	8:30 AM	2	4	1	7	1	3	1	0
8:30 AM	8:45 AM	2	3	2	3	5	3	1	3
8:45 AM	9:00 AM	4	6	4	2	4	3	1	0
9:00 AM	9:15 AM	6	9	2	3	1	1	3	2
9:15 AM	9:30 AM	4	10	4	2	3	5	3	3
9:30 AM	9:45 AM	7	6	1	1	3	6	1	5
9:45 AM	10:00 AM	2	4	1	3	5	9	1	8
10:00 AM	10:15 AM	4	3	5	5	7	4	4	1
10:15 AM	10:30 AM	5	8	9	6	4	2	3	4
10:30 AM	10:45 AM	5	2	5	4	8	8	1	3
10:45 AM	11:00 AM	2	5	10	8	4	9	9	14
11:00 AM	11:15 AM	8	7	3	2	4	4	2	4
11:15 AM	11:30 AM	9	6	6	5	8	9	6	4
11:30 AM	11:45 AM	5	10	8	6	9	5	4	5
11:45 AM	12:00 PM	6	8	6	4	18	6	5	9
12:00 PM	12:15 PM	12	10	6	7	19	4	6	3
12:15 PM	12:30 PM	6	13	12	8	7	11	4	10
12:30 PM	12:45 PM	4	3	4	7	18	10	4	3
12:45 PM	1:00 PM	3	5	12	10	10	3	10	10
1:00 PM	1:15 PM	10	5	5	4	13	2	8	8
1:15 PM	1:30 PM	13	12	7	8	22	12	4	7
1:30 PM	1:45 PM	16	6	11	5	4	6	10	9
1:45 PM	2:00 PM	12	2	11	6	20	3	8	9
2:00 PM	2:15 PM	21	10	17	1	38	1	10	12
2:15 PM	2:30 PM	157	3	138	6	105	2	24	5
2:30 PM	2:45 PM	21	8	21	6	23	5	10	6
2:45 PM	3:00 PM	12	8	19	5	15	2	3	1
3:00 PM	3:15 PM	18	2	14	4	12	8	3	3
3:15 PM	3:30 PM	23	6	11	6	18	6	2	4
3:30 PM	3:45 PM	12	5	12	7	7	8	5	5
3:45 PM	4:00 PM	11	3	15	4	5	5	6	4
4:00 PM	4:15 PM	26	5	28	5	18	2	7	0
4:15 PM	4:30 PM	38	4	32	4	20	2	8	8
4:30 PM	4:45 PM	5	1	9	4	9	0	10	2
4:45 PM	5:00 PM	6	1	5	0	4	2	8	3
5:00 PM	5:15 PM	4	1	3	5	6	3	4	1
5:15 PM	5:30 PM	7	4	8	5	5	3	8	2
5:30 PM	5:45 PM	4	2	5	2	3	1	3	4
5:45 PM	6:00 PM	4	2	3	3	3	2	3	1
6:00 PM	6:15 PM	1	0	6	2	5	5	3	2
6:15 PM	6:30 PM	8	1	3	2	5	1	5	4
6:30 PM	6:45 PM	0	1	6	1	6	2	3	5
6:45 PM	7:00 PM	3	0	2	1	2	0	7	4
7:00 PM	7:15 PM	1	0	0	1	2	0	2	0
7:15 PM	7:30 PM	3	3	2	1	1	2	5	1
7:30 PM	7:45 PM	0	1	1	2	1	1	2	1
7:45 PM	8:00 PM	1	0	3	2	5	2	4	2
8:00 PM	8:15 PM	2	2	2	1	0	0	2	0
8:15 PM	8:30 PM	0	2	5	0	0	0	0	0
8:30 PM	8:45 PM	0	0	1	1	0	0	4	0
8:45 PM	9:00 PM	4	0	2	0	1	1	3	2
9:00 PM	9:15 PM	2	0	2	0	0	3	7	1
9:15 PM	9:30 PM	0	0	0	0	4	0	2	0
9:30 PM	9:45 PM	3	1	0	0	2	1	1	0
9:45 PM	10:00 PM	3	1	2	0	5	2	0	0
10:00 PM	10:15 PM	1	1	0	0	0	0	0	0
10:15 PM	10:30 PM	0	0	1	0	1	0	5	0
10:30 PM	10:45 PM	0	0	0	0	0	0	2	2
10:45 PM	11:00 PM	0	0	0	0	0	0	2	0
11:00 PM	11:15 PM	0	0	0	0	0	0	0	1
11:15 PM	11:30 PM	0	0	0	0	0	0	2	0
11:30 PM	11:45 PM	1	1	0	0	0	0	1	0
11:45 PM	12:00 AM	0	0	0	0	0	0	1	0

East Overflow Lot									
Start Time	End Time	Wednesday (8/12/2015)		Thursday (08/13/2015)		Friday (08/14/2015)		Saturday (08/15/2015)	
		In Total	Out Total	In Total	Out Total	In Total	Out Total	In Total	Out Total
12:00 AM	12:15 AM	0	0	0	1	0	0	0	0
12:15 AM	12:30 AM	0	0	1	1	0	0	1	1
12:30 AM	12:45 AM	1	1	0	0	1	0	0	0
12:45 AM	1:00 AM	0	0	0	0	0	0	0	0
1:00 AM	1:15 AM	0	0	0	0	0	0	1	2
1:15 AM	1:30 AM	0	0	0	0	0	0	0	0
1:30 AM	1:45 AM	0	0	0	0	0	0	0	0
1:45 AM	2:00 AM	0	0	0	0	0	0	0	0
2:00 AM	2:15 AM	0	0	0	0	0	0	0	0
2:15 AM	2:30 AM	0	0	0	0	0	0	0	0
2:30 AM	2:45 AM	0	0	0	0	0	0	0	0
2:45 AM	3:00 AM	1	0	0	0	0	0	0	0
3:00 AM	3:15 AM	0	1	0	0	0	0	0	2
3:15 AM	3:30 AM	0	0	0	0	0	0	0	0
3:30 AM	3:45 AM	0	0	0	0	0	0	0	0
3:45 AM	4:00 AM	0	0	0	0	0	0	0	0
4:00 AM	4:15 AM	0	0	0	0	0	0	0	0
4:15 AM	4:30 AM	0	0	0	0	1	1	0	0
4:30 AM	4:45 AM	0	0	0	0	0	0	0	0
4:45 AM	5:00 AM	1	1	1	1	0	0	0	0
5:00 AM	5:15 AM	0	0	0	0	0	0	0	0
5:15 AM	5:30 AM	0	0	0	0	0	0	0	0
5:30 AM	5:45 AM	0	0	0	0	0	0	0	0
5:45 AM	6:00 AM	1	0	2	0	1	0	0	0
6:00 AM	6:15 AM	1	0	0	0	1	0	1	1
6:15 AM	6:30 AM	0	0	0	0	0	0	0	0
6:30 AM	6:45 AM	1	0	0	0	0	0	0	0
6:45 AM	7:00 AM	0	1	0	0	0	0	0	0
7:00 AM	7:15 AM	1	0	1	1	1	0	2	0
7:15 AM	7:30 AM	0	1	0	0	0	0	0	1
7:30 AM	7:45 AM	0	0	2	0	4	1	1	0
7:45 AM	8:00 AM	1	0	0	1	3	4	1	1
8:00 AM	8:15 AM	0	0	0	0	1	3	0	0
8:15 AM	8:30 AM	1	0	0	1	2	2	0	0
8:30 AM	8:45 AM	0	1	1	0	0	2	0	0
8:45 AM	9:00 AM	0	0	1	1	4	1	0	0
9:00 AM	9:15 AM	1	1	2	2	0	1	1	1
9:15 AM	9:30 AM	2	2	1	0	0	0	1	1
9:30 AM	9:45 AM	2	2	1	2	1	0	0	0
9:45 AM	10:00 AM	0	0	0	0	0	1	0	0
10:00 AM	10:15 AM	1	1	0	0	1	0	0	0
10:15 AM	10:30 AM	1	0	6	3	3	0	2	0
10:30 AM	10:45 AM	1	2	1	0	2	1	4	1
10:45 AM	11:00 AM	0	0	3	1	2	3	5	1
11:00 AM	11:15 AM	3	1	3	0	0	0	1	1
11:15 AM	11:30 AM	1	1	1	1	0	0	0	0
11:30 AM	11:45 AM	0	1	0	1	1	0	1	1
11:45 AM	12:00 PM	2	2	1	0	3	2	1	0
12:00 PM	12:15 PM	0	0	2	1	0	3	2	0
12:15 PM	12:30 PM	3	0	3	3	1	0	5	0
12:30 PM	12:45 PM	2	1	1	1	3	2	3	2
12:45 PM	1:00 PM	2	1	5	2	1	3	4	2
1:00 PM	1:15 PM	3	3	1	0	2	1	6	3
1:15 PM	1:30 PM	0	2	0	0	0	1	5	5
1:30 PM	1:45 PM	0	1	1	1	3	2	0	1
1:45 PM	2:00 PM	1	1	2	1	0	3	4	2
2:00 PM	2:15 PM	0	0	1	4	1	2	3	2
2:15 PM	2:30 PM	2	1	2	2	0	0	1	4
2:30 PM	2:45 PM	1	0	4	4	1	1	1	1
2:45 PM	3:00 PM	0	3	3	3	0	0	3	4
3:00 PM	3:15 PM	1	0	1	2	0	0	5	2
3:15 PM	3:30 PM	2	3	2	5	1	1	2	3
3:30 PM	3:45 PM	1	3	0	0	3	3	5	2
3:45 PM	4:00 PM	1	2	1	2	0	1	2	3
4:00 PM	4:15 PM	0	0	0	0	1	2	4	3
4:15 PM	4:30 PM	1	1	3	2	1	0	2	0
4:30 PM	4:45 PM	1	2	0	5	1	0	2	2
4:45 PM	5:00 PM	3	2	2	1	1	0	5	3
5:00 PM	5:15 PM	1	2	2	2	1	1	3	4
5:15 PM	5:30 PM	3	2	1	2	1	0	3	8
5:30 PM	5:45 PM	1	1	1	2	1	2	2	2
5:45 PM	6:00 PM	2	2	1	1	1	1	2	3
6:00 PM	6:15 PM	1	0	2	2	0	0	0	1
6:15 PM	6:30 PM	0	0	1	2	1	1	1	1
6:30 PM	6:45 PM	0	0	1	0	0	0	1	1
6:45 PM	7:00 PM	3	1	3	2	2	2	1	1
7:00 PM	7:15 PM	3	1	0	0	3	1	0	0
7:15 PM	7:30 PM	3	2	2	1	1	2	0	0
7:30 PM	7:45 PM	0	0	1	3	1	1	1	2
7:45 PM	8:00 PM	0	3	1	4	1	1	0	3
8:00 PM	8:15 PM	1	1	1	0	1	1	1	1
8:15 PM	8:30 PM	1	1	1	2	2	1	0	1
8:30 PM	8:45 PM	0	0	0	0	0	3	0	0
8:45 PM	9:00 PM	1	0	1	1	2	3	0	1
9:00 PM	9:15 PM	1	2	0	0	0	1	0	1
9:15 PM	9:30 PM	0	0	2	2	0	0	1	1
9:30 PM	9:45 PM	0	1	0	1	3	1	3	5
9:45 PM	10:00 PM	0	0	0	1	1	0	1	2
10:00 PM	10:15 PM	0	0	1	1	0	2	1	2
10:15 PM	10:30 PM	1	2	1	0	0	0	0	2
10:30 PM	10:45 PM	0	0	2	3	1	0	0	5
10:45 PM	11:00 PM	1	2	0	0	1	1	1	3
11:00 PM	11:15 PM	1	0	0	0	0	0	1	2
11:15 PM	11:30 PM	0	1	0	0	0	1	0	1
11:30 PM	11:45 PM	0	0	0	0	0	0	0	0
11:45 PM	12:00 AM	0	2	0	0	0	0	0	2

WEEKDAY SEASONAL FACTOR				
Year	Month	Date	Week #	Volume [1]
2014	1	1/8/2014	1	20,203
2014	1	1/15/2014	2	19,136
2014	1	1/22/2014	3	18,045
2014	1	1/29/2014	4	19,262
2014	2	2/5/2014	5	19,055
2014	2	2/12/2014	6	22,293
2014	2	2/19/2014	7	19,632
2014	2	2/26/2014	8	20,553
2014	3	3/5/2014	9	20,378
2014	3	3/12/2014	10	24,895
2014	3	3/19/2014	11	23,219
2014	3	3/26/2014	12	24,215
2014	4	4/2/2014	13	23,512
2014	4	4/9/2014	14	19,831
2014	4	4/16/2014	15	20,186
2014	4	4/23/2014	16	19,803
2014	4	4/30/2014	17	21,069
2014	5	5/7/2014	18	19,566
2014	5	5/14/2014	19	19,575
2014	5	5/21/2014	20	21,860
2014	5	5/28/2014	21	18,695
2014	6	6/4/2014	22	21,710
2014	6	6/11/2014	23	23,145
2014	6	6/18/2014	24	23,711
2014	6	6/25/2014	25	24,016
2014	7	7/2/2014	26	24,602
2014	7	7/9/2014	27	23,827
2014	7	7/16/2014	28	25,075
2014	7	7/23/2014	29	26,002
2014	7	7/30/2014	30	24,803
2014	8	8/6/2014	31	25,211
2014	8	8/13/2014	32	24,707
2014	8	8/20/2014	33	24,227
2014	8	8/27/2014	34	22,031
2014	9	9/3/2014	35	18,454
2014	9	9/10/2014	36	22,272
2014	9	9/17/2014	37	19,686
2014	9	9/24/2014	38	19,782
2014	10	10/1/2014	39	20,403
2014	10	10/8/2014	40	21,319
2014	10	10/15/2014	41	20,094
2014	10	10/22/2014	42	20,243
2014	10	10/29/2014	43	19,759
2014	11	11/5/2014	44	20,234
2014	11	11/12/2014	45	20,162
2014	11	11/19/2014	46	21,372
2014	11	11/26/2014	47	23,205
2014	12	12/3/2014	48	22,596
2014	12	12/10/2014	49	25,902
2014	12	12/17/2014	50	32,045
2014	12	12/24/2014	51	27,894
2014	12	12/31/2014	52	32,099
Average				22,223
August Average				*24,044*
Percent of August vs. Yearly Average				*1.08*
Adjustment Factor				0.926

SATURDAY SEASONAL FACTOR				
Year	Month	Date	Week #	Volume [1]
2014	1	1/11/2014	1	36,669
2014	1	1/18/2014	2	34,981
2014	1	1/25/2014	3	38,906
2014	2	2/1/2014	4	38,420
2014	2	2/8/2014	5	41,574
2014	2	2/15/2014	6	41,781
2014	2	2/22/2014	7	43,449
2014	3	3/1/2014	8	44,424
2014	3	3/8/2014	9	42,337
2014	3	3/15/2014	10	42,140
2014	3	3/22/2014	11	42,362
2014	3	3/29/2014	12	40,776
2014	4	4/5/2014	13	41,234
2014	4	4/12/2014	14	39,206
2014	4	4/19/2014	15	36,817
2014	4	4/26/2014	16	34,096
2014	5	5/3/2014	17	35,075
2014	5	5/10/2014	18	35,126
2014	5	5/17/2014	19	32,683
2014	5	5/24/2014	20	30,132
2014	5	5/31/2014	21	31,202
2014	6	6/7/2014	22	36,163
2014	6	6/14/2014	23	37,158
2014	6	6/21/2014	24	28,543
2014	6	6/28/2014	25	31,517
2014	7	7/5/2014	26	28,396
2014	7	7/12/2014	27	33,414
2014	7	7/19/2014	28	34,442
2014	7	7/26/2014	29	35,611
2014	8	8/2/2014	30	34,072
2014	8	8/9/2014	31	34,348
2014	8	8/16/2014	32	37,702
2014	8	8/23/2014	33	35,579
2014	8	8/30/2014	34	36,514
2014	9	9/6/2014	35	28,583
2014	9	9/13/2014	36	36,059
2014	9	9/20/2014	37	34,774
2014	9	9/27/2014	38	31,517
2014	10	10/4/2014	39	42,483
2014	10	10/11/2014	40	37,016
2014	10	10/18/2014	41	36,223
2014	10	10/25/2014	42	34,586
2014	11	11/1/2014	43	35,670
2014	11	11/8/2014	44	43,677
2014	11	11/15/2014	45	39,262
2014	11	11/22/2014	46	39,695
2014	11	11/29/2014	47	35,549
2014	12	12/6/2014	48	39,820
2014	12	12/13/2014	49	43,369
2014	12	12/20/2014	50	39,498
2014	12	12/27/2014	51	37,676
2014	1	1/3/2015	52	39,759
Average				36,963
August Average				*35,643*
Percent of August vs. Yearly Average				*0.96*
Adjustment Factor				1.042

Note 1: The volume represents the entering volume that was recorded over a 24-hour period by MOA.

Westwood

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Fax (952) 937-5822

westwoodps.com
(888) 937-5150

MEMORANDUM

- - - - - ATTORNEY CLIENT PRIVILEDGED COMMUNICATION - - - - -

Date: September 11, 2015

Re: Trip Generation Summary – Mall of America, Bloomington, MN
File R0005963.00

To: Lori R. Hartglass, Partner, Arnstein & Lehr, LLP

From: Vernon E. Swing, P.E.

Westwood has conducted a traffic study to estimate the trip generation rates for the Mall of America in Bloomington, Minnesota. The intent of this study is to determine trip generation rates for weekday and Saturday daily and peak hour periods.

BACKGROUND

The Mall of America is located in Bloomington, a suburb of Minneapolis and Saint Paul, Minnesota. The Mall is located just southwest of the Minneapolis/Saint Paul International Airport. The Mall lies just south of I-494 and just east of Minnesota Highway 77 (Cedar Avenue). The Mall is also served by Metro Transit's Blue Line LRT and several bus lines.

The Mall of America opened to the public on August 11, 1992. Since then, it has welcomed millions of guests through its doors. Besides being a shopping and dining venue, the Mall offers an amusement park and aquarium to its guests. Over the years, retailers have come and gone, but the Mall remains one of the top tourist and shopping destinations for residents of and visitors to the Twin Cities at all times of the year.

PURPOSE

Because of its size (Gross Floor Area of 4,791,388 sq. ft.; Gross Leasable Area of 2,581,582 sq. ft.), any estimation of trip generation rates for the Mall of America using standard rates and formulae found in the Institute of Transportation Engineers' Trip

Generation Manual, Ninth Edition, would be untenable. The rates and formulae found therein are suitable for shopping centers much smaller than the Mall of America.

Therefore, Westwood collected data for weekday and Saturday periods to calculate daily and peak hour traffic volumes on those days. From these samples, daily and peak hour rates have been calculated.

The results of this study is to provide more realistic trip generation rates for malls that are much larger than the shopping centers used for calculating rates in the ITE Trip Generation Manual. As a result, a more accurate forecast of trips entering and leaving these "mega-malls" can be determined.

APPROACH

The Mall of America has six gates for vehicular traffic accessing to and from the adjacent street system – two gates each on the north, east and south sides of the Mall. There are no gates directly accessing the arterial roadway to the west of the Mall. Each gate has lanes inbound and outbound.

To count the vehicular traffic inbound and outbound, mechanical tube counters were strung across the inbound and outbound lanes of each gate. These tube counters have internal clocks and tallying mechanisms to record the volume of traffic passing over these tubes every fifteen minutes. These units were used to record daily and hourly traffic volume totals. (NOTE: Because the units were deployed Wednesday morning, a full 24-hour count on that day was not possible, and therefore only Thursday through Saturday daily totals were counted.)

Westwood also deployed personnel at each gate to manually record inbound and outbound traffic during time periods identified as when peak hours of adjacent street traffic would occur. Personnel used manual count boards to record inbound and outbound vehicular traffic during the periods from 7:00 A.M. to 9:00 A.M. and from 4:00 P.M. to 6:00 P.M. for three consecutive weekdays (Wednesday through Friday, June 24-26, 2015). Personnel also counted the peak Saturday vehicular traffic entering and exiting these gates from 2:00 P.M. to 5:00 P.M. (Saturday, June 27, 2015).

The Mall of America also provides overflow parking availability at surface lots to the north and east of the Mall. During the count periods, the overflow lot to the north was occupied by construction workers during weekdays and until noon on Saturdays. The overflow lot to the east of the Mall is used primarily on weekends. Mall staff contracts with Bloomington Police to direct patrons to park in these lots when the internal parking garages are full and gates are closed. Westwood placed mechanical tube counters at the access points for these overflow lots to record the vehicular entries and exits on Saturday afternoon. Figure 1 shows all the count locations.

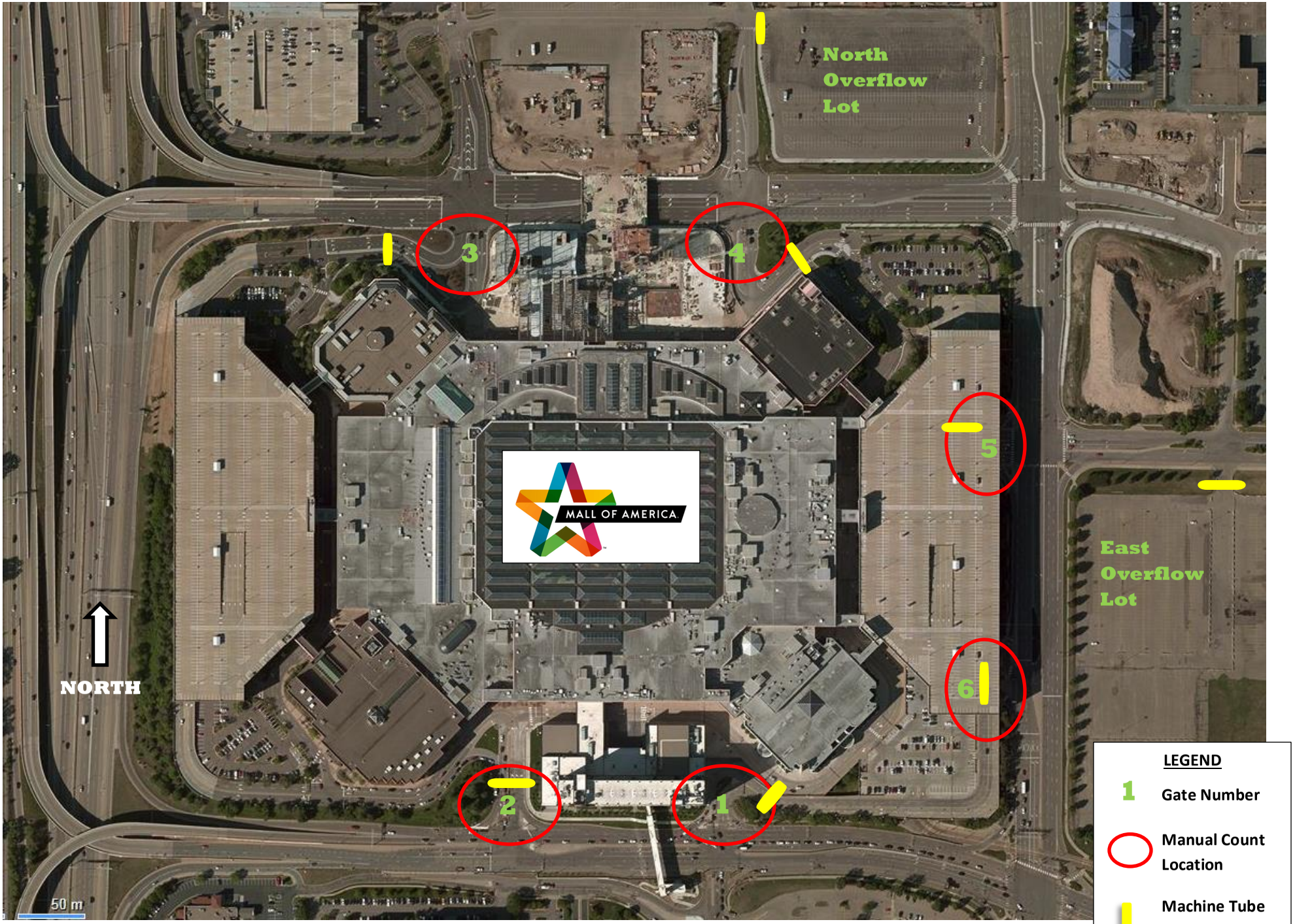

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FIGURE 1 – TRAFFIC COUNT LOCATIONS

FINDINGS

Following the completion of these count periods, the mechanical tube counters and manual count boards were retrieved and the data was downloaded. Table 1 below lists the raw count figures recorded by the tube counters. (For count information by gate, see the Count Data Summary found as an Attachment to this document.)

Table 1 – 2015 Raw Mechanical Tube Count Results
Total Vehicular Count of All Gates

Day	24-Hour Count Volumes
Thursday	48,840
Friday	59,085
Saturday	64,692

Source: Westwood Professional Services, June 2015

It is noted that the Mall monitors inbound traffic with a sophisticated camera system which can be adjusted to provide estimated traffic counts. The Westwood counts were compared with count data recorded by the Mall's inbound traffic cameras during the last week and weekend in June 2014, as a check.

During the fourth week of June, 2014, the Mall recorded an inbound-only volume on Wednesday, June 25, 2014, of 24,016 trips. If one assumes that all inbound traffic leaves the mall that same day, it is logical that total daily inbound and outbound traffic for that day was twice the inbound volume, or 48,032 trips. This compares within 2% of the Thursday volume recording in 2015.

Likewise, Westwood compared the total volume recorded by Mall cameras from the last Saturday of June, 2014, with the count recorded by the tube counters this year. The Mall recorded an inbound-only volume on Saturday, June 28, 2014, of 31,517 trips. Assuming that the total daily inbound and outbound traffic for that day was twice the inbound volume, the daily total estimate for that Saturday was 63,034 trips. This compares within 3% of the volume recorded in 2015.

To determine seasonal average daily trips, Westwood utilized 2014 inbound traffic volumes at all gates, as recorded by Mall of America staff. (Note: The fourth Wednesdays were chosen for the monthly review so as avoid Thanksgiving Thursday.) Table 2 shows the monthly variation from the average number of inbound daily traffic volumes for all gates recorded in 2014. In that year, the average number of inbound trips on a Wednesday was 21,989 trips. When doubled to estimate both inbound and outbound trips, the average daily total weekday trips inbound and outbound are 43,978 trips.

Similarly, the average number of inbound trips on a Saturday was 36,261 trips. When doubled to estimate both inbound and outbound trips, the average daily total Saturday trips inbound and outbound are 72,522 trips.

Table 2 – 2014 Monthly Variation of Total Vehicular Count of All Gates

Weekday Variation – Fourth Wednesday of Each Month (inbound only)

year	Month	date	week	Count	Variation
2014	1	01/29/14	4	19,262	0.875983
2014	2	02/26/14	8	20,553	0.934695
2014	3	03/26/14	12	24,215	1.101232
2014	4	04/23/14	16	19,803	0.900587
2014	5	05/28/14	21	18,695	0.850198
2014	6	06/25/14	25	24,016	1.092182
2014	7	07/23/14	29	26,002	1.182500
2014	8	08/27/14	34	22,031	1.001910
2014	9	09/24/14	38	19,782	0.899632
2014	10	10/22/14	42	20,243	0.920597
2014	11	11/19/14	46	21,372	0.971941
2014	12	12/24/14	51	27,894	1.268543
Daily Inbound Average Volume (2014)				21,989	

Source: Mall of America, June 2015

Saturday Variation – Fourth Saturday of Each Month (inbound only)

year	Month	date	week	Count	Variation
2014	1	01/25/14	3	38,906	1.072958
2014	2	02/22/14	7	43,449	1.198246
2014	3	03/22/14	11	42,362	1.168269
2014	4	04/26/14	16	34,096	0.940307
2014	5	05/24/14	20	30,132	0.830987
2014	6	06/28/14	25	31,517	0.869183
2014	7	07/26/14	29	35,611	0.982088
2014	8	08/23/14	33	35,579	0.981205
2014	9	09/27/14	38	31,517	0.869183
2014	10	10/25/14	42	34,586	0.953820
2014	11	11/22/14	46	39,695	1.094717
2014	12	12/27/14	51	37,676	1.039037
Daily Inbound Average Volume (2014)				36,261	

Source: Mall of America, June 2015

(Note: The fourth Wednesdays were chosen for the monthly review so as avoid Thanksgiving Thursday.)

Westwood used these average volumes to calculate seasonal variations by month for weekday and Saturday volumes at the Mall, as shown in the last column of Table 2. From these variation rates, Westwood calculated the annualized average volumes for the 2015 weekday and Saturday counts. These annualized volumes are shown in Table 3.

Table 3 – 2015 Annualized Daily Volumes Using Total Vehicular Count of All Gates

Day of Week	24-Hour Count Volume	Seasonal Variation	Annualized Daily Volume
Thursday	48,840	1.092182	44,718
Friday	59,085	1.092182	54,098
Saturday	64,692	0.869183	74,429

Source: Westwood Professional Services, June 2015

Therefore, the Average Annualized Daily Volume recorded at the Mall of America between Thursday and Friday, June 25-26, 2015, was **49,408 trips per day**. The Average Annualized Saturday Volume recorded at the Mall of America on Saturday, June 27, 2015, was **74,429 trips per day**. (Note: Saturday totals include daily traffic volumes recorded at the North and East Overflow Lots.)

To determine the Mall's peak hour volumes of adjacent street traffic, the City of Bloomington provided Westwood with the peak hours of the streets surrounding the Mall. The typical peak hours for intersections on the streets surrounding the Mall of America are:

- Weekday A.M. Peak Hour -- 7:00 A.M. to 8:00 A.M.
- Weekday P.M. Peak Hour – 4:30 P.M. to 5:30 P.M.
- Saturday Peak Hour – 3:00 P.M. to 4:00 P.M.

Table 4 lists the total hourly volumes of traffic entering and exiting the Mall at the peak hour of the adjacent street traffic. These totals do not necessarily align with the peak hour of the generator. (Note: Saturday totals include peak hour traffic volumes recorded at the North and East Overflow Lots.)

Because the Mall hours of operation are from 10:00 A.M. to 9:30 P.M., the time when customer traffic is entering the gates does not correspond with the typical A.M. Peak Hour of Adjacent Street Traffic. Early morning traffic to and from the Mall comprises employees arriving to work and deliveries coming to the Mall.

Table 4 – 2015 Peak Hour Volumes Using Total Hourly Vehicular Count of All Gates

		Inbound	Outbound		Total
Wednesday	7:00 - 8:00 AM	419	210		629
Thursday	7:00 - 8:00 AM	495	227		722
Friday	7:00 -8:00 AM	480	204		684
AVERAGE		**465**	**214**		**678**
DIRECTIONAL DISTRIBTIION - A.M. PEAK		**69%**	**31%**		
		Inbound	**Outbound**		**Total**
Wednesday	4:30 - 5:30 PM	1614	1816		3430
Thursday	4:30 - 5:30 PM	1581	1804		3385
Friday	4:30 - 5:30 PM	1961	2191		4152
AVERAGE		**1719**	**1937**		**3656**
DIRECTIONAL DISTRIBTIION - P.M. PEAK		**47%**	**53%**		
		Inbound	**Outbound**		**Total**
Satruday	3:00 - 4:00 PM	**2337**	**2271**		**4608**
DIRECTIONAL DISTRIBTIION - SAT. PEAK		**51%**	**49%**		

NOTE: Volumes shown are for the Peak Hour of Adjacent Street Traffic, not necessarily the Peak Hour of the Generator.

Source: Westwood Professional Services, June 2015

Westwood verified these volumes by comparing the manual traffic counts with the mechanical tube counts for the same time periods. These counts compared favorably and are considered accurate.

As with the mechanical tube counts, the peak hour counts were seasonally adjusted. Westwood used the same factors to adjust the Peak Hour counts (see Table 5).

Table 5 – 2015 Annualized Peak Hour Volumes Using Hourly Vehicular Count of All Gates

Weekday Average	Average Volume	Seasonal Variation	Annualized Volume
-- A.M. Peak Hour	678	1.092182	**621**
-- P.M. Peak Hour	3656	1.092182	**3347**
-- Saturday Peak	4608	0.869183	**5302**

Source: Westwood Professional Services, June 2015

TRIP GENERATION RATES

Using the Annualized daily and peak hour volumes derived above, Westwood has developed trip generation rates for the Mall of America. These rates have been calculated based on 1,000 square feet of Gross Leasable Area, and have been identified for:

- Weekday Daily
- Weekday Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 A.M.
- Weekday Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 P.M.
- Weekend Daily, Saturday
- Saturday Peak Hour of Adjacent Street Traffic

Table 6 identifies the trip generation rates calculated for each condition. Each calculation is based on the Mall's gross leasable area of 2,581,582 sq. ft. Inbound and outbound percentages are based on the seasonally-adjusted average volume counts indicated above.

ANALYSIS

The rates and equations for Land Use Code 820 (Shopping Center) as found in the ITE Trip Generation Manual, Ninth Edition, were also used to estimate the trip generation for the Mall. The resulting calculations of the trip generation for the Mall of America would vastly overestimate the actual volumes counted.

Table 7 shows the trip generation for the Mall of America based on the ITE rates and fitted curve equations for Shopping Centers. It is noted all ITE data plots for Land Use 820 are for shopping centers less than 1.6 million GLA, except the plot for Weekday Peak Hour of Adjacent Street Traffic, which provides limited data up to 2.2 million GLA.

As shown earlier in this study, the annualized daily trip volume for the Mall of America is 49,408 trips/day. The Mall of America's trip generation estimate using standard ITE Trip Generation rates result in an estimation of 110,234 trips/day (-- over two times greater than actual). Using ITE's fitted curve equation, the Mall of America's trip weekday generation would have been 56,190 trips/day (-- closer, but still 14% greater than actual).

Therefore, in terms of trip generation of very large shopping centers, the use of the ITE Trip Generation Manual, Ninth Edition will yield significant overestimations of trip volumes.

Table 6 – Trip Generation per 1000 Sq. Feet Gross Leasable Area Based on Weekday and Saturday Count Data Mall of America, Bloomington, MN

Average Vehicle Trip Ends vs:	1000 Sq. Ft. Gross Leasable Area
On a:	Weekday
Average Rate:	19.14
Directional Distribution:	50% Entering, 50% Exiting

Average Vehicle Trip Ends vs:	1000 Sq. Ft. Gross Leasable Area
On a:	Weekday, Peak Hour of Adjacent
	Street Traffic, One Hour between
	7 and 9 A.M.
Average Rate:	0.24
Directional Distribution:	69% Entering, 31% Exiting

Average Vehicle Trip Ends vs:	1000 Sq. Ft. Gross Leasable Area
On a:	Weekday, Peak Hour of Adjacent
	Street Traffic, One Hour between
	4 and 6 P.M.
Average Rate:	1.30
Directional Distribution:	47% Entering, 53% Exiting

Average Vehicle Trip Ends vs:	1000 Sq. Ft. Gross Leasable Area
On a:	Saturday
Average Rate:	28.83
Directional Distribution:	50% Entering, 50% Exiting

Average Vehicle Trip Ends vs:	1000 Sq. Ft. Gross Leasable Area
On a:	Saturday, Peak Hour of Adjacent
	Street Traffic, One Hour between
	3 and 5 P.M.
Average Rate:	2.05
Directional Distribution:	51% Entering, 49% Exiting

Source: Westwood Professional Services, June 2015

Table 7 – Trip Generation for Mall of America
Based on ITE Trip Generation Manual
Rates and Equations for Land Use 820 (Shopping Center)

Mall of America Trip Generation Rates (based on ITE Rates)						
Time Period	ITE Trip Generation Rate per 1,000 sq. ft.	MOA Trip Generation Estimate	Trip Direction	ITE Trip Generation Rate	Directional distribution	
Weekday	42.7	110,234	Enter	55,117	50%	inbound
			Exit	55,117	50%	outbound
Weekday AM Peak	0.96	2,478	Enter	1,537	62%	inbound
			Exit	942	38%	outbound
Weekday PM Peak	3.71	9,578	Enter	4,597	48%	inbound
			Exit	4,980	52%	outbound
Saturday	49.97	129,002	Enter	64,501	50%	inbound
			Exit	64,501	50%	outbound
Saturday Mid-day Peak	4.82	12,443	Enter	6,470	52%	inbound
			Exit	5,973	48%	outbound
Mall of America Trip Generation Rates (based on ITE Equations)						
Time Period	ITE Fitted Curve Equation	MOA Trip Generation Estimate	Trip Direction	ITE Trip Generation Rate	Directional distribution	
Weekday	Ln(t)=0.65 Ln(X)+5.83	56,190	Enter	28,095	50%	inbound
			Exit	28,095	50%	outbound
Weekday AM Peak	Ln(t)=0.61 Ln(X)+2.24	1,132	Enter	702	62%	inbound
			Exit	430	38%	outbound
Weekday PM Peak	Ln(t)=0.67 Ln(X)+3.31	5,290	Enter	1,534	29%	inbound
			Exit	2,751	52%	outbound
Saturday	Ln(t)=0.63 Ln(X)+6.23	71,638	Enter	35,819	50%	inbound
			Exit	35,819	50%	outbound
Saturday Mid-day Peak	Ln(t)=0.65 Ln(X)+3.78	7,234	Enter	3,762	52%	inbound
			Exit	3,472	48%	outbound

Source: Trip Generation Manual, Ninth Edition, Institute of Transportation Engineers, 2012.

CONCLUSION AND RECOMMENDATION

The data plots in the ITE Trip Generation Manual, Ninth Edition for Land Use 820 (Shopping Centers) are shown for sites up to 2.2 million sq. ft. Gross Leasable Area. (Note: All ITE data plots for Land Use 820 are for shopping centers less than 1.6 million GLA, except the plot for Weekday Peak Hour of Adjacent Street Traffic, which provides limited data up to 2.2 million GLA.)

Based on the findings of this study, shopping centers that are significantly larger should not use the trip generation rates or fitted curve equations found in the ITE Trip Generation Manual, Ninth Edition. Rates should be compared and used from other larger malls, such as the Mall of America.

The results of this study were derived from existing daily and peak hour volumes tallied for the Mall of America. The Average Annualized Daily Volume recorded at the Mall between Thursday and Friday, June 25-26, 2015, was **49,408 trips per day**. The Average Annualized Saturday Volume recorded at the Mall on Saturday, June 27, 2015, was **74,429 trips per day**.

Based on these volumes and the current gross leasable area of the mall (2,968,272 sq. ft. G.L.A.), the Mall of America has a weekday trip generation rate of **19.14 trips per 1000 sq. ft. of gross leasable area**. Similarly, the Mall of America has a Saturday trip generation rate of **28.83 trips per 1000 sq. ft. of gross leasable area**. This report also details peak hour rates of the adjacent street traffic:

- Average Rate during A.M. Peak Hour of Adjacent Street Traffic = **0.24 trips per 1000 sq. ft. GLA**
- Average Rate during P.M. Peak Hour of Adjacent Street Traffic = **1.30 trips per 1000 sq. ft. GLA**
- Average Rate during Saturday Peak Hour of Adjacent Street Traffic = **2.05 trips per 1000 sq. ft. GLA**

cc: Stephen J. Manhart, Westwood

ATTACHMENT - COUNT DATA SUMMARY

A-1 – Daily Inbound/Outbound Traffic Volume Totals by Gate

(Note: Saturday totals include inbound/outbound volumes at North and East Overflow Lots.)

Day of Week	Gate 1		Gate 2		Gate 3		Gate 4		Gate 5		Gate 6		Total		Two-Way Daily Total
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	in	Out	
Wednesday[1]	3329	3144	5900	7038	5034	5145	2225	2133	3397	3773	2099	3123	21984	24356	**46340**
Thursday	3447	3190	6064	6883	5342	5151	2303	2155	3593	3953	2845	3914	23594	25246	**48840**
Friday	4189	4640	8070	8590	6658	6460	2947	2553	4412	3569	2892	4105	29168	29917	**59085**
Saturday	4487	6387	8014	8916	6726	8250	3343	2814	4404	4459	2414	3457	29388	34283	**63671**

Day of Week	MOA		North Lot		East Lot		Total		Two-Way Daily Total
	In	Out	In	Out	in	Out	in	Out	
Saturday	29388	34283	428	478	47	68	29863	34829	**64692**

[1]Wednesday counts did not commence at any gate until 7:00 a.m.

Source: Westwood Professional Services, June 2015

A-2 – Peak Hour Inbound/Outbound Traffic Volume Totals by Gate

Wednesday June 24, 2015															
Time	Gate 01		Gate 02		Gate 03		Gate 04		Gate 05		Gate 06		Total IN	Total OUT	
	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT			
7:00 - 7:15 AM	15	2	45	30	8	4	8	5	11	5	23	11	110	57	Peak Hour of Adjacent Street (7:00 - 8:00 AM)
7:15 - 7:30 AM	12	5	26	19	9	7	10	7	10	7	20	15	87	60	
7:30 - 7:45 AM	13	3	37	18	12	5	10	5	11	4	25	13	108	48	
7:45 - 8:00 AM	9	3	33	16	5	3	21	7	23	2	23	14	114	45	
8:00 - 8:15 AM	19	5	25	18	35	11	12	13	23	3	33	14	147	64	
8:15 - 8:30 AM	17	8	43	23	22	14	15	3	32	6	22	10	151	64	
8:30 - 8:45 AM	25	7	43	23	35	12	9	6	30	8	36	20	178	76	
8:45 - 9:00 AM	20	3	43	12	57	13	35	9	39	3	32	19	226	59	
4:00 - 4:15 PM	49	82	88	159	78	136	55	40	66	78	40	30	376	525	
4:15 - 4:30 PM	44	60	93	120	99	130	58	39	77	63	25	28	396	440	
4:30 - 4:45 PM	56	72	104	118	83	121	62	50	66	83	17	34	388	478	Peak Hour of Adjacent Street (4:30 - 5:30 PM)
4:45 - 5:00 PM	42	67	126	105	97	107	56	25	86	75	11	34	418	413	
5:00 - 5:15 PM	60	69	108	154	98	92	37	45	94	72	20	32	417	464	
5:15 - 5:30 PM	48	62	122	138	84	100	50	39	62	73	25	49	391	461	
5:30 - 5:45 PM	66	73	147	127	118	108	45	37	67	90	14	35	457	470	
5:45 - 6:00 PM	61	69	131	128	134	93	54	35	50	60	23	28	453	413	
7:00 - 8:00 AM	**49**	**13**	**141**	**83**	**34**	**19**	**49**	**24**	**55**	**18**	**91**	**53**	**419**	**210**	**629**
4:30 - 5:30 PM	**206**	**270**	**460**	**515**	**362**	**420**	**205**	**159**	**308**	**303**	**73**	**149**	**1614**	**1816**	**3430**

Thursday June 25, 2015															
Time	Gate 01		Gate 02		Gate 03		Gate 04		Gate 05		Gate 06		Total IN	Total OUT	
	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT			
7:00 - 7:15 AM	12	3	28	21	24	7	8	4	16	5	29	16	117	56	Peak Hour of Adjacent Street (7:00 - 8:00 AM)
7:15 - 7:30 AM	14	4	16	18	18	5	19	14	11	4	23	14	101	59	
7:30 - 7:45 AM	9	2	20	14	33	7	17	12	10	2	31	14	120	51	
7:45 - 8:00 AM	15	2	35	16	48	12	8	6	19	7	32	18	157	61	
8:00 - 8:15 AM	17	2	41	9	61	5	14	11	22	8	22	14	177	49	
8:15 - 8:30 AM	15	4	21	24	40	15	13	6	27	5	24	13	140	67	
8:30 - 8:45 AM	11	2	31	23	35	13	16	10	41	17	32	19	166	84	
8:45 - 9:00 AM	29	8	42	14	54	3	20	13	48	18	35	17	228	73	
4:00 - 4:15 PM	41	80	99	152	91	132	45	36	77	75	34	45	387	520	
4:15 - 4:30 PM	52	70	72	102	75	121	48	35	82	71	19	40	348	439	
4:30 - 4:45 PM	39	73	91	132	100	111	43	35	71	75	17	30	361	456	Peak Hour of Adjacent Street (4:30 - 5:30 PM)
4:45 - 5:00 PM	48	63	120	118	80	95	55	38	68	60	15	25	386	399	
5:00 - 5:15 PM	51	85	109	145	94	108	46	46	73	94	26	47	399	525	
5:15 - 5:30 PM	66	71	109	101	89	99	60	28	87	75	24	50	435	424	
5:30 - 5:45 PM	52	55	103	100	97	127	54	30	82	60	27	40	415	412	
5:45 - 6:00 PM	48	65	104	84	116	95	59	37	82	79	19	24	428	384	
7:00 - 8:00 AM	**50**	**11**	**99**	**69**	**123**	**31**	**52**	**36**	**56**	**18**	**115**	**62**	**495**	**227**	**722**
4:30 - 5:30 PM	**204**	**292**	**429**	**496**	**363**	**413**	**204**	**147**	**299**	**304**	**82**	**152**	**1581**	**1804**	**3385**

Friday June 26, 2015															
Time	Gate 01		Gate 02		Gate 03		Gate 04		Gate 05		Gate 06		Total IN	Total OUT	
	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT			
7:00 - 7:15 AM	12	3	28	15	15	2	12	7	13	4	22	23	102	54	Peak Hour of Adjacent Street (7:00 - 8:00 AM)
7:15 - 7:30 AM	14	4	11	8	19	5	14	8	11	4	21	12	90	41	
7:30 - 7:45 AM	9	2	38	16	25	3	15	6	10	3	28	13	125	43	
7:45 - 8:00 AM	15	2	46	20	50	7	9	9	19	5	24	23	163	66	
8:00 - 8:15 AM	17	2	33	9	42	10	16	12	22	8	35	13	165	54	
8:15 - 8:30 AM	15	4	31	21	35	9	9	4	27	5	35	14	152	57	
8:30 - 8:45 AM	11	2	46	24	49	14	14	14	41	5	32	21	193	80	
8:45 - 9:00 AM	29	8	49	34	66	22	22	11	48	4	39	19	253	98	
4:00 - 4:15 PM	41	80	153	203	99	150	63	54	89	89	30	36	475	612	
4:15 - 4:30 PM	52	70	126	166	133	160	60	42	95	89	20	35	486	562	
4:30 - 4:45 PM	39	73	160	179	115	130	68	54	81	73	19	42	482	551	Peak Hour of Adjacent Street (7:00 - 8:00 AM)
4:45 - 5:00 PM	48	63	129	146	161	131	58	51	75	94	21	39	492	524	
5:00 - 5:15 PM	51	85	118	151	135	141	64	49	91	78	30	39	489	543	
5:15 - 5:30 PM	66	71	141	187	128	147	76	37	66	90	21	41	498	573	
5:30 - 5:45 PM	52	55	123	150	125	155	73	54	92	101	19	29	484	544	
5:45 - 6:00 PM	48	65	145	139	108	99	61	37	70	111	24	23	456	474	
7:00 - 8:00 AM	**50**	**11**	**123**	**59**	**109**	**17**	**50**	**30**	**53**	**16**	**95**	**71**	**480**	**204**	**684**
4:30 - 5:30 PM	**204**	**292**	**548**	**663**	**539**	**549**	**266**	**191**	**313**	**335**	**91**	**161**	**1961**	**2191**	**4152**

A-2 (cont'd.) – Peak Hour Inbound/Outbound Traffic Volume Totals by Gate

Saturday June 27, 2015															
Time	Gate 01		Gate 02		Gate 03		Gate 04		Gate 05		Gate 06		Total IN	Total OUT	
	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT			
2:00 - 2:15 PM	88	75	160	128	156	140	75	52	66	84	28	31	573	510	
2:15 - 2:30 PM	84	52	156	132	154	127	69	52	85	85	34	18	582	466	
2:30 - 2:45 PM	94	62	160	141	151	141	75	33	72	91	24	25	576	493	
2:45 - 3:00 PM	97	68	155	137	150	148	84	51	97	89	34	22	617	515	
3:00 - 3:15 PM	114	85	105	145	144	145	69	50	84	88	38	39	554	552	Peak Hour of Adjacent Street (3:00 - 4:00 PM)
3:15 - 3:30 PM	117	56	135	178	143	164	79	66	112	85	30	28	616	577	
3:30 - 3:45 PM	102	61	115	127	145	177	77	50	84	97	26	28	549	540	
3:45 - 4:00 PM	98	68	149	143	170	163	77	54	72	85	30	17	596	530	
4:00 - 4:15 PM	94	64	136	152	102	194	84	40	100	76	47	28	563	554	
4:15 - 4:30 PM	88	58	130	148	138	152	61	61	92	103	27	28	536	550	
4:30 - 4:45 PM	108	67	140	165	148	179	60	46	106	109	21	21	583	587	
4:45 - 5:00 PM	97	67	136	128	130	150	69	51	118	102	22	16	572	514	
3:00 - 4:00 PM	**431**	**270**	**504**	**593**	**602**	**649**	**302**	**220**	**352**	**355**	**124**	**112**	**2315**	**2199**	**4514**

Saturday June 27, 2015									
Time	MOA		N. Overflow Lot		E. Overflow Lot		Total IN	Total OUT	Total for Peak Hour (3:00 - 4:00 PM)
	IN	OUT	IN	OUT	IN	OUT			
3:00 - 4:00 PM	**2315**	**2199**	**16**	**59**	**6**	**13**	**2337**	**2271**	**4608**

Source: Westwood Professional Services, June 2015

APPENDIX I-G:
Mall of America (MOA) Special Generator Survey by Cambridge Systematics

Mall of America Special Generator Survey

Metropolitan Council Travel Behavior Inventory

Final Report

prepared for

Metropolitan Council

prepared by

Cambridge Systematics, Inc.

April 20, 2012

www.camsys.com

report

Mall of America Special Generator Survey

Metropolitan Council Travel Behavior Inventory

prepared for

Metropolitan Council

prepared by

Cambridge Systematics, Inc.
115 South LaSalle Street, Suite 2200
Chicago, IL 60603

date

April 20, 2012

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1.0 Background

In 1982, Minnesota's professional baseball and football teams, the Twins and the Vikings, moved from Metropolitan Stadium in Bloomington to the Metrodome in downtown Minneapolis[1]. The resulting 78 acres of vacant prime real estate was converted into what is now the Mall of America (MoA). The MoA is situated is extremely accessible to a majority of residents in the region and is, in fact, only a mile and a half away from the Minneapolis -St. Paul international Airport and is at the intersection of major highways.

- The MoA has a gross area of nearly 4.2 million sq. ft. and is one of the **largest malls** in the United States.
- The mall employs between **11,000 – 13,000 employees** and attracts nearly **40 million visitors** annually, making it one of the preeminent destinations in the Metropolitan Council (Met Council) region.
- Further, analyses carried out by the MoA indicate that over 30 percent of all visitors to the MoA are **out-of-region visitors**.

Given the number of visitors and, to a certain degree, employees that the mall attracts, the impact of the mall on regional travel patterns is substantial. Therefore, Met Council determined that it was critical to administer surveys at the MoA as part of the Travel Behavior Inventory to better understand the travel behavior of MoA visitors. Cambridge Systematics and its partners conducetd the survey on behalf of Met Council. The survey team (CS Team) consisted of:

- **Cambridge Systematics**, who were responsible for the oversight of the process, to support the development of the questionnaire and sampling plan and to develop a database useful for travel modeling;
- **Kevin Tierney**, who was responsible for the overall design and sampling procedures for the survey, field implementation, and survey expansion. He was supported in the field by **Robert Gollnik Jr**. ;
- **NexPro Personnel Services**, who provided fieldworkers for the survey effort.

This report summarizes the key findings of the MoA special generator survey. The report is structured as follows. **Section 2** presents an outline of the sampling plan, survey questionnaire and the field administration. **Section 3** discusses the expansion methodology and presents some key findings from the data collected through the survey effort.

---

[1] http://www.mallofamerica.com/about/moa/history

2.0 Survey Implementation

Special generator surveys have been administered in several large cities across the United States and the most relevant information to ask in such surveys is well documented.

- However, the size and scale of the Mall of America provide unique logistical challenges.
- Further, this survey effort was designed to leverage recent technological advances in data collection that have not been widely used.

This section describes the survey effort including questionnaire design, sampling and field implementation with a special emphasis on the defining elements of this endeavor.

2.1 SURVEY APPROACH

Past research has shown that studies where respondents are either asked to mail-back completed surveys or are asked for an address to receive a survey often have low response rates.

In-person surveys have higher response rates, but participation is dependent on the length of the questionnaire. However, traditional pen and paper surveys require data transcription which tends to negatively impact data quality and cost.

For this effort, a short web-based in-person survey approach was taken to improve participation and data quality. The surveys were coded into a web-based software called Survey Gizmo® and tested for soundness in logic and reasoning. The survey effort was conducted using wireless enabled IPad® devices.

2.2 SURVEY QUESTIONNAIRE

The survey scripts were designed by the CS Team and by Met Council staff, and were revised iteratively to incorporate changes suggested by both internal team members as well as staff from the MoA. Typical travel survey questionnaires such as detailed origin location and household income were dropped from this survey based on the recommendation from staff at the MoA. These changes were implemented ensure that MoA customers were not inconvenienced or made to feel uncomfortable. The survey questionnaire covered several key aspects including:

- **Socio-Demographics.** Respondents were asked to provide information about household variables such as family size and vehicle ownership, and personal information such as age, gender and worker status.
- **Residency.** Given the large number of out-of-region visitors that frequent the MoA, a question focusing on the residency status of the participants was included in the survey questionnaire. Out-of-region residents were asked to provide their primary reason for visiting the Met Council region and also asked to provide their state and city of residence.
- **Trip Information.** Responses to these questions are most relevant in the development of the new travel demand model. Respondents were asked to provide information about their origin location, time of travel, mode of transportation and travel party size. Greater detail was asked about the transit routes, bus stops and mode of access.
- **Trip Purpose**. Visitors to the MoA pursue different activities when they arrive at the mall – including shopping, recreation, fitness, group sessions and social meetings. Respondents were asked to fill information about their primary purpose of visiting the MoA on that particular trip.

The final survey script is attached to this memorandum in **Appendix A**.

2.3 SAMPLING

A customized sampling plan was designed for this study. The sampling plan focused on two key elements:

- **Survey all Entrances**. The MoA has entrances in all four directions with parking garages in the East and West directions. The sampling plan covered entrances in all directions because the mall entrance locations are expected to be related to the access mode, the activities within the mall, and the access trip origin location.
- **Focus on Visitors**. Mall employees were not interviewed beyond initial screening questions. The reasoning behind this was that mall employees are not expected to have substantially different characteristics and travel patterns than other regional retail employees whose travel behavior is well documented using the regional household survey.

2.4 FIELD IMPLEMENTATION

The Mall of America intercept surveys were performed on Thursday, September 29, 2011, and Friday, September 30, 2011, by NexPro staff under the supervision of Kevin Tierney. A typical weekday and an end of the week day were selected to capture a variety of visitors that visit the MoA.

As discussed in **Section 2.1**, the surveys were administered using web-based survey software called Survey Gizmo® on wireless enabled IPads® . There were

no major issues encountered during data collection and the technology worked relatively smoothly and supported instantaneous transmission of survey data into a ready-to-use database.

Some of the key findings and procedures are highlighted below:

- To ensure that Mall of America customers were **not inconvenienced** or made to feel uncomfortable, the surveys were designed to take only a few minutes and did not include sensitive information.
- Survey workers restricted themselves to **mall entrance locations only** so that the conduct of the survey provided only minimal interference with mall tenants. It must be noted that the MoA may be accessed by walking into the departmental stores that are at each corner of the building. However, the survey workers did not receive permission to be stationed here.
- At the time of field implementation, the **South Entrance of the MoA was closed** for renovation. Hence, survey field workers operated only out of the other three entrances.
- Since mall activity typically peaks during the later part of the day, the survey was administered during the **mid-day and PM peak** periods. This allowed the survey team to target the busiest periods that attracted the most number of visitors to the mall.
- During the survey data collection period, fieldworkers also performed **spot counts** of people entering and exiting the malls at each of the operating mall entrances. These counts enabled the surveys to be weighted by time period and entrance location.
- The average duration of the survey, as recorded by the survey software was **nine minutes**. Several respondents **did not complete the survey**, possibly because of their interest in entering the stores at the mall.

3.0 Data Analysis and Weighting

This section discusses the data collected as part of the MoA survey and identifies key findings and trends. In addition, a brief description of the weighting procedures is also included as part of this section.

3.1 DATA RETRIEVAL

A total of 330 surveys were completed with mall visitors and employees. Of these, 279 surveys of visitors were performed that provided adequate information for survey analysis. Since the surveys were completed online, data were compiled automatically and analyzed for completeness. Survey responses were aggregated by entrance/exit location and time of day to support detailed analyses.

3.2 SURVEY EXPANSION

As discussed in **Section 2.4**, fieldworkers performed spot counts of people entering and exiting the malls at each of the operating mall entrances. These counts served as the control totals that supported the survey expansion by time period and entrance location.

- The weights reflect the **differences in response rates** that occurred at the survey locations.
- These weights are important, because the mall entrance locations are related to the **trip making characteristics** including access mode, the activities within the mall, and the access trip origin location. For instance, because the light rail station is adjacent to the east entrance, collecting disproportionate numbers of surveys from the first floor east entrance would likely bias the representation of light rail riders in the survey sample.

The survey weights were calculated as the percentage of total observed foot traffic at a particular survey location divided by the percentage of total surveys taking place at the survey location. The normalized weights allow for weighted tabulations that sum to the completed cleaned survey sample size. Weighted survey results are included in the final survey spreadsheet appended to this memorandum.

Key steps in the expansion process are discussed below:

- **Step 1**. The 10 minute and 15 minute spot counts at specific locations were expanded to obtain hourly in and out traffic estimates;

- **Step 2**. Hourly spot count estimates were interpolated to obtain midday and PM peak estimates;
- **Step 3**. The counts were aggregated to develop count estimates by groups of locations. Counts on levels 1, 2, and 3 on the west ramp were combined because the level of foot traffic on the individual levels is a function of parking availability in the garage. The same was true for levels 2 and 3 of the east entrance. Counts from level 1 of the east entrance which houses the light rail station were kept separate;
- **Step 4.** Survey results were summarized by time period and location and compared against the counts to calculate normalized weights;
- **Step 5.** The normalized weights were assigned to survey records prior to performing detailed data analyses.

Table 3.1 presents the results from the survey expansion process. In general, the response rate was lower during the PM peak period than in the mid-day period and can be seen by the smaller normalization factors against the records from the mid-day period.

If total visitor count at each of the entrances can be obtained from the MoA, CS staff can develop a second round of adjustment weights that represents true visitor traffic at the MoA.

Table 3.1 Survey Expansion Procedure

Entrance/ Time Period	Surveys	Estimated Foot Traffic	Normalized Weight
East Entrance Level 1 MD	82	3,116	0.699
East Entrance Level 1 PM	24	1,919	1.471
East Entrance Levels 2-3	50	4,065	1.496
North Entrance Level 1 MD	51	2,340	0.844
North Entrance Level 1 PM	13	1,076	1.524
West Entrance All Levels MD	86	3,560	0.762
West Entrance All Levels PM	24	1,858	1.424
Total	**330**	**17,934**	

Source: CS Team Analysis of Survey Data and Entrance Counts

3.3 USE IN MODELING

A detailed modeling framework will be developed to maximize the utilization of the intercept surveys conducted at the Mall of America.

- Given the nature of information collected, only trip level models may be developed using these data.

- The most elaborate modeling effort would include a comprehensive stand-alone suite of models that include : mode choice, time-of-day choice and modeling of production (attraction) ends for trips made to (from) the Mall of America.
- These models may be segmented by resident vs. out-of-region visitors depending on the quality of the data.

Comprehensive data analyses will be implemented during the model estimation stage to determine the feasibility of developing the proposed models. The findings from that data analysis will be incorporated in the final report associated with this study.

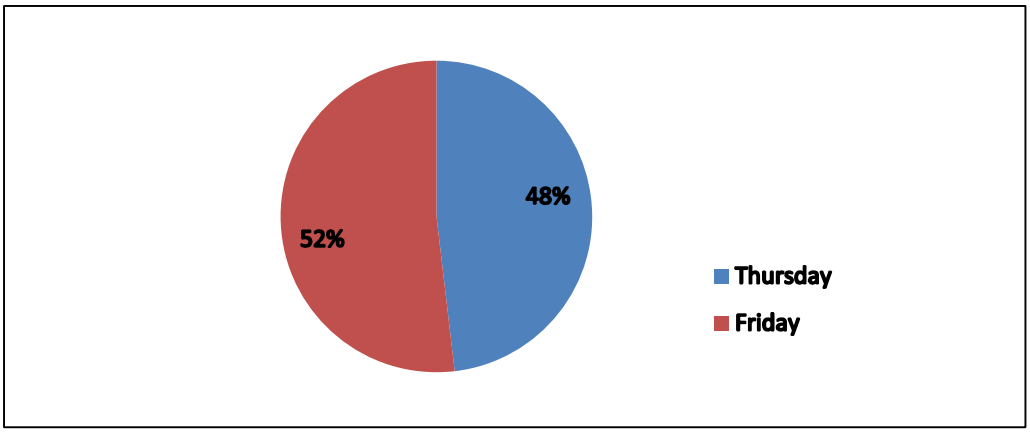
3.4 WEIGHTED DATA ANALYSIS

This section highlights some of the key statistics observed in the MoA survey.

Day of Week

Visitor traffic to the Mall of America was only four percent higher on Friday than on Thursday (**Figure 3.1**) suggesting that the MoA is frequented by respondents almost equally throughout the week.

Figure 3.1 Distribution of Survey Responses by Day of Week



Source: CS Team Analysis of Survey Data

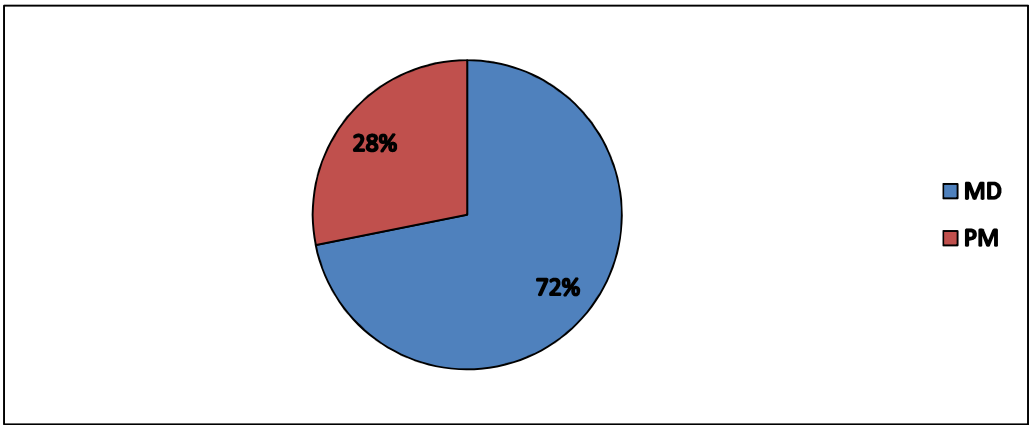
- However, Thursday visitors were significantly more likely to come to the MoA during the PM peak, rather than during the midday period. This is as expected given the work and school constraints that most households experience during the week.
- Two-thirds of all older visitors (aged 65 and above) came to the mall on Friday, while less than half of visitors in the other age groups came on Friday.

- Friday visitors were significantly more likely than Thursday visitors to be frequent mall visitors, and Friday visitors were also more likely to come to the Mall in larger travel parties.
- Thursday visitors were more likely to travel longer distances to the Mall than Friday visitors, and Thursday visitors were significantly more likely than Friday visitors to use a travel mode other than a private auto.

Time Period

Almost three quarters of the visitors to the Mall of America arrived during the midday period, before 4 PM.

Figure 3.2 Distribution of Survey Responses by Time of Day



Source: CS Team Analysis of Survey Data

- The percentage of visitors 65 years old or more that came during the midday period was significantly higher than visitors from the other time periods.
- Frequent mall visitors are significantly more likely than less frequent visitors to come to the Mall during the PM period.
- More than one-third of MSP region residents came to the mall during the PM peak, but less than 10 percent of MSP region visitors came to the mall after 4 pm.
- Similarly, more than one-third of the visitors who came to the mall by themselves came during the PM peak, but only about a quarter of those traveling with others came after 4 pm.
- Thirty percent of the private vehicle trips to the mall occurred after 4 pm, while only 24 percent of trips by other modes occurred after 4 pm.

Party Size

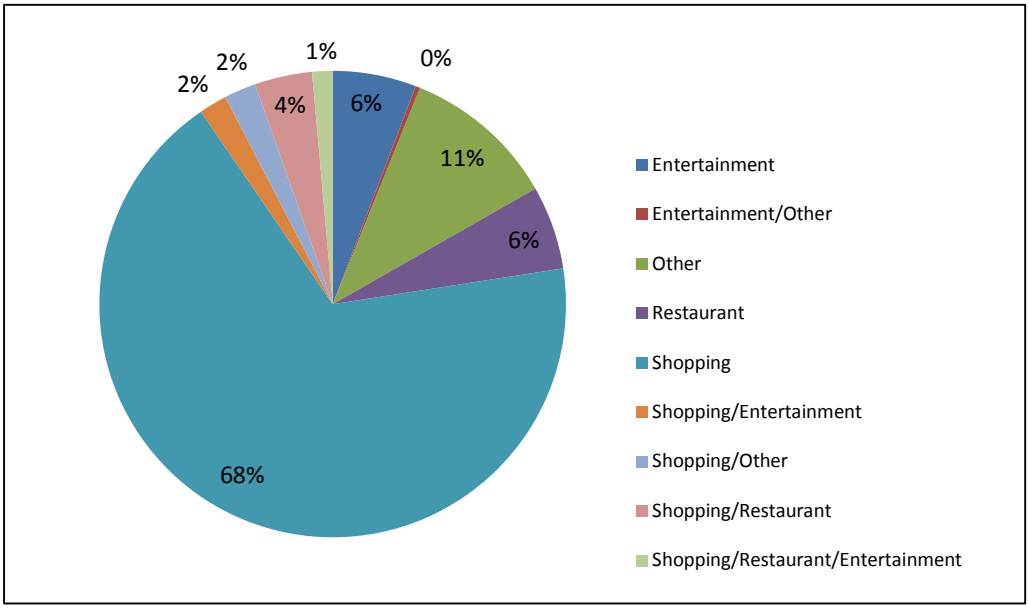
Forty-four percent of mall visits were made by people who had come to the mall by themselves. Twenty-one percent of the visits were made by people who had come to the mall with two or more other people.

- Sixteen percent of the visiting parties included a child or children.
- Larger party sizes and travel parties with children were more likely to have shorter trip durations.

Purpose of Mall Visit

Nearly 90 percent of all visitors came to the Mall of America for a single purpose. Not surprisingly, more than three-quarters of the visitors came to the mall to shop, either solely or in combination with other activities (**Figure 3.3**).

Figure 3.3 Primary Reason to Visit the Mall of America



Source: CS Team Analysis of Survey Data

- Residents from the Minneapolis – St. Paul region were more likely than visitors to come to the Mall of America for non-shopping purposes.
- Visitors traveling alone to the mall were more likely to come to the mall for shopping, and as party sizes increase, the percentage of visitors coming to the mall for non-shopping reasons increases.
- Almost ninety percent of the shopping-purpose visitors came to the mall with the expectation of visiting more than one store. Of the few visitors who came to the mall to go to a single store, only a small majority used

the mall entrance closest to that store. It appears the influence of the specific activities within the mall have only a small effect on mall access.

Residents vs. Out-of-Region Visitors

Seventy percent of Mall of America visits were made by residents of the Minneapolis-St. Paul region while the remaining thirty percent of the visits were made visitors to the region. There were some interesting observations of socio-demographics between visitors and residents.

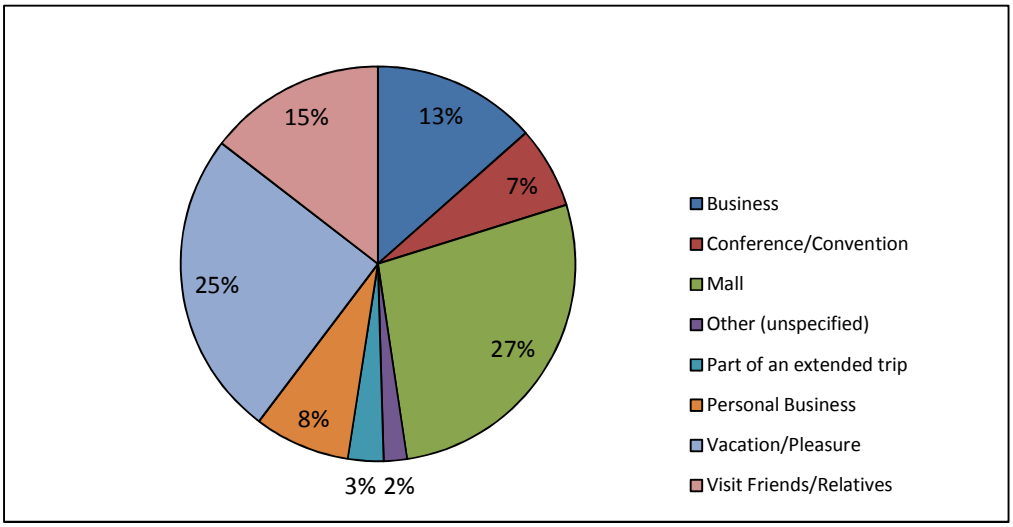
- Out-of-region visitors that came to the MoA were more likely to be male and to be between 31 and 45 years old.
- Of course, residents were far more likely than out-of-region visitors to be more frequent mall visitors, and residents were much more likely to travel by themselves to the mall.
- Residents had significantly longer trips to the MoA than out-of-region visitors. Further, residents had higher shares of private vehicle use to the MoA than visitors.

Out-of-Region Visitors

The MoA is a big attraction in the Metropolitan Council region. In fact, the most common reason that out-of-region visitors had come to the region was to visit the mall (27%).

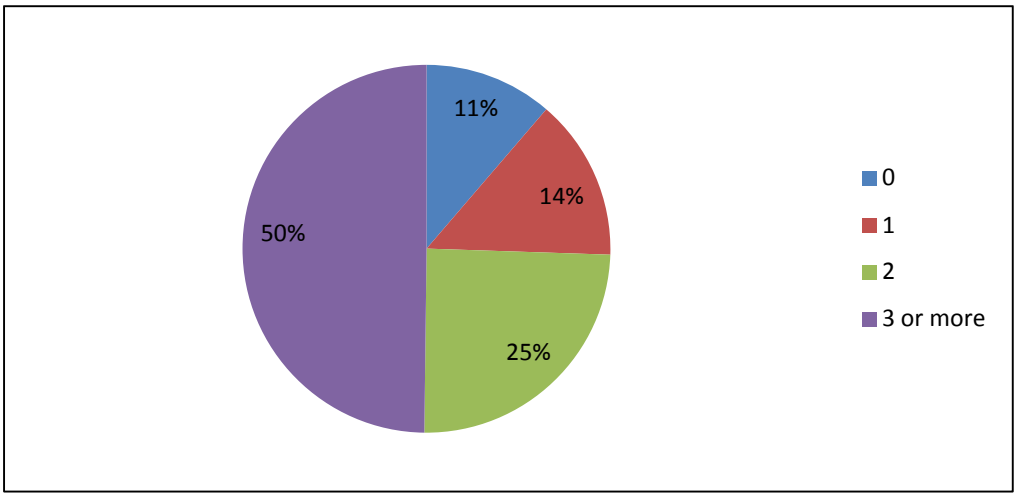
- Only 13 percent of MSP visitors that had come to the mall were in the region for business reasons (**Figure 3.4**). Another 7 percent had come for a convention or conference. The remainder of visitors had come for other non-business purposes.
- One-half of MSP visitors that came to the MoA stayed in the region for three or more nights (**Figure 3.5**). About 11 percent of visitors made day trips to the region.

Figure 3.4 Out-of-Region Visitors' Purpose for being in the Metropolitan Council Area



Source: CS Team Analysis of Survey Data

Figure 3.5 Duration of Stay of Out-of-Region Visitors



Source: CS Team Analysis of Survey Data

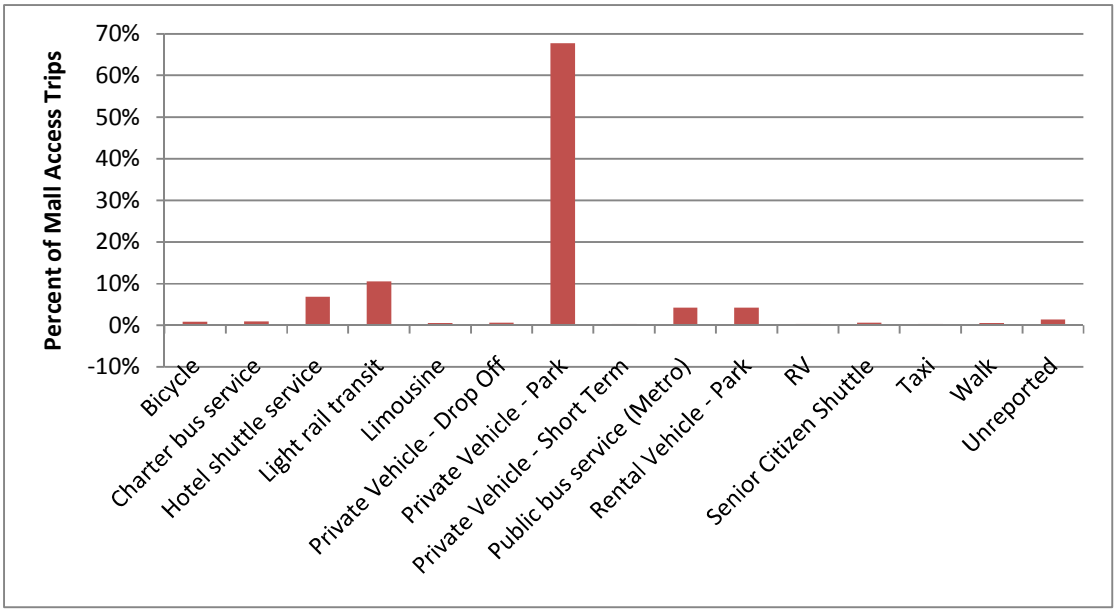
Mode of Transportation

Almost three-quarters of visitors to the Mall of America traveled by private vehicle. As we would expect, visitors from zero-vehicle households were much less likely to arrive by private vehicle.

Nearly a fourth of all visitors reported using transit or non-motorized modes of transportation to reach the MoA. Among these, light rail transit was the most

popular followed by hotel shuttle service catering almost exclusively to out-of-region visitors.

Figure 3.6 Access Mode for Mall of America Trips

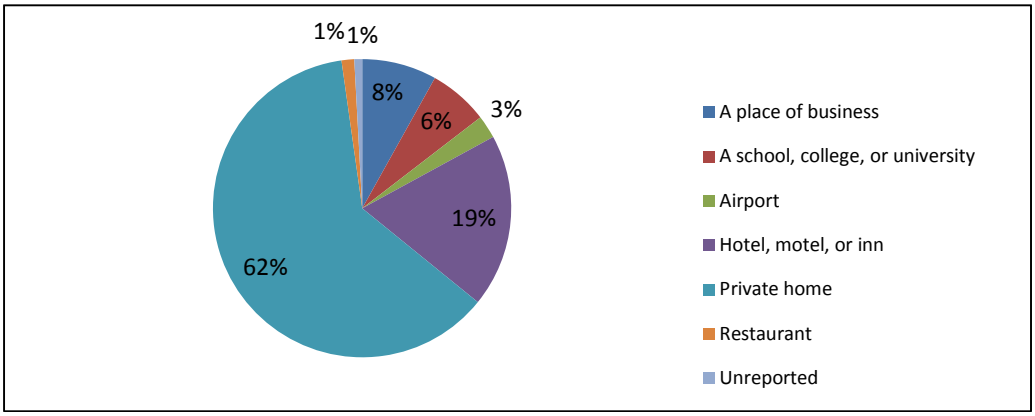


Source: CS Team Analysis of Survey Data

Origins for Mall of America Trips

As described in **Figure 3.7**, more than 60 percent of Mall visitors began their trips to the mall at private homes (70 percent of visitors are residents). An additional 19 percent of visitors began their trip to the mall at a hotel or motel (30 percent of visitors are from out-of-region).

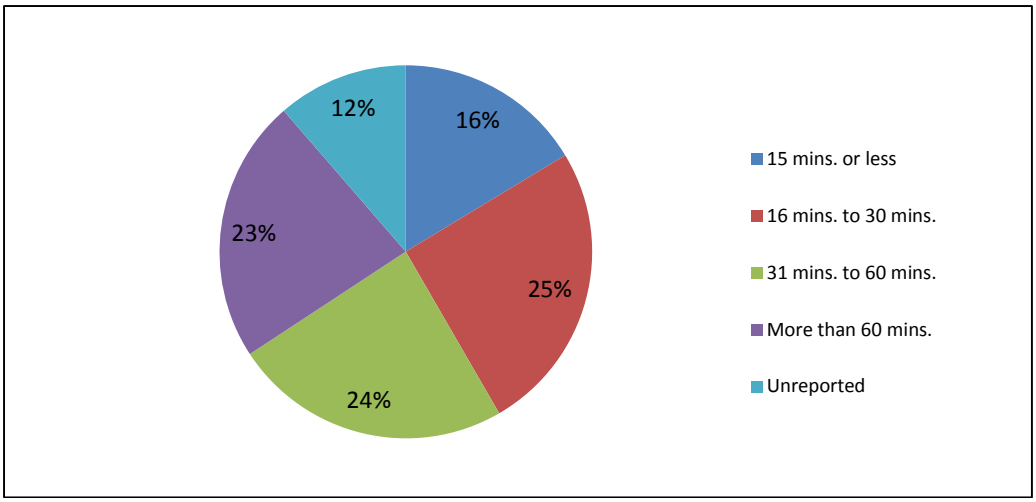
Figure 3.7 Trip Origin for Trips to the Mall of America



Source: CS Team Analysis of Survey Data

Just over a fourth of visitors estimated that their trip to the Mall of America took longer than one hour (**Figure 3.8**). Nineteen percent of visitors said that their trip to the mall took less than 15 minutes. Visitors less than 65 years old tended to have longer trips to the mall than those who were 65 or over.

Figure 3.8 Travel Time to Reach the Mall of America



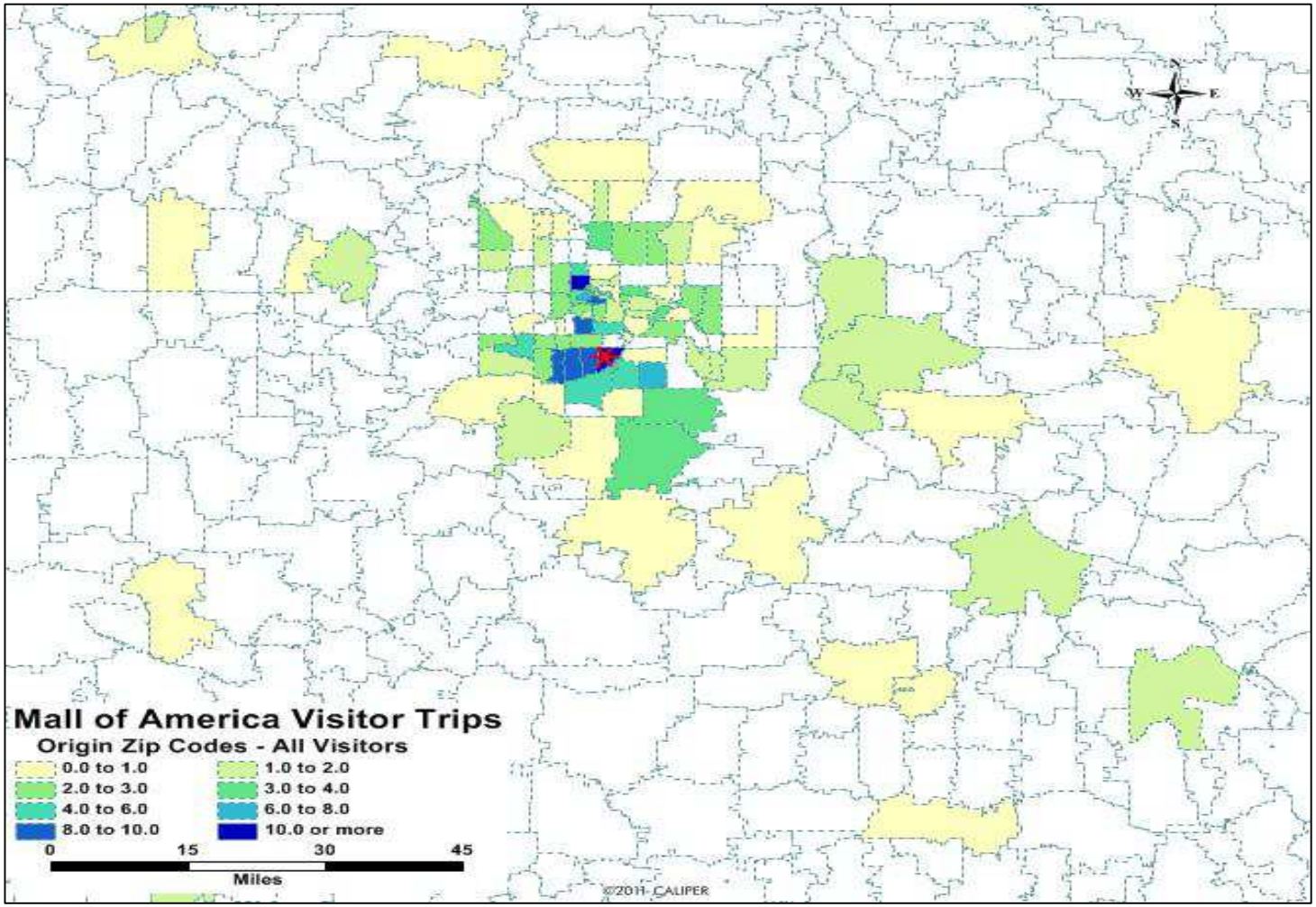
Source: CS Team Analysis of Survey Data

Visitors who traveled 15 minutes or less to the Mall of America were more likely to have more household vehicles and to have larger party sizes. In addition, these visitors were more likely to come to the mall more frequently and were more likely to travel to the mall by private vehicle.

F**igure 3.9** provide an snapshot of the zip codes for trip origins for all Mall of America survey respondents. **Figure 3.10** focuses only on residents, while **Figure 3.11** focuses on out-of-region visitors.

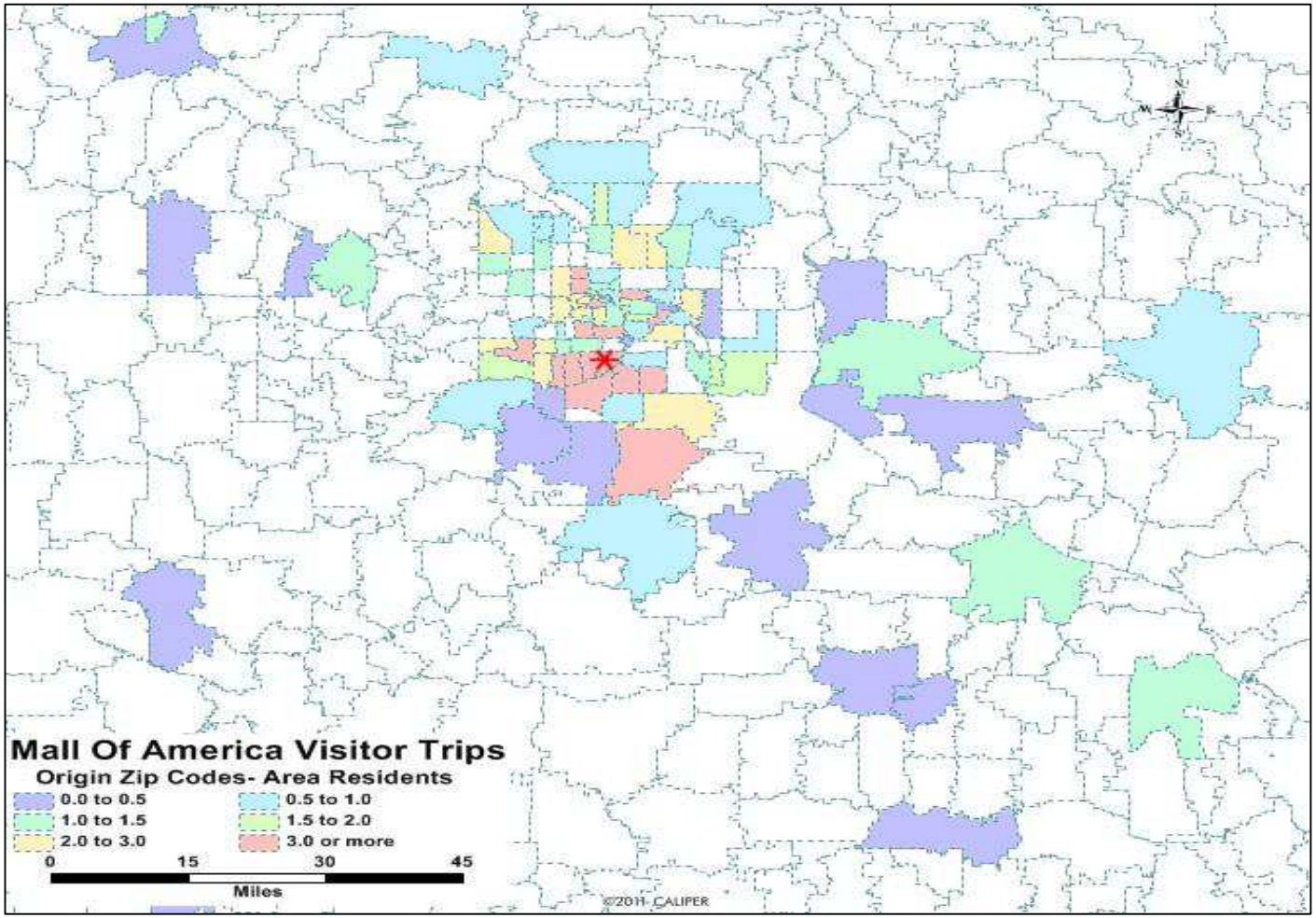
The maps indicate that MoA trips begin throughout the Twin Cities region, but the primary concentration of trip origins are in the zip code areas closest to the mall.

Figure 3.9 Origin Location of all Mall of America Visitors



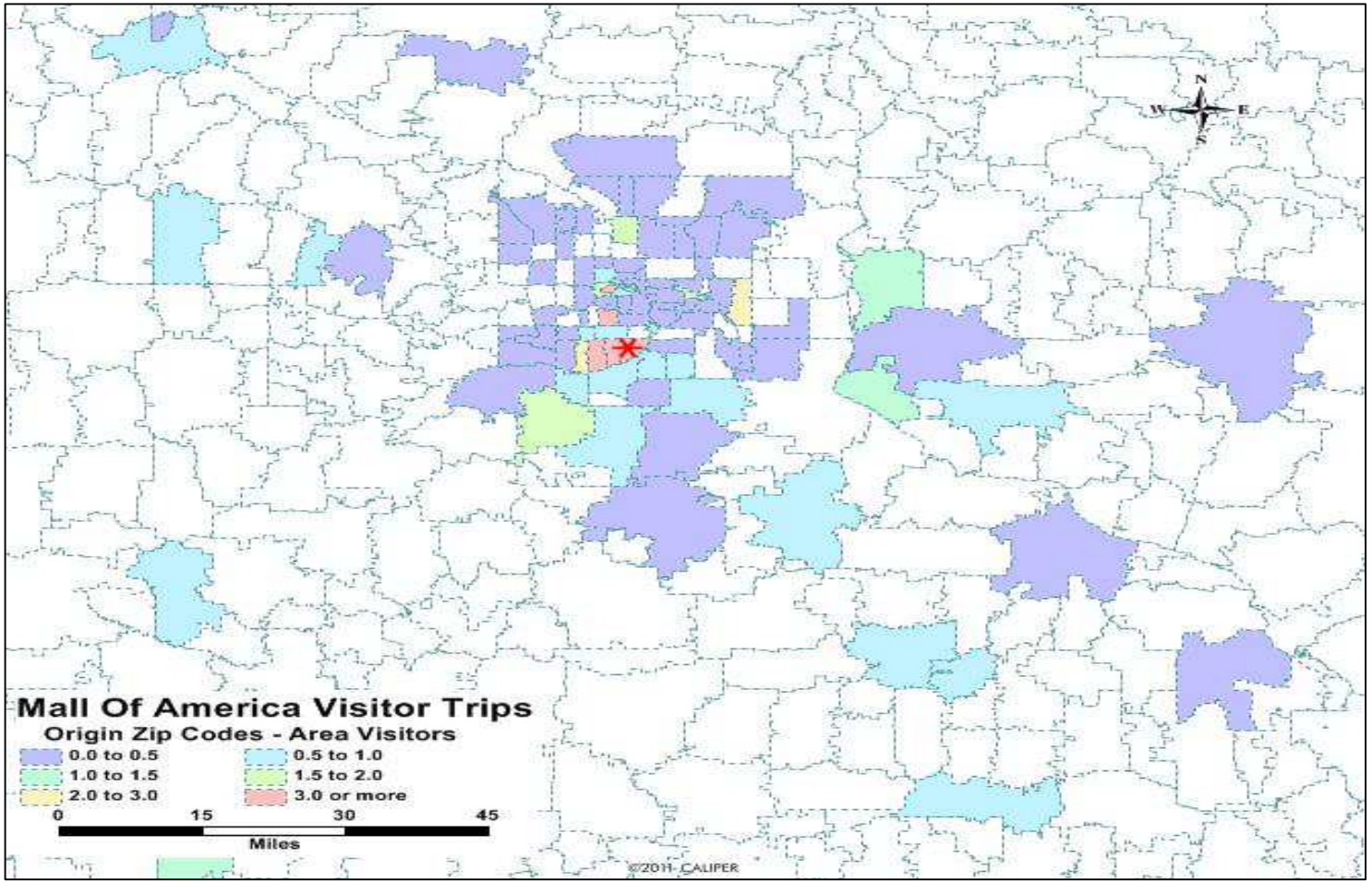
Source: CS Team Analysis of Survey Data

Figure 3.10 Origin Location of Resident Visitors at Mall of America



Source: CS Team Analysis of Survey Data

Figure 3.11 Origin Location of Out-of-Region Visitors at Mall of America



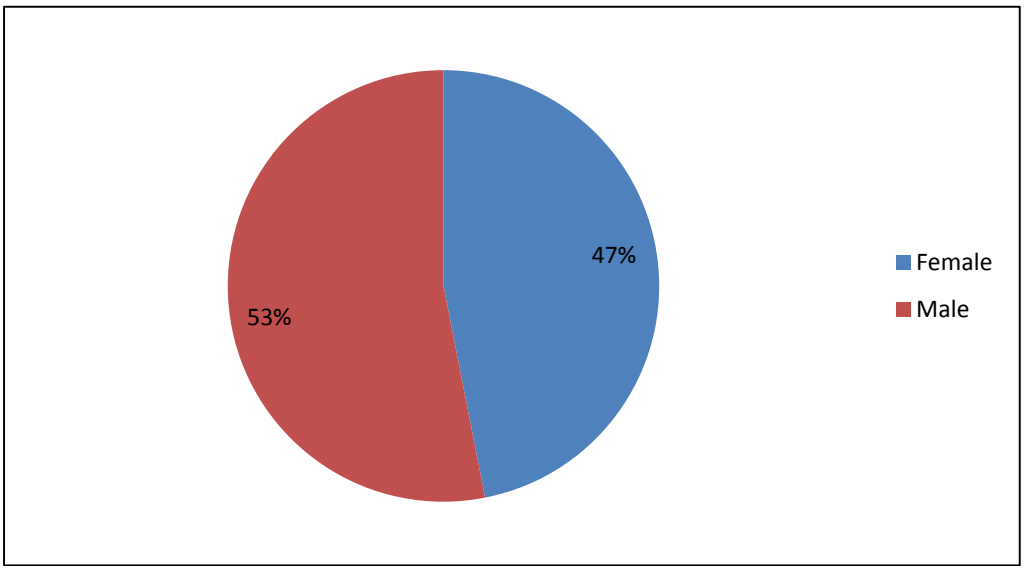
Source: CS Team Analysis of Survey Data

Demographics

The survey collected a range of demographic information about Mall of America visitors. Some key statistics are discussed below. A detailed frequency distribution of the survey data is available in the appendix of this report.

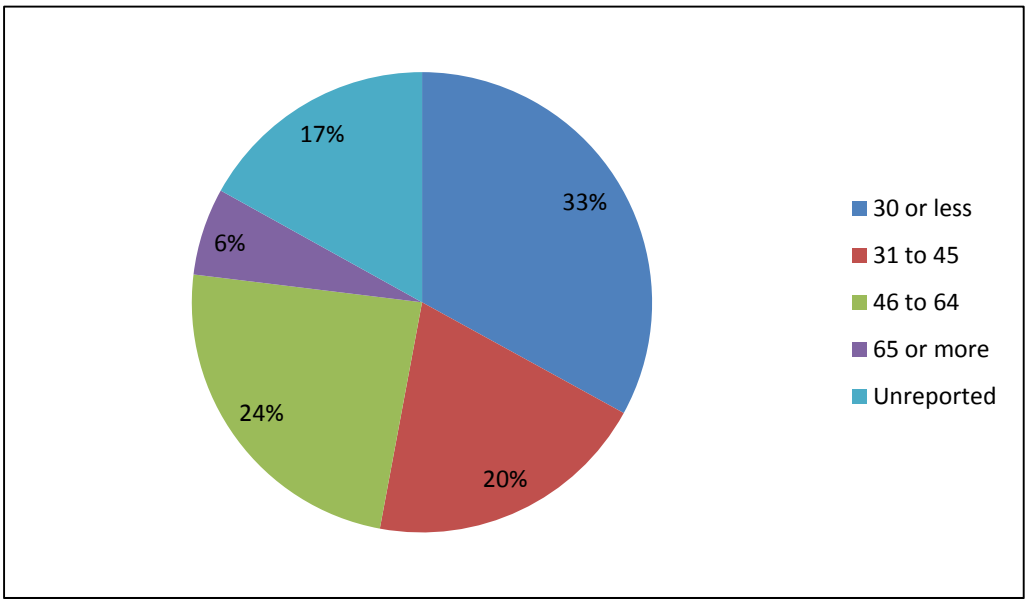
- There were slightly more men than women that visited the MoA during the survey period (**Figure 3.12**).
- Nearly a third of all visitors were under 30 years. Respondents between ages 30 and 64 comprised of almost 44 percent of all visitors (**Figure 3.13**).
- A significant proportion of visitors belonged to either one or two member households (47 percent). Households with three or four members were almost equally represented with about 14 percent each (**Figure 3.14**).
- Nearly 50 percent of all respondents belong to households with no children (**Figure 3.15**).
- Only 12 percent of respondents reported belonging to households with no workers. Of these, nearly 10 percent of respondents belong to retired households (**Figure 3.16 – 3.17**).
- Only 7 percent of all respondents reported owning no automobile. Over 50 percent of all respondents belong to household that own at least two automobiles (**Figure 3.18**)

Figure 3.12 Gender of Mall of America Visitors



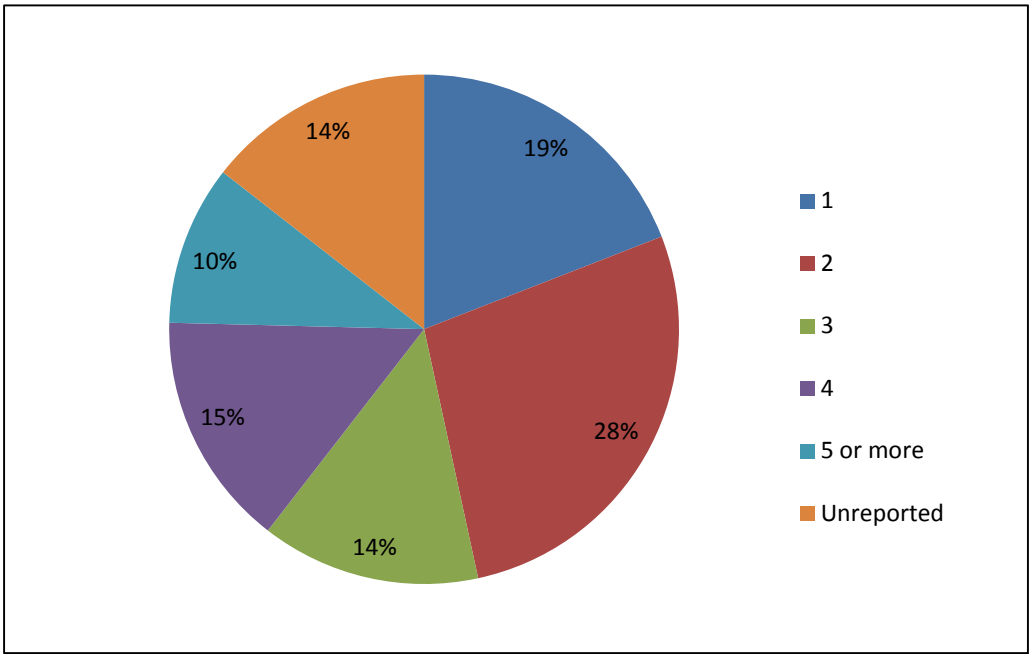
Source: CS Team Analysis of Survey Data

Figure 3.13 Age Distribution of Mall of America Visitors



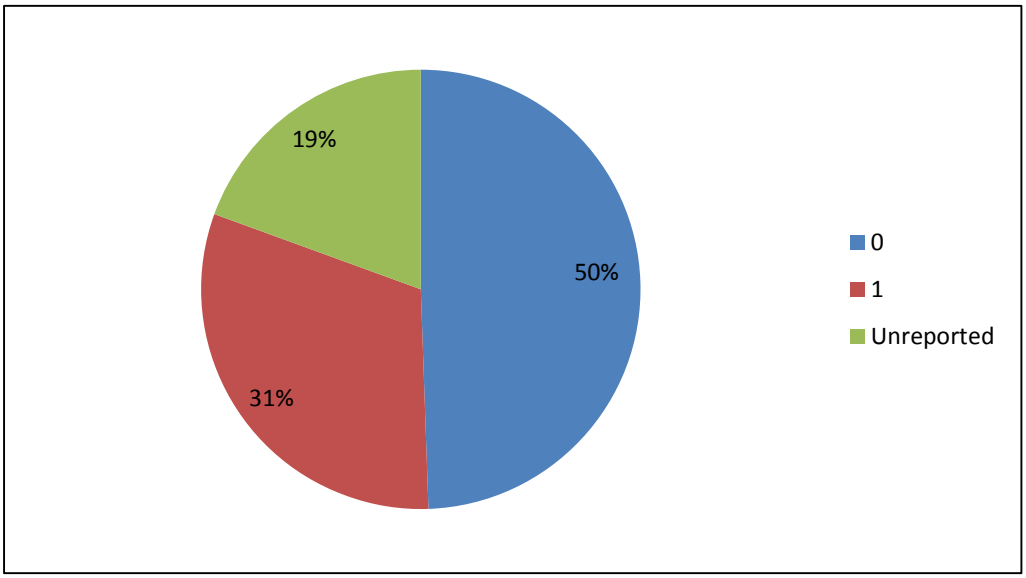
Source: CS Team Analysis of Survey Data

Figure 3.14 Household Size of Mall of America Visitors



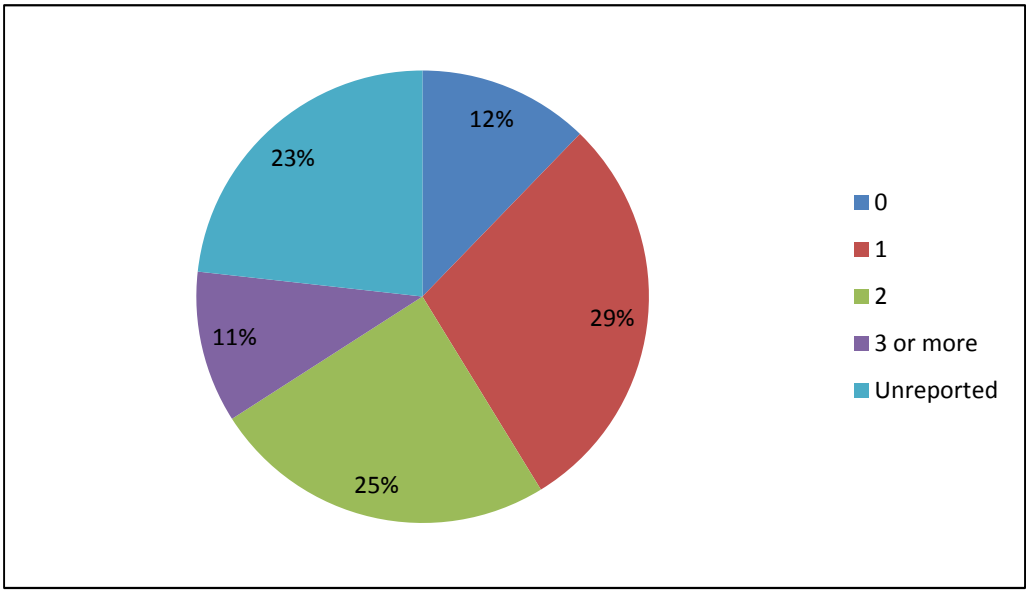
Source: CS Team Analysis of Survey Data

Figure 3.15 Number of Children in a Household for Mall of America Visitors



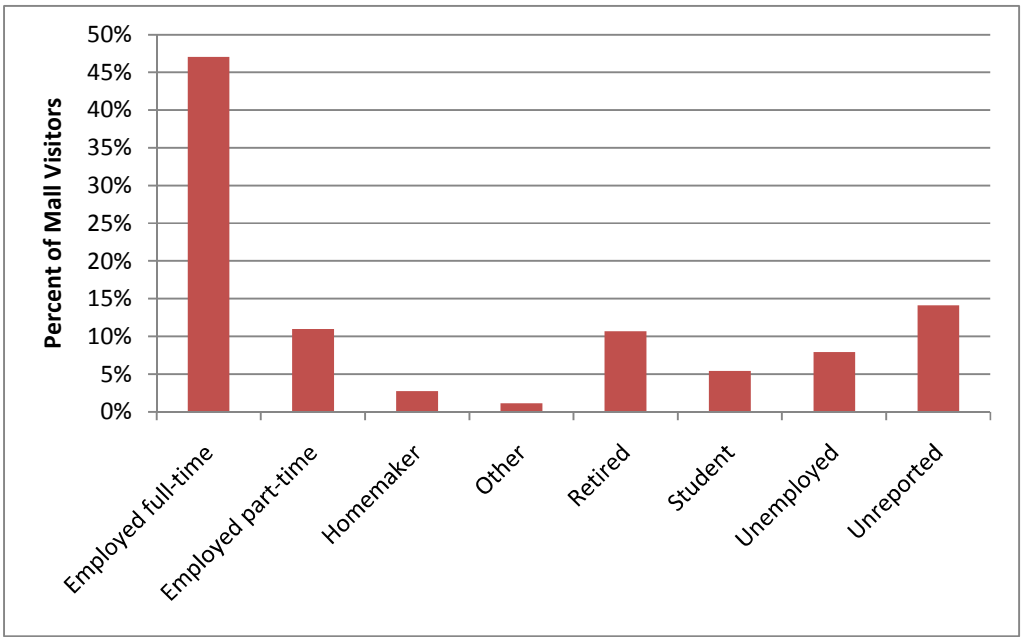
Source: CS Team Analysis of Survey Data

Figure 3.16 Number of Workers in a Household for Mall of America Visitors



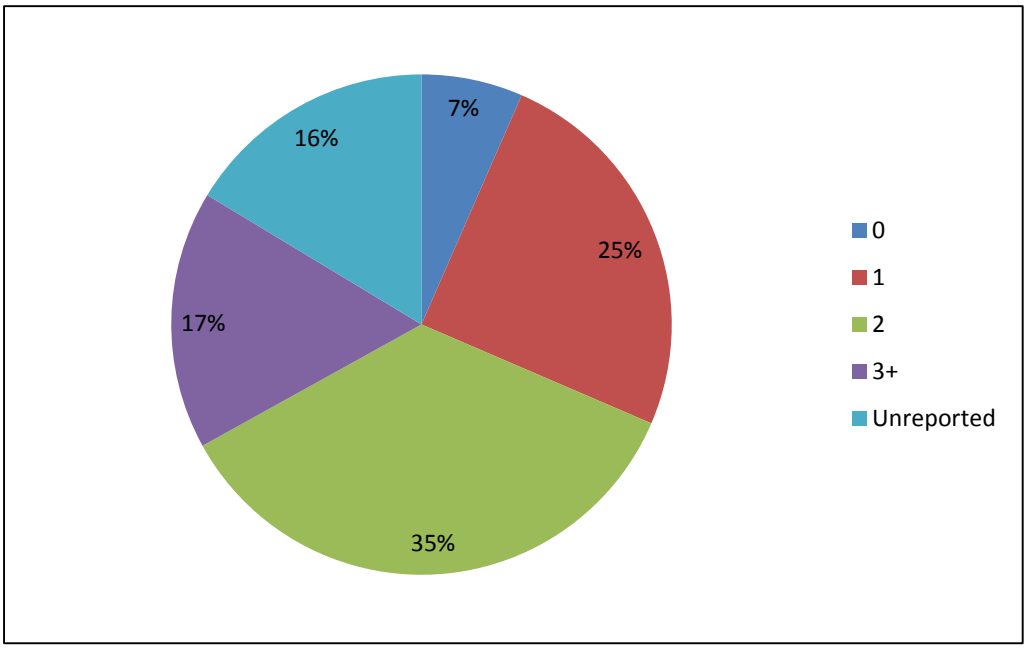
Source: CS Team Analysis of Survey Data

Figure 3.17 Employment Status of Mall of America Visitors



Source: CS Team Analysis of Survey Data

Figure 3.18 Auto Ownership of Mall of America Visitors



Source: CS Team Analysis of Survey Data

A. Survey Statistics

Table A.1 Purpose for Visiting Mall of America (Weighted)

Purpose	Frequency	Percentage
Shop	209	75%
Restaurant	30	11%
Entertainment	24	9%
Event	1	0%
Fitness	8	3%
Meeting	4	1%
Class	1	0%
Focus Group	0	0%
Mall Tour	5	2%

Source: CS Team Analysis of Survey Data

Table A.2 Number of Vehicles in the Household (Weighted)

Auto Ownership	Frequency	Percentage
0 vehicles	18	8%
1 vehicles	67	30%
2 vehicles	96	42%
3 vehicles	26	11%
4 vehicles	12	5%
5 vehicles	7	3%

Source: CS Team Analysis of Survey Data

Table A.3 Purpose of Trip (Weighted)

	Frequency	Percentage
Shop	209	78%
Restaurant	30	11%
Entertainment	24	9%
Event	1	0%
Fitness	8	3%
Meeting	4	1%
Class	1	0%
Focus Group	0	0%
Mall Tour	5	2%

Source: CS Team Analysis of Survey Data

Table A.4 Number of Vehicles in Household(Weighted)

	Frequency	Percentage

0 vehicles	18	7%
1 vehicles	67	25%
2 vehicles	96	35%
3 vehicles	26	9%
4 vehicles	12	4%
5 vehicles	7	3%
Did not report	44	16%

Source: CS Team Analysis of Survey Data

Table A.5 Day of Visit (Weighted)

	Frequency	Percentage
Friday	140	52%
Thursday	130	48%

Source: CS Team Analysis of Survey Data

Table A.6 Time of Day of Visit (Weighted)

	Frequency	Percentage
Mid-day	194	72%
Evening/Night	76	28%

Source: CS Team Analysis of Survey Data

Table A.7 Interview Location (Weighted)

	Frequency	Percentage
First floor east	82	30%
First floor north	52	19%
Second floor east	36	13%
Second floor west	74	27%
Third floor east	10	4%
Third floor west	16	6%

Source: CS Team Analysis of Survey Data

Table A.8 Interview Location and Time(Weighted)

	Frequency	Percentage
First floor east, mid-day	50	18%
First floor east, evening	32	12%
Second and third floor east	46	17%
First floor north, mid-day	38	14%
First floor north, evening	14	5%
West, mid-day	62	23%
West, evening	28	11%

Source: CS Team Analysis of Survey Data

Table A.9 Employment Status (Weighted)

	Frequency	Percentage
Employed full-time	127	47%
Employed part-time	30	11%
Homemaker	7	3%
Other (please specify)	3	1%
Retired	29	11%
Student	15	5%
Unemployed	21	8%

Source: CS Team Analysis of Survey Data

Table A.10 Mode of Transportation (Weighted)

	Frequency	Percentage
Bicycle	2	1%
Charter bus service	3	1%
Hotel shuttle service	18	7%
Light rail transit	29	11%
Limousine	2	1%
Private Vehicle - Drop Off	2	1%
Private Vehicle - Park	183	68%
Private Vehicle - Short Term	1	0%
Public bus service (Metro)	11	4%
RV	1	0%
Rental Vehicle - Park	11	4%
Senior Citizen Shuttle	2	1%
Taxi	1	0%
Walk	2	1%
Did not report	4	1%

Source: CS Team Analysis of Survey Data

Table A.11 Mode Type (Weighted)

	Frequency	Percentage
Private vehicle	198	73%
Public / Non-motorized	69	25%
Unknown	3	1%
Did not report	1	0%
Private vehicle	198	73%

Source: CS Team Analysis of Survey Data

Table A.12 Parking Lot (Weighted)

	Frequency	Percentage
East Ramp	77	29%
North Lot	16	6%
Other	2	1%
South Lot	1	0%

West Ramp	95	35%
Did not report/use	78	29%

Source: CS Team Analysis of Survey Data

Table A.13 Light Rail Station Used (Weighted)

	Frequency	Percentage
28th Avenue Station	1	3%
38th Street Station	2	8%
46th Street Station	4	13%
Cedar - Riverside Station	1	5%
Downtown East/Metrodome Station	4	16%
Franklin Avenue Station	1	5%
Government Plaza Station	1	5%
Lake Street/Midtown Station	1	3%
Nicollet Mall Station	5	19%
Target Field Station	4	16%
Warehouse District/Hennepin Avenue Station	2	8%
Did not respond	1	5%
Did not use LRT	242	

Source: CS Team Analysis of Survey Data

Table A.14 Light Rail Access Mode (Weighted)

	Frequency	Percentage
Bicycle	1	2%
Dropped off by a private automobile	1	2%
Other (please specify)	1	2%
Rode a bus	7	25%
Walked	19	68%
Did not use LRT	242	

Source: CS Team Analysis of Survey Data

Table A.15 Bus Access Mode (Weighted)

	Frequency	Percentage
Dropped off by a private automobile	1	10%
Other (please specify)	1	6%
Rode a different bus	1	5%
Walked	11	79%
Did not use	256	

Source: CS Team Analysis of Survey Data

Table A.16 Visits to Mall of America in Past 12 Months (Weighted)

	Frequency	Percentage
1 to 3	80	30%
4 to 10	65	24%

More than 10	79	29%
Did not report	46	17%

Source: CS Team Analysis of Survey Data

Table A.17 Age Distribution (Weighted)

	Frequency	Percentage
30 or less	89	33%
31 to 45	54	20%
46 to 64	65	24%
65 or more	17	6%
Unreported	46	17%

Source: CS Team Analysis of Survey Data

Table A.18 Gender Distribution (Weighted)

	Frequency	Percentage
Female	112	41%
Male	127	47%
Did not report	32	12%

Source: CS Team Analysis of Survey Data

Table A.19 Household Size (Weighted)

	Frequency	Percentage
1 person	52	19%
2 people	74	28%
3 people	38	14%
4 or more people	40	15%
Did not report	66	25%

Source: CS Team Analysis of Survey Data

Table A.20 People Who Visited More than One Store (Weighted)

	Frequency	Percentage
Multiple Stores	162	60%
One Store	21	8%
Did not report	87	32%

Source: CS Team Analysis of Survey Data

Table A.21 Residents and Visitors (Weighted)

	Frequency	Percentage
Resident	190	70%
Visitor	80	30%

Source: CS Team Analysis of Survey Data

Table A.22 Days Visiting Minneapolis/St. Paul (Weighted)

	Frequency	Percentage
0 to 1 day	20	8%
2 to 4 days	47	17%
5 or more days	13	5%
Did not respond	190	70%

Source: CS Team Analysis of Survey Data

Table A.23 Purpose for Visiting Minneapolis/St. Paul (Weighted)

	Frequency	Percentage
Business	11	13%
Conference/Convention	5	7%
Mall	22	28%
Other (unspecified)	2	2%
Part of an extended trip	2	3%
Personal Business	6	8%
Vacation/Pleasure	20	25%
Visit Friends/Relatives	12	15%

Source: CS Team Analysis of Survey Data

Table A.24 Size of Party at MoA (Weighted)

	Frequency	Percentage
1 person	119	44%
2 people	94	35%
3 or more people	58	21%

Source: CS Team Analysis of Survey Data

Table A.25 Number of Children in Party (Weighted)

	Frequency	Percentage
0 children	225	83%
1 child	26	10%
2 children	12	5%
3 or more children	5	2%
Did not report	1	1%

Source: CS Team Analysis of Survey Data

Table A.26 Origin Type of Location (Weighted)

	Frequency	Percentage
A place of business	22	8%
A school, college, or university	17	6%
Airport	7	2%
Hotel, motel, or inn	51	19%
Private home	167	62%

Restaurant	4	1%
Unreported	2	1%

Source: CS Team Analysis of Survey Data

Table A.27 Origin State(Weighted)

	Frequency	Percentage
IA	1	0%
IL	1	0%
MB	1	0%
MN	240	89%
ND	5	2%
SD	1	0%
VA	1	0%
WI	7	3%
Did not report	14	5%

Source: CS Team Analysis of Survey Data

Table A.28 Duration of Trip to Mall of America (Weighted)

	Frequency	Percentage
15 mins. or less	44	16%
16 mins. to 30 mins.	68	25%
31 mins. to 60 mins.	65	24%
More than 60 mins.	62	23%
Did not report	31	11%

Source: CS Team Analysis of Survey Data

APPENDIX I-H:
Trip Generation

TABLE 1A - THE GRAHAM COMPANIES - YEAR 2020 DEVELOPMENT PROGRAM TRIP GENERATION								
LAND USE	**UNITS**	**ITE LUC**	**ITE 9TH EDITION**	**DAILY**	**% IN**	**TRIPS IN**	**% OUT**	**TRIPS OUT**
APARTMENTS	500 DU	220	T = 6.06 (X) + 123.56	3,154	50%	1,577	50%	1,577
RETAIL	150,000 SQ. FT.	820	Ln (T) = 0.65 Ln (X) + 5.83	8,839	50%	4,420	50%	4,419
BUSINESS PARK	250,000 SQ. FT.	770	T = 10.62 (X) + 715.61	3,371	50%	1,685	50%	1,686
GROSS DRIVEWAY TRIPS				**15,363**	50%	**7,682**	50%	**7,681**
INTERNALIZATION	**See Note 1**	**15.97%**	Internalization - See Table 1B	2,453	50%	1,227	50%	1,226
DIVERTED TRIPS TO RETAIL USE	**See Note 2**	**35.00%**	Ln (TP) = -0.29 Ln (X) + 5.00	2,600	50%	1,300	50%	1,300
NET EXTERNAL TRIPS				**10,310**	50%	**5,155**	50%	**5,155**
LAND USE	**UNITS**	**ITE LUC**	**ITE 9TH EDITION**	**AM TRIPS**	**% IN**	**TRIPS IN**	**% OUT**	**TRIPS OUT**
APARTMENTS	500 DU	220	T = 0.49 (X) + 3.73	249	20%	50	80%	199
RETAIL	150,000 SQ. FT.	820	Ln (T) = 0.61 Ln (X) + 2.24	200	62%	124	38%	76
BUSINESS PARK	250,000 SQ. FT.	770	Ln (T) = 0.97 Ln (X) + 0.49	346	85%	294	15%	52
GROSS DRIVEWAY TRIPS				**795**	59%	**468**	41%	**327**
INTERNALIZATION	**See Note 1**	**8.40%**	Internalization - See Table 1C	67	59%	39	41%	28
DIVERTED TRIPS TO RETAIL USE	**See Note 2**	**35.00%**	Ln (TP) = -0.29 Ln (X) + 5.00	64	62%	40	38%	24
NET EXTERNAL TRIPS				**664**	59%	**389**	41%	**275**
LAND USE	**UNITS**	**ITE LUC**	**ITE 9TH EDITION**	**PM TRIPS**	**% IN**	**TRIPS IN**	**% OUT**	**TRIPS OUT**
APARTMENTS	500 DU	220	T = 0.55 (X) + 17.65	293	65%	190	35%	103
RETAIL	150,000 SQ. FT.	820	Ln (T) = 0.67 Ln (X) + 3.31	786	48%	377	52%	409
BUSINESS PARK	250,000 SQ. FT.	770	Ln (T) = 0.90 Ln (X) + 0.85	337	26%	88	74%	249
GROSS DRIVEWAY TRIPS				**1,416**	46%	**655**	54%	**761**
INTERNALIZATION	**See Note 1**	**24.38%**	Internalization - See Table 1D	345	46%	159	54%	186
DIVERTED TRIPS TO RETAIL USE	**See Note 2**	**35.00%**	Ln (TP) = -0.29 Ln (X) + 5.00	208	48%	100	52%	108
NET EXTERNAL TRIPS				**863**	46%	**396**	54%	**467**

Cathy Sweetapple & Associates 3/11/2016

Note 1 - See attached Tables 1B, 1C and 1D for the Daily, AM Peak Hour and PM Peak Hour Internalization calculations provided using the ITE Multi-Use Spreadsheets and the internalization factors from the ITE Trip Generation Handbook. The Daily internalization Factors are found in Tables 7.1 and 7.2 from the ITE Trip Generation Handbook 2nd Edition while the updated AM and PM Peak Hour factors are found in Tables 6.1 and 6.2 from the ITE Trip Generation Handbook 3rd Edition.

Note 2 - Diverted Trips to Retail Use for the Year 2020 proposed development program is Limited to 35% of the External Retail Trips (calculated using the ITE Pass-by Formula) and is further limited to 10% of the Adjacent Street Traffic calculated using the closest adjacent FDOT Count Stations 2518 on Miami Gardens Drive and 7048 on NW 138 Street. See Table 1E for the calculations to show compliance with the 10% threshold.

Analyst	**Sweetapple**
Date	**1/24/2016**
Project	**CDMP No. 2**
Timeframe	**Daily**

TABLE 1B - DAILY INTERNALIZATION - THE GRAHAM COMPANIES - 2020
MULTI-USE DEVELOPMENT TRIP GENERATION AND INTERNAL CAPTURE SUMMARY

LAND USE A		**Residential Apts**	
ITE LU Code		**220**	
Size		**500 DU**	
	Total	Internal	External
Enter	1,577	520	1,057
Exit	1,577	398	1,179
Total	3,154	918	2,236
%	100%	29%	71%

Exit to External: 1,179

Enter from External: 1,057

38% 599 Demand

398 Balanced

9% 398 / 0

33% 520 Demand

486 Balanced

11% 486 / 0

0% 0 Demand

0 Balanced

3% 47 Demand

34 Balanced

2% 34 Demand

0% 0 Demand

LAND USE B		**Retail**	
ITE LU Code		**820**	
Size		**150,000 SF**	
	Total	Internal	External
Enter	4,420	575	3,845
Exit	4,419	619	3,800
Total	8,839	1,193	7,646
%	100%	14%	86%

Exit to External: 3,800

Enter from External: 3,845

4% 177 Demand

177 Balanced

22% 371 Demand

3% 133 Demand

133 Balanced

15% 253 Demand

LAND USE C		**Business Park**	
ITE LU Code		**770**	
Size		**250,000 SF**	
	Total	Internal	External
Enter	1,685	133	1,552
Exit	1,686	211	1,476
Total	3,371	343	3,028
%	100%	10%	90%

Enter to External: 1,552

Exit from External: 1,476

NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT					
	LAND USE A	**LAND USE B**	**LAND USE C**	**TOTAL**	
Enter	1,057	3,845	1,552	6,455	
Exit	1,179	3,800	1,476	6,455	
Total	2,236	7,646	3,028	12,910	**INTERNAL CAPTURE**
Single Use	**3,154**	**8,839**	**3,371**	**15,364**	**15.97%**
	Residential	**Retail**	**Business Park**		

Note - The Internal Capture Rates have been obtained from Tables 7.1 and 7.2 from the ITE Trip Generation Handbook, 2nd Edition.

Table 1B
Daily Internalization
November 2015 CDMP Amendment Application No. 2

Analyst	**Sweetapple**
Date	**1/24/2016**
Project	**CDMP No. 2**
Timeframe	**AM Peak Hr**

TABLE 1C - AM PEAK HOUR INTERNALIZATION - THE GRAHAM COMPANIES - 2020
MULTI-USE DEVELOPMENT TRIP GENERATION AND INTERNAL CAPTURE SUMMARY

LAND USE A	**Residential Apts**		
ITE LU Code	**220**		
Size	**500 DU**		
	Total	Internal	External
Enter	50	1	49
Exit	199	6	193
Total	249	7	242
%	100%	3%	97%

Exit to External: 193

Enter from External: 49

LAND USE B	**Retail**		
ITE LU Code	**820**		
Size	**100,000 SF**		
	Total	Internal	External
Enter	124	17	107
Exit	76	13	63
Total	200	29	171
%	100%	15%	85%

Exit to External: 63

Enter from External: 107

LAND USE C	**Business Park**		
ITE LU Code	**770**		
Size	**250,000 SF**		
	Total	Internal	External
Enter	294	16	278
Exit	52	15	37
Total	346	30	316
%	100%	9%	91%

Enter to External: 278

Exit from External: 37

1%	2	Demand		
2%	1	Demand	2%	4 Demand
0%	0	Demand		
2	Balanced			
1	Balanced			
4	Balanced			
0	Balanced			
17%	21	0		
14%	11	0		
3%	9	Demand		
1%	1	Demand		
32%	40	Demand	15 Balanced	28% 15 Demand
29%	22	Demand	12 Balanced	4% 12 Demand

NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT					
	LAND USE A	**LAND USE B**	**LAND USE C**	**TOTAL**	
Enter	49	107	278	435	
Exit	193	63	37	294	
Total	242	171	316	728	**INTERNAL CAPTURE**
Single Use	**249**	**200**	**346**	**795**	**8.40%**
	Residential	**Retail**	**Business Park**		

Note - The Internal Capture Rates have been obtained from Tables 6.1 and 6.2 from the ITE Trip Generation Handbook, 3rd Edition.

Table 1C
AM Peak Hour Internalization
November 2015 CDMP Amendment Application No. 2

Analyst	**Sweetapple**
Date	**1/24/2016**
Project	**CDMP No. 2**
Timeframe	**PM Peak Hr**

TABLE 1D - PM PEAK HOUR INTERNALIZATION - THE GRAHAM COMPANIES - 2020
MULTI-USE DEVELOPMENT TRIP GENERATION AND INTERNAL CAPTURE SUMMARY

LAND USE A	**Residential Apts**		
ITE LU Code	**220**		
Size	**500 DU**		
	Total	Internal	External
Enter	190	92	98
Exit	103	42	61
Total	293	134	159
%	100%	46%	54%

Exit to External: 61

Enter from External: 98

42% 43 Demand

38 Balanced

10% 38 / 0

46% 87 Demand

87 Balanced

26% 106 / 0

4% 4 Demand

4 Balanced

57% 50 Demand

4% 8 Demand

5 Balanced

2% 5 Demand

LAND USE B	**Retail**		
ITE LU Code	**820**		
Size	**100,000 SF**		
	Total	Internal	External
Enter	377	68	309
Exit	409	96	313
Total	786	164	623
%	100%	21%	79%

Exit to External: 313

Enter from External: 309

8% 30 Demand — 30 Balanced — **20%** 50 Demand

2% 8 Demand — 8 Balanced — **31%** 27 Demand

LAND USE C	**Business Park**		
ITE LU Code	**770**		
Size	**250,000 SF**		
	Total	Internal	External
Enter	88	12	76
Exit	249	35	214
Total	337	48	290
%	100%	14%	86%

Enter to External: 76

Exit from External: 214

NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT					
	LAND USE A	**LAND USE B**	**LAND USE C**	**TOTAL**	
Enter	98	309	76	482	
Exit	61	313	214	588	
Total	159	623	290	1,071	**INTERNAL CAPTURE**
Single Use	**293**	**786**	**337**	**1,416**	**24.38%**
	Residential	**Retail**	**Business Park**		

Note - The Internal Capture Rates have been obtained from Tables 6.1 and 6.2 from the ITE Trip Generation Handbook, 3rd Edition.

Table 1D
PM Peak Hour Internalization
November 2015 CDMP Amendment Application No. 2

Table 1E - 10% of Adjacent Street Traffic Volumes from FDOT Count Stations 2518 and 7048

3/11/2016

Count Station	Count Dates	Count Location	Timeframe	Day 1	Day 2	Day 3	3 Day Ave	2020 Trip Generation 35% Diverted / Pass-by Trips	2040 Trip Generation 20% Diverted / Pass-by Trips	10% Limit	Diverted/Pass-by Trips are limited to no more than 10% of Adjacent Street Traffic - See Below:
FDOT-2518	6/17-19/2014	**SR-860 - Miami Gardens Dr**	Daily	40398	40433	40165	**40332**				
		800 feet W of NW 87 Ave	10% of Daily	4040	4043	4017	**4033**	**2,600**	**5,376**	**6,046**	Daily Diverted /Pass-by is < 10% of Adjacent Street Traffic
			AM PK HR	3174	3122	3049	**3115**				
			10% of AM Peak	317	312	305	**312**	**64**	**117**	**472**	AM Diverted /Pass-by is < 10% of Adjacent Street Traffic
			PM PK HR	3666	3531	3570	**3589**				
			10% of PM Peak	367	353	357	**359**	**208**	**457**	**540**	PM Diverted /Pass-by is < 10% of Adjacent Street Traffic
Count Station	**Count Dates**	**Count Location**	**Timeframe**	**Day 1**	**Day 2**	**Day 3**	**Average**				
FDOT-7048	10/22-23/2014	**NW 138 Street**	Daily	20211	20046	0	**20129**				
		0.5 miles West of NW 97 Ave	10% of Daily	2021	2005	0	**2013**				
			AM PK HR	1718	1493	0	**1606**				
			10% of AM Peak	172	149	0	**161**				
			PM PK HR	1753	1866	0	**1810**				
			10% of PM Peak	175	187	0	**181**				
		Stations 2518 + 7048									
			10% of Daily			**Daily**	**6046**				
			10% of AM Peak			**AM PK HR**	**472**				
			10% of PM Peak			**PM PK HR**	**540**				

Cathy Sweetapple & Associates

COUNTY: 87
STATION: 2518
DESCRIPTION: SR 860/MIAMI GARDENS DR, 800' W OF NW 87 AV
START DATE: 06/17/2014
START TIME: 0000

	DIRECTION: E					DIRECTION: W					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	83	83	62	54	282	40	39	28	32	139	421
0100	45	33	31	25	134	29	10	17	13	69	203
0200	22	20	16	17	75	7	13	14	13	47	122
0300	11	15	19	17	62	16	13	24	16	69	131
0400	11	11	15	22	59	20	32	36	57	145	204
0500	24	26	30	45	125	44	71	128	154	397	522
0600	44	54	72	99	269	162	239	406	435	1242	1511
0700	94	104	147	183	528	458	584	691	654	2387	2915
0800	204	189	207	244	844	571	535	563	519	2188	3032
0900	195	187	185	202	769	406	348	338	303	1395	2164
1000	206	186	156	190	738	255	271	258	252	1036	1774
1100	192	186	193	224	795	212	219	215	222	868	1663
1200	221	209	255	240	925	203	204	209	203	819	1744
1300	208	215	250	191	864	245	211	252	213	921	1785
1400	224	264	261	321	1070	217	228	226	219	890	1960
1500	269	302	340	365	1276	226	228	229	221	904	2180
1600	428	450	429	503	1810	195	220	228	224	867	2677
1700	600	639	631	678	2548	241	279	252	260	1032	3580
1800	630	640	544	481	2295	297	263	243	260	1063	3358
1900	468	427	373	350	1618	246	252	219	252	969	2587
2000	342	336	309	285	1272	213	185	207	186	791	2063
2100	291	286	322	270	1169	151	153	135	126	565	1734
2200	236	261	244	161	902	90	92	61	68	311	1213
2300	157	158	108	129	552	45	58	59	141	303	855
24-HOUR TOTALS:					20981					19417	40398

PEAK VOLUME INFORMATION

	DIRECTION: E		DIRECTION: W		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	800	844	715	2500	730	3174
P.M.	1730	2579	1715	1088	1715	3666
DAILY	1730	2579	715	2500	1715	3666

TRUCK PERCENTAGE 2.35 2.33 2.34

CLASSIFICATION SUMMARY DATABASE

DIR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TOTTRK	TOTVOL
E	77	17526	2885	31	371	25	3	34	29	0	0	0	0	0	0	493	20981
W	56	16452	2456	32	315	27	0	41	38	0	0	0	0	0	0	453	19417

GENERATED BY SPS 5.0.45P

COUNTY: 87
STATION: 2518
DESCRIPTION: SR 860/MIAMI GARDENS DR, 800' W OF NW 87 AV
START DATE: 06/18/2014
START TIME: 0000

	DIRECTION: E					DIRECTION: W					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	83	91	61	65	300	96	63	51	42	252	552
0100	50	40	39	33	162	25	26	27	20	98	260
0200	26	18	31	20	95	16	13	19	22	70	165
0300	7	31	22	11	71	8	17	15	24	64	135
0400	9	15	16	16	56	20	25	40	56	141	197
0500	21	18	47	38	124	46	66	128	146	386	510
0600	52	55	76	97	280	156	223	403	435	1217	1497
0700	107	139	138	195	579	460	599	653	617	2329	2908
0800	204	216	203	257	880	541	558	586	483	2168	3048
0900	229	181	176	200	786	430	386	343	324	1483	2269
1000	173	186	189	205	753	262	274	242	241	1019	1772
1100	196	200	241	253	890	231	247	234	218	930	1820
1200	246	237	232	247	962	249	216	218	237	920	1882
1300	238	221	252	234	945	240	228	258	264	990	1935
1400	265	291	295	280	1131	221	167	205	186	779	1910
1500	316	331	363	378	1388	189	182	212	201	784	2172
1600	413	465	412	455	1745	225	257	249	233	964	2709
1700	485	580	646	619	2330	251	266	279	274	1070	3400
1800	601	561	559	510	2231	259	292	264	265	1080	3311
1900	447	427	386	335	1595	235	215	217	220	887	2482
2000	330	290	292	277	1189	198	201	166	157	722	1911
2100	274	255	231	211	971	159	156	142	141	598	1569
2200	197	245	212	159	813	126	115	103	120	464	1277
2300	146	129	135	90	500	82	72	45	43	242	742
24-HOUR TOTALS:					20776					19657	40433

PEAK VOLUME INFORMATION

	DIRECTION: E		DIRECTION: W		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	815	905	715	2410	730	3122
P.M.	1715	2446	1730	1104	1730	3531
DAILY	1715	2446	715	2410	1730	3531

TRUCK PERCENTAGE 2.47 2.04 2.26

CLASSIFICATION SUMMARY DATABASE

DIR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TOTTRK	TOTVOL
E	59	17354	2849	49	360	24	0	41	40	0	0	0	0	0	0	514	20776
W	43	16696	2517	29	287	12	0	33	40	0	0	0	0	0	0	401	19657

GENERATED BY SPS 5.0.45P

COUNTY: 87
STATION: 2518
DESCRIPTION: SR 860/MIAMI GARDENS DR, 800' W OF NW 87 AV
START DATE: 06/19/2014
START TIME: 0000

	DIRECTION: E					DIRECTION: W					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	83	93	75	45	296	48	39	41	22	150	446
0100	47	31	38	26	142	26	24	25	22	97	239
0200	27	28	19	11	85	14	20	13	13	60	145
0300	17	14	17	13	61	15	12	27	23	77	138
0400	23	15	19	17	74	17	26	28	53	124	198
0500	15	24	38	44	121	46	69	130	126	371	492
0600	48	61	71	85	265	162	246	380	421	1209	1474
0700	103	123	155	161	542	435	515	631	590	2171	2713
0800	186	208	207	250	851	541	577	565	504	2187	3038
0900	191	213	184	199	787	389	322	325	334	1370	2157
1000	192	168	200	198	758	275	271	250	226	1022	1780
1100	188	220	226	240	874	241	262	218	233	954	1828
1200	239	239	263	200	941	201	205	208	232	846	1787
1300	241	199	231	262	933	252	234	237	232	955	1888
1400	263	313	234	267	1077	194	210	234	227	865	1942
1500	304	340	356	434	1434	231	222	195	229	877	2311
1600	431	428	451	524	1834	216	208	224	249	897	2731
1700	579	658	687	661	2585	255	267	254	198	974	3559
1800	603	627	547	525	2302	242	238	237	202	919	3221
1900	496	407	399	389	1691	208	236	204	174	822	2513
2000	356	314	363	293	1326	181	151	163	139	634	1960
2100	287	317	277	267	1148	144	131	121	125	521	1669
2200	206	241	192	174	813	101	115	78	78	372	1185
2300	168	142	117	89	516	73	59	45	58	235	751
24-HOUR TOTALS:					21456					18709	40165

PEAK VOLUME INFORMATION

	DIRECTION: E		DIRECTION: W		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	830	861	730	2339	730	3049
P.M.	1715	2609	1645	1025	1715	3570
DAILY	1715	2609	730	2339	1715	3570

TRUCK PERCENTAGE 2.41 2.04 2.24

CLASSIFICATION SUMMARY DATABASE

DIR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TOTTRK	TOTVOL
E	99	17855	2984	36	370	27	0	46	39	0	0	0	0	0	0	518	21456
W	21	15889	2418	36	253	17	0	45	30	0	0	0	0	0	0	381	18709

GENERATED BY SPS 5.0.45P

COUNTY: 87
STATION: 7048
DESCRIPTION: NW 138TH ST 0.5 MILE WEST OF 36TH AVE/97TH AVE
START DATE: 10/22/2014
START TIME: 0000

	DIRECTION: E					DIRECTION: W					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	26	19	25	18	88	7	13	8	8	36	124
0100	15	10	14	13	52	7	8	7	6	28	80
0200	18	11	7	5	41	4	12	8	13	37	78
0300	12	21	13	7	53	14	20	17	27	78	131
0400	23	22	13	15	73	29	35	51	69	184	257
0500	22	24	43	44	133	66	86	101	142	395	528
0600	70	85	88	146	389	84	146	174	209	613	1002
0700	109	120	158	161	548	222	267	240	254	983	1531
0800	170	176	181	159	686	251	240	259	282	1032	1718
0900	142	137	116	136	531	237	169	147	148	701	1232
1000	134	124	120	109	487	155	105	117	117	494	981
1100	107	137	113	119	476	135	136	127	129	527	1003
1200	154	139	138	121	552	116	143	128	129	516	1068
1300	142	120	127	125	514	127	118	139	129	513	1027
1400	149	135	148	136	568	138	140	145	155	578	1146
1500	160	164	171	161	656	149	149	209	203	710	1366
1600	189	200	229	231	849	175	175	191	194	735	1584
1700	290	217	247	201	955	171	230	163	156	720	1675
1800	195	220	185	156	756	162	183	129	151	625	1381
1900	135	147	102	77	461	114	113	94	82	403	864
2000	81	77	63	57	278	78	81	48	49	256	534
2100	78	69	36	46	229	63	39	43	36	181	410
2200	56	36	55	27	174	31	28	31	36	126	300
2300	44	25	25	26	120	25	18	15	13	71	191
24-HOUR TOTALS:					9669					10542	20211

PEAK VOLUME INFORMATION

	DIRECTION: E		DIRECTION: W		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	745	688	800	1032	800	1718
P.M.	1645	985	1630	786	1630	1753
DAILY	1645	985	800	1032	1630	1753

TRUCK PERCENTAGE 22.36 20.86 21.58

CLASSIFICATION SUMMARY DATABASE

DIR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TOTTRK	TOTVOL
E	40	5893	1529	100	1011	292	235	170	334	9	3	5	3	0	45	2162	9669
W	305	5691	2314	175	854	549	86	169	337	23	0	3	3	0	33	2199	10542

GENERATED BY SPS 5.0.45P

COUNTY: 87
STATION: 7048
DESCRIPTION: NW 138TH ST 0.5 MILE WEST OF 36TH AVE/97TH AVE
START DATE: 10/23/2014
START TIME: 0000

	DIRECTION: E					DIRECTION: W					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	23	21	8	11	63	8	11	5	12	36	99
0100	12	12	11	21	56	11	14	15	10	50	106
0200	12	6	12	4	34	13	8	10	10	41	75
0300	12	12	14	4	42	15	26	21	31	93	135
0400	18	24	20	21	83	23	32	54	66	175	258
0500	16	22	35	37	110	56	72	91	113	332	442
0600	85	111	99	120	415	99	135	155	182	571	986
0700	121	145	145	149	560	169	228	226	268	891	1451
0800	150	141	159	142	592	182	190	220	190	782	1374
0900	137	152	143	117	549	175	172	142	146	635	1184
1000	138	113	118	118	487	163	138	147	133	581	1068
1100	103	100	116	145	464	122	131	120	139	512	976
1200	160	143	109	115	527	139	112	122	151	524	1051
1300	147	138	131	125	541	148	150	167	141	606	1147
1400	147	155	168	126	596	148	146	156	169	619	1215
1500	154	165	174	159	652	160	164	157	185	666	1318
1600	219	192	217	225	853	181	210	197	193	781	1634
1700	272	305	271	233	1081	192	218	190	170	770	1851
1800	206	192	157	173	728	184	177	141	115	617	1345
1900	124	120	100	89	433	96	109	100	69	374	807
2000	86	74	71	101	332	71	69	49	43	232	564
2100	74	58	59	57	248	48	47	51	31	177	425
2200	68	62	54	44	228	36	28	26	27	117	345
2300	57	36	24	21	138	18	15	11	8	52	190
24-HOUR TOTALS:					9812					10234	20046

PEAK VOLUME INFORMATION

	DIRECTION: E		DIRECTION: W		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	745	599	715	904	715	1493
P.M.	1700	1081	1630	800	1645	1866
DAILY	1700	1081	715	904	1645	1866

TRUCK PERCENTAGE 23.17 23.14 23.15

CLASSIFICATION SUMMARY DATABASE

DIR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TOTTRK	TOTVOL
E	54	5870	1569	125	954	299	332	182	354	16	1	4	6	0	46	2273	9812
W	294	5335	2215	176	877	679	103	175	337	18	1	1	1	0	22	2368	10234

GENERATED BY SPS 5.0.45P

TABLE 2A - THE GRAHAM COMPANIES - YEAR 2040 DEVELOPMENT PROGRAM TRIP GENERATION								
LAND USE	**UNITS**	**ITE LUC**	**ITE 9TH EDITION**	**DAILY**	**% IN**	**TRIPS IN**	**% OUT**	**TRIPS OUT**
APARTMENTS	2,000 DU	220	T = 6.06 (X) + 123.56	12,244	50%	6,122	50%	6,122
RETAIL	1,000,000 SQ. FT.	820	Ln (T) = 0.65 Ln (X) + 5.83	30,334	50%	15,167	50%	15,167
BUSINESS PARK	3,000,000 SQ. FT.	770	T = 10.62 (X) + 715.61	32,576	50%	16,288	50%	16,288
GROSS DRIVEWAY TRIPS				**75,153**	50%	**37,577**	50%	**37,576**
INTERNALIZATION	**See Note 1**	**11.39%**	Internalization - See Table 2B	8,560	50%	4,280	50%	4,280
DIVERTED TRIPS TO RETAIL USE	**See Note 2**	**20.00%**	Ln (TP) = -0.29 Ln (X) + 5.00	5,376	50%	2,688	50%	2,688
NET EXTERNAL TRIPS				**61,217**	50%	**30,609**	50%	**30,608**
LAND USE	**UNITS**	**ITE LUC**	**ITE 9TH EDITION**	**AM TRIPS**	**% IN**	**TRIPS IN**	**% OUT**	**TRIPS OUT**
APARTMENTS	2,000 DU	220	T = 0.49 (X) + 3.73	984	20%	197	80%	787
RETAIL	1,000,000 SQ. FT.	820	Ln (T) = 0.61 Ln (X) + 2.24	635	62%	394	38%	241
BUSINESS PARK	3,000,000 SQ. FT.	770	Ln (T) = 0.97 Ln (X) + 0.49	3,851	85%	3,273	15%	578
GROSS DRIVEWAY TRIPS				**5,470**	71%	**3,864**	29%	**1,606**
INTERNALIZATION	**See Note 1**	**8.17%**	Internalization - See Table 2C	447	71%	317	29%	130
DIVERTED TRIPS TO RETAIL USE	**See Note 2**	**20.00%**	Ln (TP) = -0.29 Ln (X) + 5.00	117	62%	72	38%	45
NET EXTERNAL TRIPS				**4,906**	71%	**3,475**	29%	**1,431**
LAND USE	**UNITS**	**ITE LUC**	**ITE 9TH EDITION**	**PM TRIPS**	**% IN**	**TRIPS IN**	**% OUT**	**TRIPS OUT**
APARTMENTS	2,000 DU	220	T = 0.55 (X) + 17.65	1,118	65%	726	35%	392
RETAIL	1,000,000 SQ. FT.	820	Ln (T) = 0.67 Ln (X) + 3.31	2,802	48%	1,345	52%	1,457
BUSINESS PARK	3,000,000 SQ. FT.	770	Ln (T) = 0.90 Ln (X) + 0.85	3,152	26%	820	74%	2,332
GROSS DRIVEWAY TRIPS				**7,072**	41%	**2,891**	59%	**4,181**
INTERNALIZATION	**See Note 1**	**18.38%**	Internalization - See Table 2D	1,300	41%	533	59%	767
DIVERTED TRIPS TO RETAIL USE	**See Note 2**	**20.00%**	Ln (TP) = -0.29 Ln (X) + 5.00	457	48%	220	52%	237
NET EXTERNAL TRIPS				**5,315**	40%	**2,138**	60%	**3,177**

Cathy Sweetapple & Associates 3/11/2016

Note 1 - See attached Tables 2B, 2C and 2D for the Daily, AM Peak Hour and PM Peak Hour Internalization calculations provided using the ITE Multi-Use Spreadsheets and the internalization factors from the ITE Trip Generation Handbook. The Daily internalization Factors are found in Tables 7.1 and 7.2 from the ITE Trip Generation Handbook 2nd Edition while the updated AM and PM Peak Hour factors are found in Tables 6.1 and 6.2 from the ITE Trip Generation Handbook 3rd Edition.

Note 2 - Diverted Trips to Retail Use for the Year 2040 proposed development program is Limited to 20% of the External Retail Trips (calculated using the ITE Pass-by Formula) and is further limited to 10% of the Adjacent Street Traffic calculated using the closest adjacent FDOT Count Stations 2518 on Miami Gardens Drive and 7048 on NW 138 Street. See Table 2E for the calculations to show compliance with the 10% threshold.

Analyst	**Sweetapple**
Date	**1/25/2016**
Project	**CDMP No. 2**
Timeframe	**Daily**

TABLE 2B - DAILY INTERNALIZATION - THE GRAHAM COMPANIES - 2040
MULTI-USE DEVELOPMENT TRIP GENERATION AND INTERNAL CAPTURE SUMMARY

LAND USE A		**Residential Apts**	
ITE LU Code		**220**	
Size		**2000 DU**	
	Total	Internal	External
Enter	6,122	1,852	4,270
Exit	6,122	1,365	4,757
Total	12,244	3,217	9,027
%	100%	26%	74%

Exit to External: 4,757

Enter from External: 4,270

38% 2,326 Demand

1,365 Balanced

9% 1,365 / 0

33% 2,020 Demand

1,668 Balanced

11% 1,668 / 0

0% 0 Demand

0 Balanced

3% 184 Demand

184 Balanced

2% 326 Demand

0% 0 Demand

LAND USE B		**Retail**	
ITE LU Code		**820**	
Size		**1,000,000 SF**	
	Total	Internal	External
Enter	15,167	1,972	13,195
Exit	15,167	2,123	13,044
Total	30,334	4,095	26,239
%	100%	14%	86%

Exit to External: 13,044

Enter from External: 13,195

4% 607 Demand; 607 Balanced; **22%** 3,583 Demand

3% 455 Demand; 455 Balanced; **15%** 2,443 Demand

LAND USE C		**Business Park**	
ITE LU Code		**770**	
Size		**3,000,000 SF**	
	Total	Internal	External
Enter	16,288	455	15,833
Exit	16,288	790	15,498
Total	32,576	1,245	31,331
%	100%	4%	96%

Enter to External: 15,833

Exit from External: 15,498

NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT					
	LAND USE A	**LAND USE B**	**LAND USE C**	**TOTAL**	
Enter	4,270	13,195	15,833	33,298	
Exit	4,757	13,044	15,498	33,298	
Total	9,027	26,239	31,331	66,596	**INTERNAL CAPTURE**
Single Use	**12,244**	**30,334**	**32,576**	**75,154**	**11.39%**
	Residential	**Retail**	**Business Park**		

Note - The Internal Capture Rates have been obtained from Tables 7.1 and 7.2 from the ITE Trip Generation Handbook, 2nd Edition.

Table 2B
Daily Internalization - 2040
November 2015 CDMP Amendment Application No. 2

Analyst	**Sweetapple**
Date	**1/25/2016**
Project	**CDMP No. 2**
Timeframe	**AM Peak Hr**

TABLE 2C - AM PEAK HOUR INTERNALIZATION - THE GRAHAM COMPANIES - 2040
MULTI-USE DEVELOPMENT TRIP GENERATION AND INTERNAL CAPTURE SUMMARY

LAND USE A	**Residential Apts**		
ITE LU Code	**220**		
Size	**2000 DU**		
	Total	Internal	External
Enter	197	4	193
Exit	787	24	763
Total	984	28	957
%	100%	3%	97%

Exit to External 763

193 *Enter from External*

1% 8 Demand

8 Balanced

17% 67 0

2% 4 Demand

4 Balanced

14% 34 0

2% 16 Demand

16 Balanced

3% 98 Demand

0% 0 Demand

0 Balanced

1% 6 Demand

LAND USE B	**Retail**		
ITE LU Code	**820**		
Size	**1,000,000 SF**		
	Total	Internal	External
Enter	394	134	260
Exit	241	74	167
Total	635	208	427
%	100%	33%	67%

Exit to External 167

260 Enter from External

32% 126 Demand | 126 Balanced | 28% 162 Demand

29% 70 Demand | 70 Balanced | 4% 131 Demand

LAND USE C	**Business Park**		
ITE LU Code	**770**		
Size	**3,000,000**		
	Total	Internal	External
Enter	3,273	86	3,187
Exit	578	126	452
Total	3,851	212	3,639
%	100%	5%	95%

Enter to External 3,187

452 Exit from External

NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT					
	LAND USE A	**LAND USE B**	**LAND USE C**	**TOTAL**	
Enter	193	260	3,187	3,641	
Exit	763	167	452	1,383	
Total	957	427	3,639	5,023	**INTERNAL CAPTURE**
Single Use	**984**	**635**	**3,851**	**5,470**	**8.17%**
	Residential	**Retail**	**Business Park**		

Note - The Internal Capture Rates have been obtained from Tables 6.1 and 6.2 from the ITE Trip Generation Handbook, 3rd Edition.

Table 2C
AM Peak Hour Internalization - 2040
November 2015 CDMP Amendment Application No. 2

Analyst	**Sweetapple**
Date	**1/25/2016**
Project	**CDMP No. 2**
Timeframe	**PM Peak Hr**

TABLE 2D - PM PEAK HOUR INTERNALIZATION - THE GRAHAM COMPANIES - 2040
MULTI-USE DEVELOPMENT TRIP GENERATION AND INTERNAL CAPTURE SUMMARY

LAND USE A	**Residential Apts**		
ITE LU Code	**220**		
Size	**2000 DU**		
	Total	Internal	External
Enter	726	363	363
Exit	392	150	242
Total	1,118	513	605
%	100%	46%	54%

Exit to External 242

363 *Enter from External*

42% 165 Demand

135 Balanced

10% 135 / 0

46% 334 Demand

334 Balanced

26% 379 / 0

4% 29 Demand

16 Balanced

57% 467 Demand

29 Balanced

2% 47 Demand

LAND USE B	**Retail**		
ITE LU Code	**820**		
Size	**1,000,000 SF**		
	Total	Internal	External
Enter	1,345	242	1,103
Exit	1,457	363	1,094
Total	2,802	605	2,197
%	100%	22%	78%

Exit to External 1,094

1,103 Enter from External

8% 108 Demand

108 Balanced

20% 466 Demand

2% 29 Demand

29 Balanced

31% 254 Demand

LAND USE C	**Business Park**		
ITE LU Code	**770**		
Size	**3,000,000**		
	Total	Internal	External
Enter	820	45	775
Exit	2,332	137	2,195
Total	3,152	181	2,971
%	100%	6%	94%

Enter to External 775

2,195 Exit from External

NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT					
	LAND USE A	**LAND USE B**	**LAND USE C**	**TOTAL**	
Enter	363	1,103	775	2,241	
Exit	242	1,094	2,195	3,531	
Total	605	2,197	2,971	5,772	**INTERNAL CAPTURE**
Single Use	**1,118**	**2,802**	**3,152**	**7,072**	**18.38%**
	Residential	**Retail**	**Business Park**		

Note - The Internal Capture Rates have been obtained from Tables 6.1 and 6.2 from the ITE Trip Generation Handbook, 3rd Edition.

Table 2D
PM Peak Hour Internalization - 2040
November 2015 CDMP Amendment Application No. 2

Table 2E - 10% of Adjacent Street Traffic Volumes from FDOT Count Stations 2518 and 7048

3/11/2016

Count Station	Count Dates	Count Location	Timeframe	Day 1	Day 2	Day 3	3 Day Ave	2020 Trip Generation 35% Diverted / Pass-by Trips	2040 Trip Generation 20% Diverted / Pass-by Trips	10% Limit	Diverted/Pass-by Trips are limited to no more than 10% of Adjacent Street Traffic - See Below:
FDOT-2518	6/17-19/2014	**SR-860 - Miami Gardens Dr**	Daily	40398	40433	40165	**40332**				
		800 feet W of NW 87 Ave	10% of Daily	4040	4043	4017	**4033**	**2,600**	**5,376**	**6,046**	Daily Diverted /Pass-by is < 10% of Adjacent Street Traffic
			AM PK HR	3174	3122	3049	**3115**				
			10% of AM Peak	317	312	305	**312**	**64**	**117**	**472**	AM Diverted /Pass-by is < 10% of Adjacent Street Traffic
			PM PK HR	3666	3531	3570	**3589**				
			10% of PM Peak	367	353	357	**359**	**208**	**457**	**540**	PM Diverted /Pass-by is < 10% of Adjacent Street Traffic
Count Station	**Count Dates**	**Count Location**	**Timeframe**	**Day 1**	**Day 2**	**Day 3**	**Average**				
FDOT-7048	10/22-23/2014	**NW 138 Street**	Daily	20211	20046	0	**20129**				
		0.5 miles West of NW 97 Ave	10% of Daily	2021	2005	0	**2013**				
			AM PK HR	1718	1493	0	**1606**				
			10% of AM Peak	172	149	0	**161**				
			PM PK HR	1753	1866	0	**1810**				
			10% of PM Peak	175	187	0	**181**				
		Stations 2518 + 7048									
			10% of Daily			**Daily**	**6046**				
			10% of AM Peak			**AM PK HR**	**472**				
			10% of PM Peak			**PM PK HR**	**540**				

Cathy Sweetapple & Associates

COUNTY: 87
STATION: 2518
DESCRIPTION: SR 860/MIAMI GARDENS DR, 800' W OF NW 87 AV
START DATE: 06/17/2014
START TIME: 0000

	DIRECTION: E					DIRECTION: W					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	83	83	62	54	282	40	39	28	32	139	421
0100	45	33	31	25	134	29	10	17	13	69	203
0200	22	20	16	17	75	7	13	14	13	47	122
0300	11	15	19	17	62	16	13	24	16	69	131
0400	11	11	15	22	59	20	32	36	57	145	204
0500	24	26	30	45	125	44	71	128	154	397	522
0600	44	54	72	99	269	162	239	406	435	1242	1511
0700	94	104	147	183	528	458	584	691	654	2387	2915
0800	204	189	207	244	844	571	535	563	519	2188	3032
0900	195	187	185	202	769	406	348	338	303	1395	2164
1000	206	186	156	190	738	255	271	258	252	1036	1774
1100	192	186	193	224	795	212	219	215	222	868	1663
1200	221	209	255	240	925	203	204	209	203	819	1744
1300	208	215	250	191	864	245	211	252	213	921	1785
1400	224	264	261	321	1070	217	228	226	219	890	1960
1500	269	302	340	365	1276	226	228	229	221	904	2180
1600	428	450	429	503	1810	195	220	228	224	867	2677
1700	600	639	631	678	2548	241	279	252	260	1032	3580
1800	630	640	544	481	2295	297	263	243	260	1063	3358
1900	468	427	373	350	1618	246	252	219	252	969	2587
2000	342	336	309	285	1272	213	185	207	186	791	2063
2100	291	286	322	270	1169	151	153	135	126	565	1734
2200	236	261	244	161	902	90	92	61	68	311	1213
2300	157	158	108	129	552	45	58	59	141	303	855
24-HOUR TOTALS:					20981					19417	40398

PEAK VOLUME INFORMATION

	DIRECTION: E		DIRECTION: W		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	800	844	715	2500	730	3174
P.M.	1730	2579	1715	1088	1715	3666
DAILY	1730	2579	715	2500	1715	3666

TRUCK PERCENTAGE 2.35 2.33 2.34

CLASSIFICATION SUMMARY DATABASE

DIR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TOTTRK	TOTVOL
E	77	17526	2885	31	371	25	3	34	29	0	0	0	0	0	0	493	20981
W	56	16452	2456	32	315	27	0	41	38	0	0	0	0	0	0	453	19417

GENERATED BY SPS 5.0.45P

COUNTY: 87
STATION: 2518
DESCRIPTION: SR 860/MIAMI GARDENS DR, 800' W OF NW 87 AV
START DATE: 06/18/2014
START TIME: 0000

	DIRECTION: E					DIRECTION: W					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	83	91	61	65	300	96	63	51	42	252	552
0100	50	40	39	33	162	25	26	27	20	98	260
0200	26	18	31	20	95	16	13	19	22	70	165
0300	7	31	22	11	71	8	17	15	24	64	135
0400	9	15	16	16	56	20	25	40	56	141	197
0500	21	18	47	38	124	46	66	128	146	386	510
0600	52	55	76	97	280	156	223	403	435	1217	1497
0700	107	139	138	195	579	460	599	653	617	2329	2908
0800	204	216	203	257	880	541	558	586	483	2168	3048
0900	229	181	176	200	786	430	386	343	324	1483	2269
1000	173	186	189	205	753	262	274	242	241	1019	1772
1100	196	200	241	253	890	231	247	234	218	930	1820
1200	246	237	232	247	962	249	216	218	237	920	1882
1300	238	221	252	234	945	240	228	258	264	990	1935
1400	265	291	295	280	1131	221	167	205	186	779	1910
1500	316	331	363	378	1388	189	182	212	201	784	2172
1600	413	465	412	455	1745	225	257	249	233	964	2709
1700	485	580	646	619	2330	251	266	279	274	1070	3400
1800	601	561	559	510	2231	259	292	264	265	1080	3311
1900	447	427	386	335	1595	235	215	217	220	887	2482
2000	330	290	292	277	1189	198	201	166	157	722	1911
2100	274	255	231	211	971	159	156	142	141	598	1569
2200	197	245	212	159	813	126	115	103	120	464	1277
2300	146	129	135	90	500	82	72	45	43	242	742
24-HOUR TOTALS:					20776					19657	40433

PEAK VOLUME INFORMATION

	DIRECTION: E		DIRECTION: W		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	815	905	715	2410	730	3122
P.M.	1715	2446	1730	1104	1730	3531
DAILY	1715	2446	715	2410	1730	3531

TRUCK PERCENTAGE 2.47 2.04 2.26

CLASSIFICATION SUMMARY DATABASE

DIR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TOTTRK	TOTVOL
E	59	17354	2849	49	360	24	0	41	40	0	0	0	0	0	0	514	20776
W	43	16696	2517	29	287	12	0	33	40	0	0	0	0	0	0	401	19657

GENERATED BY SPS 5.0.45P

COUNTY: 87
STATION: 2518
DESCRIPTION: SR 860/MIAMI GARDENS DR, 800' W OF NW 87 AV
START DATE: 06/19/2014
START TIME: 0000

	DIRECTION: E					DIRECTION: W					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	83	93	75	45	296	48	39	41	22	150	446
0100	47	31	38	26	142	26	24	25	22	97	239
0200	27	28	19	11	85	14	20	13	13	60	145
0300	17	14	17	13	61	15	12	27	23	77	138
0400	23	15	19	17	74	17	26	28	53	124	198
0500	15	24	38	44	121	46	69	130	126	371	492
0600	48	61	71	85	265	162	246	380	421	1209	1474
0700	103	123	155	161	542	435	515	631	590	2171	2713
0800	186	208	207	250	851	541	577	565	504	2187	3038
0900	191	213	184	199	787	389	322	325	334	1370	2157
1000	192	168	200	198	758	275	271	250	226	1022	1780
1100	188	220	226	240	874	241	262	218	233	954	1828
1200	239	239	263	200	941	201	205	208	232	846	1787
1300	241	199	231	262	933	252	234	237	232	955	1888
1400	263	313	234	267	1077	194	210	234	227	865	1942
1500	304	340	356	434	1434	231	222	195	229	877	2311
1600	431	428	451	524	1834	216	208	224	249	897	2731
1700	579	658	687	661	2585	255	267	254	198	974	3559
1800	603	627	547	525	2302	242	238	237	202	919	3221
1900	496	407	399	389	1691	208	236	204	174	822	2513
2000	356	314	363	293	1326	181	151	163	139	634	1960
2100	287	317	277	267	1148	144	131	121	125	521	1669
2200	206	241	192	174	813	101	115	78	78	372	1185
2300	168	142	117	89	516	73	59	45	58	235	751
24-HOUR TOTALS:					21456					18709	40165

PEAK VOLUME INFORMATION

	DIRECTION: E		DIRECTION: W		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	830	861	730	2339	730	3049
P.M.	1715	2609	1645	1025	1715	3570
DAILY	1715	2609	730	2339	1715	3570

TRUCK PERCENTAGE 2.41 2.04 2.24

CLASSIFICATION SUMMARY DATABASE

DIR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TOTTRK	TOTVOL
E	99	17855	2984	36	370	27	0	46	39	0	0	0	0	0	0	518	21456
W	21	15889	2418	36	253	17	0	45	30	0	0	0	0	0	0	381	18709

GENERATED BY SPS 5.0.45P

COUNTY: 87
STATION: 7048
DESCRIPTION: NW 138TH ST 0.5 MILE WEST OF 36TH AVE/97TH AVE
START DATE: 10/22/2014
START TIME: 0000

	DIRECTION: E					DIRECTION: W					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	26	19	25	18	88	7	13	8	8	36	124
0100	15	10	14	13	52	7	8	7	6	28	80
0200	18	11	7	5	41	4	12	8	13	37	78
0300	12	21	13	7	53	14	20	17	27	78	131
0400	23	22	13	15	73	29	35	51	69	184	257
0500	22	24	43	44	133	66	86	101	142	395	528
0600	70	85	88	146	389	84	146	174	209	613	1002
0700	109	120	158	161	548	222	267	240	254	983	1531
0800	170	176	181	159	686	251	240	259	282	1032	1718
0900	142	137	116	136	531	237	169	147	148	701	1232
1000	134	124	120	109	487	155	105	117	117	494	981
1100	107	137	113	119	476	135	136	127	129	527	1003
1200	154	139	138	121	552	116	143	128	129	516	1068
1300	142	120	127	125	514	127	118	139	129	513	1027
1400	149	135	148	136	568	138	140	145	155	578	1146
1500	160	164	171	161	656	149	149	209	203	710	1366
1600	189	200	229	231	849	175	175	191	194	735	1584
1700	290	217	247	201	955	171	230	163	156	720	1675
1800	195	220	185	156	756	162	183	129	151	625	1381
1900	135	147	102	77	461	114	113	94	82	403	864
2000	81	77	63	57	278	78	81	48	49	256	534
2100	78	69	36	46	229	63	39	43	36	181	410
2200	56	36	55	27	174	31	28	31	36	126	300
2300	44	25	25	26	120	25	18	15	13	71	191
24-HOUR TOTALS:					9669					10542	20211

PEAK VOLUME INFORMATION

	DIRECTION: E		DIRECTION: W		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	745	688	800	1032	800	1718
P.M.	1645	985	1630	786	1630	1753
DAILY	1645	985	800	1032	1630	1753

TRUCK PERCENTAGE 22.36 20.86 21.58

CLASSIFICATION SUMMARY DATABASE

DIR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TOTTRK	TOTVOL
E	40	5893	1529	100	1011	292	235	170	334	9	3	5	3	0	45	2162	9669
W	305	5691	2314	175	854	549	86	169	337	23	0	3	3	0	33	2199	10542

GENERATED BY SPS 5.0.45P

COUNTY: 87
STATION: 7048
DESCRIPTION: NW 138TH ST 0.5 MILE WEST OF 36TH AVE/97TH AVE
START DATE: 10/23/2014
START TIME: 0000

	DIRECTION: E					DIRECTION: W					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	23	21	8	11	63	8	11	5	12	36	99
0100	12	12	11	21	56	11	14	15	10	50	106
0200	12	6	12	4	34	13	8	10	10	41	75
0300	12	12	14	4	42	15	26	21	31	93	135
0400	18	24	20	21	83	23	32	54	66	175	258
0500	16	22	35	37	110	56	72	91	113	332	442
0600	85	111	99	120	415	99	135	155	182	571	986
0700	121	145	145	149	560	169	228	226	268	891	1451
0800	150	141	159	142	592	182	190	220	190	782	1374
0900	137	152	143	117	549	175	172	142	146	635	1184
1000	138	113	118	118	487	163	138	147	133	581	1068
1100	103	100	116	145	464	122	131	120	139	512	976
1200	160	143	109	115	527	139	112	122	151	524	1051
1300	147	138	131	125	541	148	150	167	141	606	1147
1400	147	155	168	126	596	148	146	156	169	619	1215
1500	154	165	174	159	652	160	164	157	185	666	1318
1600	219	192	217	225	853	181	210	197	193	781	1634
1700	272	305	271	233	1081	192	218	190	170	770	1851
1800	206	192	157	173	728	184	177	141	115	617	1345
1900	124	120	100	89	433	96	109	100	69	374	807
2000	86	74	71	101	332	71	69	49	43	232	564
2100	74	58	59	57	248	48	47	51	31	177	425
2200	68	62	54	44	228	36	28	26	27	117	345
2300	57	36	24	21	138	18	15	11	8	52	190
24-HOUR TOTALS:					9812					10234	20046

PEAK VOLUME INFORMATION

	DIRECTION: E		DIRECTION: W		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	745	599	715	904	715	1493
P.M.	1700	1081	1630	800	1645	1866
DAILY	1700	1081	715	904	1645	1866

TRUCK PERCENTAGE 23.17 23.14 23.15

CLASSIFICATION SUMMARY DATABASE

DIR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TOTTRK	TOTVOL
E	54	5870	1569	125	954	299	332	182	354	16	1	4	6	0	46	2273	9812
W	294	5335	2215	176	877	679	103	175	337	18	1	1	1	0	22	2368	10234

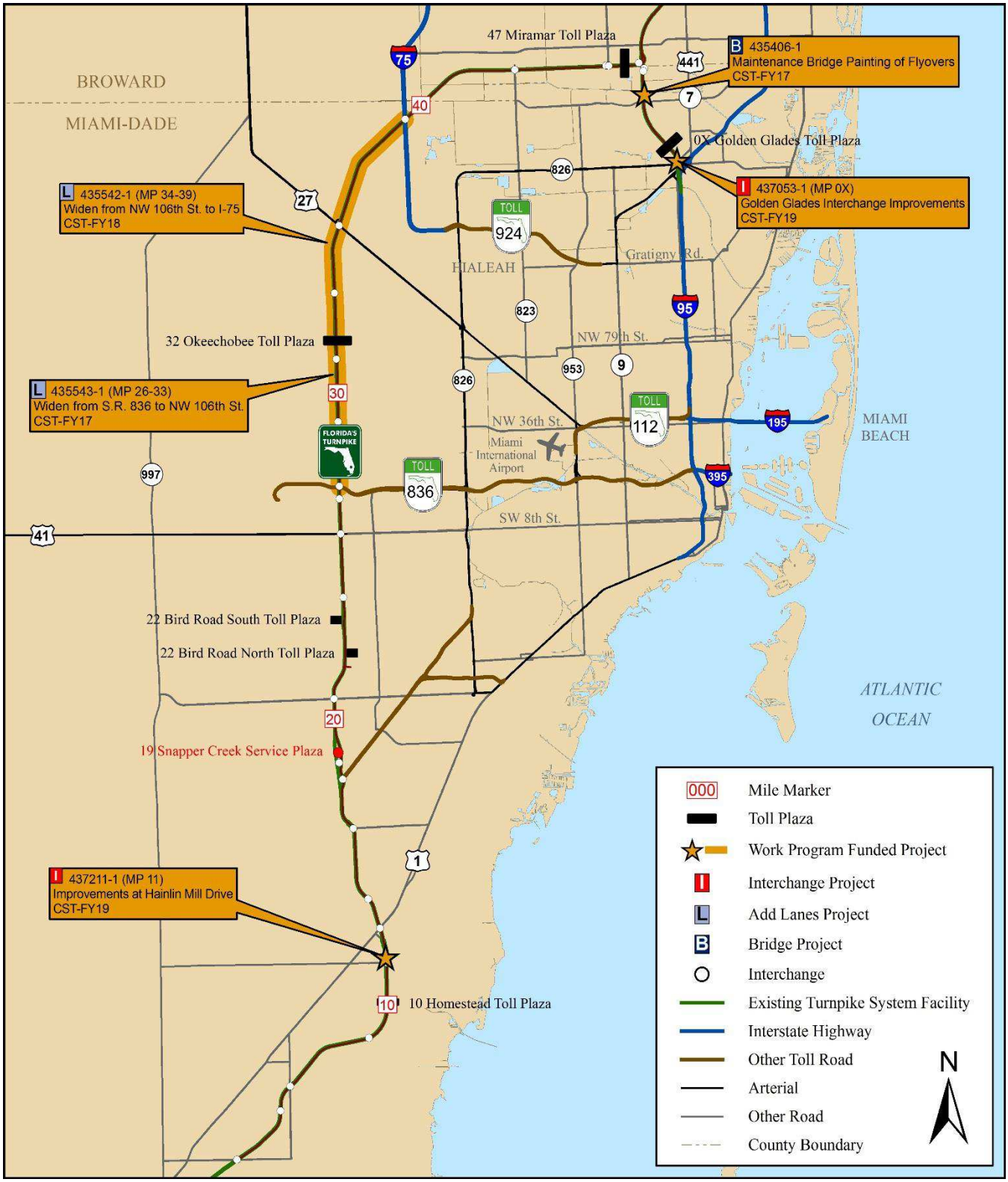
GENERATED BY SPS 5.0.45P

APPENDIX I-I:
CF Plans and TIPS

APPENDIX I-1

Miami Dade County (MPO) Transportation Improvement Program

Florida's Turnpike Enterprise
Tentative Five-Year Work Program - FY 2016/17 thru FY 2020/21
Summary of Projects in FDOT District Six



TURNPIKE

MPO Project No:	TP4060963
LRTP Ref.:	NA
County:	MIAMI-DADE
Roadway ID:	87471000
Lanes Exist:	7
Lanes Improved:	
Lanes Added:	7
Project Length:	4.000
District:	6

Project Description: **THERMOPLASTIC FOR WIDEN HEFT FROM N OF EUREKA TO S OF KILLIAN**

Type of Work: **SIGNING/PAVEMENT MARKINGS**

PHASE :	Funding Source	Proposed Funding (in $000s) <2017	2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020	2020 - 2021	>2021	All Years
	PKYI	0	325	0	0	0	0	0	325
CONSTRUCTION	**Total**	**0**	**325**	**0**	**0**	**0**	**0**	**0**	**325**

RESPONSIBLE AGENCY: **Turnpike Enterprise**

Item Segment TOTAL ALL Years ALL Phases: $325

Item Number: 406096 **Item TOTAL ALL Years ALL Phases All Segments: $194,998**

MPO Project No:	TP4150511
LRTP Ref.:	6-12
County:	MIAMI-DADE
Roadway ID:	87471000
Lanes Exist:	3
Lanes Improved:	2
Lanes Added:	3
Project Length:	2.473
District:	6

Project Description: **WIDEN HEFT - S OF KILLIAN PKWY TO N OF SW 72 ST (MP 19.4-21.87) INC EXP LANE**

Type of Work: **ADD LANES & RECONSTRUCT**

PHASE :	Funding Source	Proposed Funding (in $000s) <2017	2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020	2020 - 2021	>2021	All Years
		83,203	0	0	0	0	0	0	83,203
DESIGN/BUILD	**Total**	**83,203**	**0**	**0**	**0**	**0**	**0**	**0**	**83,203**
		100	0	0	0	0	0	0	100
ENVIRONMENTAL	**Total**	**100**	**0**	**0**	**0**	**0**	**0**	**0**	**100**

***Project is not funded in LRTP and will require a LRTP amendment.
***Project was funded in a previous TIP.

TURNPIKE

MPO Project No:	TP4150511
LRTP Ref.:	6-12
County:	MIAMI-DADE
Roadway ID:	87471000
Lanes Exist:	3
Lanes Improved:	2
Lanes Added:	3
Project Length:	2.473
District:	6

Project Description: **WIDEN HEFT - S OF KILLIAN PKWY TO N OF SW 72 ST (MP 19.4-21.87) INC EXP LANE**

Type of Work: **ADD LANES & RECONSTRUCT**

PHASE :	Funding Source	Proposed Funding (in $000s) <2017	2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020	2020 - 2021	>2021	All Years
		3,347	0	0	0	0	0	0	3,347
PROJECT DEVELOPMENT AND ENVIRONMENTAL	Total	**3,347**	**0**	**0**	**0**	**0**	**0**	**0**	**3,347**
		10	0	0	0	0	0	0	10
		9,302	0	0	0	0	0	0	9,302
PLANNING AND DESIGN	Total	**9,312**	**0**	**0**	**0**	**0**	**0**	**0**	**9,312**
		0	0	0	0	0	0	0	0
RIGHT OF WAY	Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

RESPONSIBLE AGENCY: **Turnpike Enterprise**

Item Segment TOTAL ALL Years ALL Phases: **$95,962**

Item Number: **415051** **Item TOTAL ALL Years ALL Phases All Segments:** **$229,514**

***Project is not funded in LRTP and will require a LRTP amendment.
***Project was funded in a previous TIP.

TURNPIKE

MPO Project No:	TP4150514
LRTP Ref.:	6-12
County:	MIAMI-DADE
Roadway ID:	87471000
Lanes Exist:	3
Lanes Improved:	2
Lanes Added:	3
Project Length:	3.063
District:	6

Project Description: **WIDEN HEFT, BIRD RD - SR836(MP23.8-26)(6 TO 10 LANES) INC. EXPRESS LAN**

Type of Work: **ADD LANES & RECONSTRUCT**

		Proposed Funding (in $000s)							
PHASE :	Funding Source	<2017	2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020	2020 - 2021	>2021	All Years
		122,186	0	0	0	0	0	0	122,186
DESIGN/BUILD	**Total**	**122,186**	**0**	**0**	**0**	**0**	**0**	**0**	**122,186**
		6,058	0	0	0	0	0	0	6,058
PLANNING AND DESIGN	**Total**	**6,058**	**0**	**0**	**0**	**0**	**0**	**0**	**6,058**
		143	0	0	0	0	0	0	143
		107	0	0	0	0	0	0	107
RAILROAD & UTILITIES	**Total**	**250**	**0**	**0**	**0**	**0**	**0**	**0**	**250**

RESPONSIBLE AGENCY: **Turnpike Enterprise**

Item Segment TOTAL ALL Years ALL Phases: **$128,494**

Item Number: **415051** **Item TOTAL ALL Years ALL Phases All Segments:** **$229,514**

***Project is not funded in LRTP and will require a LRTP amendment.
***Project was funded in a previous TIP.

TURNPIKE

MPO Project No:	TP4271461
LRTP Ref.:	NA
County:	MIAMI-DADE
Roadway ID:	87471000
Lanes Exist:	4
Lanes Improved:	1
Lanes Added:	4
Project Length:	1.864
District:	6

Project Description: **WIDEN HEFT N OF SW72 ST TO BIRD RD (MP21.873 TO 23.8)(6TO10)(INC EXP LN**

Type of Work: **ADD LANES & RECONSTRUCT**

PHASE :	Funding Source	Proposed Funding (in $000s) <2017	2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020	2020 - 2021	>2021	All Years
	PKBD	60,680	0	0	0	0	0	0	60,680
	PKYI	2,184	200	0	0	0	0	0	2,384
DESIGN/BUILD	**Total**	**62,864**	**200**	**0**	**0**	**0**	**0**	**0**	**63,064**
	PKYI	197	0	0	0	0	0	0	197
PROJECT DEVELOPMENT AND ENVIRONMENTAL	**Total**	**197**	**0**	**0**	**0**	**0**	**0**	**0**	**197**
	PKYI	4,203	0	0	0	0	0	0	4,203
PLANNING AND DESIGN	**Total**	**4,203**	**0**	**0**	**0**	**0**	**0**	**0**	**4,203**
	PKYI	15	0	0	0	0	0	0	15
RIGHT OF WAY	**Total**	**15**	**0**	**0**	**0**	**0**	**0**	**0**	**15**
	PKBD	449	0	0	0	0	0	0	449
RAILROAD & UTILITIES	**Total**	**449**	**0**	**0**	**0**	**0**	**0**	**0**	**449**

RESPONSIBLE AGENCY: **Turnpike Enterprise**

Item Segment TOTAL ALL Years ALL Phases: **$67,928**

Item Number: **427146** **Item TOTAL ALL Years ALL Phases All Segments:** **$69,172**

***Project is not funded in LRTP and will require a LRTP amendment.
***Project was funded in a previous TIP.

TURNPIKE

MPO Project No:	TP4354622
LRTP Ref.:	
County:	MIAMI-DADE
Roadway ID:	
Lanes Exist:	
Lanes Improved:	
Lanes Added:	
Project Length:	0.348
District:	6

Project Description: **THERMOPLASTIC FOR CAMPBELL DRIVE INTERCHANGE NEW NORTHBOUND RAMP**

Type of Work: **SIGNING/PAVEMENT MARKINGS**

PHASE :	Funding Source	Proposed Funding (in $000s) <2017	2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020	2020 - 2021	>2021	All Years
	PKYI	0	0	177	0	0	0	0	177
CONSTRUCTION	**Total**	**0**	**0**	**177**	**0**	**0**	**0**	**0**	**177**

RESPONSIBLE AGENCY: **FDOT**

Item Segment TOTAL ALL Years ALL Phases: $177

Item Number: 435462 **Item TOTAL ALL Years ALL Phases All Segments: $27,074**

MPO Project No:	TP4355421
LRTP Ref.:	6-12
County:	MIAMI-DADE
Roadway ID:	87471000
Lanes Exist:	3
Lanes Improved:	2
Lanes Added:	3
Project Length:	6.165
District:	6

Project Description: **WIDEN HEFT- NW 106TH ST TO I-75 (MP34 TO MP39) 6TO10 LANES W/EXP LANES**

Type of Work: **ADD LANES & RECONSTRUCT**

PHASE :	Funding Source	Proposed Funding (in $000s) <2017	2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020	2020 - 2021	>2021	All Years
	PKYI	2	0	110,737	0	0	0	0	110,739
DESIGN/BUILD	**Total**	**2**	**0**	**110,737**	**0**	**0**	**0**	**0**	**110,739**
	PKYI	1,801	0	1,214	0	0	0	0	3,015
PLANNING AND DESIGN	**Total**	**1,801**	**0**	**1,214**	**0**	**0**	**0**	**0**	**3,015**

***Project is not funded in LRTP and will require a LRTP amendment.
***Project was funded in a previous TIP.

TURNPIKE

MPO Project No:	TP4355421
LRTP Ref.:	6-12
County:	MIAMI-DADE
Roadway ID:	87471000
Lanes Exist:	3
Lanes Improved:	2
Lanes Added:	3
Project Length:	6.165
District:	6

Project Description: **WIDEN HEFT- NW 106TH ST TO I-75 (MP34 TO MP39) 6TO10 LANES W/EXP LANES**

Type of Work: **ADD LANES & RECONSTRUCT**

		Proposed Funding (in $000s)							
PHASE :	Funding Source	<2017	2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020	2020 - 2021	>2021	All Years
	PKYI	0	250	350	0	0	0	0	600
RAILROAD & UTILITIES	**Total**	**0**	**250**	**350**	**0**	**0**	**0**	**0**	**600**

RESPONSIBLE AGENCY: **Turnpike Enterprise**

Item Segment TOTAL ALL Years ALL Phases: **$114,354**

Item Number: **435542** **Item TOTAL ALL Years ALL Phases All Segments:** **$115,622**

***Project is not funded in LRTP and will require a LRTP amendment.
***Project was funded in a previous TIP.

TURNPIKE

MPO Project No:	TP4355422
LRTP Ref.:	6-12
County:	MIAMI-DADE
Roadway ID:	87471000
Lanes Exist:	6
Lanes Improved:	2
Lanes Added:	3
Project Length:	5.822
District:	6

Project Description: **THERMOPLASTIC FOR HEFT WIDENING NW106TH TO I-75 (MP34 TO 39)**

Type of Work: **SIGNING/PAVEMENT MARKINGS**

PHASE :	Funding Source	Proposed Funding (in $000s) <2017	2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020	2020 - 2021	>2021	All Years
	PKYI	0	0	0	0	91	0	677	768
CONSTRUCTION	**Total**	**0**	**0**	**0**	**0**	**91**	**0**	**677**	**768**
	PKYI	0	0	500	0	0	0	0	500
RAILROAD & UTILITIES	**Total**	**0**	**0**	**500**	**0**	**0**	**0**	**0**	**500**

RESPONSIBLE AGENCY: **Turnpike Enterprise**

Item Segment TOTAL ALL Years ALL Phases: $1,268

Item Number: 435542 **Item TOTAL ALL Years ALL Phases All Segments: $115,622**

MPO Project No:	TP4355431
LRTP Ref.:	6-12
County:	MIAMI-DADE
Roadway ID:	87471000
Lanes Exist:	3
Lanes Improved:	2
Lanes Added:	3
Project Length:	6.025
District:	0

Project Description: **SR 821 (HEFT) Widening (MP 26-33) (6/8 LNS TO 10 INC EXP) FROM SR 836 (Dolphin Expressway) TO NW 106TH ST**

Type of Work: **ADD LANES & RECONSTRUCT**

PHASE :	Funding Source	Proposed Funding (in $000s) <2017	2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020	2020 - 2021	>2021	All Years
	PKYI	3	195,113	0	8,706	0	0	0	203,822
DESIGN/BUILD	**Total**	**3**	**195,113**	**0**	**8,706**	**0**	**0**	**0**	**203,822**

***Project is not funded in LRTP and will require a LRTP amendment.
***Project was funded in a previous TIP.

TURNPIKE

MPO Project No:	TP4355431
LRTP Ref.:	6-12
County:	MIAMI-DADE
Roadway ID:	87471000
Lanes Exist:	3
Lanes Improved:	2
Lanes Added:	3
Project Length:	6.025
District:	0

Project Description: **SR 821 (HEFT) Widening (MP 26-33) (6/8 LNS TO 10 INC EXP)** **FROM SR 836 (Dolphin Expressway)** **TO NW 106TH ST**

Type of Work: **ADD LANES & RECONSTRUCT**

PHASE :	Funding Source	Proposed Funding (in $000s) <2017	2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020	2020 - 2021	>2021	All Years
	PKYI	0	100	0	0	0	0	0	100
ENVIRONMENTAL	**Total**	**0**	**100**	**0**	**0**	**0**	**0**	**0**	**100**
	PKYI	5,066	1,993	0	0	0	0	0	7,059
PLANNING AND DESIGN	**Total**	**5,066**	**1,993**	**0**	**0**	**0**	**0**	**0**	**7,059**
	PKYI	0	3,050	0	0	0	0	0	3,050
RAILROAD & UTILITIES	**Total**	**0**	**3,050**	**0**	**0**	**0**	**0**	**0**	**3,050**

RESPONSIBLE AGENCY: **Turnpike Enterprise**

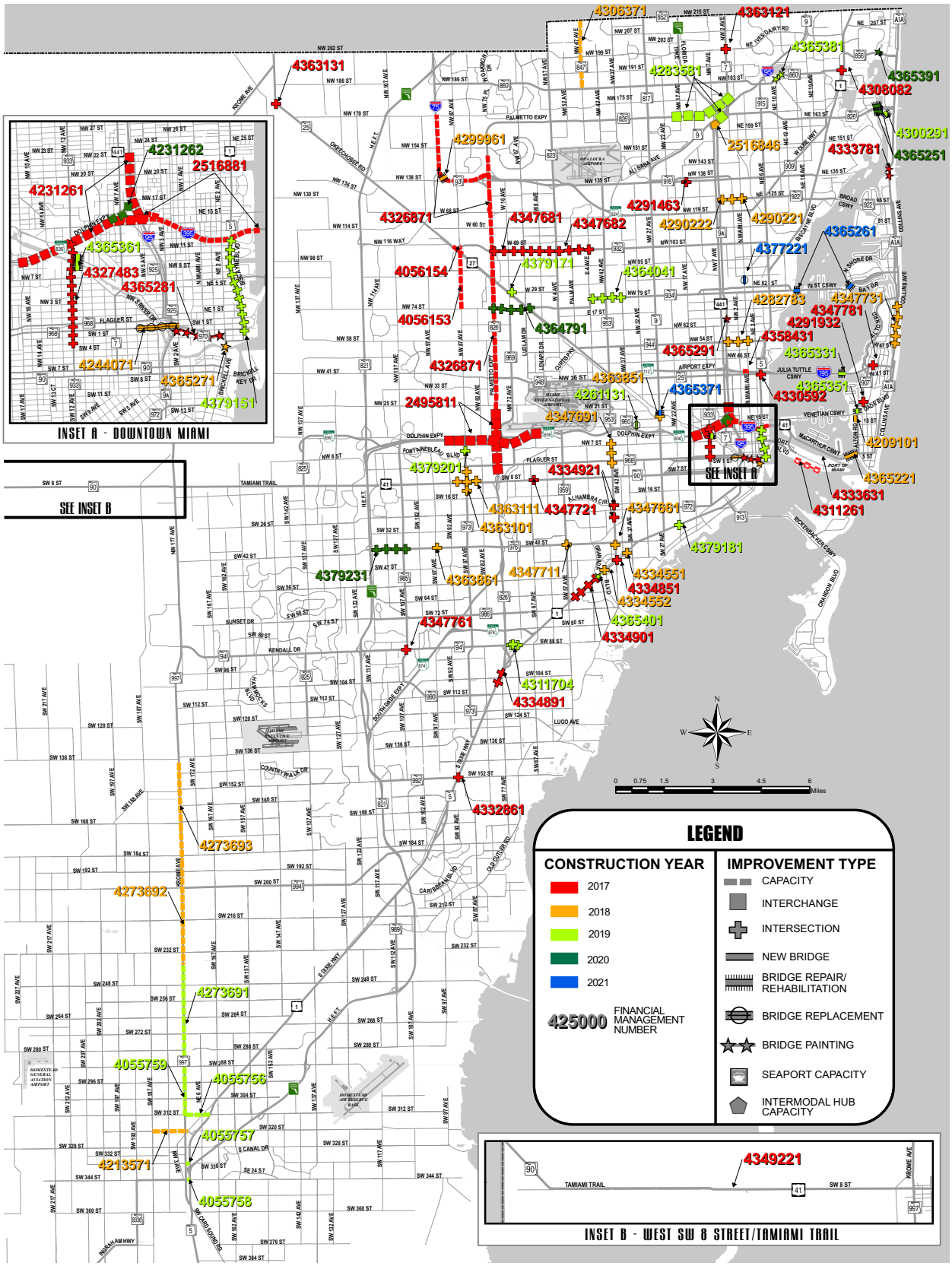
Item Segment TOTAL ALL Years ALL Phases: **$214,031**

Item Number: **435543** **Item TOTAL ALL Years ALL Phases All Segments:** **$215,077**

***Project is not funded in LRTP and will require a LRTP amendment.
***Project was funded in a previous TIP.

2017 - 2021 TENTATIVE FIVE YEAR WORK PROGRAM

MIAMI-DADE COUNTY



FDOT

FLORIDA DEPARTMENT OF TRANSPORTATION DISTRICT SIX

Capacity, Interchange, Intersection, and Bridge Projects

January, 2016

HIGHWAYS

RESPONSIBLE AGENCY: **Florida Department of Transportation District 6**

Item Segment TOTAL ALL Years ALL Phases: **$7,368**

Item Number: 432639 **Item TOTAL ALL Years ALL Phases ALL Segments:** **$11,029**

MPO Project No:	DT4326396
LRTP Ref:	6-36
County:	MIAMI-DADE
Roadway ID:	87120000
Lanes Exist:	3
Lanes Improved:	
Lanes Added:	
Project Length:	2.970
District:	6

Project Description: **SR 90/SW 7 ST/SW 8 ST** **FROM BRICKELL AVENUE** **TO SR 9/SW 27 AVENUE**

Type of Work: **PD&E/EMO STUDY** SIS or Non-SIS: **No**

Extra Description:

PHASE :	Funding Source	Proposed Funding (in $000s) <2017	2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020	2020 - 2021	>2021	All Years
		2,000	0	0	0	0	0	0	2,000
		40	0	0	0	0	0	0	40
PROJECT DEVELOPMENT AND ENVIRONMENTAL	**Total**	**2,040**	**0**	**0**	**0**	**0**	**0**	**0**	**2,040**

RESPONSIBLE AGENCY: **Florida Department of Transportation District 6**

Item Segment TOTAL ALL Years ALL Phases: **$2,040**

Item Number: 432639 **Item TOTAL ALL Years ALL Phases ALL Segments:** **$11,029**

MPO Project No:	DT4326871
LRTP Ref:	6-12
County:	MIAMI-DADE
Roadway ID:	87260000
Lanes Exist:	3
Lanes Improved:	5
Lanes Added:	1
Project Length:	13.518
District:	6

Project Description: **SR 826** **FROM FLAGLER ST** **TO NW 154 ST & I-75 FROM SR 826 TO NW 170 ST**

Type of Work: **ADD SPECIAL USE LANE** SIS or Non-SIS: **Yes**

Extra Description:

PHASE :	Funding Source	Proposed Funding (in $000s) <2017	2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020	2020 - 2021	>2021	All Years
	DDR	1,677	0	0	0	0	0	0	1,677
	DIH	192	0	0	0	0	0	0	192
	DS	178	0	0	0	0	0	0	178

HIGHWAYS

MPO Project No:	DT4326871
LRTP Ref:	6-12
County:	MIAMI-DADE
Roadway ID:	87260000
Lanes Exist:	3
Lanes Improved:	5
Lanes Added:	1
Project Length:	13.518
District:	6

Project Description: **SR 826** **FROM FLAGLER ST** **TO NW 154 ST & I-75 FROM SR 826 TO NW 170 ST**

Type of Work: **ADD SPECIAL USE LANE** SIS or Non-SIS: **Yes**

Extra Description:

PHASE :	Funding Source	Proposed Funding (in $000s) <2017	2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020	2020 - 2021	>2021	All Years
	PKYI	194	0	0	0	0	0	0	194
	STED	309	0	0	0	0	0	0	309
PLANNING AND DESIGN	**Total**	**2,550**	**0**	**0**	**0**	**0**	**0**	**0**	**2,550**
	ACNP	1,766	0	0	0	0	0	0	1,766
	DDR	363	0	0	0	0	0	0	363
	NHPP	1,000	0	0	0	0	0	0	1,000
	PKED	15	0	0	0	0	0	0	15
RAILROAD & UTILITIES	**Total**	**3,144**	**0**	**0**	**0**	**0**	**0**	**0**	**3,144**
	ACNP	112,502	0	0	0	0	0	0	112,502
	DDR	227	62	42	0	0	0	0	331
	DI	516	0	0	0	0	0	0	516
	DIH	729	63	32	0	0	0	0	824
	DIS	150	0	0	0	0	0	0	150
	DIS	500	0	0	0	0	0	0	500
	DS	38	513	527	0	0	0	0	1,078
	DSBD	19,999	0	0	0	0	0	0	19,999
	DSBD	2,470	0	0	0	0	0	0	2,470
	GMR	0	2,000	0	0	0	0	0	2,000

HIGHWAYS

MPO Project No:	DT4326871
LRTP Ref:	6-12
County:	MIAMI-DADE
Roadway ID:	87260000
Lanes Exist:	3
Lanes Improved:	5
Lanes Added:	1
Project Length:	13.518
District:	6

Project Description: **SR 826** **FROM FLAGLER ST** **TO NW 154 ST & I-75 FROM SR 826 TO NW 170 ST**

Type of Work: **ADD SPECIAL USE LANE** SIS or Non-SIS: **Yes**

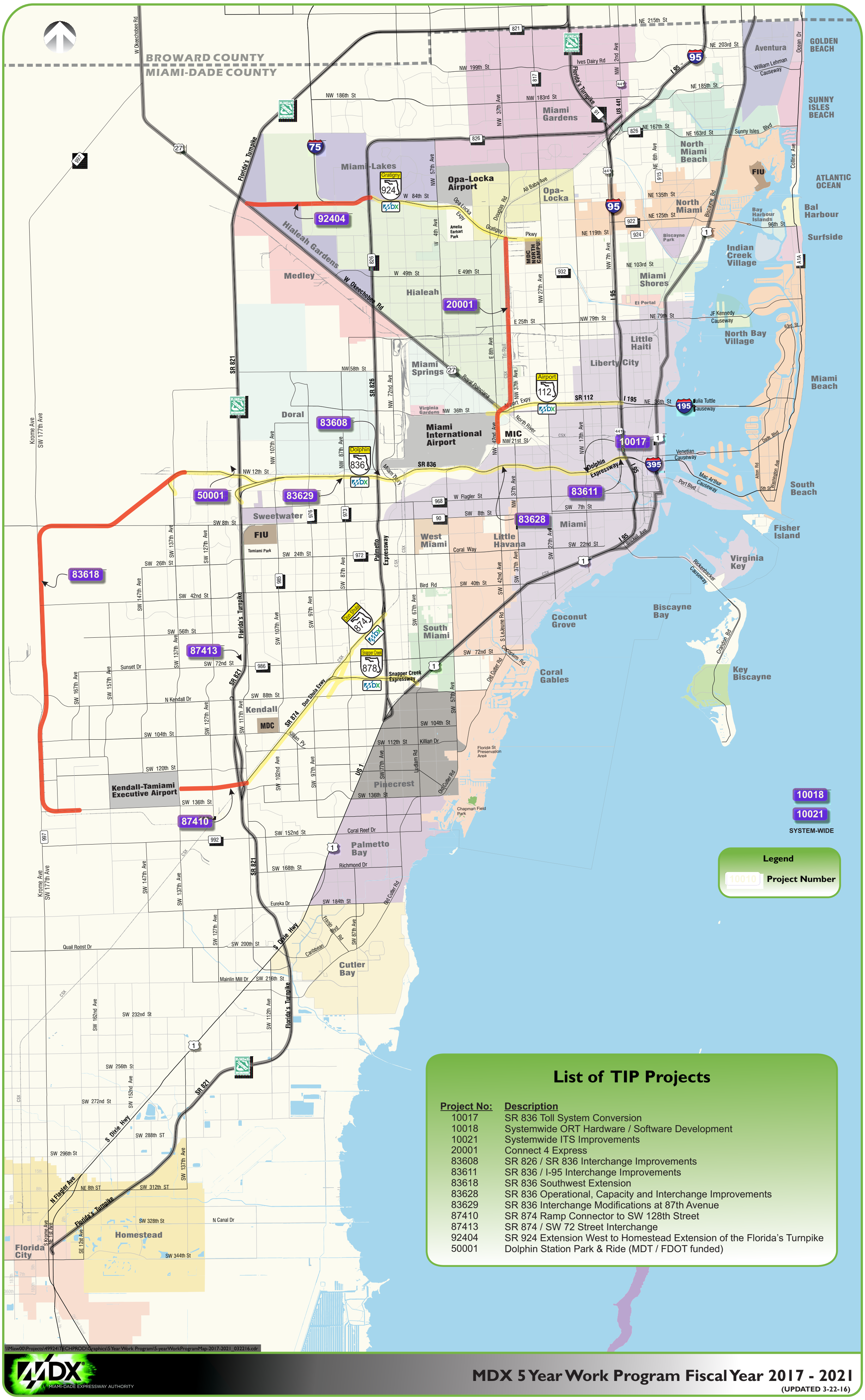
Extra Description:

PHASE :	Funding Source	Proposed Funding (in $000s) <2017	2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020	2020 - 2021	>2021	All Years
	NHPP	82,297	0	0	0	0	0	0	82,297
	PKED	26,220	0	0	0	0	0	0	26,220
	PKED	8,264	0	0	0	0	0	0	8,264
	PKYI	5	0	0	0	0	0	0	5
	SA	1	0	0	0	0	0	0	1
	STED	15,309	0	0	0	0	0	0	15,309
DESIGN/BUILD	**Total**	**269,227**	**2,638**	**601**	**0**	**0**	**0**	**0**	**272,466**
	GMR	0	2,363	0	0	0	0	0	2,363
	STED	0	7,887	0	0	0	0	0	7,887
ALTERNATIVE CONTRACTING INCENTIVES	**Total**	**0**	**10,250**	**0**	**0**	**0**	**0**	**0**	**10,250**

RESPONSIBLE AGENCY: **Florida Department of Transportation District 6**

Item Segment TOTAL ALL Years ALL Phases: $288,410

Item Number: 432687 **Item TOTAL ALL Years ALL Phases ALL Segments: $290,695**



List of TIP Projects

Project No:	Description
10017	SR 836 Toll System Conversion
10018	Systemwide ORT Hardware / Software Development
10021	Systemwide ITS Improvements
20001	Connect 4 Express
83608	SR 826 / SR 836 Interchange Improvements
83611	SR 836 / I-95 Interchange Improvements
83618	SR 836 Southwest Extension
83628	SR 836 Operational, Capacity and Interchange Improvements
83629	SR 836 Interchange Modifications at 87th Avenue
87410	SR 874 Ramp Connector to SW 128th Street
87413	SR 874 / SW 72 Street Interchange
92404	SR 924 Extension West to Homestead Extension of the Florida's Turnpike
50001	Dolphin Station Park & Ride (MDT / FDOT funded)

MDX MIAMI-DADE EXPRESSWAY AUTHORITY

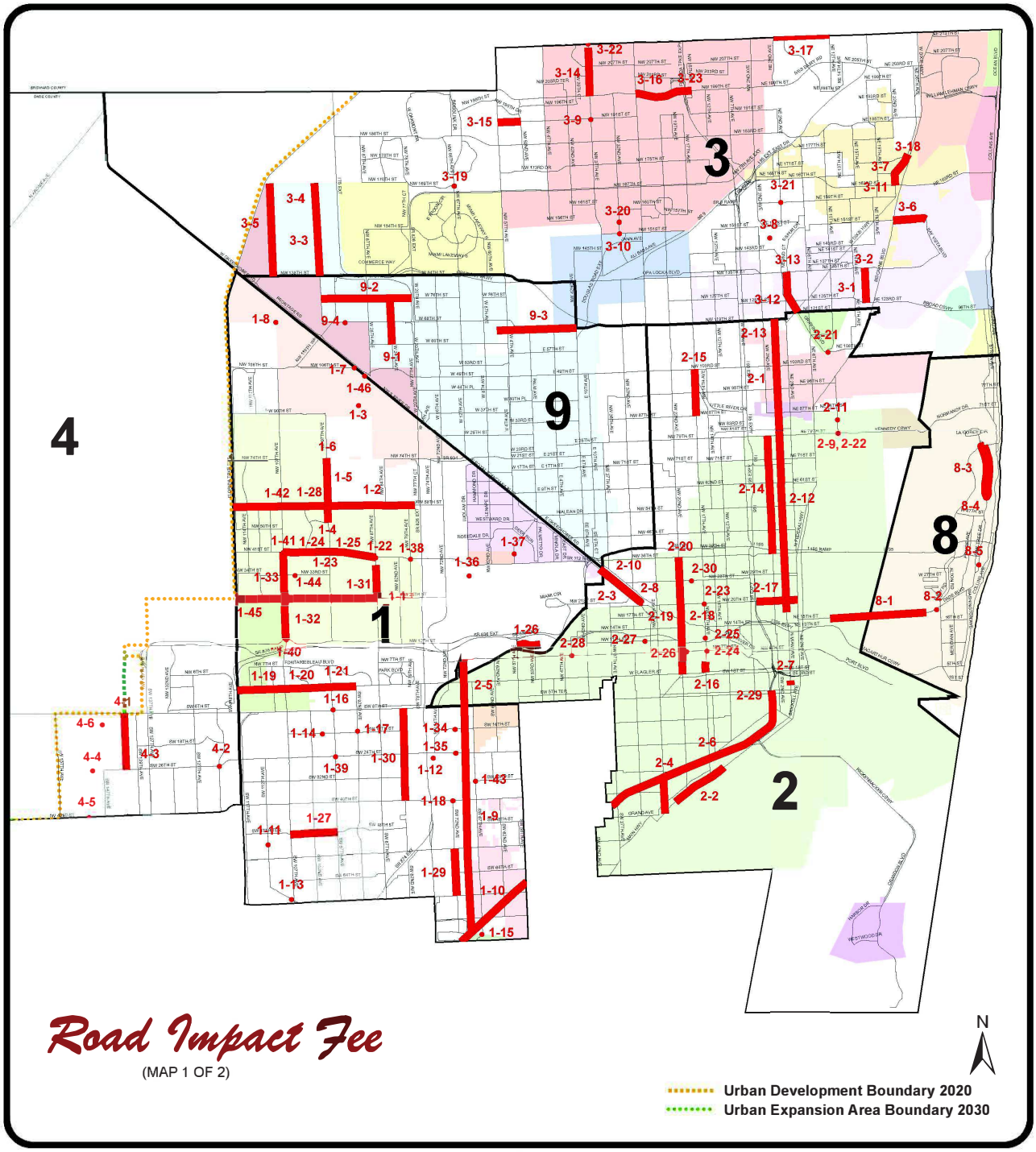
MDX 5 Year Work Program Fiscal Year 2017 - 2021
(UPDATED 3-22-16)

MIAMI-DADE METROPOLITAN PLANNING ORGANIZATION
TRANSPORTATION IMPROVEMENT PROGRAM
MIAMI-DADE EXPRESSWAY AUTHORITY (MDX)

MPO Project No / Agency Project No	Facility/Project Name / From /Location / To /Location / Remarks /Comments	Length (miles)	Type of Work	LRTP Ref See Footnote	Project Cost ($000s)	Prior Years Cost ($000s)	Activity /Phase	Funding Source	Proposed Funding (in $000s) 2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020	2020 - 2021
XA87410 / 87410	SR 874 (Don Shula) Ramp Connector; SW 128 St; SR 874	2.0	New Connector	6-12	**$97,274**	**$40,280**	ROW	MDX	8,780	0	0	0	0
							DSB	MDX	25,633	18,309	4,272	0	0
XA87413 / 87413	SR 874 / SW 72nd Street Interchange; SW 72nd Street; SR 874; Congestion Relief Project	0.5	New Interchange	***	**$10,321**	**$57**	PLN	T004	845	0	0	0	0
							ROW	T004	187	47	0	0	0
							DSB	T004	0	5,328	3,858	0	0
XA92404 / 92404	SR 924 Gratigny West Extension to HEFT; SR 826 (Palmetto) / I-75; SR 821 (HEFT)	3.0	PD&E Study and Roadway Improvements	6-20	**$39,142**	**$16,705**	PLN	MDX	86	0	0	0	0
							DSB	MDX	304	3,345	5,930	3,802	1,825
							ROW	MDX	0	0	858	4,791	1,496

Notes:

***Project requires a CDMP amendment prior to construction.
****Project was funded in a previous TIP.



Program of Projects

RIF District 1

1-1. NW 25th Street from NW 117th Avenue to NW 87th Avenue
1-2. NW 58th Street from NW 97th Avenue to SR 826
1-3. NW 89th Avenue and NW 93rd Street
1-4. NW 97th Avenue from NW 52nd Street to NW 58th Street
1-5. NW 97th Avenue from NW 58th Street to NW 70th Street
1-6. NW 97th Avenue from NW 70th Street to NW 74th Street
1-7. NW 106th Street and NW S River Drive Culvert
1-8. NW 107th Avenue and NW 122nd Street
1-9. Ludlam Bikepath
1-10. Underline
1-11. SW 112th Avenue South of SW 50th Terrace
1-12. SW 75th Avenue South of SW 24th Street
1-13. Snapper Creek Drive West of SW 107th Avenue
1-14. SW 16th Street West of SW 99th Avenue
1-15. SW 67th Avenue South of US1
1-16. SW 97th Avenue North of SW 8th Street
1-17. SW 92nd Avenue North of SW 16th Street
1-18. SW 72nd Avenue North of SW 40th Street
1-19. W Flagler Street from W 117th Avenue to W 107th Avenue
1-20. W Flagler Street from W 107th Avenue to W 102nd Avenue
1-21. W Flagler Street from W 102nd Avenue to W 92nd Avenue
1-22. NW 36th Street and NW 87th Avenue
1-23. NW 41st Street from NW 104th Avenue to NW 93rd Avenue
1-24. NW 41st Street from NW 107th Avenue to NW 97th Avenue
1-25. NW 41st Street from NW 97th Avenue to NW 87th Avenue
1-26. NW Blue Lagoon Drive from NW 57th Avenue to Dead End (East)
1-27. SW 48th Street from SW 107th Avenue to SW 97th Avenue
1-28. NW 58th Street from NW 117th Avenue to NW 97th Avenue
1-29. SW 72nd Avenue from SW 72nd Street to SW 56th Street
1-30. SW 82nd Avenue from SW 40th Street to SW 8th Street
1-31. NW 87th Avenue from NW 25th Street to NW 36th Street
1-32. NW 107th Avenue from NW 12th Street to NW 25th Street
1-33. NW 107th Avenue from NW 25th Street to NW 41st Street
1-34. SW 16th Street and SW 71 Court (R/R Crossing)
1-35. SW 24th Street and SW 72nd Avenue (R/R Crossing)
1-36. Waterway Drive and SW 72nd Avenue (R/R Crossing)
1-37. NW 40th Street and NW 57th Avenue
1-38. NW 79th Avenue and NW 36th Street
1-39. SW 97th Avenue and SW 24th Street
1-40. NW 107th Avenue and NW 12th Street
1-41. NW 107th Avenue and NW 41st Street
1-42. NW 107th Avenue and NW 58th Street
1-43. SW 67th Avenue and SW 33rd Street
1-44. NW 104th Avenue and NW 33rd Street
1-45. NW 117th Avenue and NW 25th Street
1-46. NW South River Drive and NW 89th Avenue

RIF District 2

2-1. Miami Avenue from 87th Street to 105th Street
2-2. South Bayshore Drive from Darwin Street to Mercy Way
2-3. NW South River Drive from NW 31st Street to Tamiami Swing Bridge
2-4. SW 27th Avenue from US-1 to Bayshore Drive
2-5. Ludlam Bikepath
2-6. Underline
2-7. Miami Avenue Bridge over the Miami River
2-8. Tamiami Canal Bridge Replacement
2-9. NE 10th Avenue North of NE 79th Street
2-10. Palmer Lake Bridge
2-11. N Miami Avenue and Little River Canal
2-12. N Miami Avenue from NW 17th Street and NW 87th Avenue
2-13. Miami Avenue from 105th Street to 119th Street
2-14. NW 2nd Avenue from NW 36th Street to NW 79th Street
2-15. NW 17th Avenue from NW 87th Street to NW 103rd Street
2-16. W 17th Avenue from Flagler Street to NW 3rd Street
2-17. NW 20th Street from NW 7th Avenue to NE 2nd Avenue
2-18. NW 22nd Avenue from W Flagler Street to NW 7th Street
2-19. NW 22nd Avenue from NW 7th Street to NW 20th Street
2-20. NW 22nd Avenue from NW 20th Street to NW 36th Street
2-21. NE 107th Street and NE 9th Avenue (R/R)
2-22. NE 10th Avenue and NE 79th Street
2-23. NW 17th Avenue and NW 20th Street
2-24. NW 17th Avenue and NW 7th Street
2-25. NW 17th Avenue and NW South River Drive
2-26. NW 22nd Avenue and NW 7th Street
2-27. NW 30th Avenue and NW 11th Street
2-28. NW 45th Avenue and NW 7th Street
2-29. South Miami Avenue and South 10th Street
2-30. NW 28th Street and NW 19th Avenue

RIF District 3

3-1. NE 16th Avenue near NE 131st Street Railroad Crossing
3-2. NE 16th Avenue from NE 123rd Street to NE 135th Street
3-3. NW 97th Avenue from NW 138th Street to NW 154th Street
3-4. NW 97th Avenue from NW 154th Street to NW 170th Street
3-5. NW 107th Avenue from NW 138th Street to NW 170th Street
3-6. NE 151st Street from Biscayne Boulevard to Bay Vista Boulevard
3-7. West Dixie Highway from NE 163rd Street to NE 173rd Street
3-8. North Miami Avenue North of NW 143rd Street
3-9. NW 191st Street West of NW 37th Avenue
3-10. NW 32nd Avenue North of NW 151st Street
3-11. W Dixie Highway North of NW 163rd Street
3-12. Memorial Highway from NE 121st Street and NE 131st Street
3-13. Memorial Highway from NE 131st Street and NE 135th Street
3-14. NW 37th Avenue from NW 199th Street to NW 213th Terrace
3-15. NW 191st Street from NW 57th Avenue to NW 52nd Avenue
3-16. NW 199th Street from NW 27th Avenue to NW 14th Court
3-17. NE 215th Street from NE 2nd Avenue to NE 12th Avenue
3-18. W Dixie Highway and NE 172nd Street
3-19. NW 67th Avenue and NW 169th Street
3-20. NW 32nd Avenue and NW 157th Street
3-21. NE 2nd Avenue and NE 159th Street
3-22. NW 37th Avenue and NW 215th Street
3-23. NW 199th Street and FL Turnpike

RIF District 4

4-1. SW 142nd Avenue from SW 26th Street to SW 8th Street
4-2. SW 122nd Avenue and SW 26th Street
4-3. SW 137th Avenue and SW 26th Street
4-4. SW 149th Avenue and SW 26th Street
4-5. SW 42nd Street and SW 149th Avenue
4-6. SW 147th Avenue and SW 10th Street

RIF District 8

8-1. Venetian Causeway Bridge
8-2. West Avenue Bridge over the Collins Canal
8-3. Pine Tree Drive and La Gorce Drive from 51st Street to 63rd Street
8-4. Pine Tree Drive and La Gorce Drive Traffic Circle
8-5. Pine Tree Drive and W 30th Street

RIF District 9

9-1. W 24th Avenue from W 60th Street to W 76th Street
9-2. W 76th Street from W 36th Avenue to W 20th Avenue
9-3. NW 119th Street from NW 60th Avenue to NW 42nd Avenue
9-4. W 32nd Avenue and W 68th Street

MIAMI-DADE METROPOLITAN PLANNING ORGANIZATION
TRANSPORTATION IMPROVEMENT PROGRAM
ROAD IMPACT FEES (RIF)

Road Impact Fee District: **District 3**

Municipalities: ***Aventura / Bal Harbour / Bay Harbor Islands / Golden Beach / Hialeah / Indian Creek / Miami Lakes / Opa-Locka / Miami Gardens / North Miami / North Miami Beach / Sunny Isles Beach / Surfside / Uninc.Miami-Dade County***

MPO Project No. / Agency Project No.	Facility/Project Name / From /Location	To /Location	Bicycle Accom / Length (miles)	Type of Work / Detailed Project Description / Status	Remarks	LRTP Ref	Project Cost ($000s)	Prior Years' Funding ($000s)
PW0000110	NW 97 Avenue		Wide Curb Lane	New 4 lanes				
	NW 138 Street	NW 154 Street	1.0					
110	New 4 lanes. Prior Years' Funding as follows: $3,630,000 for CST.							
	Under construction				Joint Participation Agreement with City of Hialeah for CST.	NA	$3,630	$3,630

Activity /Phase	Funding (in $000s) Proposed 2016 - 2017	2017 - 2018	Tentative 3-Year Program 2018 - 2019	2019 - 2020	2020 - 2021

MPO Project No. / Agency Project No.	Facility/Project Name / From /Location	To /Location	Bicycle Accom / Length (miles)	Type of Work / Detailed Project Description / Status	Remarks	LRTP Ref	Project Cost ($000s)	Prior Years' Funding ($000s)
PW000961	NW 97 Avenue			New 2 lanes				
	NW 154 Street	NW 170 Street	1.0					
000961	New 2 lanes.							
					Subject to LRTP Amendment.		$5,000	

Activity /Phase	Funding (in $000s) Proposed 2016 - 2017	2017 - 2018	Tentative 3-Year Program 2018 - 2019	2019 - 2020	2020 - 2021
PE	350	0	0	0	0
CST	900	1,250	2,500	0	0

BOND - Capital Asset Acquisition Special Obligation Bonds
B.R. - Repayment of Capital Asset Acquisition Special Obligation Bonds
CIGP - County Incentive Grant Program
LRTP - Subject to Long Range Plan Amendment

PE Preliminary Engineering
CST Construction
CEI Construction Engineering Inspection
COMB Combined Funding in Prior Years

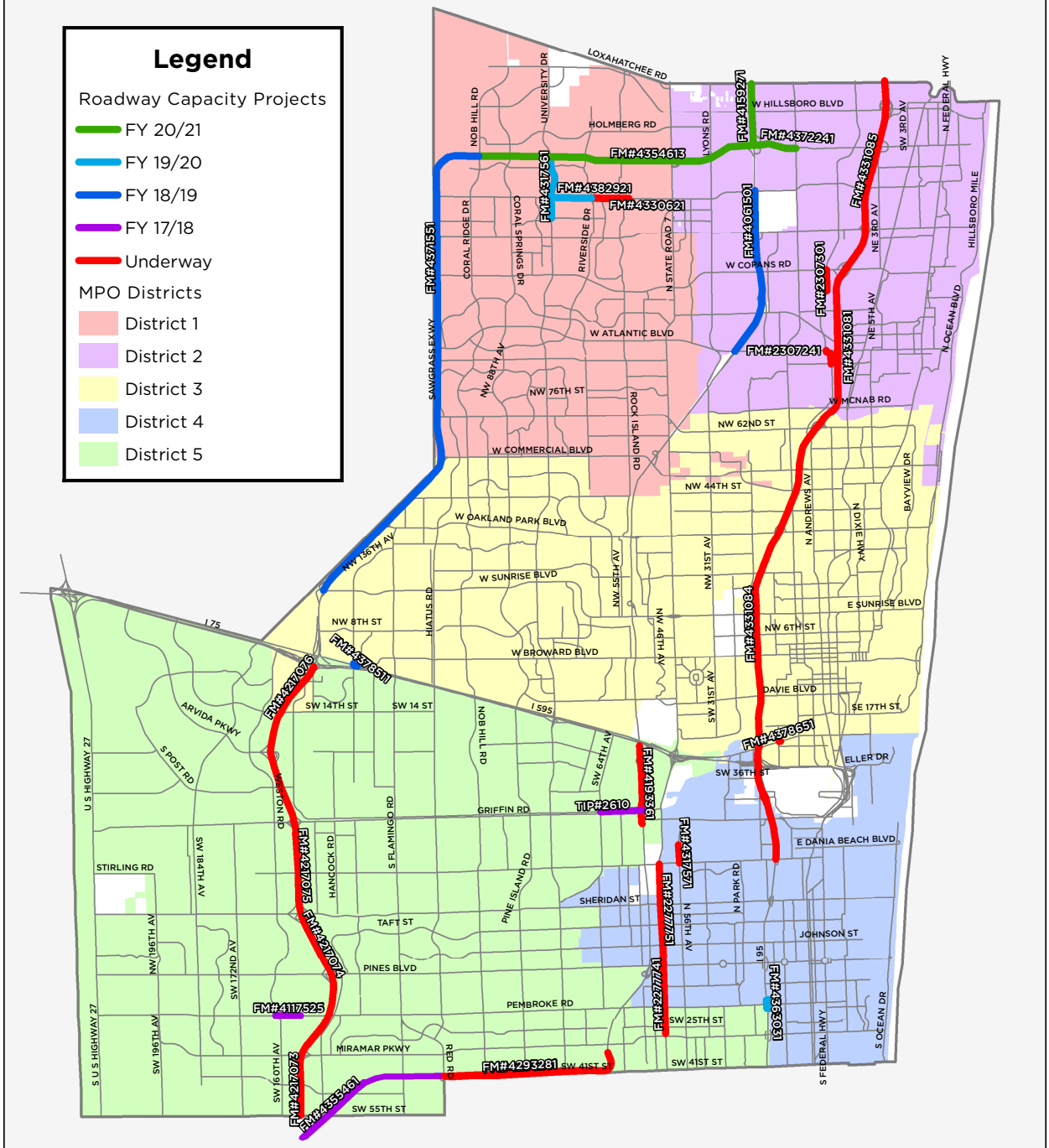
Totals reflect expenditures based on latest budgetary information of anticipated revenues, and may differ from actual amounts received.

APPENDIX I-2

Broward County (MPO) Transportation Improvement Program

Transportation Improvement Program (TIP)

Roadway Capacity Projects FY 2016/2017 - 2020/2021



Prepared By:

Broward MPO
Metropolitan Planning Organization
BrowardMPO.org

Notes:

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Source: Broward MPO
File Name: Roadways_11x17.mxd
Map Date: June 2, 2016
Aerial Image Date: N/A
Created by: C. Campobasso

0 0.5 1 2 Miles

Phase	Fund Source	2017	2018	2019	2020	2021	Total
SR-93/I-75 INTRCHNG @ ROYAL PALM BLVD F N OF SW 36 ST TO S OF SW 14 ST - FM# 4215481 (TIP#)					**Length: .706**	***SIS***	
Type of Work: ADD LANES & RECONSTRUCT					**Lead Agency: MANAGED BY FDOT**		
Project Type: State Managed					**LRTP#: Pg. 43**		
ULTIMATE INTERCHANGE IMPROVEMENTS, PD&E STUDY UNDER 419343-1							
PE	ACNP	0	0	0	0	918,999	**918,999**
Total		**0**	**0**	**0**	**0**	**918,999**	**918,999**
	Prior Years Cost		*Future Years Cost*	*14,925,872*		*Total Project Cost*	*15,844,871*
SR-93/I-75 ML SYSTEM FR MIAMI-DADE/BROWARD CL TO S. OF MIRAMAR PARKWAY - FM# 4217073 (TIP#)					**Length: 1.080 MI**	***SIS***	***RSP***
Type of Work: ADD SPECIAL USE LANE					**Lead Agency: FDOT**		
Project Type: State Managed					**LRTP#: Pg. 43**		
INC	DDR	1,175,000	0	0	0	0	**1,175,000**
DSB	DDR	56,000	40,000	40,000	0	0	**136,000**
Total		**1,231,000**	**40,000**	**40,000**	**0**	**0**	**1,311,000**
	Prior Years Cost	*57,506,771*	*Future Years Cost*			*Total Project Cost*	*58,817,771*
SR-93/I-75 ML SYSTEM FR N OF GRIFFIN ROAD TO I-595 - FM# 4217076 (TIP#)					**Length: 3.650 MI**	***SIS***	***RSP***
Type of Work: ADD SPECIAL USE LANE					**Lead Agency: FDOT**		
Project Type: State Managed					**LRTP#: Pg. 43**		
INC	DDR	500,000	0	0	0	0	**500,000**
DSB	DDR	15,000	0	0	0	0	**15,000**
Total		**515,000**	**0**	**0**	**0**	**0**	**515,000**
	Prior Years Cost	*82,414,055*	*Future Years Cost*			*Total Project Cost*	*82,929,055*
SR-93/I-75 ML SYSTEM FR S OF MIRAMAR PKWY INTG TO S OF SHERIDAN ST - FM# 4217074 (TIP#)					**Length: 3.565 MI**	***SIS***	***RSP***
Type of Work: ADD SPECIAL USE LANE					**Lead Agency: FDOT**		
Project Type: State Managed					**LRTP#: Pg. 43**		
INC	DDR	200,000	0	0	0	0	**200,000**
DSB	DDR	45,750	0	0	0	0	**45,750**
Total		**245,750**	**0**	**0**	**0**	**0**	**245,750**
	Prior Years Cost	*95,789,762*	*Future Years Cost*			*Total Project Cost*	*96,035,512*

Phase	Fund Source	2017	2018	2019	2020	2021	Total
SR-93/I-75 ML SYSTEM FR S OF SHERIDAN ST INTRG TO N OF GRIFFIN ROAD - FM# 4217075 (TIP#)					**Length: 3.699 MI**	***SIS***	***RSP***
Type of Work: ADD SPECIAL USE LANE					**Lead Agency: FDOT**		
Project Type: State Managed					**LRTP#: Pg. 43**		
INC	DDR	200,000	0	0	0	0	**200,000**
DSB	DDR	66,250	0	0	0	0	**66,250**
Total		**266,250**	**0**	**0**	**0**	**0**	**266,250**
	Prior Years Cost	*89,311,935*	*Future Years Cost*			*Total Project Cost*	*89,578,185*
SR-93/I-75 ML SYSTEM FROM MD/BROW COUNTYLINE TO I-595 - FM# 4217077 (TIP#)					**Length: 11.994 MI**	***SIS***	
Type of Work: ITS COMMUNICATION SYSTEM					**Lead Agency: FDOT**		
Project Type: State Managed					**LRTP#: Pg. 43**		
INC	DDR	350,000	0	0	0	0	**350,000**
Total		**350,000**	**0**	**0**	**0**	**0**	**350,000**
	Prior Years Cost	*5,729,876*	*Future Years Cost*			*Total Project Cost*	*6,079,876*
SR-A1A FROM E OF MERCEDES RIVER SMALL BRDG TO SUNRISE BLVD - FM# 4306011 (TIP#)						***Non-SIS***	
Type of Work: RESURFACING					**Lead Agency: FDOT**		
Project Type: State Managed							
INC	DDR	150,000	0	0	0	0	**150,000**
Total		**150,000**	**0**	**0**	**0**	**0**	**150,000**
	Prior Years Cost	*6,941,333*	*Future Years Cost*			*Total Project Cost*	*7,091,333*
SR-A1A FR. SR-816/OAKLAND PARK BLVD. TO FLAMINGO AVE. - FM# 4312042 (TIP#)					**Length: 1.036 MI**	***Non-SIS***	
Type of Work: LANDSCAPING					**Lead Agency: MANAGED BY FDOT**		
Project Type: State Managed							
CST	DIH	67,235	0	0	0	0	**67,235**
CST	DDR	1,792,529	0	0	0	0	**1,792,529**
Total		**1,859,764**	**0**	**0**	**0**	**0**	**1,859,764**
	Prior Years Cost	*122,729*	*Future Years Cost*			*Total Project Cost*	*1,982,493*

Phase	Fund Source	2017	2018	2019	2020	2021	Total
THERMOPLASTIC FOR SUNRISE BLVD INTERCHANGE - FM# 4061032 (TIP#)						***SIS***	
Type of Work: SIGNING/PAVEMENT MARKINGS					**Lead Agency: FTPK, Florida's Turnpike**		
Project Type: State Managed					**LRTP#: Pg. 43**		
CST	PKYI	21,417	205,090	0	0	0	**226,507**
Total		**21,417**	**205,090**	**0**	**0**	**0**	**226,507**
	Prior Years Cost		*Future Years Cost*			*Total Project Cost*	*226,507*
TOLL OPERATIONS - FM# 0001621 (TIP#)						***SIS***	
Type of Work: OPERATING FOR FIXED ROUTE					**Lead Agency: FTPK, Florida's Turnpike**		
Project Type: State Managed					**LRTP#: Pg. 43**		
OPS	PKYO	3,185,000	3,784,685	3,884,685	3,885,000	3,885,000	**18,624,370**
Total		**3,185,000**	**3,784,685**	**3,884,685**	**3,885,000**	**3,885,000**	**18,624,370**
	Prior Years Cost	*103,761,253*	*Future Years Cost*	*12,840,000*		*Total Project Cost*	*135,225,623*
TOWNWIDE DRAINAGE - FM# 2041 (TIP# 2041)						***Non-SIS***	
Type of Work:					**Lead Agency: Lauderdale-By-The-Sea, Town of**		
TOWNWIDE DRAINAGE IMPLEMENT STORMWATER MASTER PLAN							
CST	MUN	150,000	0	0	0	0	**150,000**
Total		**150,000**	**0**	**0**	**0**	**0**	**150,000**
	Prior Years Cost	*933,000*	*Future Years Cost*			*Total Project Cost*	*1,083,000*
TPK RAMPS FROM I-595 TO GRIFFIN ROAD SB WORK - FM# 4193361 (TIP#)					**Length: .794 MI**	***SIS***	***RSP***
Type of Work: ADD LANES & RECONSTRUCT					**Lead Agency: FDOT**		
Project Type: State Managed					**LRTP#: Pg. 43**		
ROW	BNIR	600,000	0	0	0	0	**600,000**
ROW	SIWR	0	85,090	0	0	0	**85,090**
ROW	GMR	0	1,354,783	0	0	0	**1,354,783**
Total		**600,000**	**1,439,873**	**0**	**0**	**0**	**2,039,873**
	Prior Years Cost	*11,533,091*	*Future Years Cost*			*Total Project Cost*	*13,572,964*

Phase	Fund Source	2017	2018	2019	2020	2021	Total
WIDEN THE FTPK/SR 821 FROM I-75 TO NW 57th AVENUE - FM# 4355461 (TIP#)						***SIS***	
Type of Work: ADD LANES & RECONSTRUCT					**Lead Agency: MANAGED BY FDOT**		
					LRTP#: Pg. 43		
CST	PKYI	0	86,215,000	0	0	0	**86,215,000**
RRU	PKYI	0	150,000	0	0	0	**150,000**
UPD	PKYI	0	0	0	900,000	0	**900,000**
Total		**0**	**86,365,000**	**0**	**900,000**	**0**	**87,265,000**
	Prior Years Cost	*7,300,000*	*Future Years Cost*			*Total Project Cost*	*94,565,000*
WIDEN THE TURNPIKE/SR 821 FROM NW 57 AVE TO MIRAMAR TOLL PLAZA (MP 43 - 47) - FM# 4293281 (TIP#)					**Length: 4.100 mi**	***SIS***	***RSP***
Type of Work: ADD AUXILIARY LANE(S)					**Lead Agency: FTPK, Florida's Turnpike**		
Project Type: State Managed					**LRTP#: Pg. 43**		
NW 57TH AVENUE (MP 43) TO MIRAMAR TOLL PLAZA (MP 47)							
CST	PKYI	86,855,000	1,500,000	0	445,000	0	**88,800,000**
RRU	PKYI	400,000	0	0	0	0	**400,000**
Total		**87,255,000**	**1,500,000**	**0**	**445,000**	**0**	**89,200,000**
	Prior Years Cost	*7,147,484*	*Future Years Cost*			*Total Project Cost*	*96,347,484*
WIDEN TPK(SR91) FROM SAWGRASS TO PALM BEACH COUNTY LINE (MP 71-73) - FM# 4159271 (TIP#)					**Length: 1.500**	***SIS***	
Type of Work: ADD LANES & RECONSTRUCT					**Lead Agency: MANAGED BY FDOT**		
Project Type: State Managed					**LRTP#: Pg. 43**		
CST	PKBD	0	0	0	0	46,426,679	**46,426,679**
RRU	PKBD	0	0	0	0	4,000,000	**4,000,000**
Total		**0**	**0**	**0**	**0**	**50,426,679**	**50,426,679**
	Prior Years Cost	*6,006,815*	*Future Years Cost*	*320,100*		*Total Project Cost*	*56,753,594*
WIDEN TPK- ATLANTIC BLVD(SR814) TO WILES RD (MP66-70)(6TO8 LANES) W/EL - FM# 4061501 (TIP#)					**Length: 5.076**	***SIS***	
Type of Work: ADD LANES & RECONSTRUCT					**Lead Agency: MANAGED BY FDOT**		
Project Type: State Managed					**LRTP#: Pg. 43**		
ROW	PKYI	5,886,000	0	0	0	0	**5,886,000**
ENV	PKYI	250,000	0	0	0	0	**250,000**
CST	PKBD	0	0	234,958,464	0	270,000	**235,228,464**
RRU	PKBD	0	0	2,000,000	0	0	**2,000,000**
Total		**6,136,000**	**0**	**236,958,464**	**0**	**270,000**	**243,364,464**
	Prior Years Cost	*18,021,897*	*Future Years Cost*	*144,785*		*Total Project Cost*	*261,531,146*

APPENDIX I-3

Miami Dade County (MPO) Long Range Transportation Plan

PRIORITY I **SNAPSHOT**

Figure 6-2 | Number of Priority I Projects by Improvement Type

Roadway	Transit
59	11

Improvement Type

- Roadway Operational
- Roadway Capacity
- Intersection/Interchange
- Park-and-Ride/Multimodal
- Express Bus/Enhanced Bus
- Bus Rapid Transit (BRT)
- Fixed Guideway

*Figure 6-3 | Priority I Allocation by Project Funding Phase**

Funding Phase

- Preliminary Engineering (PRE-ENG)
- Right-of-Way (ROW)
- Construction (CST)
- Operations and Maintenance (O&M)

Note: Snapshot does not include the Miami Intermodal Center (MIC) Repayment.
**Funds Allocated do not include funds included through the TIP or O&M for improvements on the SHS.*

Figure 6-4 | Priority I Project Map

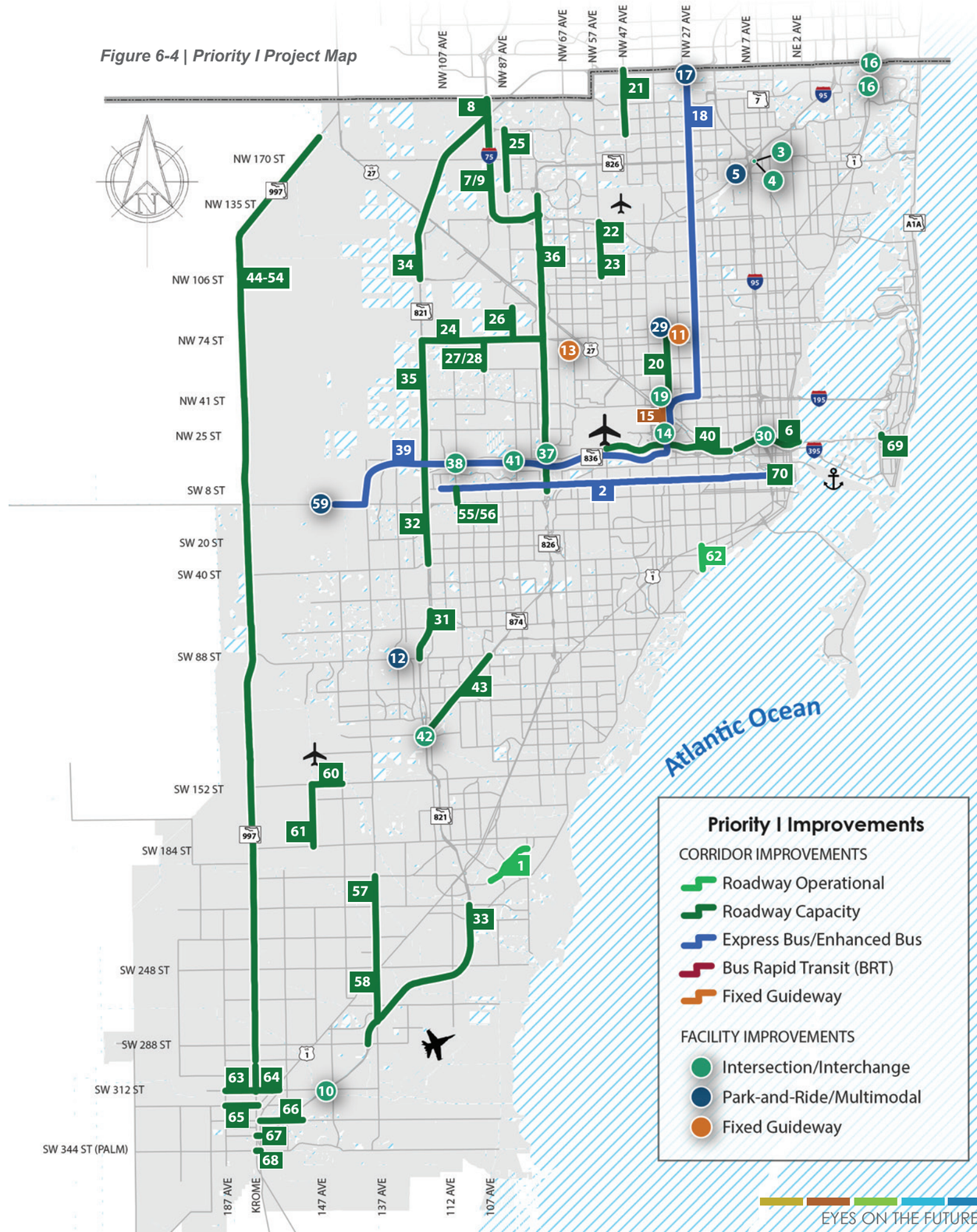


Table 6-6 | Priority I Projects (Values in Millions YOE $)

MAP ID	Project	Limits From	Limits To	Description	Total Capital Cost Funded via TIP	Total Capital Cost (2013 $)	Project Costs Funded via 2040 Plan		Priority I 2015-2020				Priority II 2021-2025				Priority III 2026-2030				Priority IV 2031-2040			
									PRE-ENG	ROW	CST	O&M	PRE-ENG	ROW	CST	O&M	PRE-ENG	ROW	CST	O&M	PRE-ENG	ROW	CST	O&M
1	Caribbean Blvd	Coral Sea Rd	SW 87 Ave	Add center turn lane	$4.467						$4.467													
2	East-West Corridor (Flager Enhanced Bus)**	Miami Downtown Terminal	FIU-MMC (SW 112 Ave)	Incremental improvement on PTP corridor	$2.000	$13.000	$15.730				*$17.730	**				**				**				**
3	Golden Glades Interchange: SR-826 (Palmetto)	SR-826 (Palmetto) EB Ramp	I-95 NB	Modify interchange	$171.426				$6.000	$31.111	$113.914													
4	Golden Glades Interchange Improvements	Florida's Turnpike		Interchange improvement	$74.448				$6.337	$6.743	$61.368													
5	Golden Glades Multi-Modal Terminal (Phase 1)			Modal hub capacity improvements	$51.243				$1.500		$49.549													
6	I-395	I-95	MacArthur Causeway Bridge	Modify interchange	$760.584		$200.010		$3.273	$10.179	*$596.877													
7	I-75	South of NW 170 St	Miami-Dade County Line	ITS communications	$6.593						$1.890													
8	I-75 Managed Lanes System	NW 170 St	South of SR-821 (HEFT) Interchange	Managed lanes	$38.853						$1.695													
9	I-75 Managed Lanes System	South of SR-821 (HEFT) Interchange	Miami-Dade County Line	Managed lanes	$108.037						$2.215													
n/a	Implementation of Quiet Zones for All Aboard Florida	Miami-Dade/Broward County Line	Downtown Miami	19 intersection for quiet zones in the County		$3.200	$3.872				$3.872													
10	Improvements at SW 312 St (Campbell) Interchange	SR-821 (HEFT)/ SW 312 St (Campbell)		Interchange improvements	$3.984				$0.285		$3.699													
11	IRIS Connection	CSX Mainline	FEC Mainline	Rail capacity project	$8.304				$0.100		$7.782													
12	Kendall Park-and Ride Facility	SW 127 Ave/ SW 88 St (Kendall)		Park-and-Ride facility with 160 spaces	$0.741						$0.741													
13	Lehman Yard Rehabilitation & Expansion (Phase 1)	Lehman Center		Rehabilitation and expansion	$1.232						$1.232													
n/a	Miami Intermodal Center (MIC) Repayment***				$199.046						$32.834													
14	Miami Intermodal Center (MIC) Connection To NW 37 Ave	Miami Intermodal Center (MIC)	NW 37 Ave	New 2 lane road construction	$9.827					$5.168	$4.371													
15	Miami River-Miami Intermodal Center (MIC) Capacity Improvement			Double track remaining single track of Tri-Rail near Miami River	$50.400	$49.000	$59.290		*$14.258		*$95.432													
16	NE 203 St and NE 215 St	US-1	West Dixie Highway	Intersection improvements, passing track/siding	$42.960				$4.010		$38.286													
17	NW 215 St Transit Terminal Facility**	At NW 27 Ave		Park-and-Ride facility	$2.994						$2.550	**				**				**				**
18	North Corridor (NW 27 Ave) Enhanced Bus**	Miami Intermodal Center (MIC)	NW 215 St Terminal	Enhanced bus service	$27.000						$3.181	**				**				**				**
19	NW 36 St	NW 42 Ave (LeJeune)	US-27 (Okeechobee)	Replace bridge and add lanes	$10.280						$0.600													
20	NW 37 Ave	North River Dr	NW 79 St	Add 2 lanes and center turn lane and reconstruct	$17.508				$0.013		$17.495													
21	NW 47 Ave	NW 183 St	Miami-Dade/Broward County Line	Capacity improvements	$41.652				$0.025	$18.217	$21.639													
22	NW 57 Ave (Red)	W 65 St	W 84 St	Add 2 lanes and reconstruct	$22.587						$3.730													
23	NW 57 Ave (Red)	W 53 St	W 65 St	Add 2 lanes and reconstruct	$23.907						$3.278													
24	NW 74 St	SR-821 (HEFT)	SR-826 (Palmetto)	Add 2 lanes and reconstruct	$8.476					$5.000	$8.476													
25	NW 87 Ave	NW 154 St	NW 186 St	Add 2 lanes and reconstruct	$6.483						$6.483													
26	NW 87 Ave	NW 74 St	NW 103 St	New 2 lane road construction	$36.822				$0.300		$32.805													
27	NW 97 Ave	NW 70 St	NW 74 St	New 4 lane road construction	$0.977						$0.977													

Bolded phase funds are included in the 2015/2019 Miami-Dade TIP
**denotes portions of phase values are included in both the TIP and 2040 Plan*
*** denotes Operations and Maintenance is funded via MDT system e¨ciencies*
****denotes Repayment of TIFIA Loan is funded through Local Funds Not in Escrow (LPNE) with payments scheduled to 2034.*
n/a - not applicable, project not shown on map

Table 6-6 | Priority I Projects (continued) (Values in Millions YOE $)

MAP ID	Project	Limits From	Limits To	Description	Total Capital Cost Funded via TIP	Total Capital Cost (2013 $)	Project Costs Funded via 2040 Plan		Priority I 2015-2020				Priority II 2021-2025				Priority III 2026-2030				Priority IV 2031-2040			
									PRE-ENG	ROW	CST	O&M	PRE-ENG	ROW	CST	O&M	PRE-ENG	ROW	CST	O&M	PRE-ENG	ROW	CST	O&M
28	NW 97 Ave	NW 58 St	NW 70 St	Add 2 lanes and reconstruct	$5.500						$5.500													
29	SFRTA Metrorail Tri-Rail 79 St Transfer Station			Intermodal hub capacity	$0.374						$0.374													
30	SR 836 (Dolphin)/I-95 Interchange Ramps	NW 12 Ave	I-95	Modify interchange	$142.048		$131.824			$9.189	$131.824													
31	SR-821 (HEFT)	SW 88 St (Kendall)	60 St Canal Bridge	Add lanes and reconstruct	$224.049						$0.834													
32	SR-821 (HEFT)	SW 40 St (Bird)	SR-836 (Dolphin)	Add lanes and reconstruct	$156.248				$1.314		$154.934													
33	SR-821 (HEFT)	SW 288 St	SW 216 St	Add lanes and reconstruct	$80.267				$0.413		$79.854													
34	SR-821 (HEFT)	NW 106 St	I-75	Add lanes and reconstruct	$100.907				$7.407		$93.500													
35	SR-821 (HEFT)	SR-836 (Dolphin)	NW 74 St	Add lanes and reconstruct	$194.220				$14.257		$179.963													
36	SR-826 (Palmetto) and I-75	Flagler NW 170 St	NW 154 St SR-826 (Palmetto)	Managed lanes	$298.103						$38.895													
37	SR-826 (Palmetto) and SR 836 (Dolphin) Interchange	North of SW 8 St (Tamiami) NW 87 Ave	South of 25 St NW 57 Ave (Red)	Interchange improvement	$843.949						$96.510													
38	SR-836 (Dolphin) Access Ramp	NW 107 Ave	SR-836 (Dolphin)	Construction of access ramp	$3.467						$3.467													
39	SR-836 (Dolphin) Enhanced Bus**	Miami Intermodal Center (MIC)	SW 147 Ave/ SW 8 St (Tamiami) Park-and-Ride	Enhanced bus service	$25.000							**				**				**				**
40	SR-836 (Dolphin) Improvements	NW 57 Ave	NW 17 Ave	Mainline widening and interchange improvements	$198.786				$0.210	$10.860	$187.716													
41	SR-836 (Dolphin) Interchange Modiÿcations At 87 Ave	SR-836 (Dolphin) West of 82 Ave	NW 97 Ave	Interchange improvements	$80.979				$0.050		$80.929													
42	SR-874 (Don Shula) Ramp Connector	SW 128 St	SR-874 (Don Shula)	New connector ramp construction	$103.421				$0.973	$3.711	$98.737													
43	SR-874 (Don Shula)/ Killian Parkway Interchange	SR-821 (HEFT)	SW 88 St (Kendall)	Mainline widening and interchange reconstruction	$1.269						$1.269													
44	SR-997 (Krome)	SW 88 St (Kendall)	One Mile North of SW 8 St (Tamiami)	Add 2 lanes and reconstruct	$75.580					$3.989	$55.546													
45	SR-997 (Krome)	SW 136 St	SW 88 St (Kendall)	Add 2 lanes and reconstruct	$51.838					$5.100	$45.168													
46	SR-997 (Krome)	North of SW 8 St (Tamiami)	MP 2.754	Add 2 lanes and reconstruct	$22.184						$21.653													
47	SR-997 (Krome)	MP 10.953	MP 14.184/ US-27 (Okeechobee)	Add 2 lanes and reconstruct	$42.082				$0.020		$41.803													
48	SR-997 (Krome)	MP 2.754	MP 5.122	Add 2 lanes and reconstruct	$20.714						$20.547													
49	SR-997 (Krome)	MP 5.122	MP 8.151	Add 2 lanes and reconstruct	$27.589						$27.556													
50	SR-997 (Krome)	MP 8.151	MP 10.935	Add 2 lanes and reconstruct	$24.460						$24.425													
51	SR-997 (Krome)	SW 312 St (Campbell)	SW 296 St	Resurface and add 2 lanes	$14.098				$1.075		$13.023													
52	SR-997 (Krome)	SW 296 St	SW 232 St	Add 2 lanes and reconstruct	$79.351				$2.850	$43.126	$33.109													
53	SR-997 (Krome)	SW 232 St	SW 184 St (Eureka)	Add 2 lanes and reconstruct	$53.080				$1.785	$29.200	$21.694													
54	SR-997 (Krome)	SW 184 St (Eureka)	SW 136 St	Add 2 lanes and reconstruct	$38.236				$0.087	$12.183	$24.116													
55	SW 107 Ave	SW 3 St	West Flagler St	Add lanes and rehabilitate pavement	$14.132					$6.859	$5.401													
56	SW 107 Ave	SW 1100 Block	SW 3 St	Add lanes and rehabilitate pavement	$32.470					$13.376	$12.234													

Bolded phase funds are included in the 2015/2019 Miami-Dade TIP
** denotes portions of phase values are included in both the TIP and 2040 Plan*
*** denotes Operations and Maintenance is funded via MDT system efficiencies*

Table 6-6 | Priority I Projects (continued) (Values in Millions YOE $)

MAP ID	Project	Limits From	Limits To	Description	Total Capital Cost Funded via TIP	Total Capital Cost (2013 $)	Project Costs Funded via 2040 Plan		Priority I 2015-2020				Priority II 2021-2025				Priority III 2026-2030				Priority IV 2031-2040			
									PRE-ENG	ROW	CST	O&M	PRE-ENG	ROW	CST	O&M	PRE-ENG	ROW	CST	O&M	PRE-ENG	ROW	CST	O&M
57	SW 137 Ave	US-1	SW 200 St	Completion as 2 continuous lanes	$13.934				**$0.100**		**$13.834**													
58	SW 137 Ave	SR-821 (HEFT)	US-1	Add 2 lanes and reconstruct	$6.949				**$0.031**		**$6.918**													
59	SW 147 Ave/SW 8 St Park-and-Ride**			Park-and- Ride facility	$9.000						**$9.000**	**				**				**				**
60	SW 152 St	SW 157 Ave	SW 147 Ave	Add 2 lanes and reconstruct	$2.351						**$2.351**													
61	SW 157 Ave	SW 184 St (Eureka)	SW 152 St (Coral Reef)	New 4 lane road construction	$6.662						**$6.662**													
62	SW 27 Ave	US-1	Bayshore Dr	Add center turn lane	$1.347						**$1.347**													
63	SW 312 St (Campbell)	SW 187 Ave	SW 177 Ave	Add 2 lanes and center turn lane and reconstruct	$5.723				**$0.443**		**$5.280**													
64	SW 312 St (Campbell)	SR-997 (Krome)	US-1	Widening existing lanes and reconstruct	$13.181				**$0.880**		**$12.301**													
65	SW 320 St (Mowry)	SW 187 Ave	Flagler Ave	Add 2 lanes and reconstruct	$1.805						**$1.805**													
66	SW 328 St	US-1	SW 162 Ave	Add 2 lanes and reconstruct	$2.146						**$2.146**													
67	SW 336 St	SR-997 (Krome)	US-1	Widen and resurface existing roadway	$1.390				**$0.275**		**$1.115**													
68	SW 344 St (Palm)	SR-997 (Krome)	US-1	Widen and resurface existing roadway	$0.890				**$0.220**		**$0.670**													
69	West Ave Connector Bridge	North of Lincoln Rd	South of 18 St	New bridge construction	$ 5.473					**$1.635**	**$2.552**													
70	SR-968/SW 1 St	At Miami		Bridge replacement	$ 84.981				**$0.140**	**$4.651**	**$84.981**													

Bolded phase funds are included in the 2015/2019 Miami-Dade TIP
** denotes portions of phase values are included in both the TIP and 2040 Plan*
*** denotes Operations and Maintenance is funded via MDT system efficiencies*

PRIORITY II **SNAPSHOT**

Figure 6-5 | Number of Priority II Projects by Improvement Type

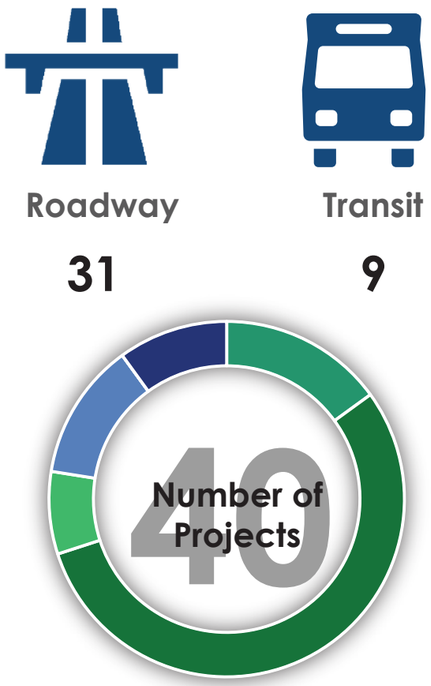
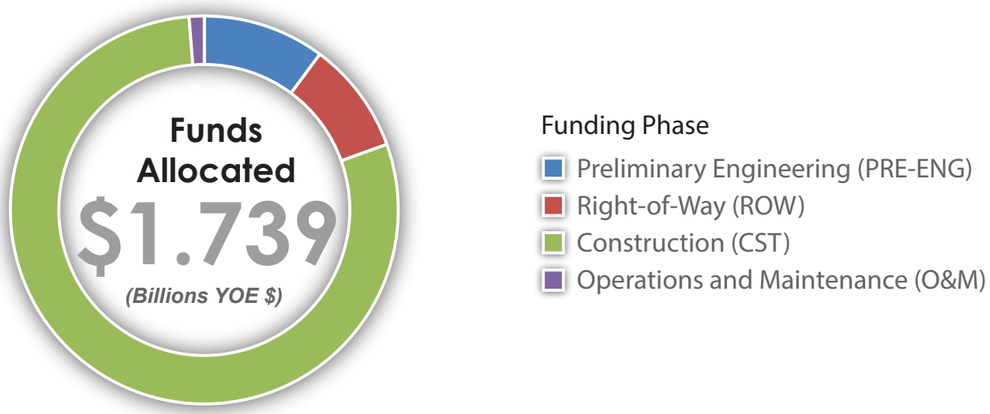


*Figure 6-6 | Priority II Allocation by Project Funding Phase**



Note: Snapshot does not include the Port of Miami Tunnel / Oversight Consultant.
**Funds Allocated do not include funds included through the TIP or O&M for improvements on the SHS.*

Figure 6-7 | Priority II Project Map

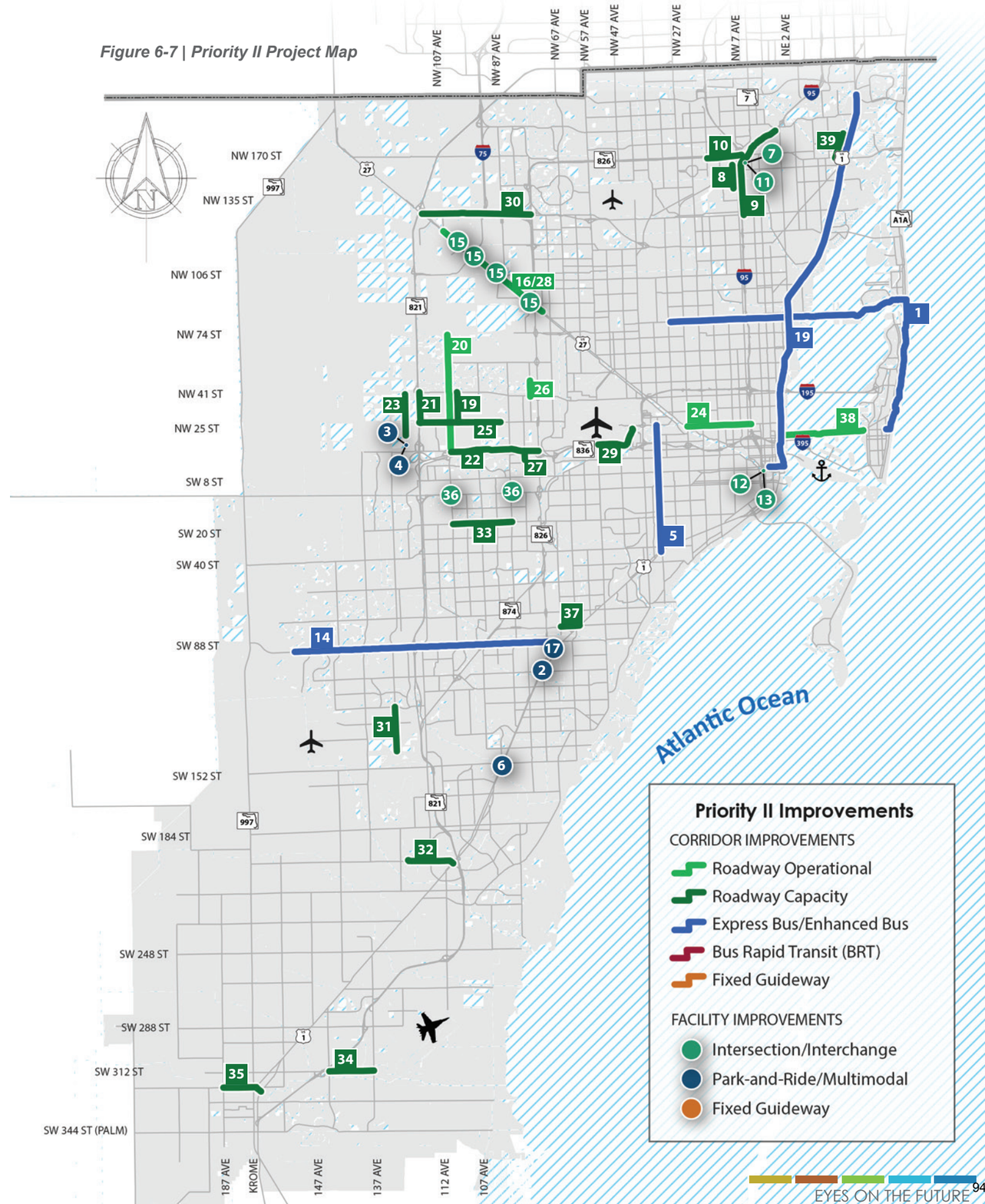


Table 6-7 | Priority II Projects (Values in Millions YOE $)

MAP ID	Project	Limits From	Limits To	Description	Total Capital Cost Funded via TIP	Total Capital Cost (2013 $)	Project Costs Funded via 2040 Plan		Priority I 2015-2020				Priority II 2021-2025				Priority III 2026-2030				Priority IV 2031-2040			
									PRE-ENG	ROW	CST	O&M	PRE-ENG	ROW	CST	O&M	PRE-ENG	ROW	CST	O&M	PRE-ENG	ROW	CST	O&M
1	79 St Causeway (JFK Cwy) Enhanced Bus	Northside Metrorail Station	Miami Beach Convention Center	Improve/implement transit service		$55.457	$218.876						$7.371	$15.795	$45.279	$16.054				$37.816				$96.561
2	Busway Park-and-Ride Facility	US-1 Busway	SW 104 St	Park-and-Ride facility with 250-300 surface parking spaces		$0.116	$1.581									$0.169				$0.398				$1.015
3	Direct Ramps to Dolphin Station Transit Terminal	SR-821 (HEFT) Managed Lanes	Dolphin Station Transit Terminal	Direct access ramps for transit and trucks		$45.000	$60.750						$8.505		$52.245									
4	Dolphin Station Transit Terminal	West of SR-821 (HEFT) and North of NW 12 St		Park-and-Ride with kiss-and-ride, 12 bus bays & 1000 parking spaces		$25.000	$31.425		$4.235		$24.714				$1.451	$0.109				$0.257				$0.657
5	Douglas Road Corridor (37 Ave) Enhanced Bus**	US-1	Miami Intermodal Center (MIC)	Incremental improvement on PTP corridor		$13.200	$17.820								$17.820									
6	Expand Overcapacity Park-and-Ride lot at SW 152 St			New parking garage with 500 parking spaces		$16.250	$22.333						$2.363	$5.063	$14.513	$0.042				$0.099				$0.254
7	Golden Gladed Interchange: Florida Turnpike SouthBound	At I-95		Express Lane Flyover	$3.413		$64.683		**$3.413**						$61.270									
8	Golden Glades Interchange: I-95	Biscayne River Canal	Miami Gardens Dr	Add 2 auxiliary lanes	$2.791		$35.980		**$2.791**						$33.189									
9	Golden Glades Interchange: I-95	SR 916/Opa-Locka Boulevard	Golden Glades Interchange	New road construction	$3.672		$70.916		**$3.672**						$67.244									
10	Golden Glades Interchange: SR-826 (Palmetto)	NW 17 Ave	Golden Glades Interchange	Managed lanes	$104.639		$103.289								$103.289									
11	Golden Glades Interchange: SR-826 (Palmetto)	At I-95		New express lane ramps on I-95	$11.388		$228.120		**$11.388**						$216.732									
12	I-95	I-95	E 2 Ave	Ramp reconstruction/ reconÿguration of I-95 ramps		$29.614	$39.979						$6.663		$33.316									
13	I-95	I-95	S Miami Ave	Ramp reconstruction/ reconÿguration of I-95 ramps		$29.614	$39.979						$6.663		$33.316									
14	Kendall Corridor (Kendall Enhanced Bus)**	West Kendall Transit Terminal	Dadeland North Metrorail Station	Incremental improvement on PTP corridor	$6.609	$8.800	$11.880			**$1.000**	**$5.609**				$11.880	**				**				**
n/a	MDT Bus Stop Enhancements	MDT System		Enhance all off-street bus stops		$2.500	$3.375						$0.473		$2.903									
15	Medley Bridge/Canal Improvement Program			Improvements at; NW 121 Way, NW 116 Way, NW 105 Way, NW 79 Ave		$5.000	$6.750						$1.350	$1.688	$3.713									
16	Medley Freight Access Roadway Improvements	US-27 (Okeechobee)	Medley	Bridge widening and canal improvements		$ 0.263	$2.073						$0.071		$0.284	$0.183				$0.432				$1.103
17	Metrorail Park-and-Ride Facility	At Dadeland South		Expand Park-and-Ride facility with 1000 parking space garage		$25.000	$34.541						$4.725		$29.025	$0.084				$0.199				$0.508
18	Northeast Corridor (Biscayne) Enhanced Bus**	Miami Downtown Terminal	Aventura Terminal	Incremental improvement on PTP corridor	$4.500	$14.000	$17.293				* **$18.391**				$3.402	**				**				**
19	NW 107 Ave	NW 41 St	NW 25 St	Add 2 lanes and reconstruct		$12.873	$16.810		$0.593	$5.539	$0.944				$9.483	$0.027				$0.063				$0.161
20	NW 107 Ave	NW 12 St	NW 74 St	Operational and capacity improvements where feasible		$0.263	$1.091						$0.071		$0.284	$0.079				$0.185				$0.473
21	NW 117 Ave	NW 25 St	NW 41 St	New 2 lane road to support the °o w of truck tra¸ c to SR-821 (HEFT)		$2.500	$9.153						$2.187		$6.966									
22	NW 12 St	NW 107 Ave	SR-826 (Palmetto)	Widening		$20.000	$26.476		$4.840	$6.050					$14.850	$0.079				$0.185				$0.473
23	NW 122 Ave	NW 12 St	NW 41 St	New 2 lane road to support the °o w of truck tra¸ c from SR-821 (HEFT)		$11.635	$14.257		$2.816	$3.519	$6.194				$1.728									
24	NW 20 St	NW 27 Ave	I-95	Roadway infrastructure improvements		$0.566	$1.255		$0.137	$0.171					$0.420	$0.056				$0.133				$0.339
25	NW 25 St	NW 89 Ct	SR-821 (HEFT)	Capacity and operational improvements		$24.336	$32.853						$6.070	$7.587	$19.196									
26	NW 79 Ave	NW 48 Way	NW 36 St	Merge and reduce access points if possible		$0.197	$0.254		$0.048	$0.060					$0.146									
27	NW 82 Ave	NW 8 St	NW 12 St	New 4 lane road construction		$2.977	$3.999		$0.214	$0.315	$0.307				$3.086	$0.008				$0.019				$0.049
28	NW South River Dr	NW 107 Ave	NW 74 Ave	Roadway and operational improvements		$5.000	$6.750						$1.350	$1.688	$3.713									

Bolded phase funds are included in the 2015/2019 Miami-Dade TIP
** denotes portions of phase values are included in both the TIP and 2040 Plan*
*** denotes Operations and Maintenance is funded via MDT system efficiencies*
n/a - not applicable, project not shown on map

Table 6-7 | Priority II Projects (continued) (Values in Millions YOE $)

MAP ID	Project	Limits From	Limits To	Description	Total Capital Cost Funded via TIP	Total Capital Cost (2013 $)	Project Costs Funded via 2040 Plan		Priority I 2015-2020)				Priority II 2021-2025				Priority III 2026-2030				Priority IV 2031-2040			
									PRE-ENG	ROW	CST	O&M	PRE-ENG	ROW	CST	O&M	PRE-ENG	ROW	CST	O&M	PRE-ENG	ROW	CST	O&M
29	Perimeter Rd	NW 42 Ave (LeJeune)	NW 57 Ave	Add 2 lanes and reconstruct		$13.488	$17.373		$1.801		$8.712				$6.480	$0.041				$0.096				$0.244
n/a	Port of Miami Tunnel / Oversight Consultant			Payment to oversight consultant of the Port of Miami Tunnel	$3.300		$2.816				$1.500				$1.316									
30	SR-924 Gratigny West Extension	SR-826 (Palmetto)/I-75	SR-821 (HEFT)	Extend SR-924 to SR-821 (HEFT) with connections to I-75 and SR- 826 (Palmetto)	$25.886	$150.000	$240.800		**$13.748**	**$12.138**	$43.996				$153.414	$4.635				$10.917				$27.876
31	SW 127 Ave	SW 120 St	SW 144 St	Add 2 lanes and new 4 lane road construction		$10.118	$13.536		$0.551	$2.791	$0.890				$8.937	$0.039				$0.092				$0.235
32	SW 200 St	US-1	Quail Roost Dr	Add 2 lanes and reconstruct		$11.211	$15.279		$0.801		$1.276				$12.816	$0.041				$0.097				$0.247
33	SW 24 St	SW 107 Ave	SW 87 Ave	Add 2 lanes and reconstruct		$15.758	$21.428		$1.109		$1.796				$18.032	$0.052				$0.123				$0.315
34	SW 312 St (Campbell)	SW 152 Ave	SW 137 Ave	Add 2 lanes with left turn lanes and reconstruct		$11.314	$14.932		$2.738	$3.422					$8.401	$0.040				$0.093				$0.238
35	SW 320 St (Mowry)	SW 197 Ave US-1	SW 187 Ave SW 142 Ave	Add 2 lanes with left turn lanes and reconstruct		$5.355	$7.091		$1.296	$1.620	$1.069				$2.783	$0.035				$0.081				$0.208
36	SW 8 St (Tamiami)	SW 87 Ave	SW 107 Ave	Grade Separations at SW 8 St/SW 87 Ave and SW 8 St/SW 107 Ave	$1.650	$79.410	$181.653		**$1.650**				$21.441	$101.250	$58.962									
37	SW 80 St	SW 72 Ave	US-1	Add 2 lanes and center turn lane and reconstruct		$6.257	$8.605						$0.452	$0.849	$7.147	$0.017				$0.039				$0.101
38	Venetian Causeway Bridge	Bayshore Dr	Purdy Ave	Bridge replacement		$131.462	$177.601		$4.769						$172.152	$0.073				$0.171				$0.436
39	W Dixie Hwy	NE 163 St	NE 175 St	Widen to 4 Lanes		$4.682	$5.997				$4.532				$1.264	$0.021				$0.051				$0.129

Bolded phase funds are included in the 2015/2019 Miami-Dade TIP
** denotes portions of phase values are included in both the TIP and 2040 Plan*
*** denotes Operations and Maintenance is funded via MDT system efficiencies*
n/a - not applicable, project not shown on map

PRIORITY III **SNAPSHOT**

Figure 6-8 | Number of Priority III Projects by Improvement Type

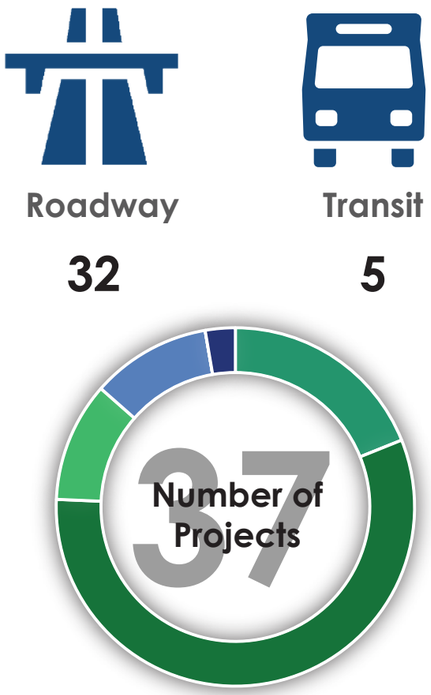
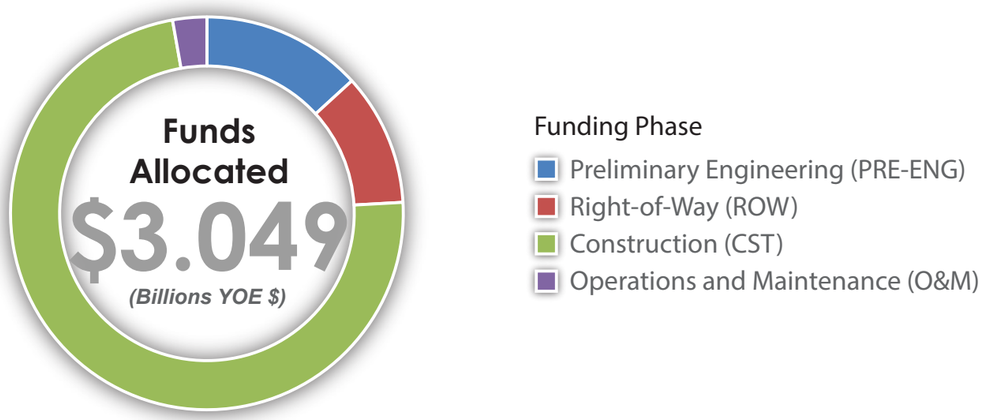


*Figure 6-9 | Priority III Allocation by Project Funding Phase**



**Funds Allocated do not include funds included through the TIP or O&M for improvements on the SHS.*

Figure 6-10 | Priority III Project Map

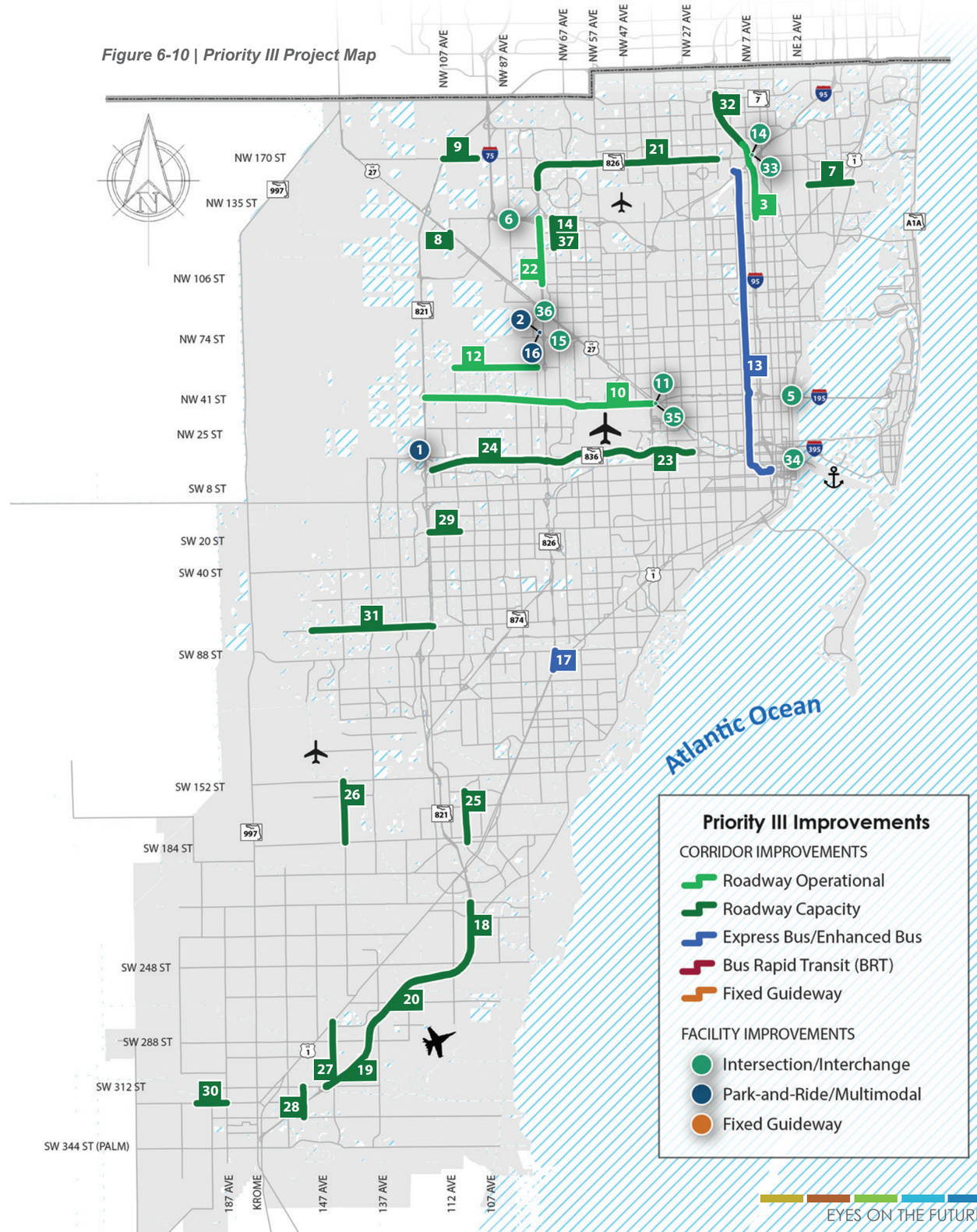


Table 6-8 | Priority III Projects (Values in Millions YOE$)

MAP ID	Project	Limits From	Limits To	Description	Total Capital Cost Funded via TIP	Total Capital Cost (2013 $)	Project Costs Funded via 2040 Plan	Priority I 2015-2020				Priority II 2021-2025				Priority III 2026-2030				Priority IV 2031-2040			
								PRE-ENG	ROW	CST	O&M	PRE-ENG	ROW	CST	O&M	PRE-ENG	ROW	CST	O&M	PRE-ENG	ROW	CST	O&M
1	Direct Ramps to Dolphin Station Transit Terminal	SR-836 (Dolphin) Managed Lanes	Dolphin Station Transit Terminal	Direct access ramps for transit		$45.000	$ 71.550									$10.017		$61.533					
2	Direct Ramps to Palmetto Intermodal Terminal	SR-826 (Palmetto) Managed Lanes	Palmetto Intermodal Terminal	Direct access ramps for transit		$45.000	$70.038					$8.505						$61.533					
3	Golden Glades Interchange	SB Turnpike	SB I-95 at NW 135 St	Modify interchange			$224.190										$111.300	$112.890					
4	Golden Glades Interchange: SR-826 (Palmetto)	NW 17 Ave at SR-826 (Palmetto)	NB I-95 at NW 183 St	Modify interchange			$322.770										$7.950	$314.820					
5	I-195 ramps in Midtown (N 36 & N 38 Sts)	I-195	N 36 & N 38 St	Reconstruction/ reconÿguration of ramps leading to N 36 St & N 38 St		$29.614	$47.087									$7.848		$39.239					
6	I-75 Ramp	At NW 87 Ave		Construct an o° ramp from SB I-75 to SB W 28 Ave/NW 87 Ave		$29.614	$47.087									$7.848		$39.239					
7	NE 151 St	NE 10 Ave	West Dixie Highway	Add 2 lanes and reconstruct		$12.105	$19.517									$0.980	$2.822	$15.445	$0.044				$0.225
8	NW 107 Ave	1000 feet North of W 122 St	US-27 (Okeechobee)	Widen bridge over Miami Canal		$2.602	$4.199									$0.260		$3.876	$0.010				$0.052
9	NW 170 St	SR-821 (HEFT)	NW 97 Ave	6-lane divided roadway		$14.716	$23.609									$4.680	$5.850	$12.869	$0.035				$0.176
10	NW 36 St/NW 41 St	NW 42 Ave (Le Jeune)	SR-821 (HEFT)	Operational improvements		$0.263	$0.418									$0.084		$0.335					
11	NW 42 Ave (LeJeune)	US-27 (Okeechobee)		Improve advance signage for intersection lane alignment		$0.134	$0.213									$0.021		$0.192					
12	NW 58 St	NW 107 Ave	NW 82 Ave	Corridor traffic operational improvements		$0.263	$0.795									$0.084		$0.335	$0.062				$0.315
13	NW 7 Ave Enhanced Bus	Downtown Miami	Golden Glades Interchange Terminal	Premium limited stop transit service		$37.050	$85.241					$5.387	$11.543	$9.265				$28.059	$5.074				$25.914
14	NW 72 Ave (Milam Dairy)	NW 122 St	NW 138 St	Add center turn lane		$4.200	$6.865									$0.457		$6.221	$0.031				$0.156
15	NW 72nd Ave (Milam Dairy)	Hialeah Expy		Operational improvements		$0.103	$0.164									$0.016		$0.147					
16	Palmetto Intermodal Terminal	SR-826 (Palmetto) and NW 74 St		Expadand Park-and-Ride facility	$2.655	$25.000	$35.647	**$2.655**				$4.725		$21.769				$8.546	$0.099				$0.508
17	Ramps between US-1 Busway and SR-826 (Palmetto)	US-1 Busway	SR-826 (Palmetto)	Construct ramps connecting the US-1 Busway to SR-826 (Palmetto)		$60.000	$93.384					$11.340						$82.044					
18	SR-821 (HEFT)	SW 137 Ave	SW 216 St	Widen to 8 lanes, include express lanes for portion of project length		$72.160	$185.439					$8.856						$104.304	$11.836				$60.444
19	SR-821 (HEFT)	SW 312 (Campbell Dr)	SW 288 St	Widen to 6 lanes		$36.080	$66.947					$4.428		$19.040				$29.727	$2.252				$11.500
20	SR-821 (HEFT)	SW 288 St	SW 137 Ave (Speedway)	Widen to 8 lanes		$11.990	$29.676					$1.472						$17.331	$1.781				$9.093
21	SR-826 (Palmetto)	NW 154 St	NW 17 Ave	Managed lanes	$21.000		$701.190	**$3.100**	**$18.000**									$701.190					
22	SR-826 (Palmetto)	NW 138 St	NW 103 St/W 49 St	Add a braided o° ramp to W 68 St/NW 122 St		$52.600	$47.087									$7.848		$39.239					
23	SR-836 (Dolphin) Managed Lanes	SR-826 (Palmetto)/ SR-836 (Dolphin)	Just West of 27 Ave	Two new managed lanes within the right-of-way of SR-836 (Dolphin)		$59.300	$129.700									$6.837		$87.450	$5.800				$29.618
24	SR-836 (Dolphin) Managed Lanes	SR-821 (HEFT)	SR-826 (Palmetto)/SR-836 (Dolphin) Interchange	Two new managed lanes within the ROW of SR 836 (Dolphin)		$80.500	$140.400					$7.425		$74.520				$31.482	$4.435				$22.649
25	SW 107 Ave	Quail Roost Dr	SW 160 St	Add 2 lanes and reconstruct		$11.295	$18.280									$0.985	$1.451	$15.524	$0.052				$0.268
26	SW 147 Ave	SW 184 St (Eureka)	SW 152 St (Coral Reef)	Add 2 lanes and reconstruct		$13.359	$21.626									$1.245	$0.328	$19.667	$0.063				$0.323
27	SW 152 Ave	US-1	SW 312 St (Campbell)	Add 2 lanes and reconstruct		$11.220	18.276									$1.057		$16.784	$0.071				$0.364
28	SW 162 Ave (Farm Life)	SW 312 (Campbell)	SW 328 (Lucy)	Add 2 lanes and center turn lane and reconstruct		$8.410	$13.562									$2.674	$3.343	$7.354	$0.031				$0.159
29	SW 24 St	SW 117 Ave	SW 107 Ave	Add 2 lanes and reconstruct		$8.235	$13.284									$0.774		$12.320	$0.031				$0.159

Bolded phase funds are included in the 2015/2019 Miami-Dade TIP
** denotes portions of phase values are included in both the TIP and 2040 Plan*
*** denotes Operations and Maintenance is funded via MDT system efficiencies*

Table 6-8 | Priority III Projects (continued) (Values in Millions YOE $)

MAP ID	Project	Limits From	Limits To	Description	Total Capital Cost Funded via TIP	Total Capital Cost (2013 $)	Project Costs Funded via 2040 Plan		Priority I 2015-2020				Priority II 2021-2025				Priority III 2026-2030				Priority IV 2031-2040			
									PRE-ENG	ROW	CST	O&M	PRE-ENG	ROW	CST	O&M	PRE-ENG	ROW	CST	O&M	PRE-ENG	ROW	CST	O&M
30	SW 320 St (Mowry)	SW 187 Ave S. Dixie Hwy	SW 197 Ave SW 142 Ave	Add 2 lanes and reconstruct		$24.804	$37.310						$2.025		$11.011				$24.085	$0.031				$0.158
31	SW 72 St	SW 117 Ave	SW 157 Ave	Add 2 lanes and reconstruct		$29.783	$48.118										$2.742		$44.613	$0.125				$0.638
32	Turnpike (Mainline)	Golden Glades Interchange	SR-821 (HEFT)	Widen to 8 lanes		$73.984	$129.543						$8.213					$11.235	$96.727	$2.189				$11.179
33	Turnpike (Mainline)	Golden Glades Interchange		Add SB ramp capacity		$55.000	$87.450												$87.450					
34	US-1	Port Blvd		Expand SB left turn lane for trucks entering Port of Miami		$1.275	$1.986						$0.235						$1.751					
35	US-27 (Okeechobee)	NW 42 Ave (Le Jeune)		Improve access at intersection		$0.263	$0.418										$0.084		$0.335					
36	US-27 (Okeechobee)	SR-826 (Palmetto)		Operational improvements		$8.024	$12.758										$2.552	$3.190	$7.017					
37	NW 72 Ave (Milam Dairy)/ W 16 Ave	W 68 St/NW 122 St	W 77 St	Roadway improvements		$2.253	$3.583												$3.583					

Bolded phase funds are included in the 2015/2019 Miami-Dade TIP
** denotes portions of phase values are included in both the TIP and 2040 Plan*
*** denotes Operations and Maintenance is funded via MDT system efficiencies*

PRIORITY IV **SNAPSHOT**

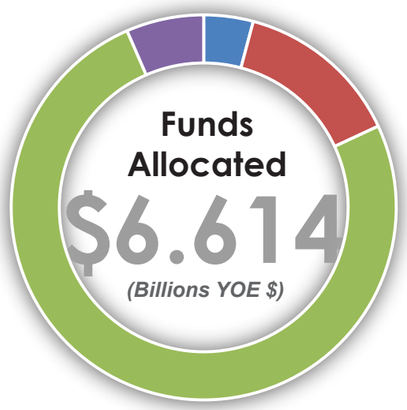
Figure 6-11 | Number of Priority IV Projects by Improvement Type

Roadway	Transit
38	1

Improvement Type

- Roadway Operational
- Roadway Capacity
- Intersection/Interchange
- Park-and-Ride/Multimodal
- Express Bus/Enhanced Bus
- Bus Rapid Transit (BRT)
- Fixed Guideway

*Figure 6-12 | Priority IV Allocation by Project Funding Phase**



Funding Phase

- Preliminary Engineering (PRE-ENG)
- Right-of-Way (ROW)
- Construction (CST)
- Operations and Maintenance (O&M)

Note: Snapshot does not include the Port of Miami Tunnel Financial Repayments
**Funds Allocated do not include funds included through the TIP or O&M for improvements on the SHS.*

Figure 6-13 | Priority IV Project Map

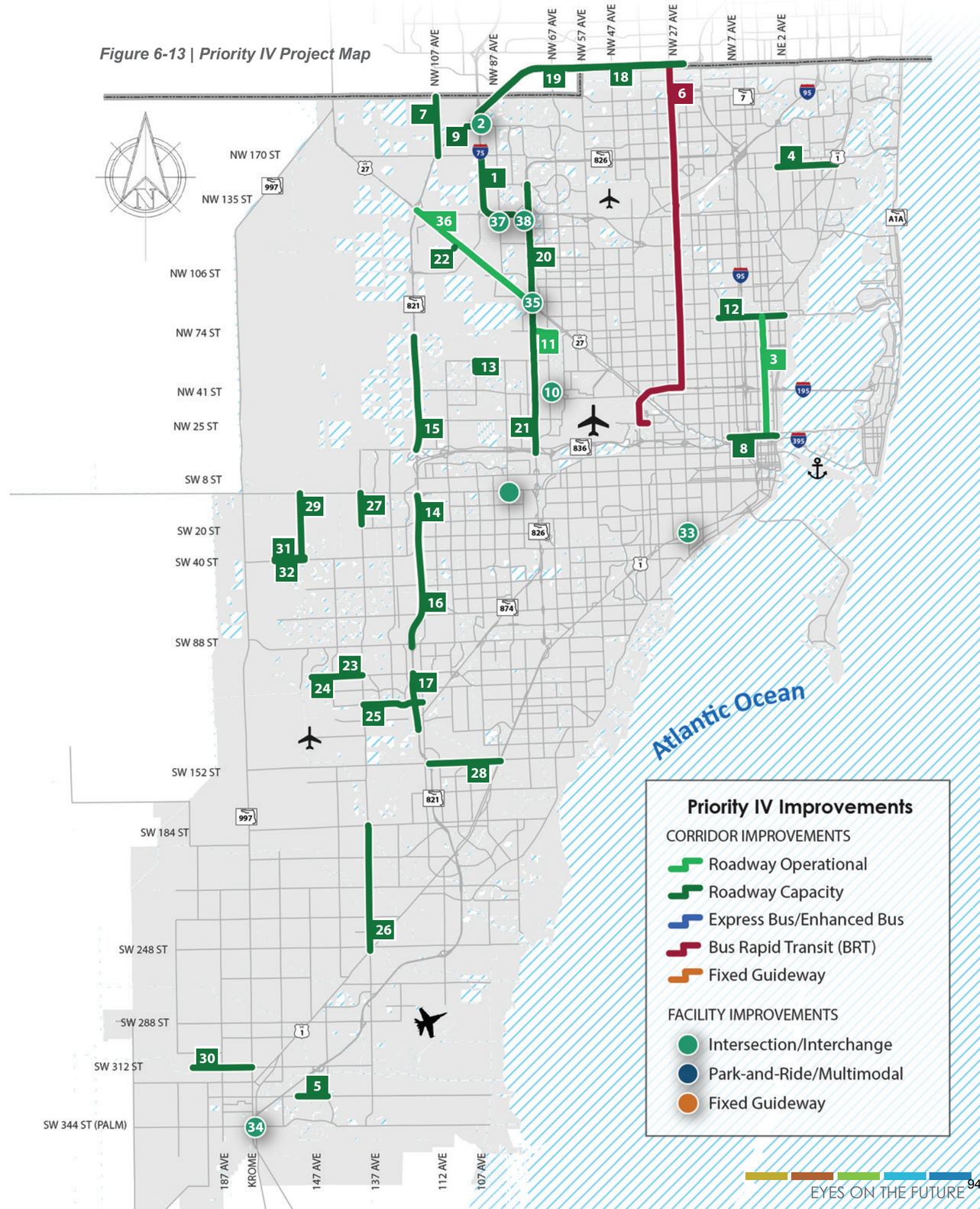


Table 6-9 | Priority IV Projects (Values in Millions YOE $)

MAP ID	Project	Limits From	Limits To	Description	Total Capital Cost Funded via TIP	Total Capital Cost (2013 $)	Project Costs Funded via 2040 Plan		Priority I 2015-2020				Priority II 2021-2025				Priority III 2026-2030				Priority IV 2031-2040			
									PRE-ENG	ROW	CST	O&M	PRE-ENG	ROW	CST	O&M	PRE-ENG	ROW	CST	O&M	PRE-ENG	ROW	CST	O&M
1	I-75	SR-826 (Palmetto)	NW 170 St	Widen with express lanes			$550.000																$550.000	
2	I-75	At Miami Garden Dr		Modify Interchange	$8.520		$132.820		**$8.520**														$124.300	
3	N. Miami Ave	NW 14 St	Miami City Limitis	Roadway improvements		$3.358	$7.576														$1.444		$5.778	$0.354
4	NE 159 St	NE 6 Ave	West Dixie Highway	Add 2 lanes and reconstruct		$13.731	$ 28.032														$1.590	$0.754	$25.530	$0.158
5	North Canal Dr	SW 162 Ave	SW 152 Ave	Add 2 lanes and divided roadway with left turn lanes		$8.493	$17.321														$3.448	$4.310	$9.483	$0.080
6	North Corridor (NW 27 Ave) BRT with Dedicated Lanes	Miami Intermodal Center (MIC)	NW 215 St	Full bus rapid transit		$291.120	$625.975						$36.288	$17.107				$71.436	$39.457				$369.102	$92.589
7	NW 107 Ave***	NW 170 St	Broward County line	Extend NW 107 Ave to the County Line		$34.404	$70.887														$14.130	$17.663	$38.859	$0.235
8	NW 14 St	Civic Center	US-1	Widen to 3 lanes and resurface		$7.857	$16.056														$3.190	$3.987	$8.772	$0.107
9	NW 186 St	NW 97 Ave	I-75	New 4 lane road construction		$5.355	$10.906														$2.174	$2.717	$5.978	$0.036
10	NW 36 St	At NW 72 Ave (Milam Dairy)		Grade separation of NW 36 St over NW 72 Ave		$39.705	$80.601														$7.060	$14.708	$58.833	
11	NW 74 St	SR-826 (Palmetto)	FEC Intermodal Yard	Modify connector			$130.900																$130.900	
12	NW 79 St/NW 81 St/NW 82 St	NW 13 Ct	Biscayne Bay	Capacity improvements		$16.859	$34.223														$6.845	$8.556	$18.823	
13	NW 97 Ave	NW 58 St	NW 52 St	Add 2 lanes and reconstruct		$2.514	$5.132														$1.021	$1.276	$2.807	$0.028
n/a	Port of Miami Tunnel	Port of Miami	SR 836 (Dolphin)/I-395	Financing/repayments	$10.264		$6.500		**$1.250**		$0.250				$1.250				$1.250				$2.500	
n/a	Port of Miami Tunnel	Port of Miami	SR 836 (Dolphin)/I-395	Financing/repayments	$2,611.161		$1,463.342		**$0.625**		$207.676				$247.975				$287.471				$719.595	
n/a	Port Tunnel / Miami-Dade County MPO Priority			FDOT repayment to Miami-Dade County	$110.000		$382.000				$42.000				$85.000				$85.000				$170.000	
14	SR-821 (HEFT)	SW 40 St (Bird)	SW 8 St (Tamiami	Transportation systems management and operations (TSM&O)		$8.640	$17.539																$17.539	
15	SR-821 (HEFT)	NW 12 St	NW 74 St	Transportation systems management and operations (TSM&O)		$17.064	$34.640																$34.640	
16	SR-821 (HEFT)	SW 88 St (Kendall)	SW 40 St (Bird)	Transportation systems management and operations (TSM&O)		$13.997	$28.414																$28.414	
17	SR-821 (HEFT)	SR-874 (Don Shula)	Killian Pkwy	Widen to 10 lanes		$52.742	$101.973														$5.889	$26.767	$58.887	$10.431
18	SR-821 (HEFT)	NW 57 Ave (Red)	Turnpike (Mainline)	Widen to 8 lanes		$40.238	$90.991														$5.255	$23.884	$52.545	$9.307
19	SR-821 (HEFT)	I-75	NW 57 St (Red)	Widen to 8 lanes		$47.176	$93.266										$4.825	$21.933	$21.713				$33.882	$10.912
20	SR-826 (Palmetto)	NW 103 St	NW 154 St	Widen with express lanes			$763.400																$763.400	
21	SR-826 (Palmetto)	SR-836 (Dolphin)	NW 103 St	Add 4 special use lanes			$763.400																$763.400	
22	SW 102 Ave	Tamiami Canal		New bridge over Tamiami Canal		$5.520	$11.221														$2.241	$2.801	$6.163	$0.016
23	SW 104 St	SW 147 Ave	SW 137 Ave	Add 2 lanes and reconstruct		$7.568	$15.442														$3.072	$3.841	$8.449	$0.080
24	SW 104 St	Hammocks Blvd	SW 147 Ave	Add 2 lanes and reconstruct		$5.245	$10.702														$2.129	$2.662	$5.856	$0.055
25	SW 120 St	SW 137 Ave	SW 117 Ave	Add 2 lanes and reconstruct		$15.285	$31.190														$6.206	$7.757	$17.066	$0.161
26	SW 137 Ave	US-1	SW 184 St	Add 2 lanes and reconstruct		$10.466	$21.581														$1.228		$20.017	$0.336

Bolded phase funds are included in the 2015/2019 Miami-Dade TIP
** denotes portions of phase values are included in both the TIP and 2040 Plan*
*** denotes Operations and Maintenance is funded via MDT system efficiencies*
****Project does not comply with the CDMP*
n/a - not applicable, project not shown on map

Table 6-9 | Priority IV Projects (continued) (Values in Millions YOE $)

MAP ID	Project	Limits From	Limits To	Description	Total Capital Cost Funded via TIP	Total Capital Cost (2013 $)	Project Costs Funded via 2040 Plan	Priority I 2015-2020				Priority II 2021-2025				Priority III 2026-2030				Priority IV 2031-2040			
								PRE-ENG	ROW	CST	O&M	PRE-ENG	ROW	CST	O&M	PRE-ENG	ROW	CST	O&M	PRE-ENG	ROW	CST	O&M
27	SW 137 Ave	SW 24 St	SW 8 St (Tamiami	Add 2 lanes and reconstruct		$ $9.291	$ $18.958													$3.772	$4.715	$10.373	$0.098
28	SW 152 St (Coral Reef)	SR-821 (HEFT)	US-1	Add 2 lanes and reconstruct	$ $1.750	$ $64.607	$ $131.153	**$0.175**	**$1.000**											$7.362	$103.546	$20.245	
29	SW 157 Ave	SW 8 St (Tamiami)	SW 42 St	Add 2 lanes and construct new 4 lane road		$ $14.585	$ $29.787													$1.060	$11.704	$16.844	$0.179
30	SW 312 St (Campbell)	NW 14 Ave/SW 176 Ave	SW 197 Av	Add 2 lanes and reconstruct		$ $29.611	$ $51.506									$2.419	$5.871	$23.275				$19.811	$0.130
31	SW 40 St	SW 157 Ave	SW 167 Ave	New 2 lane road construction		$ $1.400	$ $2.912															$2.842	$0.070
32	SW 42 St	SW 162 Ave	SW 157 Ave	Add 2 lanes and reconstruct		$ $7.752	$ $15.824													$3.147	$3.934	$8.655	$0.087
33	US-1	At SW 27 Ave		Grade separation of US-1 over SW 27 Ave		$ $39.705	$ $73.588									$5.530	$11.520	$8.295				$48.243	
34	US-1	At SW 344 St (Palm)		Grade separated overpass		$ $39.705	$ $80.601													$7.060	$14.708	$58.833	
35	US-27 (Okechobee)/ SR-826 (Palmetto) Interchange	NW 95 St	W 16 Ave	Ramp improvements		$ $52.600	$ $106.778													$11.368	$10.150	$85.260	
36	US-27 (Okeechobee)	SR-826 (Palmetto)	SR-997 (Krome)	Operational/capacity improvements with grade separated intersections	$31.330[1]	$	$ $624.800	**$31.330**														$624.800	
37	W 24 St	W 28 Ave		Operational improvements		$0.460	$ $0.934													$0.093		$0.840	
38	W 24 St	W 23 Ave		Lower curbs to allow wider turns		$ $0.039	$ $0.079													$0.008		$0.071	

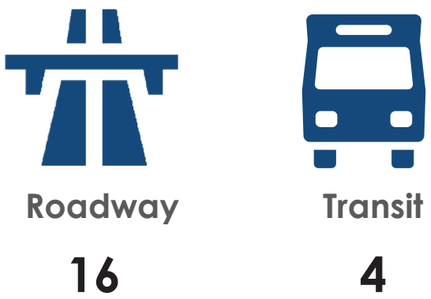
[1]US-27 Okeechobee Details of TIP

	US-27 (Okeechobee)	SR 997 (Krome)	NW 79 Ave	Operational/capacity improvements with grade separated intersections	$1.130
	US-27 (Okeechobee)	West of SR-997 (Krome)	East of 117 Ave	Operational/capacity improvements with grade separated intersections	$5.550
	US-27 (Okeechobee)	East of NW 87 Ave	NW 79 Ave	Operational/capacity improvements with grade separated intersections	$2.600
	US-27 (Okeechobee)	East of NW 116	East of 87 Ave	Operational/capacity improvements with grade separated intersections	$13.100
	US-27 (Okeechobee)	East of NW 107 Ave	East of NW 116 Way	Operational/capacity improvements with grade separated intersections	$5.350
	US-27 (Okeechobee)	East of NW 117 Ave	East of NW 107 Ave	Operational/capacity improvements with grade separated intersections	$3.600

Bolded phase funds are included in the 2015/2019 Miami-Dade TIP
** denotes portions of phase values are included in both the TIP and 2040 Plan*
*** denotes Operations and Maintenance is funded via MDT system efficiencies*

PARTIALLY FUNDED **SNAPSHOT**

Figure 6-14 | Number of Partially Funded Projects by Improvement Type



Roadway **16**

Transit **4**

Improvement Type

- Roadway Operational
- Roadway Capacity
- Intersection/Interchange
- Park-and-Ride/Multimodal
- Express Bus/Enhanced Bus
- Bus Rapid Transit (BRT)
- Fixed Guideway

Figure 6-15 | Funds Needed to Complete Partially Funded Projects (2041-2050 YOE $)*

$ 7,300,000,000

**Funds needed to complete Partially Funded projects, excluding those projects where the PD&E will determine the scope.*

Figure 6-16 | Partially Funded Project Map

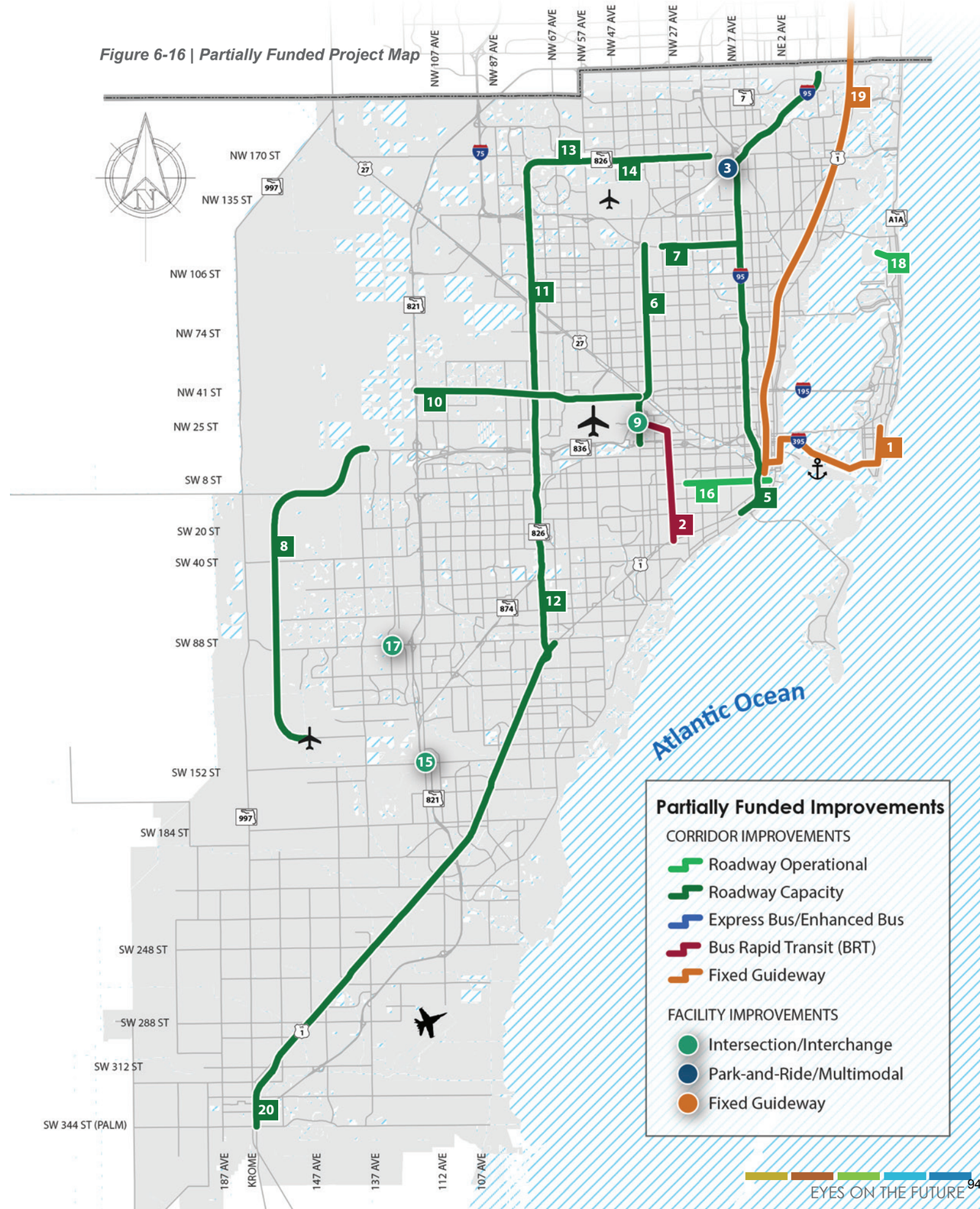


Table 6-10 | Partially Funded Projects (Values in Millions YOE $)

MAP ID	Project	Limits From	Limits To	Description	Total Capital Cost Funded via TIP	Total Capital Cost (2013 $)	Project Costs Funded via 2040 Plan		Priority I 2015-2020				Priority II 2021-2025				Priority III 2026-2030				Priority IV 2031-2040			
									PRE-ENG	ROW	CST	O&M	PRE-ENG	ROW	CST	O&M	PRE-ENG	ROW	CST	O&M	PRE-ENG	ROW	CST	O&M
1	Beach Connection (Baylink)	Miami Downtown Terminal	Miami Beach Convention Center	Premium transit service		$532.132	$161.273										$91.088	$24.645				$45.540		
2	Douglas Rd Corridor BRT(SW 27/37 Ave) Dedicated Lanes	US-1	Miami Intermodal Center (MIC)	Full bus rapid transit		$166.400	$36.378														$36.378			
3	Golden Glades Multimodal Terminal (Phase 2)			Park-and-Ride facility with 1,800 space garage		$45.000	$6.075						$6.075											
4	I-95	South of SR 836/I-395	Broward County Line	Operational and capacity improvements	$13.035		$13.035		**$13.035**															
5	I-95	US-1	South of SR 836/I-395	Operational and capacity improvements	$10.200		$10.200		**$10.200**															
6	MDX Connect 4 Express	Central Miami-Dade County	North Miami-Dade County	New expressway connecting SR-836 (Dolphin), SR- 112 , SR-924, and SR-826 (Palmetto)	$7.300	$150.000	$323.800		**$7.300**								$63.600	$47.700					$212.451	
7	MDX SR-924/Gratigny Parkway East Extension	NW 32 Ave	I-95	New expressway extension of SR-924 Eas* to I-95	$0.240	$477.000	$296.500		**$0.240**								$49.290					$107.540	$139.613	
8	MDX SR-836 (Dolphin) SouthWest Extension***	Western Terminus of SR-836 (Dolphin)	SW 136 St	Extend SR-836 from NW 137 Ave to the Southwest Kendall area	$7.490	$808.000	$681.900		**$7.490**								$63.600					$347.130	$271.208	
9	Miami Intermodal Center (MIC)			NW 42 Ave (LeJeune) Strip	$0.012					**$0.012**														
10	NW 36th /NW 41 St	SR-821 (HEFT)	NW 42 Ave (LeJeune)	Redesign NW 36 St/41 St as a superarterial express street		$397.051	$509.504										$31.566				$120.902	$161.203	$195.834	
11	SR-826 (Palmetto)	West Flagler St	NW 154 St	Operational and capacity improvements			$2.080						$2.080											
12	SR-826 (Palmetto)	US-1/S Dixie Highway	SR-836 (Dolphin)	Managed lanes	$7.150				**$7.150**															
13	SR-826 (Palmetto)	East of NW 67 Ave	East of NW 57 Ave	Capacity and operational improvements	$5.500				**$5.500**															
14	SR-826 (Palmetto)	West of NW 32 Ave	East of NW 27 Ave	Capacity and operational improvements	$6.900				**$6.900**															
15	SW 117 Ave/SW 152 St (Coral Reef) Grade Separation			Grade separate SW 117 Ave over SW 152 St (Coral Reef)		$39.705	$7.060														$7.060			
16	SW 7 St/ SW 8 St	Brickell Ave	SW 27 Ave	Operational and capacity improvements		$0.278	$0.093														$0.093			
17	SW 88 St (Kendall)/SW 127 Ave Grade Separation			Grade separate SW 88 St (Kendall) over SW 127 Ave.		$39.705	$7.060														$7.060			
18	Town of Indian Creek Bridge			Reconstruct bridge	$1.515	$13.860			**$1.515**															
19	Tria-Rail Coastal Link	Miami	Pompano	Tri-Rail service	$5.566				**$5.566**															
20	US-1 Managed Lanes***	SW 344 St (Palm)	Dadeland South Metrorail Station	Add 2 /1 reversible new managed lanes within the ROW of the Busway	$1.809	$367.000	$139.700		**$1.809**								$31.800	$1.590					$106.270	

Bolded phase funds are included in the 2015/2019 Miami-Dade TIP
** denotes portions of phase values are included in both the TIP and 2040 Plan*
*** denotes Operations and Maintenance is funded via MDT system efficiencies*
****Project would require amendment of the Miami-Dade County Comprehensive Plan Development Master Plan*

APPENDIX I-4

Broward County (MPO) Long Range Transportation Plan

Affordable Transit Projects

ID	Project	Description	Location	Total Cost*	Time Period
1	Wave Streetcar	Construct new streetcar route	SE 17th St. to SE 7th St. and NW 4th Ave. to NE 6th Ave.	$30.6	2019-2020
4	SR 842/Broward Blvd.	Upgrades to support enhanced bus service	Sawgrass Mills Mall and SR 817/University Dr.	$5.9	2019-2020
n/a	Modern Trolleys	Purchase 15 trolley vehicles	City of Fort Lauderdale	$5.7	2019-2020
5	SR 5/US 1	Upgrades to support enhanced bus service	Aventura Mall and Downtown Terminal	$3.7	2019-2020
7	SR 816/Oakland Park Blvd.	Upgrades to support enhanced bus service	Sawgrass Mills Mall and SR A1A	$138.7	2019-2025
8	SR 820/Hollywood/ Pines Blvd.	Upgrades to support enhanced bus service	US 27 and SR A1A	$85.3	2019-2025
9	SR 834/Sample Rd.	Upgrades to support enhanced bus service	SR 869/Sawgrass Expy. and SR A1A	$5.8	2019-2025
18	SR 817/University Dr.	Upgrades to support enhanced bus service	Golden Glades and north of SR 834/Sample Rd.	$174.3	2026-2030
23	SR 838/Sunrise Blvd.	Upgrades to support enhanced bus service	Sawgrass Mills Mall and SR A1A	$4.1	2026-2030
29	SR 7/US 441	Upgrades to support enhanced bus service	Golden Glades and Sample Rd.	$386.2	2031-2040
TOTAL				$840.4	

Affordable Roadway Projects

ID	Project	Description	Location	Total Cost*	Time Period
2	NW 21st Ave.	Reconstruct roadway to include multimodal alternatives	SR 816/Oakland Park Blvd. and SR 870/Commercial Blvd.	$23.1	2019-2020
3	Intersection Improvement	Reconstruct intersection	SR 845/Powerline Rd. and SR 816/Oakland Park Blvd.	$14.5	2019-2020
n/a	Wayfinding Program	Install traveler wayfinding components	City of Fort Lauderdale	$1.5	2019-2020
n/a	Downtown ITS System	Install Intelligent Transportation Systems (ITS) components	City of Fort Lauderdale	$1.1	2019-2020
6	Intersection Improvement	Reconstruct intersection	Rock Island Rd. and Royal Palm Blvd.	$0.5	2019-2020
n/a	Broward Signal Network	Install Ethernet to fiber-optics signal component	Broward County	$24.0	2019-2025
n/a	FDOT Signal Network	Install cellular to fiber-optics signal components	Broward County	$109.6	2019-2040
10	SR 818/Griffin Rd.	Add 2 lanes (from 4 to 6)	I-75 and SR 823/Flamingo Rd.	$35.7	2021-2025
11	NE 3rd Ave.	Reconstruct roadway to include multimodal alternatives	SR834/Sample Rd. and Copans Rd.	$21.2	2021-2025
12	NE 6th Ave.	Reconstruct roadway to include multimodal alternatives	Prospect and SR 870/Commercial Blvd.	$1.9	2021-2025
13	Intersection Improvement	Reconstruct intersection	SR 7/US 441 and SR 816/Oakland Park Blvd.	$1.8	2021-2025
14	Intersection Improvement	Reconstruct intersection	SR 823/Flamingo Rd. and SR 820/Hollywood/Pines Blvd.	$1.4	2021-2025
15	Intersection Improvement	Reconstruct intersection	Military Trail and SR 834/Sample Rd.	$1.4	2021-2025
16	Intersection Improvement	Reconstruct intersection	SW 15th Ave. and SR 84	$0.6	2021-2025
17	SR 817/University Dr.	Add 2 lanes (from 4 to 6)	SR 869/Sawgrass Expy. and NW 40th St. (Cardinal)	$35.0	2021-2030
19	Pembroke Rd.	Add 2 lanes (from 2 to 4)	SW 184th Ave. and SW 160th Ave.	$28.9	2026-2030
20	SR A1A	Reconstruct roadway to include multimodal alternatives	SR 858/Hallandale Beach Blvd. and SR 820/Hollywood/Pines Blvd.	$16.1	2026-2030
21	NW 136th Ave.	Construct turn-lanes	I-595 and NW 2nd St.	$10.3	2026-2030
n/a	Bridge Improvements	Reconstruct bridges	City of Oakland Park	$4.5	2026-2030
24	Wiles Rd.	Reconstruct roadway to include multimodal alternatives	Sawgrass Expy. and Coral Ridge Dr.	$3.5	2026-2030
25	Pembroke Rd.	Construct new 4 lane roadway	SW 200th Ave. and SW 184th Ave.	$53.1	2026-2030
26	Intersection Improvement	Reconstruct intersection to eliminate turn-lanes	SR 820/Hollywood Blvd. and 62nd Ave.	$0.3	2026-2030
27	SR 817/University Dr.	Add 2 lanes (from 2 to 4)	Holmberg Rd. and County Line Rd.	$34.1	2026-2040
28	SW 148th Ave.	Add 2 lanes (from 2 to 4)	Bass Creek Rd. and SR 858/Miramar Pkwy.	$27.3	2026-2040
30	SW 184th Ave.	Construct new 2 lane roadway	SR 822/Sheridan St. and SR 818/Griffin Rd.	$36.2	2031-2040
31	SE 2nd St.	Construct new 2 lane roadway	SR 5/US 1 and Layne Blvd.	$56.6	2031-2040
32	SW 196th Ave.	Add 2 lanes (from 2 to 4)	SR 858/Miramar Pkwy. and SR 820/Pines Blvd.	$47.5	2031-2040
33	Intersection Modification	Reconstruct interchange	I-95 and SR 84	$38.6	2031-2040
34	Pembroke Rd.	Add 2 lanes (from 4 to 6)	Douglas Rd. and SR 817/University Dr.	$25.3	2031-2040
35	SE 9th St.	Upgrade railroad crossing	Florida East Coast Railroad and SE 9th St.	$15.6	2031-2040
36	Pembroke Rd.	Restripe roadway to 6 lanes	SR 7/US 441 and Florida's Turnpike	$13.1	2031-2040
37	NE 3rd Ave./SW 11th W.	Add 2 lanes (from 2 to 4)	SR 834/Sample Rd. to SW 10th St.	$38.0	2031-2040
TOTAL				$722.3	

* Millions of dollars in year of expenditure

APPENDIX I-J:
Intersection Growth Rate Initial Review by Links

% 2015-Future Year Growth Worksheet - Initial Intersection % by Links				2015-2020 Adj Final Annual Growth %		2015-2040 Adj Final Annual Growth %	
Roadway	To	From	Intersection ID	Individiual Road Link Growth %	Avg Road Link Growth %	Individiual Road Link Growth %	Avg Road Link Growth %
Florida's Turnpike/ HEFT/SR 821	SW 8th St	SR 836		1.6%		1.5%	
	SR 836	NW 12th Street		1.9%		1.5%	
	NW 12th Street	NW 41th Street		2.5%		1.5%	
	NW 41th Street	NW 74th Street		2.5%		1.5%	
	NW 74th Street	NW 106th Street		1.9%		1.5%	
	NW 106th Street	US 27/ Okeechobee Rd	14, 15	2.1%	2.1%	1.5%	1.5%
	US 27/ Okeechobee Rd	NW 170th St		1.9%		1.5%	
	NW 170th St	Interstate 75		1.9%		1.5%	
	Interstate 75	CR 823/Red Rd	16, 17	2.1%	1.9%	1.5%	1.5%
	CR 823/Red Rd	CR 817/NW 27th Ave		1.8%		1.5%	
	CR 817/NW 27th Ave	Florida's Turnpike/SR 91		1.5%		1.5%	
Florida's Turnpike/ SR 91	I-595	Griffin Rd		1.0%		1.0%	
	Griffin Rd	Pines Blvd		1.0%		1.0%	
	Pines Blvd	Florida's Turnpike/HEFT/SR 821		1.0%		1.0%	
	Florida's Turnpike/HEFT/SR 821	NW 203rd St		2.4%		1.5%	
Interstate 75	W. Sunrise Blvd	I-595		1.0%		1.1%	
	I-595	Royal Palm Blvd		2.5%		1.5%	
	Royal Palm Blvd	Griffin Rd		2.5%		1.5%	
	Griffin Rd	Sheridan St		2.5%		1.5%	
	Sheridan St	Pines Blvd		1.0%		1.0%	
	Pines Blvd	Miramar Pkwy/ S 33rd St	36, 37	1.0%	1.3%	1.0%	1.3%
	Miramar Pkwy/ S 33rd St	Florida's Turnpike		1.7%		1.5%	
	Florida's Turnpike	Miami Gardens Dr/NW 186 St		1.0%		1.0%	
	Miami Gardens Dr/NW 186 St	NW 178th St		1.3%		1.4%	
	NW 178th St	NW 138th Street		1.3%		1.4%	
	NW 138th Street	SR 826		1.0%		1.0%	
	SR 826	NW 57th Ave (Red Road)		1.0%		1.0%	
	NW 57th Ave (Red Road)	Douglas(Le Jeune Connector)		2.4%		1.5%	
	Douglas(Le Jeune Connector)	NW 32nd Ave		1.0%		1.0%	
NW 107th Ave	NW 122nd St	NW 138th St		1.0%		1.0%	
	NW 138th St	NW 170th St		n/a		n/a	
NW 102nd Ave	NW 170th St	NW 178th St					
	NW 178th St	ADM Project Access Rd					
Miami Gardens Dr	ADM Project Access Rd	Interstate 75 Western Ramps					
	Interstate 75 Western Ramps	Interstate 75 Eastern Ramps	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11		1.0%		1.0%
	Interstate 75 Eastern Ramps	NW 87th Ave		1.0%		1.0%	
	NW 87th Ave	NW 82nd Ave		1.0%		1.0%	
	NW 82nd Ave	NW 77nd Ave		1.0%		1.0%	
	NW 77nd Ave	NW 67nd Ave		1.0%		1.0%	
	NW 67nd Ave	NW 57nd Ave		1.0%		1.0%	
	NW 57th Ave	NW 47th Ave		1.0%		1.0%	
NW 170th St	Florida Turnpike	NW 102 Ave/NW 107 Ave		n/a		n/a	
	NW 102 Ave/NW 107 Ave	NW 97th Ave	50		1.0%		1.0%
	NW 87th Ave	NW 82nd Ave		1.0%		1.0%	
	NW 82nd Ave	NW 78th Ave		1.0%		1.0%	
NW 169th St	NW 77th Ct	NW 67th Ave		2.6%		2.1%	

% 2015-Future Year Growth Worksheet - Initial Intersection % by Links				2015-2020 Adj Final Annual Growth %		2015-2040 Adj Final Annual Growth %	
Roadway	To	From	Intersection ID	Individiual Road Link Growth %	Avg Road Link Growth %	Individiual Road Link Growth %	Avg Road Link Growth %
NW 154th St	NW 87th Ave	NW 82nd Ave		1.0%		1.0%	
	NW 82nd Ave	SR 826		1.0%		1.0%	
	SR 826	NW 67th Ave		1.0%		1.0%	
	NW 67th Ave	NW 57th Ave (Red Road)		5.0%		2.6%	
NW 138th St	Florida's Turnpike	US 27/ Okeechobee Rd	20	5.0%	3.0%	2.6%	1.8%
	US 27/ Okeechobee Rd	NW 107th Ave		1.0%		1.0%	
	NW 107th Ave	NW 97th Ave	12	1.9%	1.9%	2.0%	2.0%
	NW 97th Ave	Hialeah Gardens Blvd		1.9%		2.0%	
Hialeah Gardens Blvd	NW 106th Terrace	US 27/ Okeechobee Rd		5.0%		2.6%	
	US 27/ Okeechobee Rd	NW 138th St	23, 44, 51, 52, 53, 54	1.0%	1.0%	1.0%	1.0%
NW 97th Ave	NW 122nd St	NW 130th St	12, 13	3.3%	3.3%	2.3%	2.3%
	NW 130th St	NW 138th St		3.3%		2.3%	
	NW 138th St	NW 154th St		3.3%		2.3%	
	NW 154th St	NW 170th St		n/a		n/a	
	NW 170th St	Graham Access		n/a		n/a	
	Graham Access	NW 178th St		n/a		n/a	
NW 87th Ave	Miami Gardens Dr/NW 186 St	NW 170th St	1, 50	1.0%	1.0%	1.0%	1.0%
	NW 170th St	NW 154th St		1.0%		1.0%	
NW178th St	Graham Access	NW 97th Ave		n/a		n/a	
	NW 97th Ave	Iinterstate 75		n/a		n/a	
Miramar Pkwy	SW 172nd Ave	SW 160th Ave		2.3%		1.5%	
	SW 160th Ave	Interstate 75	36, 37	1.0%	1.0%	1.0%	1.0%
	Interstate 75	SW 148th Ave		1.0%		1.0%	
	SW 148th Ave	Flamingo Rd		2.6%		1.5%	
NW 122nd St	NW 97th Ave	Hialeah Gardens Blvd		1.0%		1.0%	
	Hialeah Gardens Blvd	NW 89th Ave		1.0%		1.0%	
	NW 89th Ave	NW 87th Ave		1.0%		1.0%	
	NW 87th Ave	SR 826		1.0%		1.0%	
	N Okeechobee Rd	NW 97th Ave		5.0%		2.6%	
SR 826	I-75	NW 122nd St		2.5%		1.5%	
	NW 122nd St	NW 103rd St		1.0%		1.0%	
	NW 103rd St	N Okeechobee Rd		2.5%		1.5%	
Pines Blvd	I-75	SW 160th Ave	38, 39	1.0%	1.0%	1.0%	1.0%
	SW 160th Ave	SW 172th Ave		2.0%		1.9%	
Okeechobee Rd	NW 154th St	Florida's Turnpike	14, 15, 20, 23	1.0%	1.0%	1.0%	1.0%
	Florida's Turnpike	NW 138th St		1.0%		1.0%	
	NW 138th St	NW 107th Ave		1.0%		1.0%	
	NW 107th Ave	Hialeah Gardens Blvd		1.0%		1.0%	
	Hialeah Gardens Blvd	NW 103rd St		3.0%		2.2%	
	NW 103rd St	SR 826		3.0%		2.2%	
	SR 826	W 16th Ave (Milam Dairy Rd)		1.0%		1.0%	
	W 16th Ave (Milam Dairy Rd)	Hialeah Expy		1.0%		1.2%	
	Hialeah Expy	NW 57th Ave (Red Road)		1.0%		1.2%	
	NW 57th Ave (Red Road)	Hialeah Dr		1.0%		1.2%	
	Hialeah Dr	SW 42nd Ave (Le Jeune Rd)		5.0%		2.6%	

APPENDIX I-K:
Intersection Volume Spreadsheets

APPENDIX I-K1:
2020 AM Background with Combined

ADM/Graham

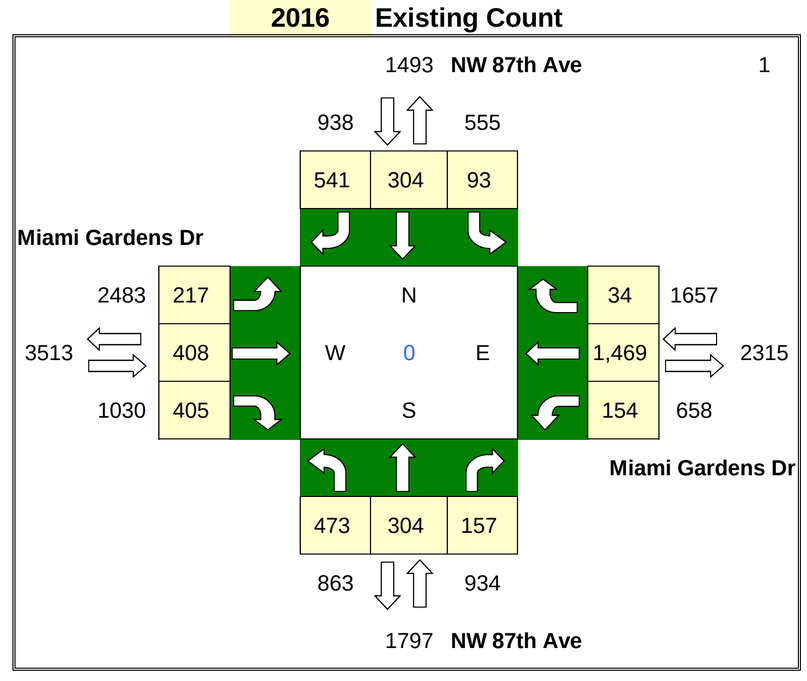
AM Turning Movement Volumes

N/S Roadway: NW 87th Ave

E/W Roadway: Miami Gardens Dr

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1%

Seasonal Factor = 1.00

PHASE 1

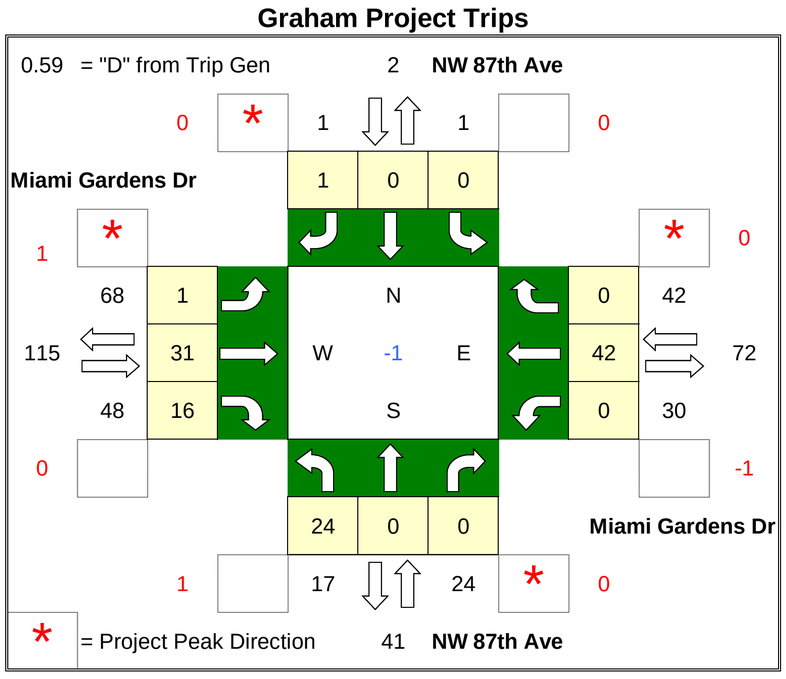
Project Trips

IN= 389

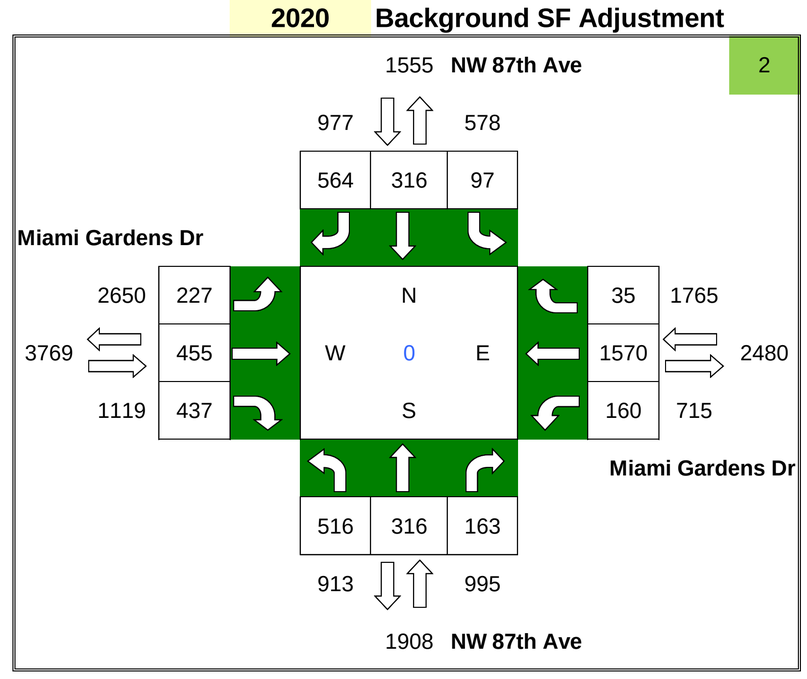
OUT= 275

	PD	#
N =	0.35%	2
E =	10.91%	72
S =	6.12%	41
W =	17.37%	115

Graham Project Trips



2020 Background SF Adjustment



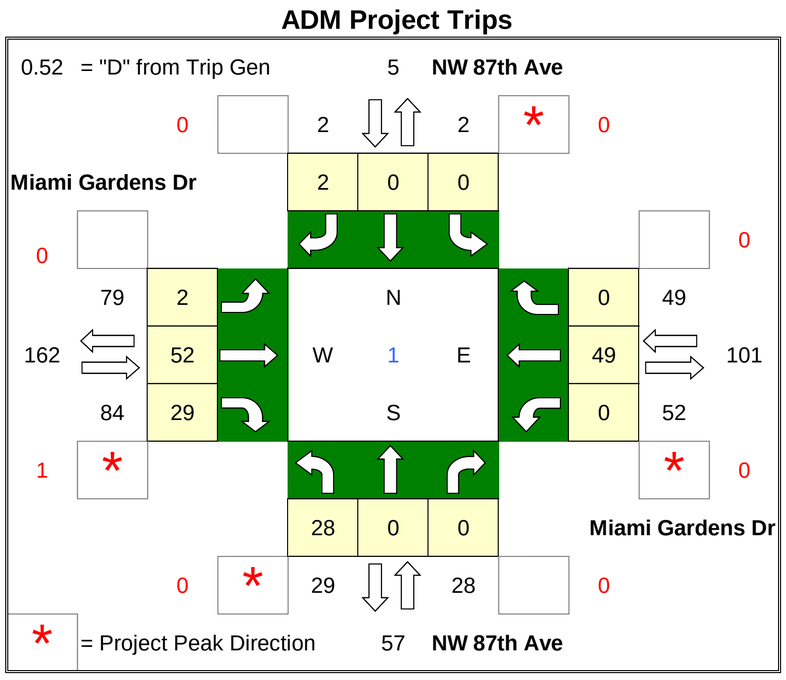
Project Trips

IN= 558

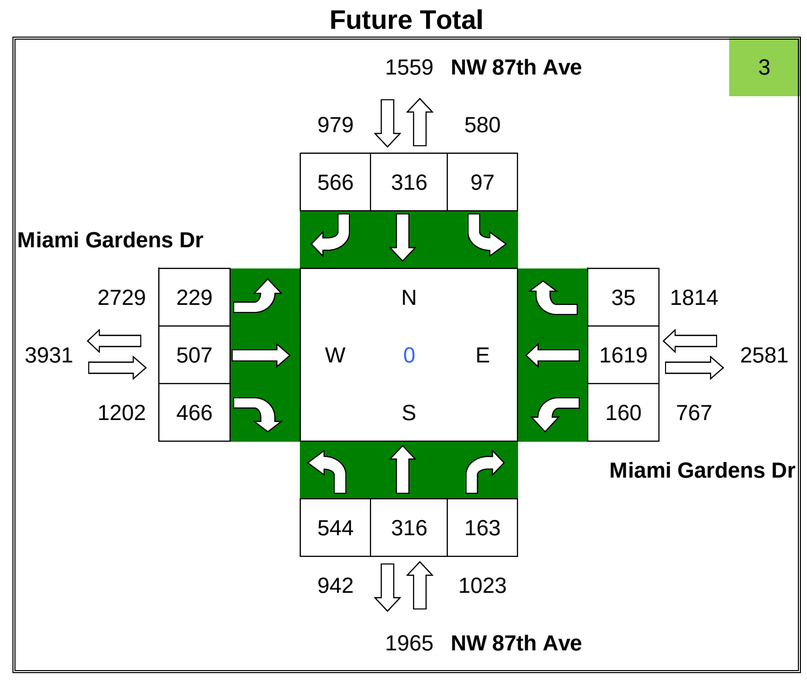
OUT= 596

	PD	#
N =	0.39%	5
E =	8.76%	101
S =	4.93%	57
W =	14.08%	162

ADM Project Trips



Future Total



ADM/Graham

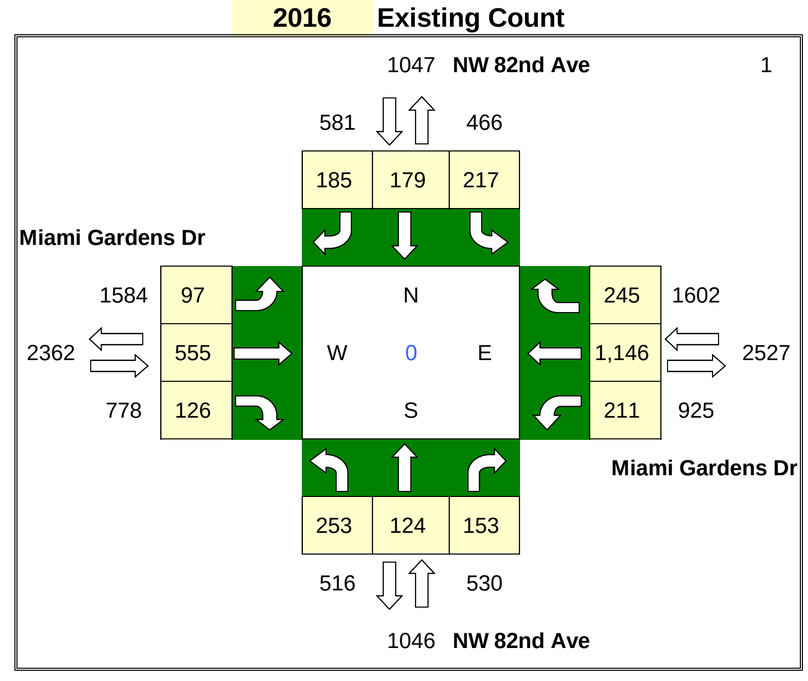
AM Turning Movement Volumes

N/S Roadway: NW 82nd Ave

E/W Roadway: Miami Gardens Dr

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1%

Seasonal Factor = 1.00

PHASE 1

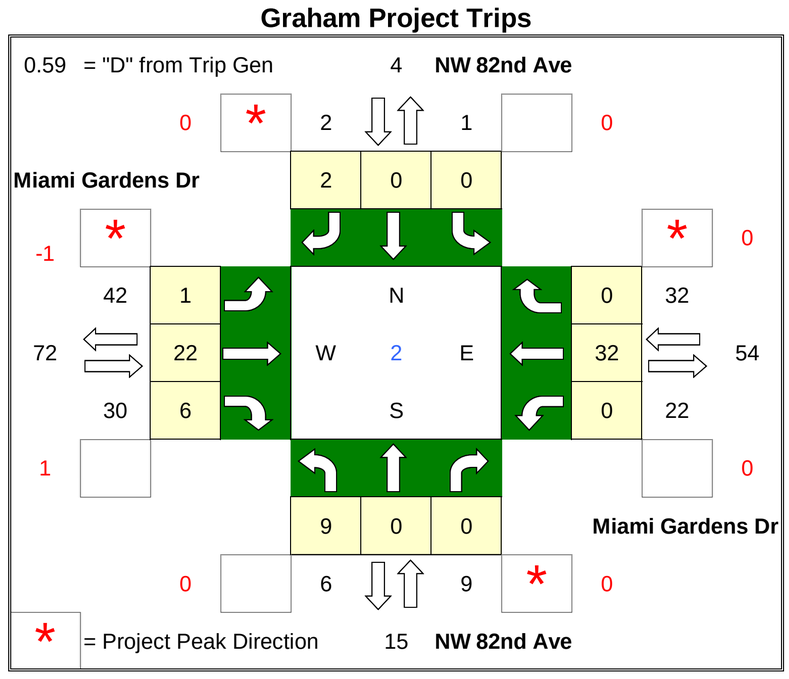
Project Trips

IN= 389

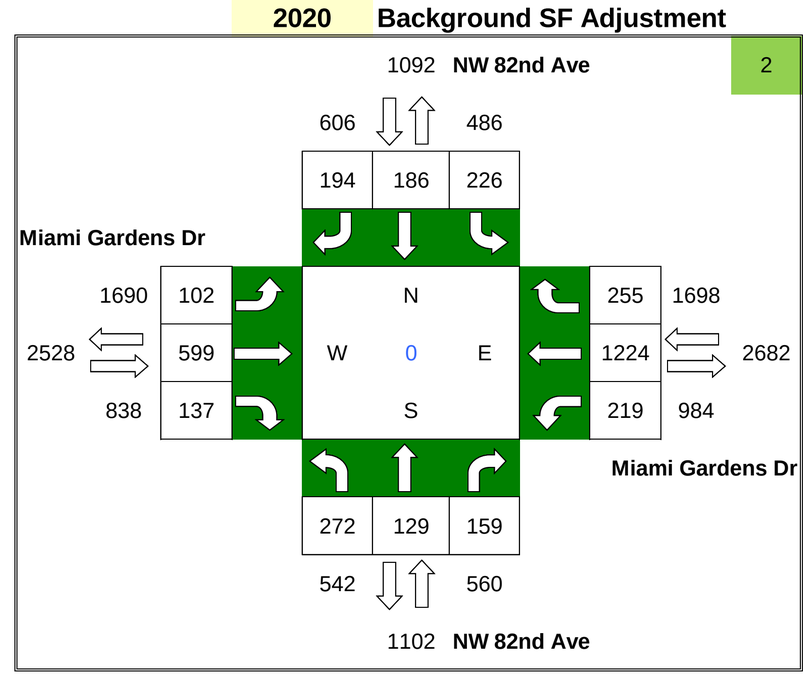
OUT= 275

	PD	#
N =	0.54%	4
E =	8.10%	54
S =	2.27%	15
W =	10.91%	72

Graham Project Trips

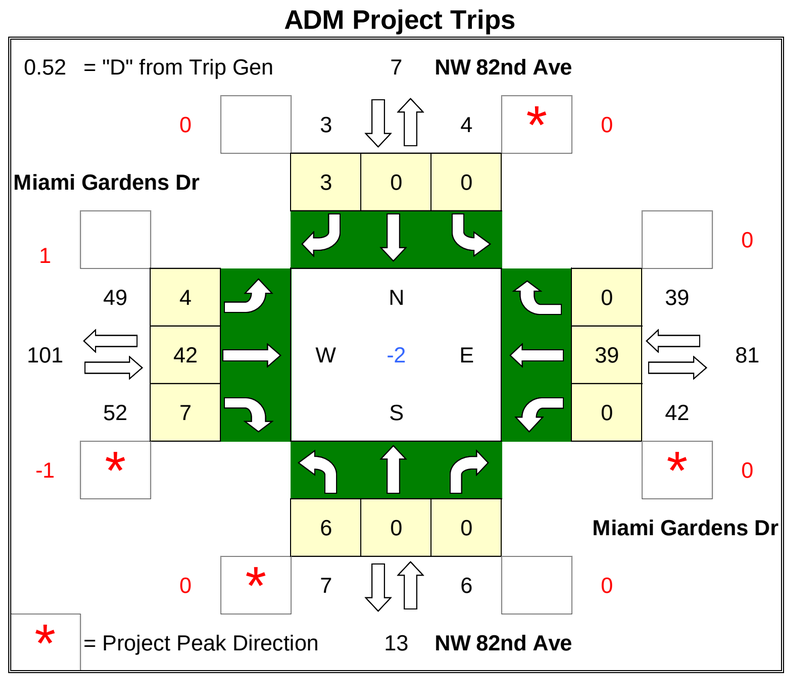


2020 Background SF Adjustment

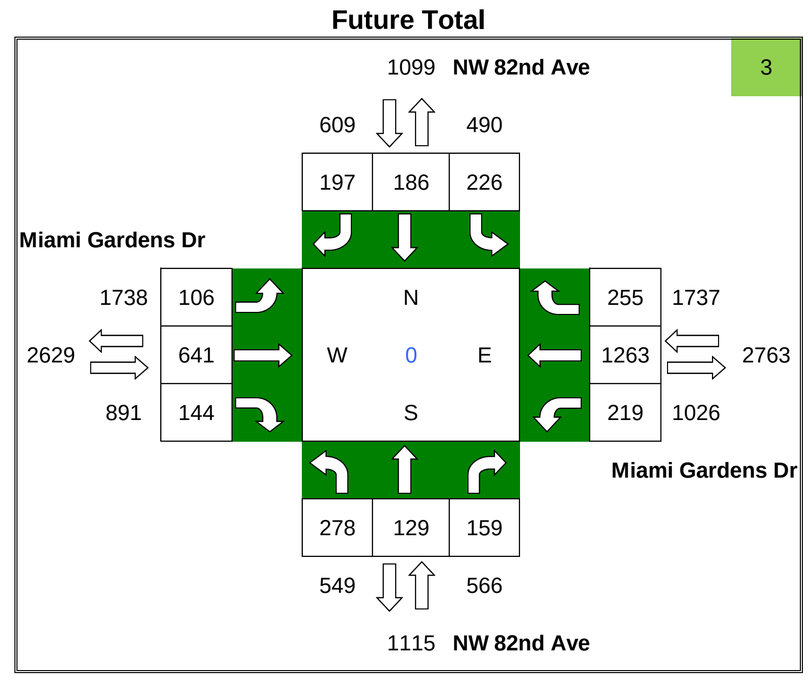


negar

ADM Project Trips



Future Total



ADM/Graham

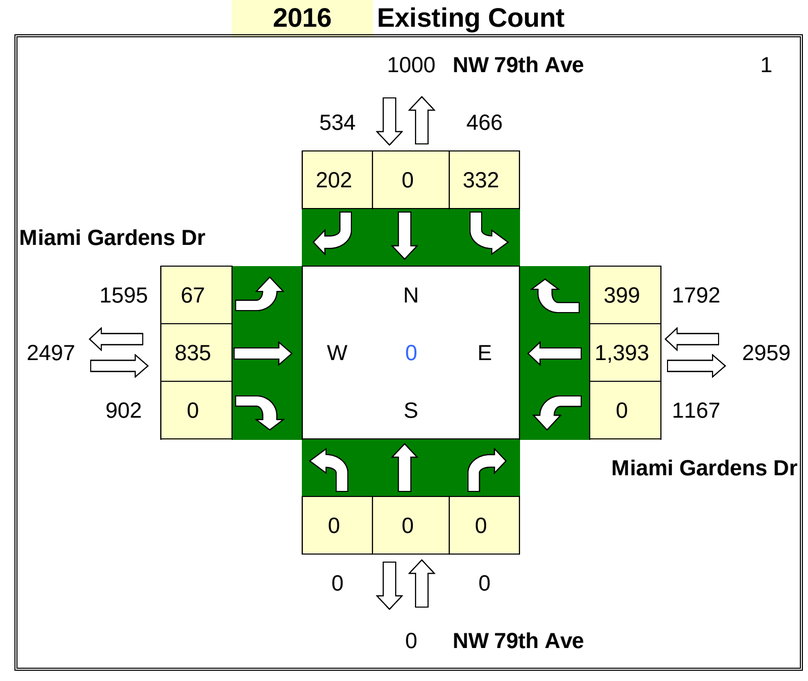
AM Turning Movement Volumes

N/S Roadway: NW 79th Ave

E/W Roadway: Miami Gardens Dr

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1%

Seasonal Factor = 1.00

PHASE 1

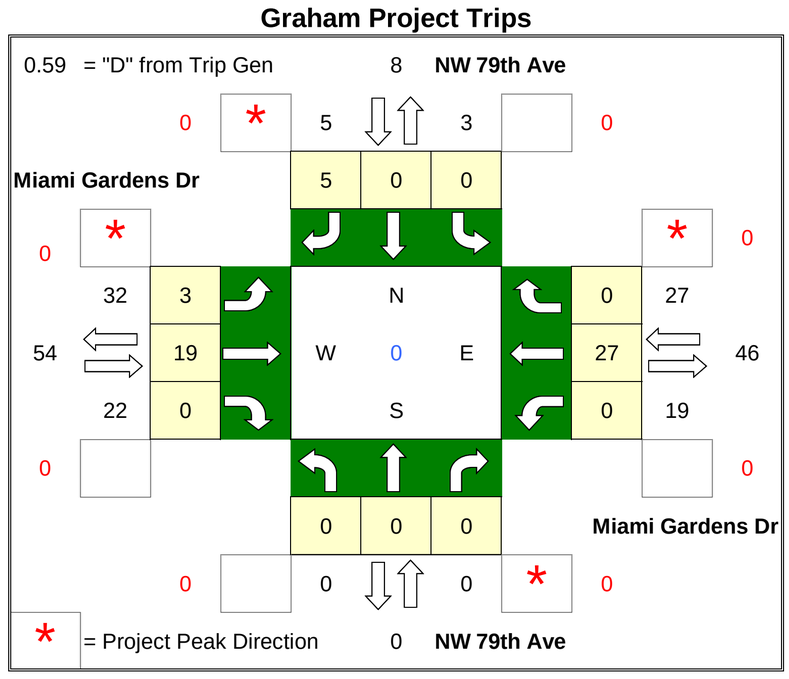
Project Trips

IN= 389

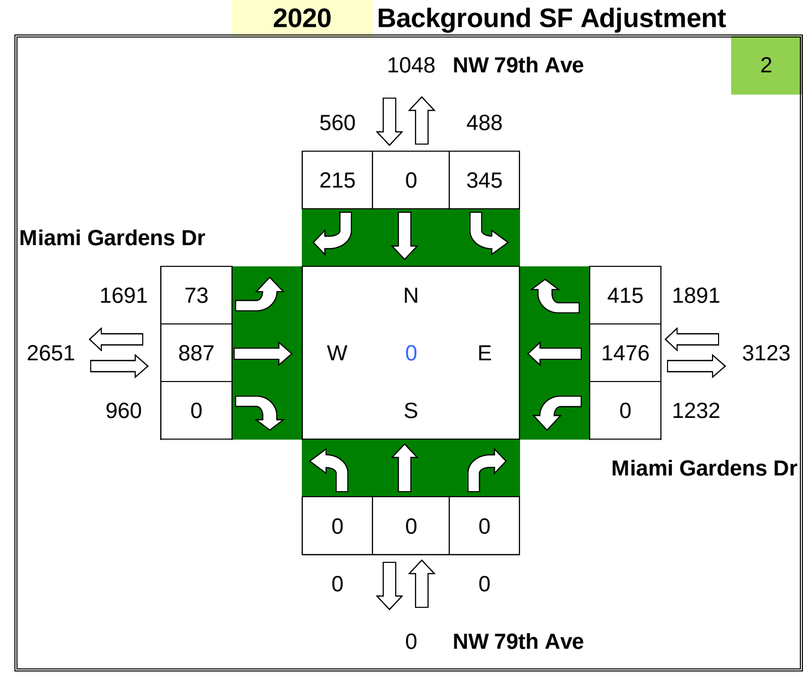
OUT= 275

	PD	#
N =	1.16%	8
E =	6.94%	46
S =	0.00%	0
W =	8.10%	54

Graham Project Trips



2020 Background SF Adjustment



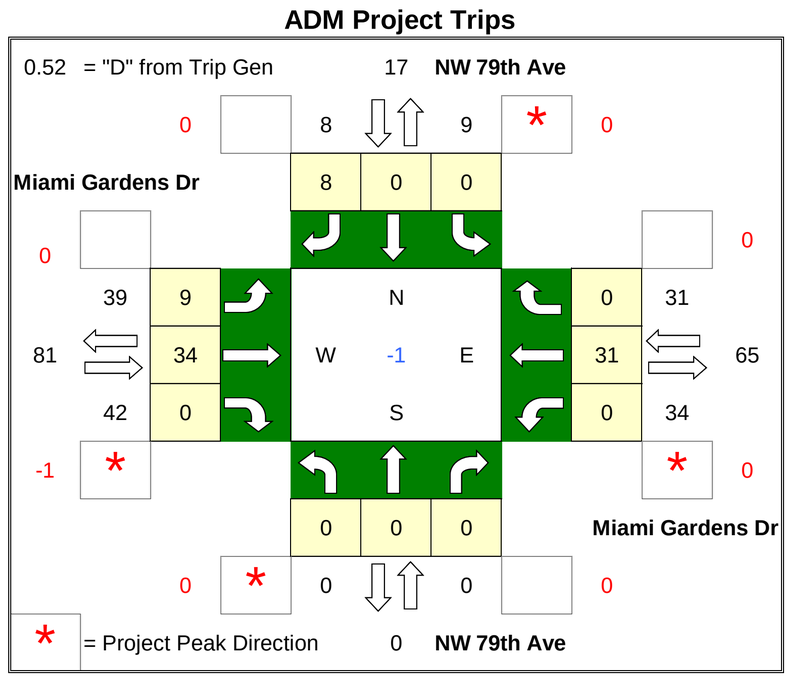
Project Trips

IN= 558

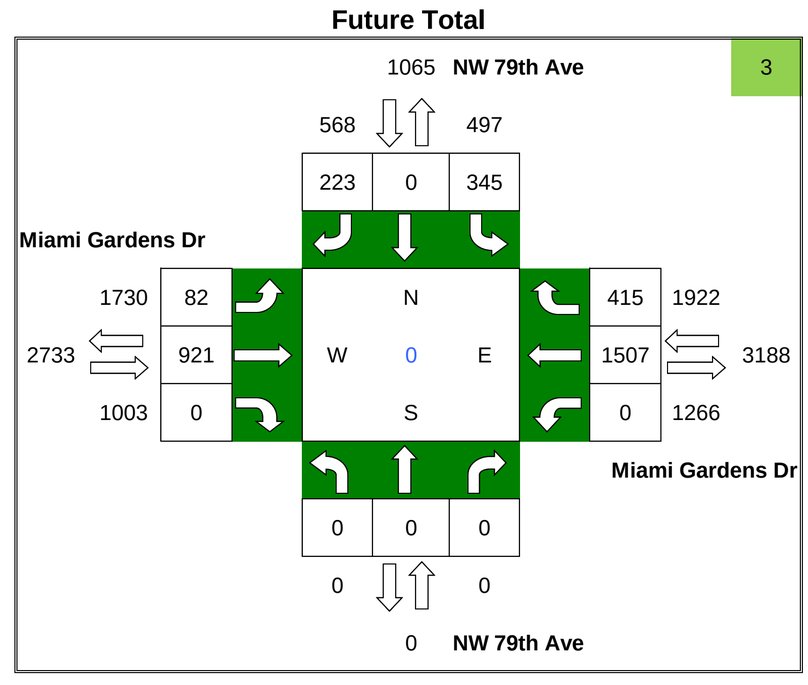
OUT= 596

	PD	#
N =	1.49%	17
E =	5.63%	65
S =	0.00%	0
W =	7.06%	81

ADM Project Trips



Future Total



ADM/Graham

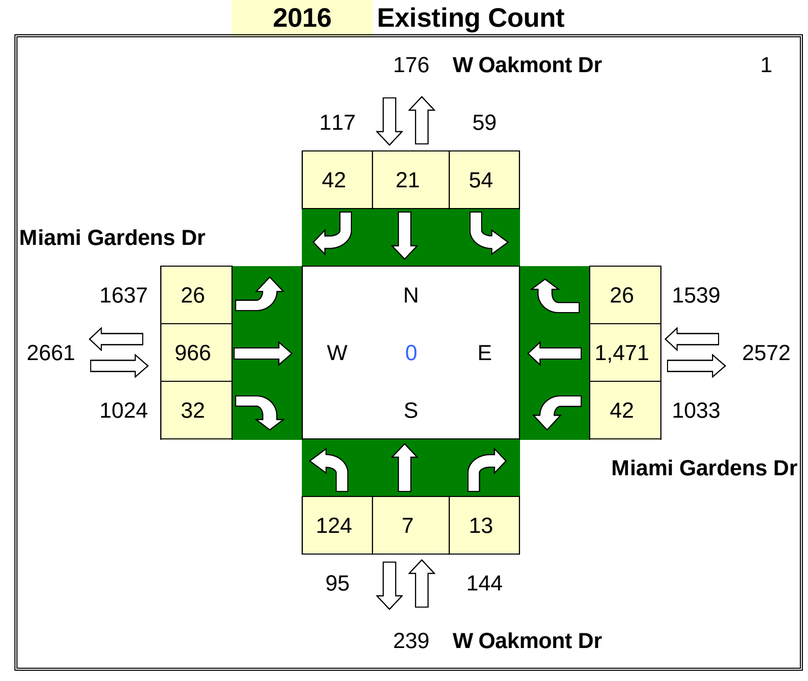
AM Turning Movement Volumes

N/S Roadway: W Oakmont Dr

E/W Roadway: Miami Gardens Dr

Date Taken: 4/20/16

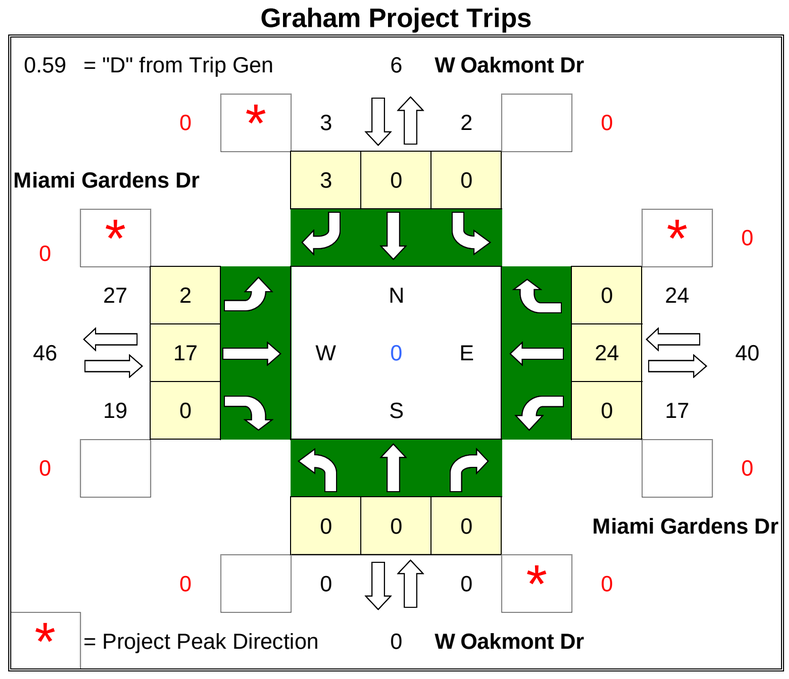
2016 Existing Count



% Annual Growth = 1% **Seasonal Factor =** 1.00

PHASE 1

Graham Project Trips

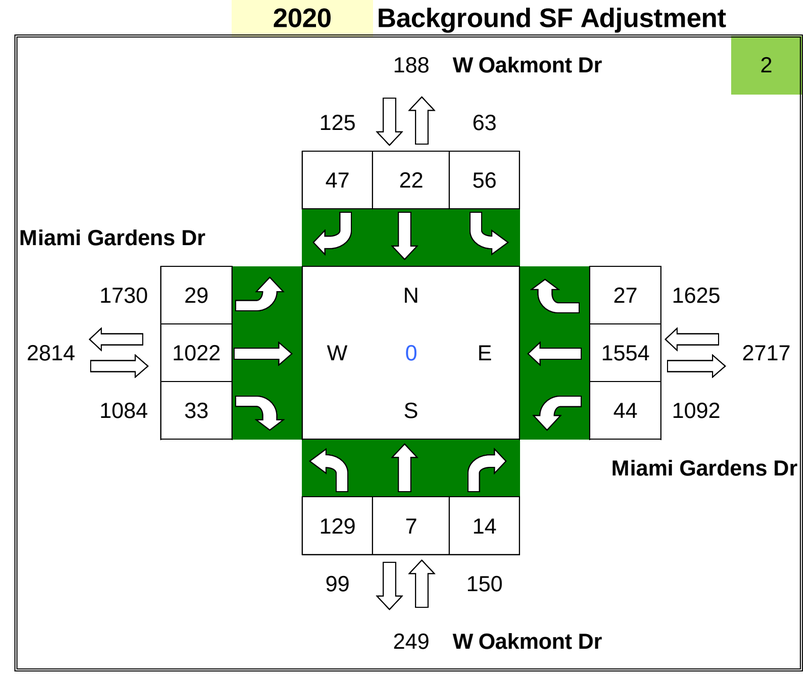


Project Trips

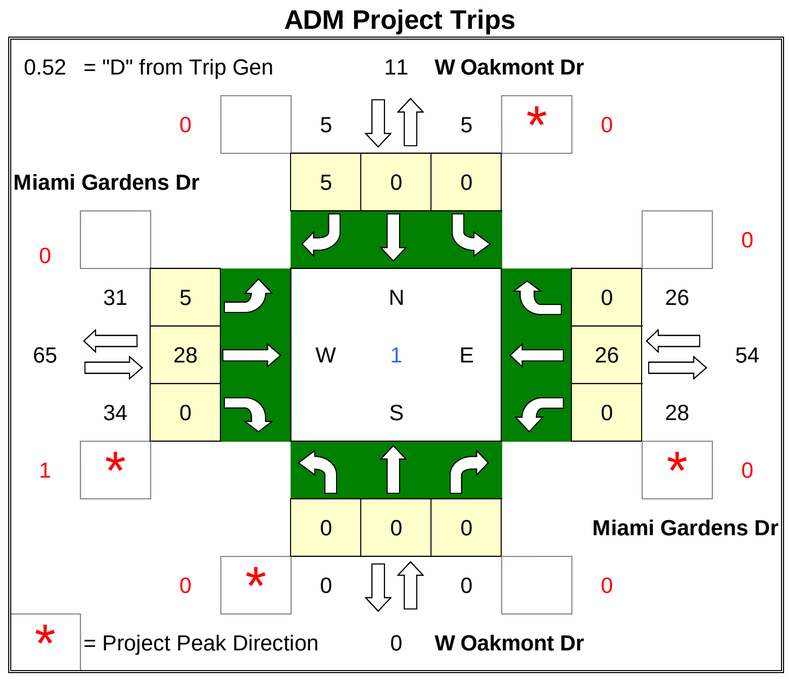
IN=	389
OUT=	275

	PD	#
N =	0.89%	6
E =	6.05%	40
S =	0.00%	0
W =	6.94%	46

2020 Background SF Adjustment



ADM Project Trips

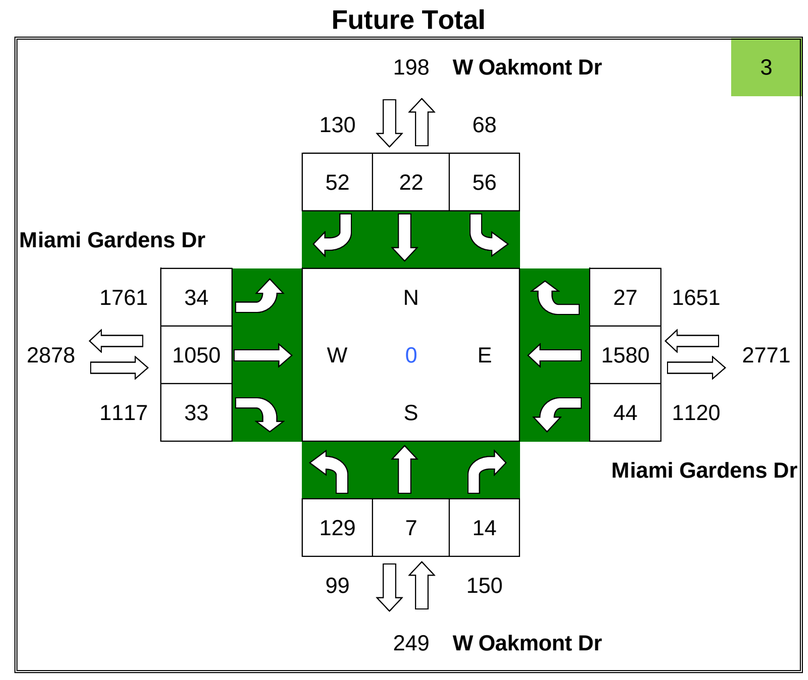


Project Trips

IN=	558
OUT=	596

	PD	#
N =	0.92%	11
E =	4.71%	54
S =	0.00%	0
W =	5.63%	65

Future Total



ADM/Graham

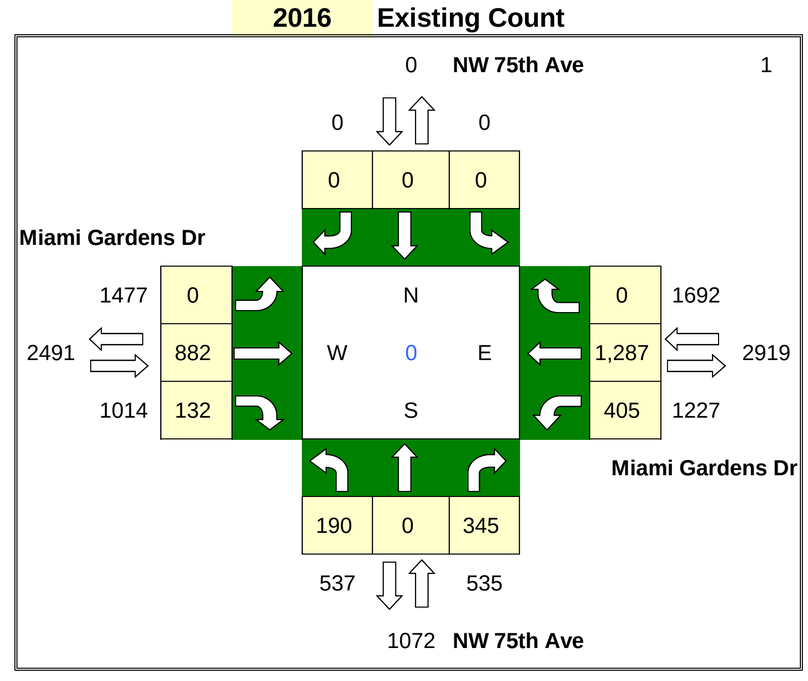
AM Turning Movement Volumes

N/S Roadway: NW 75th Ave

E/W Roadway: Miami Gardens Dr

Date Taken: 4/20/16

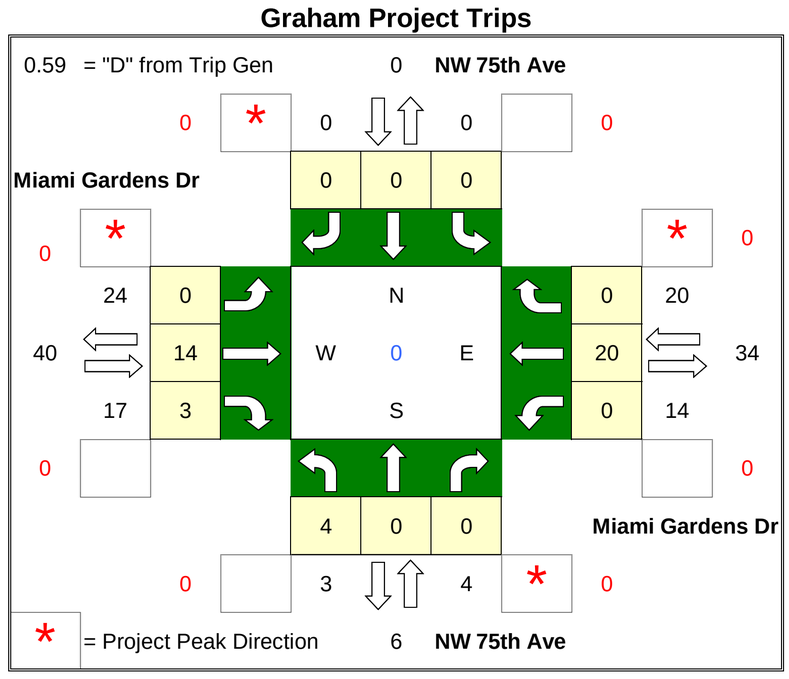
2016 Existing Count



% Annual Growth = 1% **Seasonal Factor =** 1.00

PHASE 1

Graham Project Trips

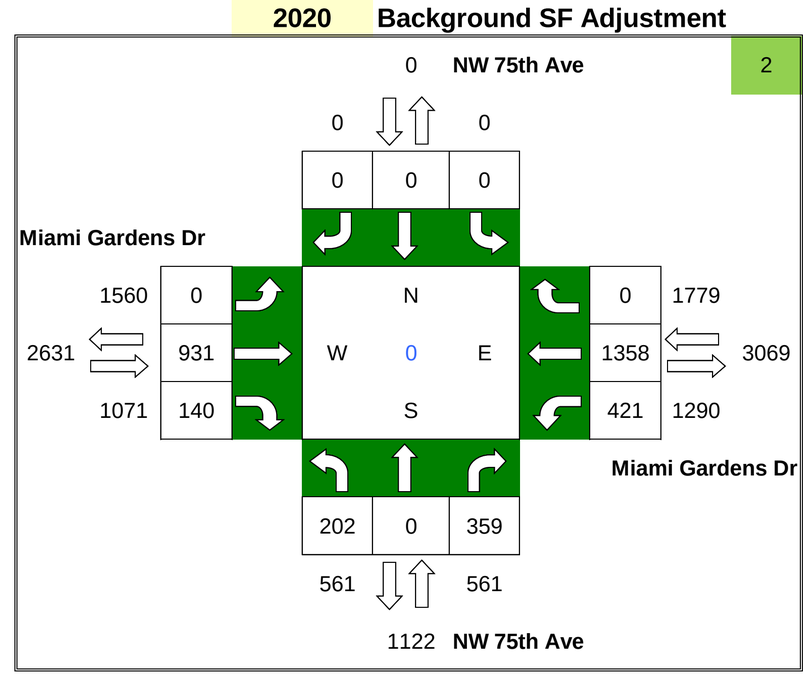


Project Trips

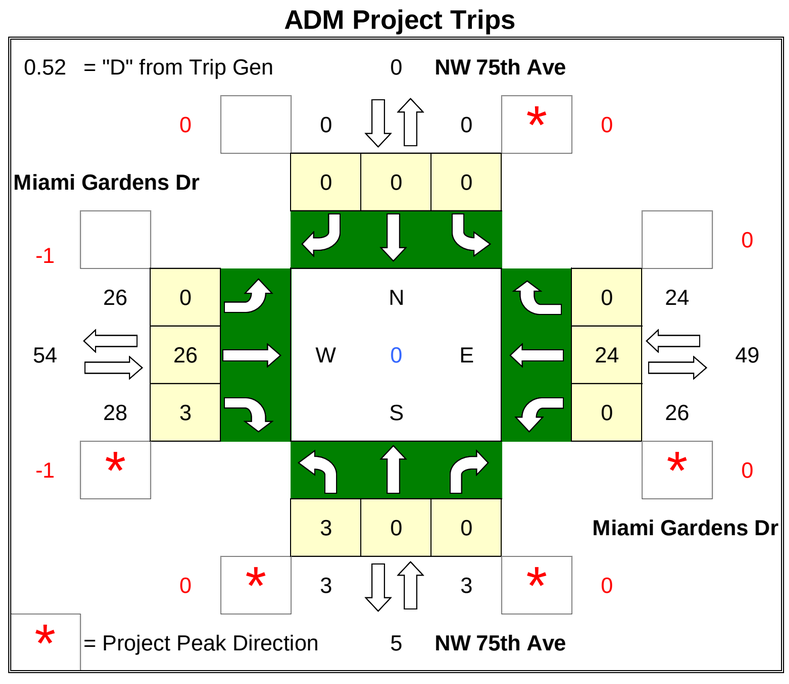
IN=	389
OUT=	275

	PD	#
N =	0.00%	0
E =	5.12%	34
S =	0.94%	6
W =	6.05%	40

2020 Background SF Adjustment



ADM Project Trips

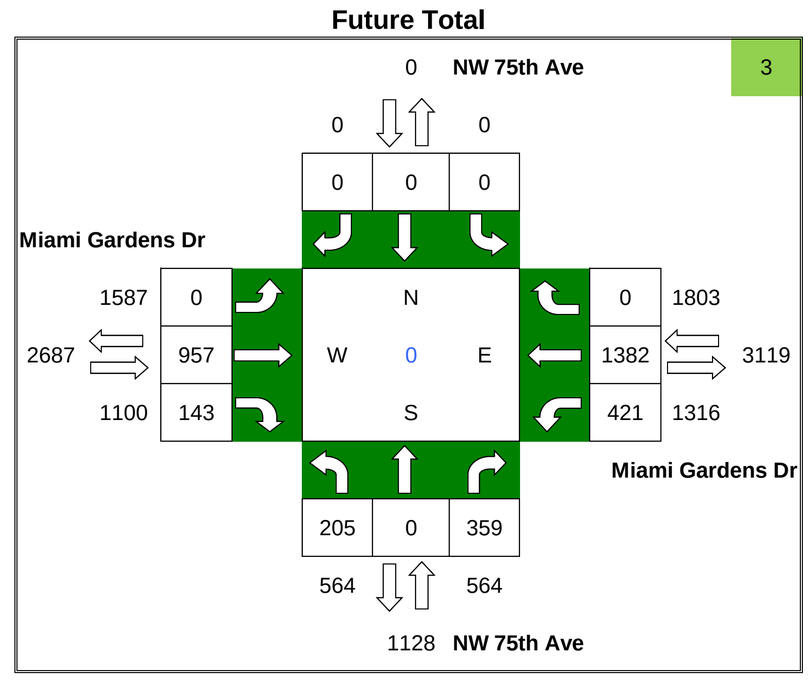


Project Trips

IN=	558
OUT=	596

	PD	#
N =	0.00%	0
E =	4.28%	49
S =	0.44%	5
W =	4.71%	54

Future Total



ADM/Graham

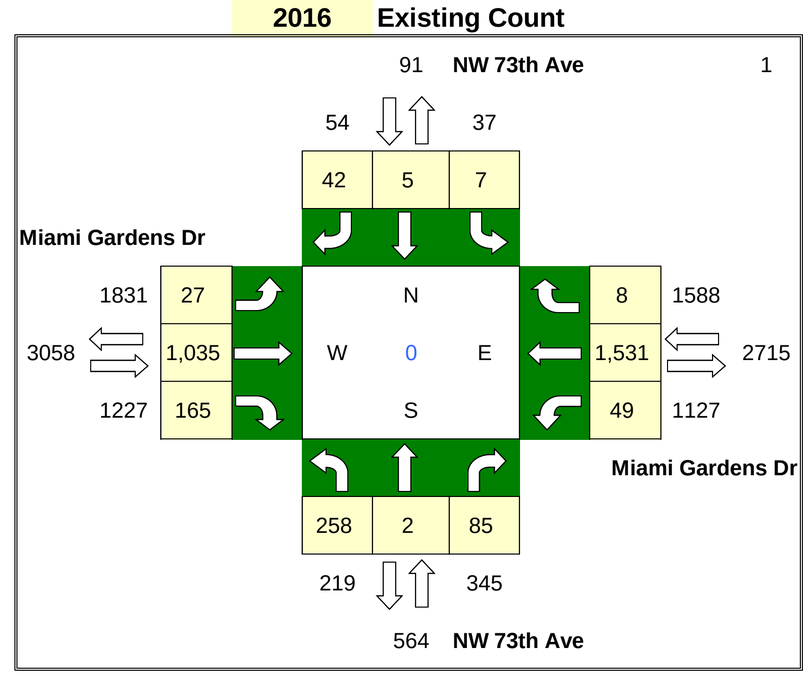
AM Turning Movement Volumes

N/S Roadway: NW 73th Ave

E/W Roadway: Miami Gardens Dr

Date Taken: 4/20/16

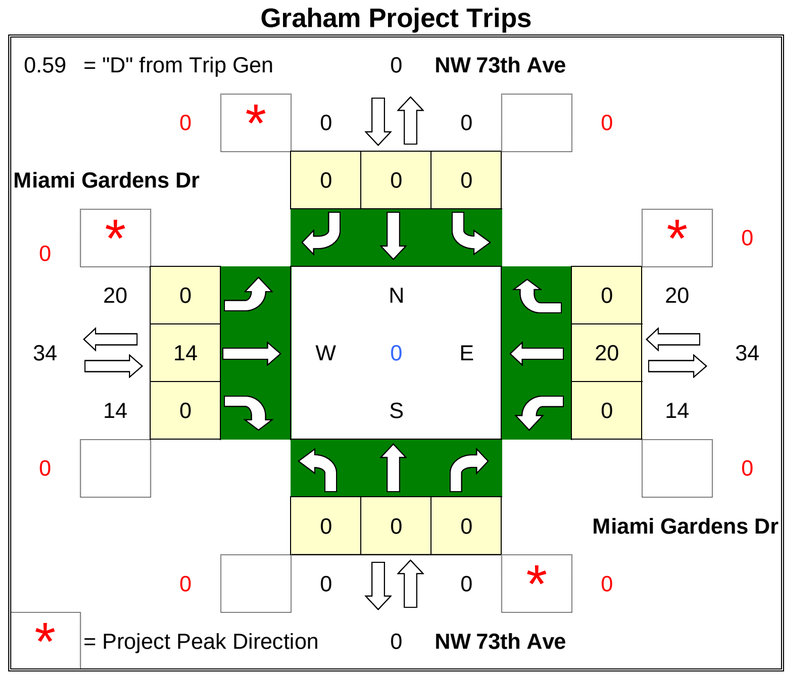
2016 Existing Count



% Annual Growth = 1% **Seasonal Factor =** 1.00

PHASE 1

Graham Project Trips

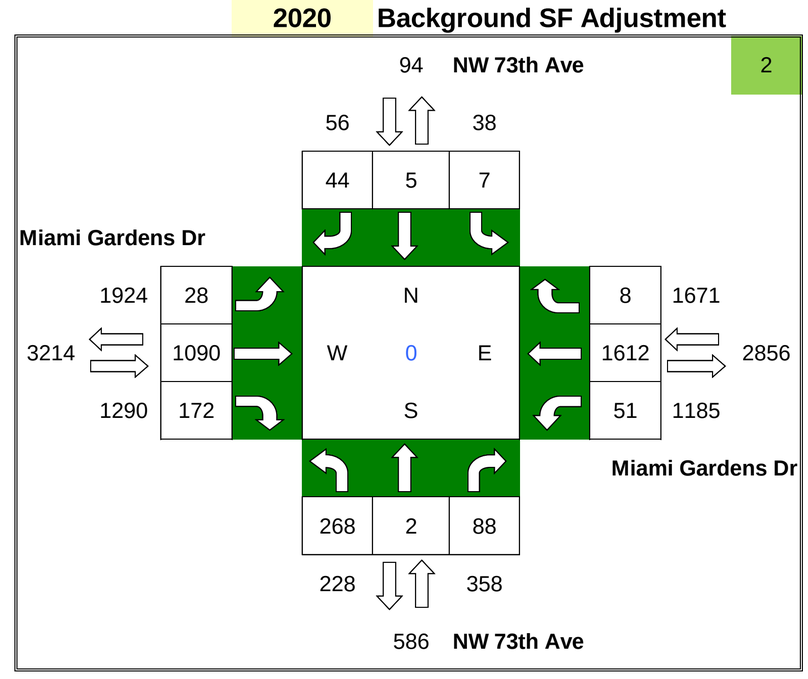


Project Trips

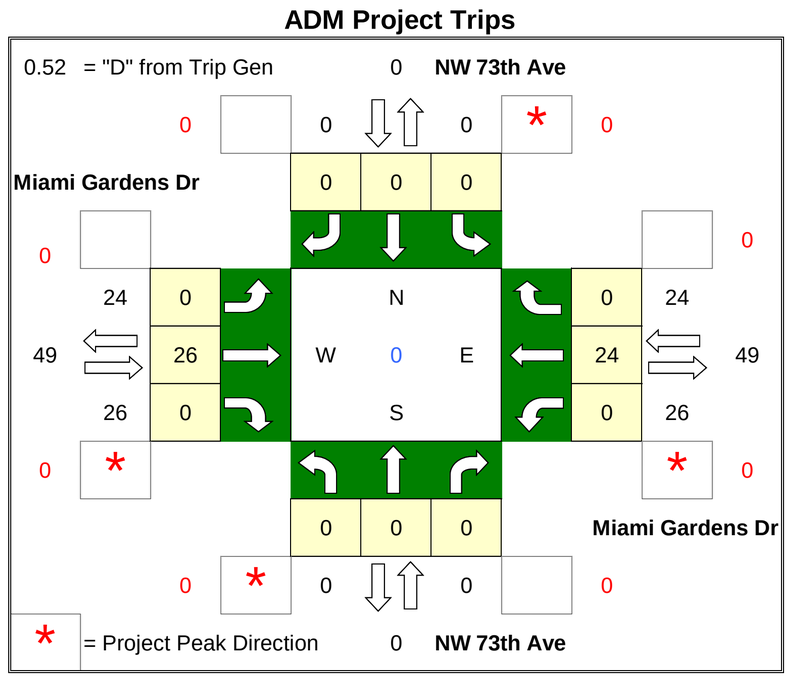
IN=	389
OUT=	275

	PD	#
N =	0.00%	0
E =	5.12%	34
S =	0.00%	0
W =	5.12%	34

2020 Background SF Adjustment



ADM Project Trips

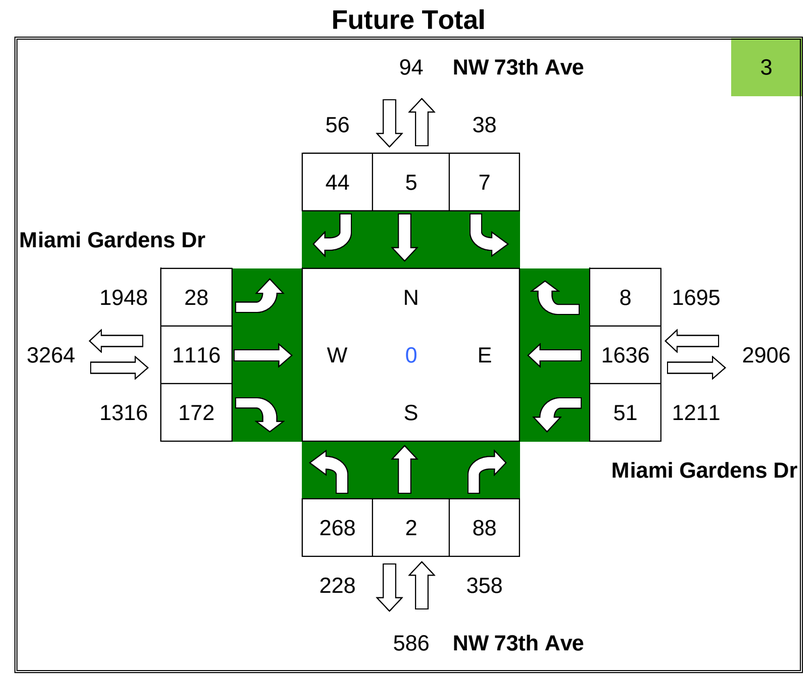


Project Trips

IN=	558
OUT=	596

	PD	#
N =	0.00%	0
E =	4.28%	49
S =	0.00%	0
W =	4.28%	49

Future Total



ADM/Graham

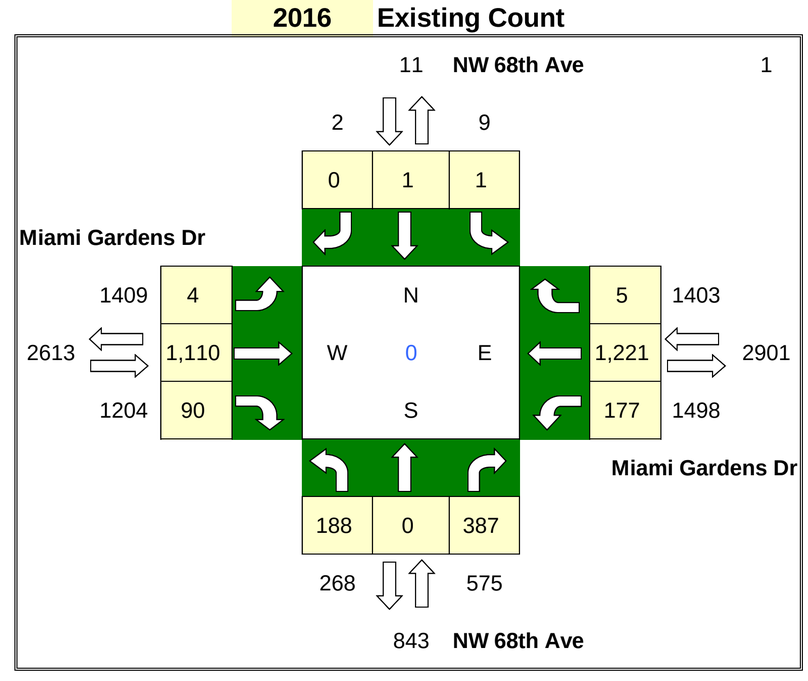
AM Turning Movement Volumes

N/S Roadway: NW 68th Ave

E/W Roadway: Miami Gardens Dr

Date Taken: 4/20/16

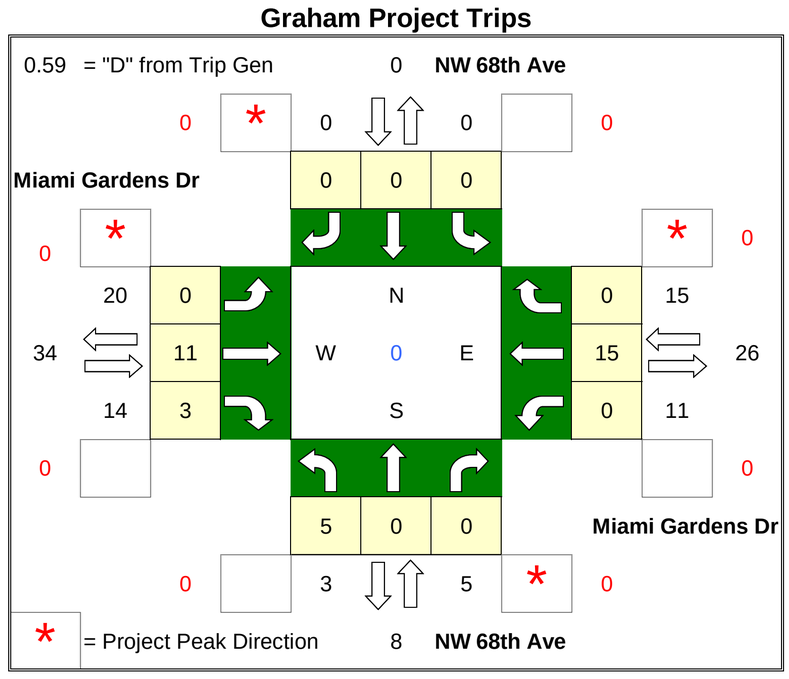
2016 Existing Count



% Annual Growth = 1% **Seasonal Factor =** 1.00

PHASE 1

Graham Project Trips



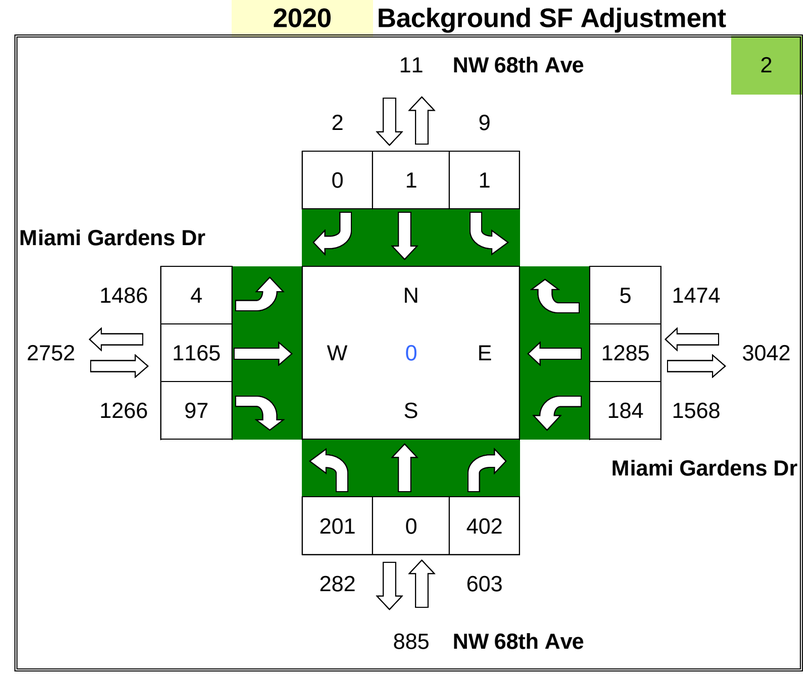
Project Trips

IN= 389

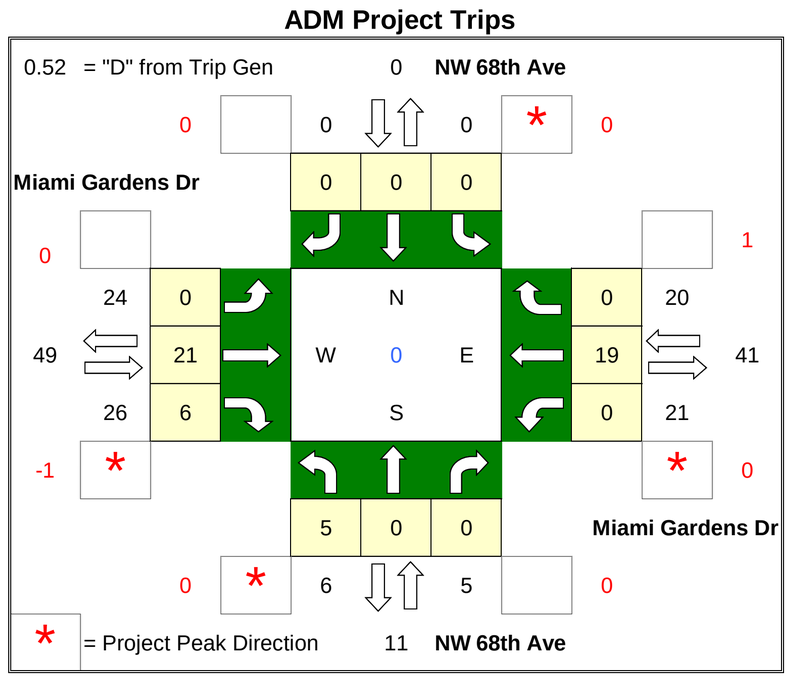
OUT= 275

	PD	#
N =	0.00%	0
E =	3.86%	26
S =	1.26%	8
W =	5.12%	34

2020 Background SF Adjustment



ADM Project Trips



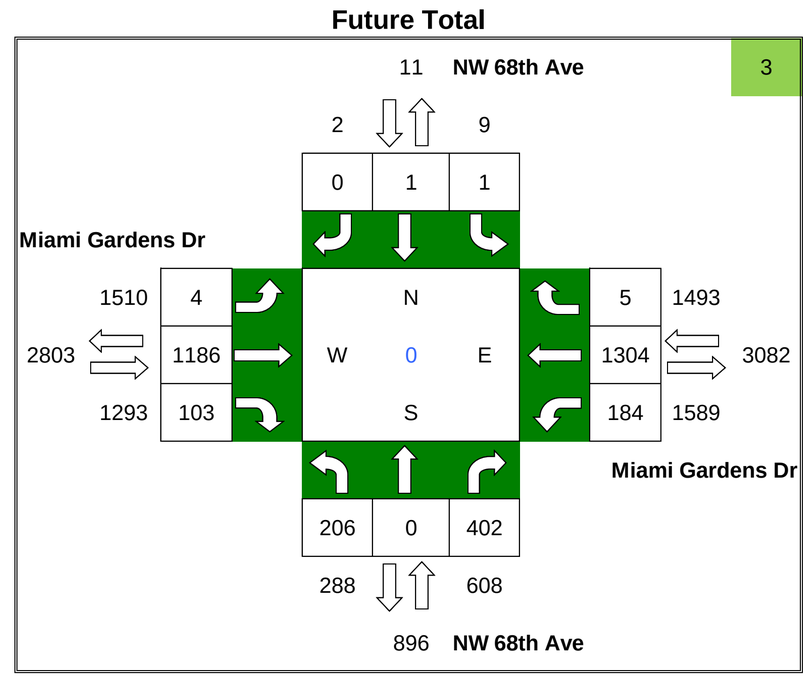
Project Trips

IN= 558

OUT= 596

	PD	#
N =	0.00%	0
E =	3.56%	41
S =	0.93%	11
W =	4.28%	49

Future Total



ADM/Graham

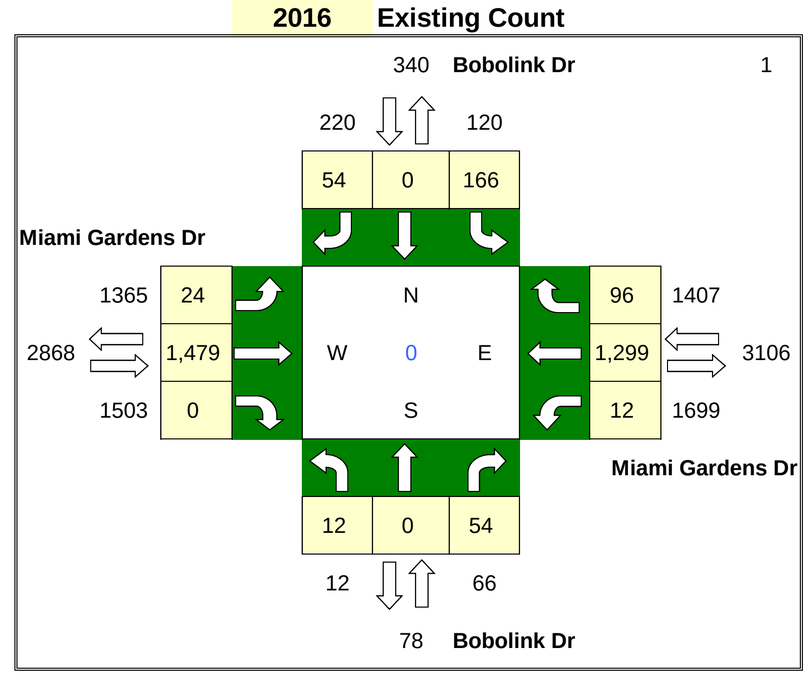
AM Turning Movement Volumes

N/S Roadway: Bobolink Dr

E/W Roadway: Miami Gardens Dr

Date Taken: 4/20/16

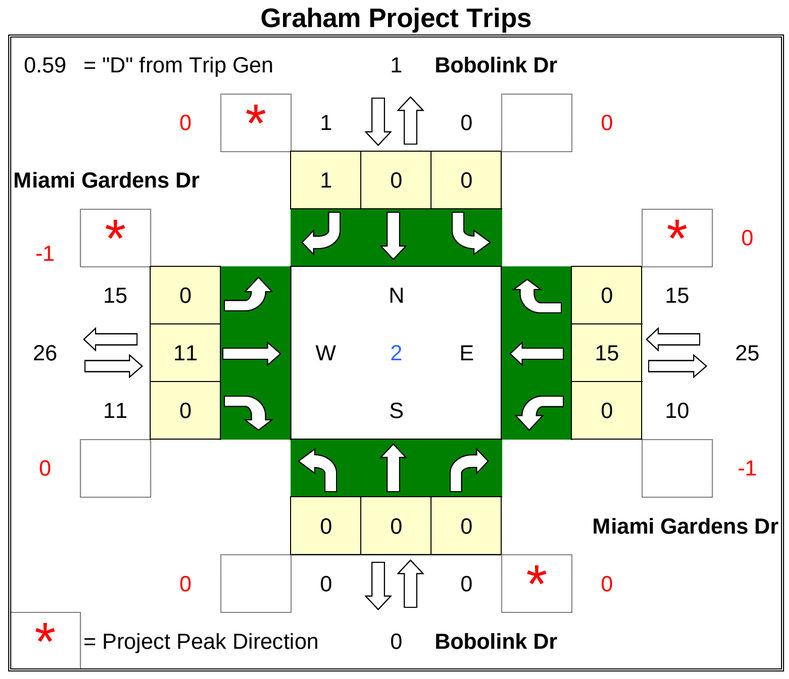
2016 Existing Count



% Annual Growth = 1% **Seasonal Factor =** 1.00

PHASE 1

Graham Project Trips



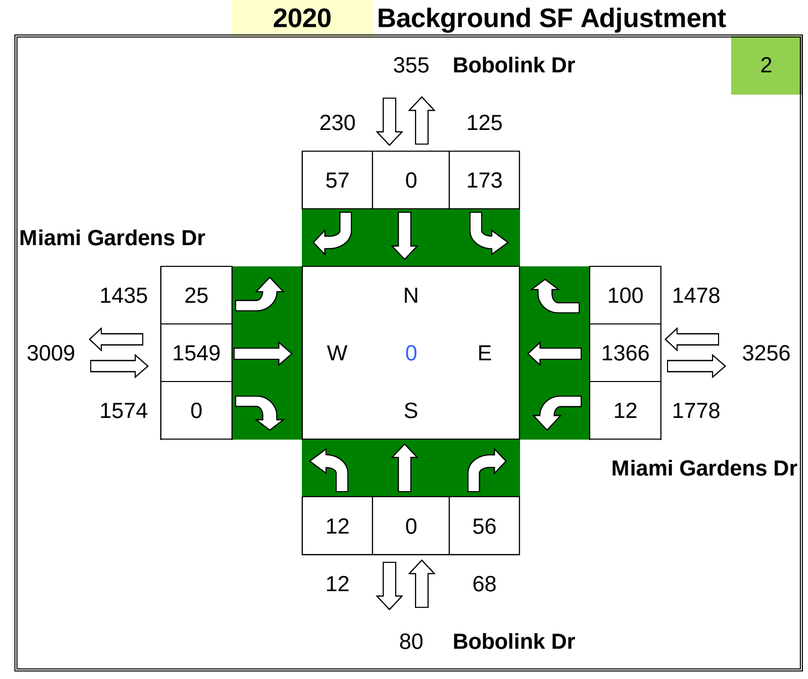
Project Trips

IN= 389

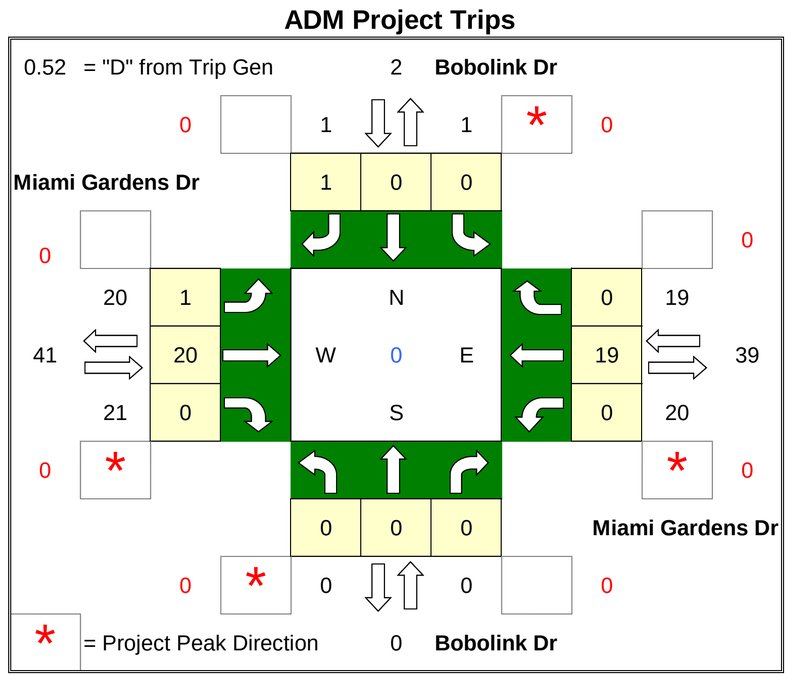
OUT= 275

	PD	#
N =	0.13%	1
E =	3.73%	25
S =	0.00%	0
W =	3.86%	26

2020 Background SF Adjustment



ADM Project Trips



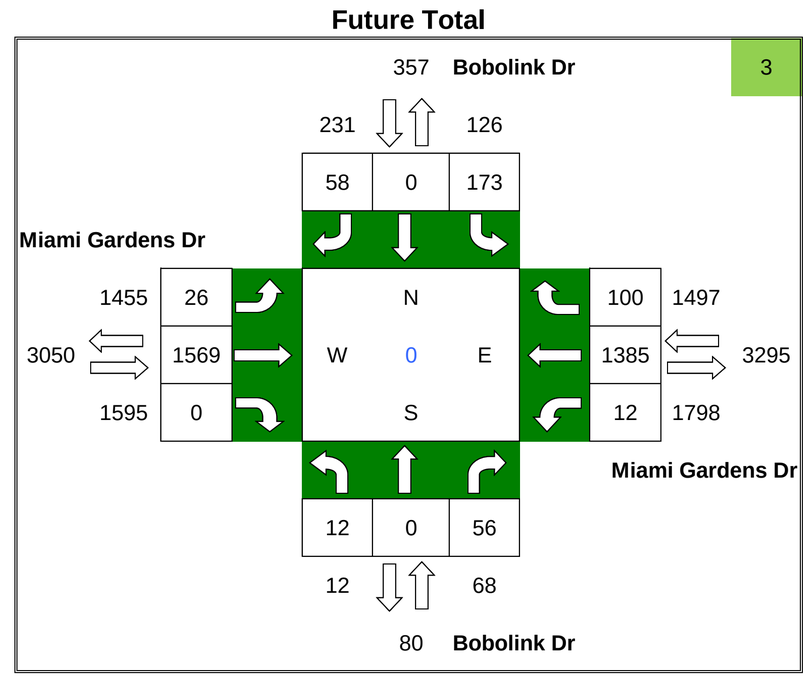
Project Trips

IN= 558

OUT= 596

	PD	#
N =	0.14%	2
E =	3.42%	39
S =	0.00%	0
W =	3.56%	41

Future Total



ADM/Graham

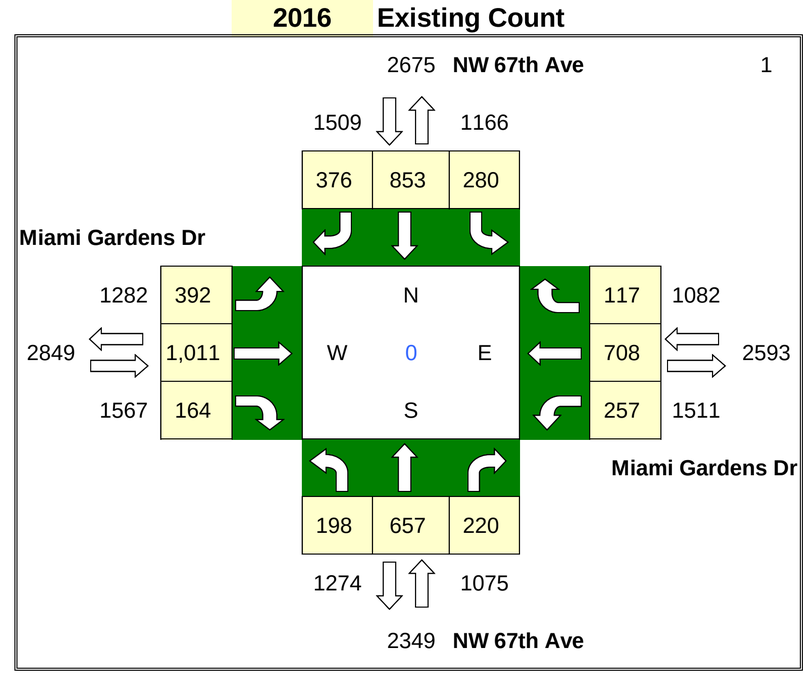
AM Turning Movement Volumes

N/S Roadway: NW 67th Ave

E/W Roadway: Miami Gardens Dr

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1% **Seasonal Factor =** 1.00

PHASE 1

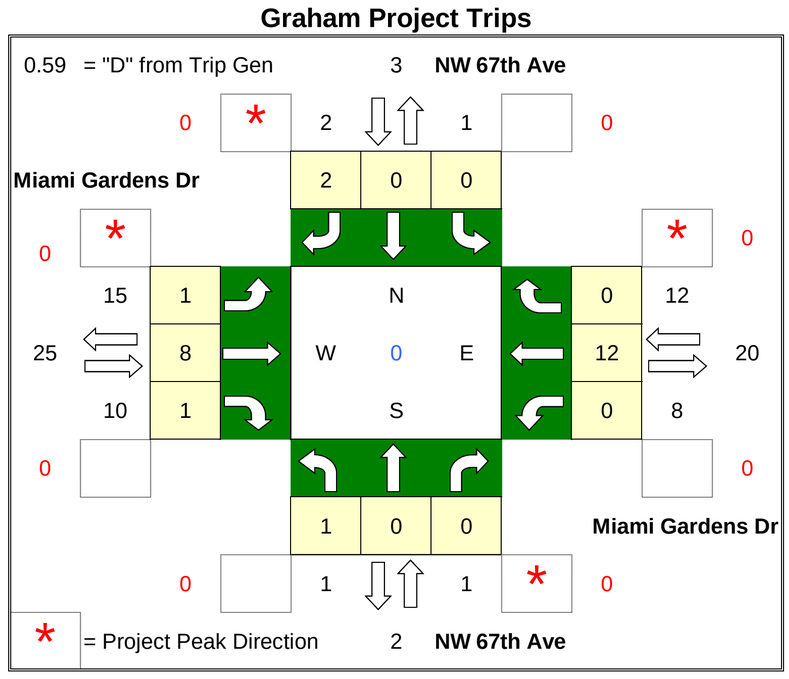
Project Trips

IN= 389

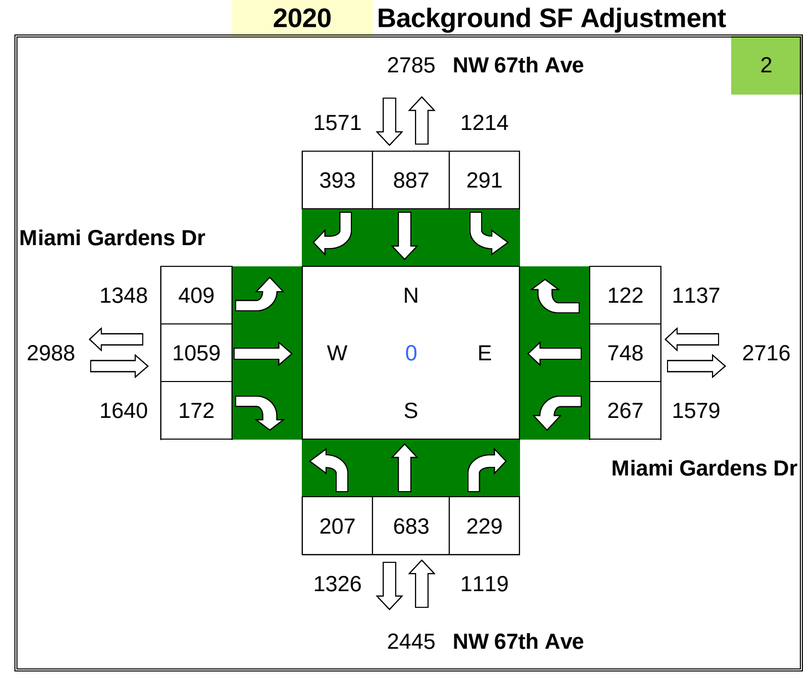
OUT= 275

	PD	#
N =	0.45%	3
E =	2.96%	20
S =	0.31%	2
W =	3.73%	25

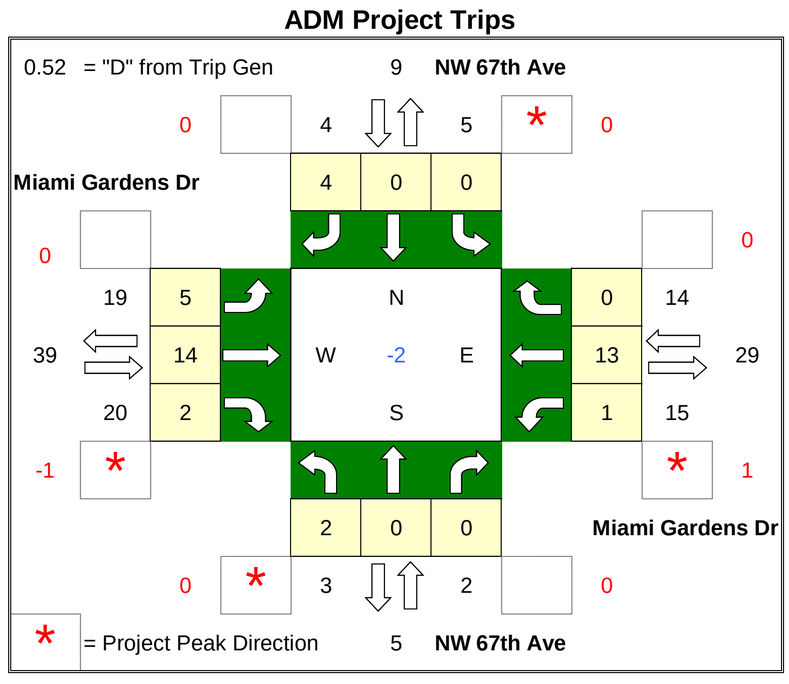
Graham Project Trips



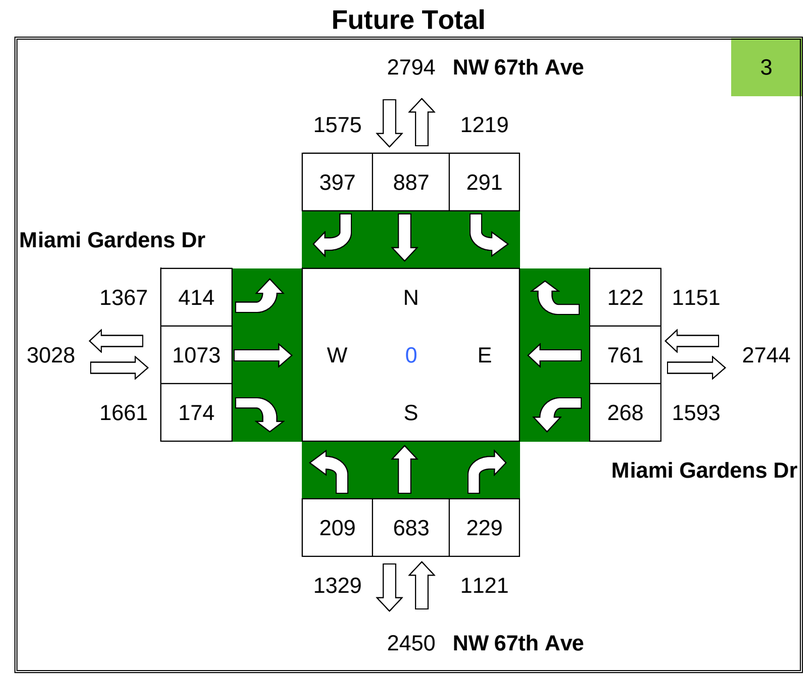
2020 Background SF Adjustment



ADM Project Trips



Future Total



ADM/Graham

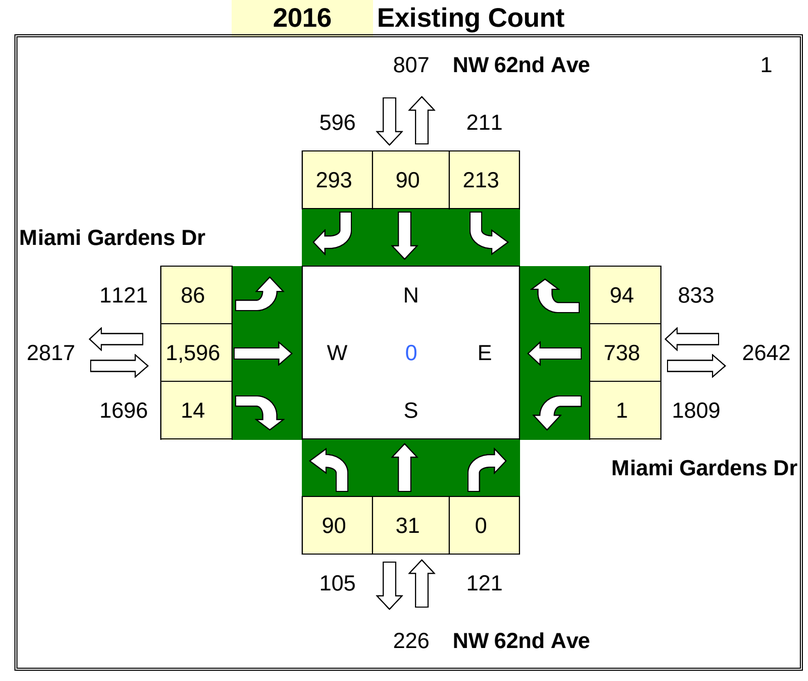
AM Turning Movement Volumes

N/S Roadway: NW 62nd Ave

E/W Roadway: Miami Gardens Dr

Date Taken: 4/20/16

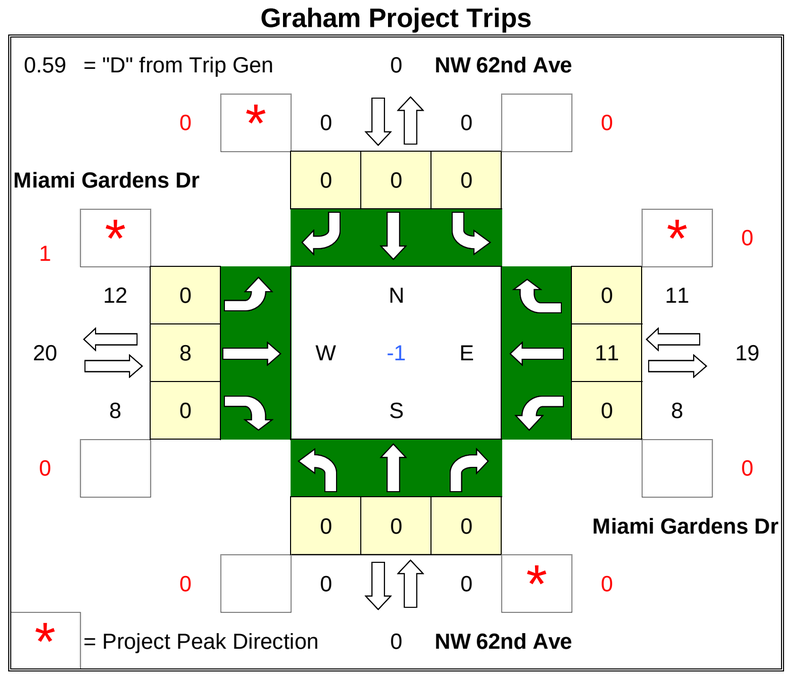
2016 Existing Count



% Annual Growth = 1% **Seasonal Factor =** 1.00

PHASE 1

Graham Project Trips



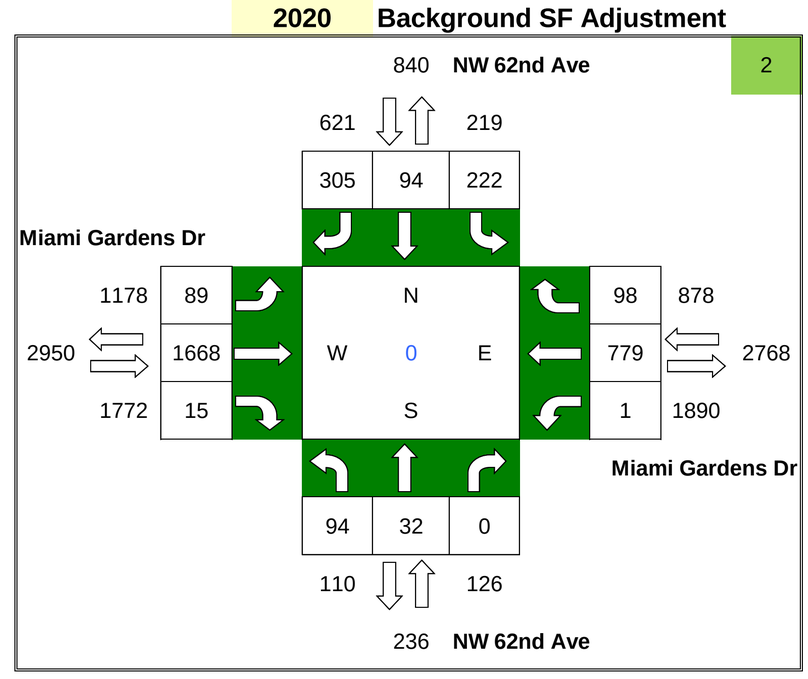
Project Trips

IN= 389

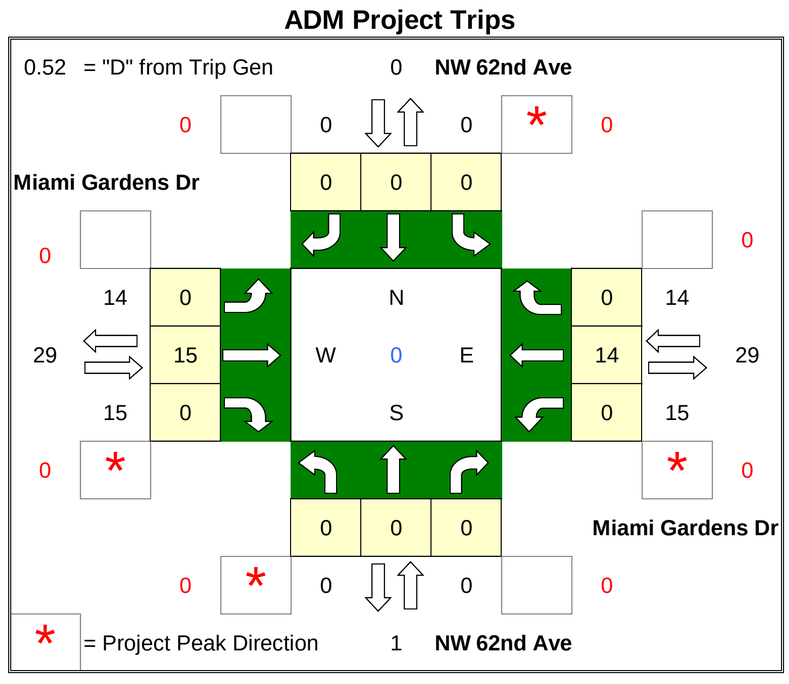
OUT= 275

	PD	#
N =	0.00%	0
E =	2.92%	19
S =	0.04%	0
W =	2.96%	20

2020 Background SF Adjustment



ADM Project Trips



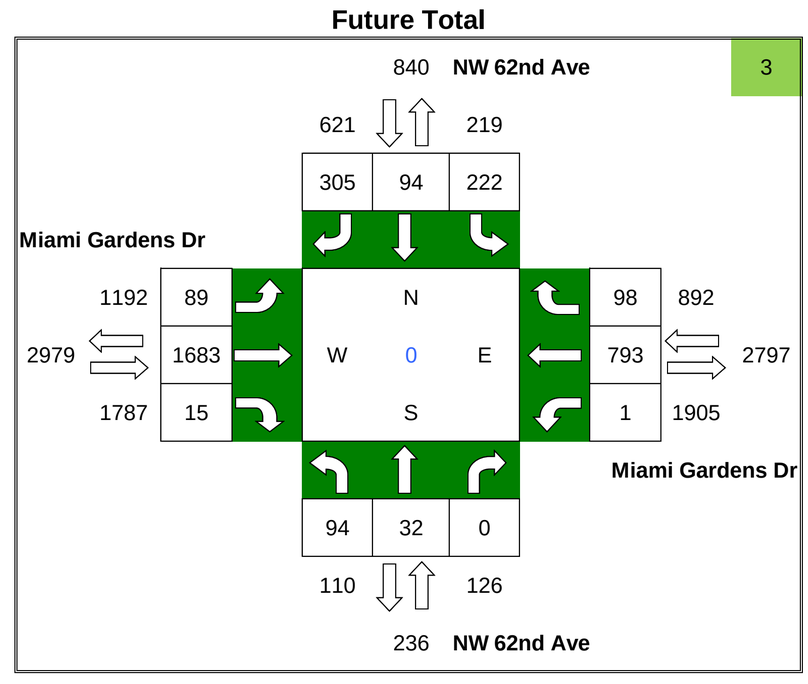
Project Trips

IN= 558

OUT= 596

	PD	#
N =	0.00%	0
E =	2.49%	29
S =	0.05%	1
W =	2.53%	29

Future Total



ADM/Graham

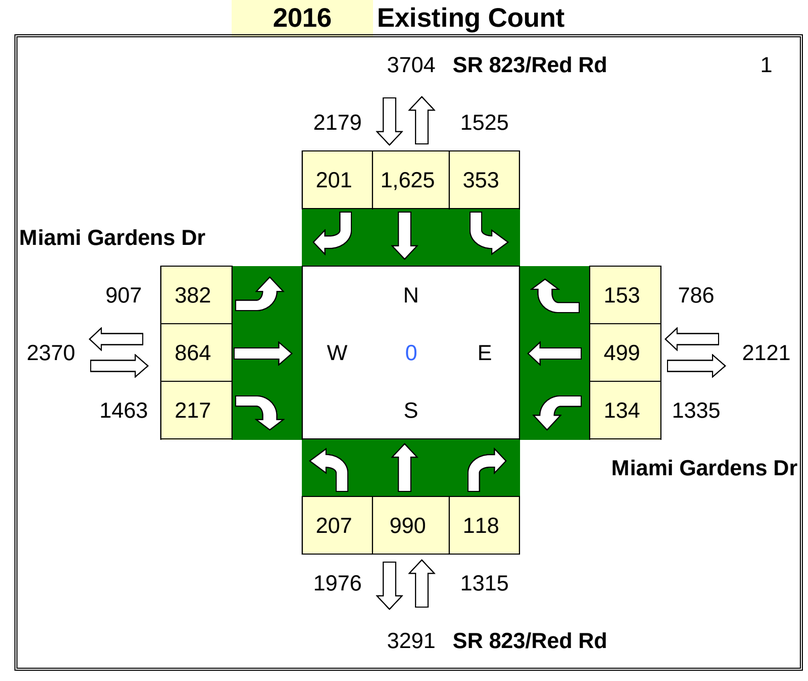
AM Turning Movement Volumes

N/S Roadway: SR 823/Red Rd

E/W Roadway: Miami Gardens Dr

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1%

Seasonal Factor = 1.00

PHASE 1

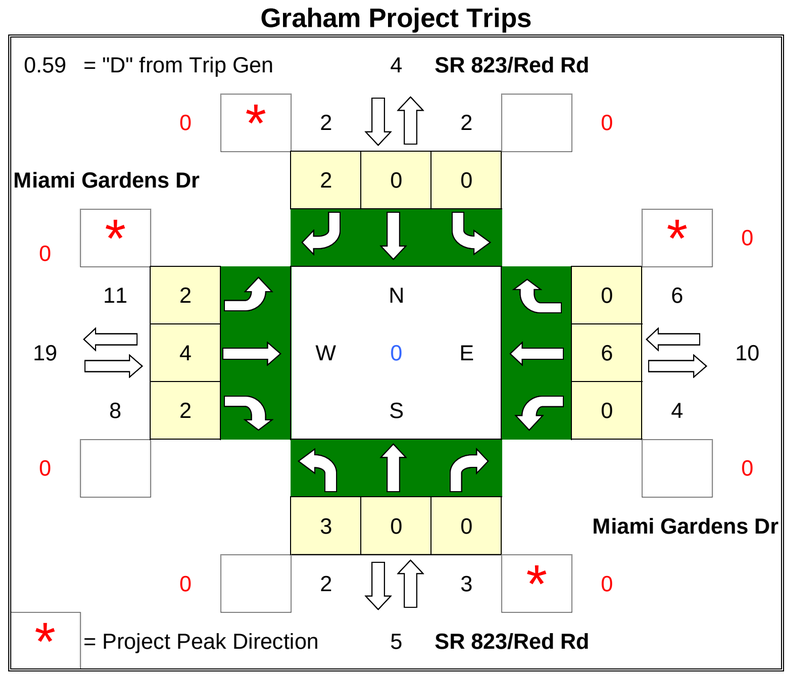
Project Trips

IN= 389

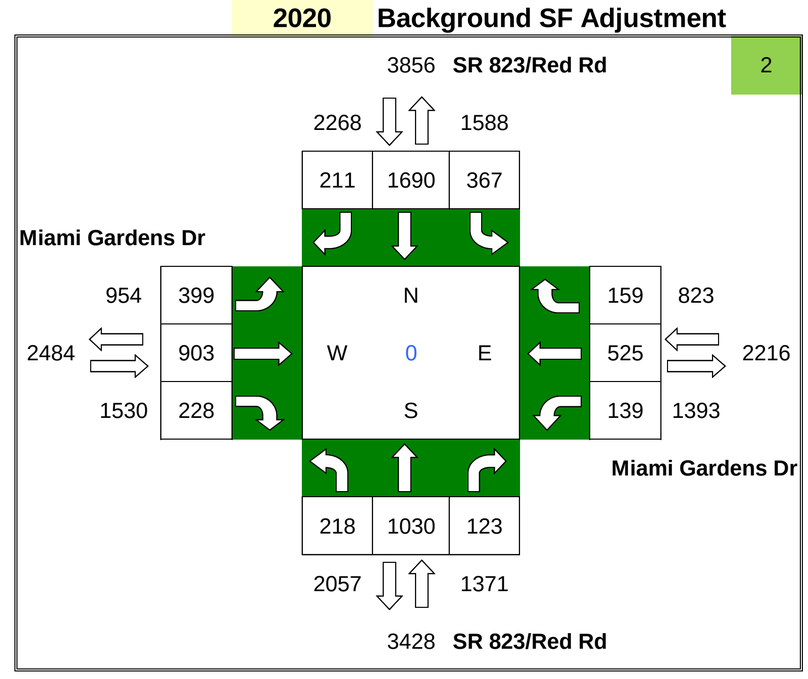
OUT= 275

	PD	#
N =	0.58%	4
E =	1.55%	10
S =	0.69%	5
W =	2.81%	19

Graham Project Trips



2020 Background SF Adjustment



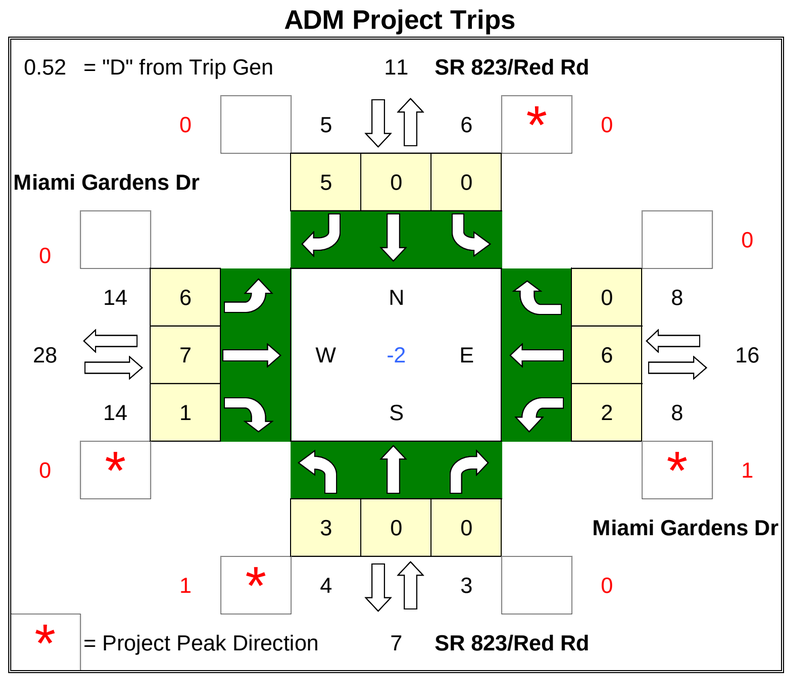
Project Trips

IN= 558

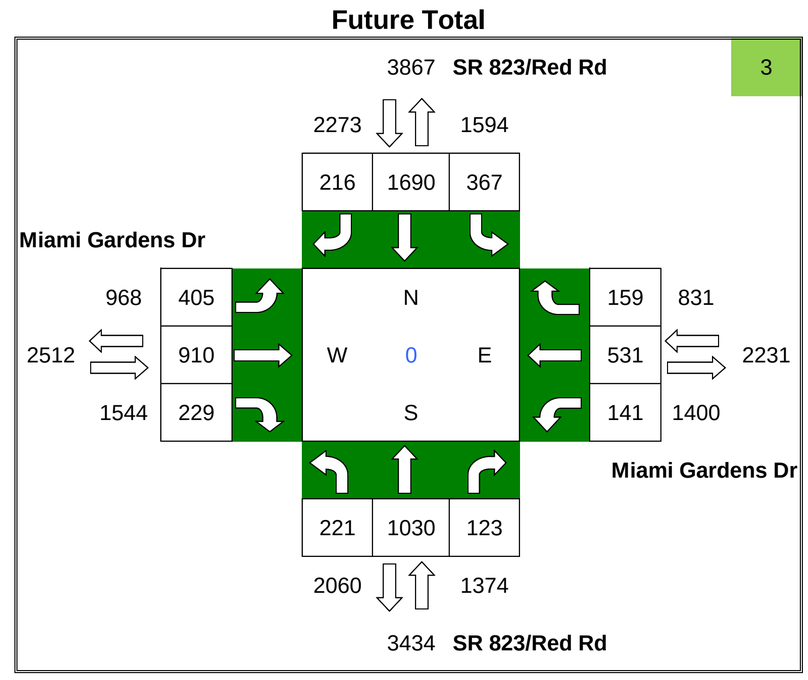
OUT= 596

	PD	#
N =	0.93%	11
E =	1.35%	16
S =	0.62%	7
W =	2.43%	28

ADM Project Trips



Future Total



ADM/Graham

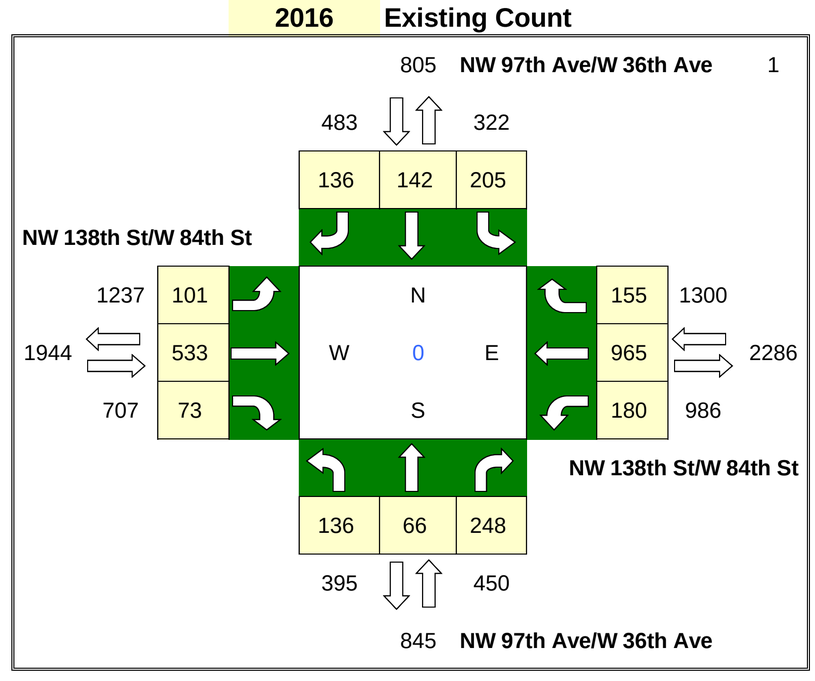
AM Turning Movement Volumes

N/S Roadway: NW 97th Ave/W 36th Ave

E/W Roadway: NW 138th St/W 84th St

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1.6% **Seasonal Factor =** 1.00

PHASE 1

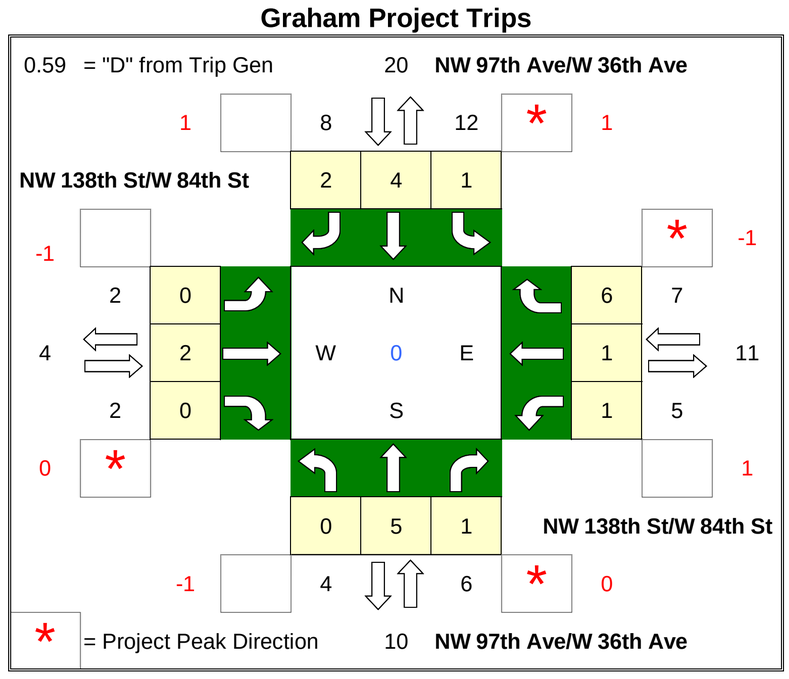
Project Trips

IN= 389

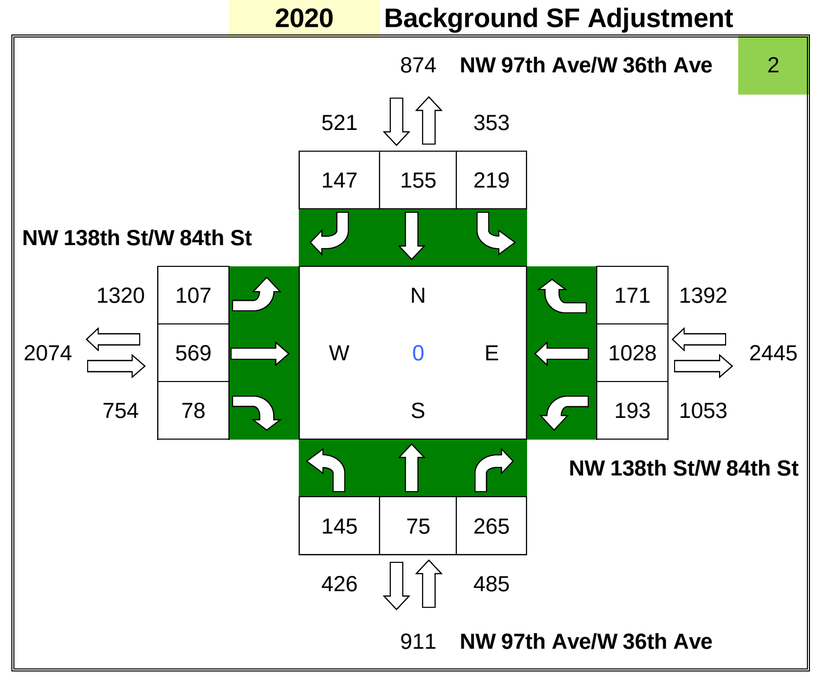
OUT= 275

	PD	#
N =	3.07%	20
E =	1.71%	11
S =	1.56%	10
W =	0.58%	4

Graham Project Trips



2020 Background SF Adjustment



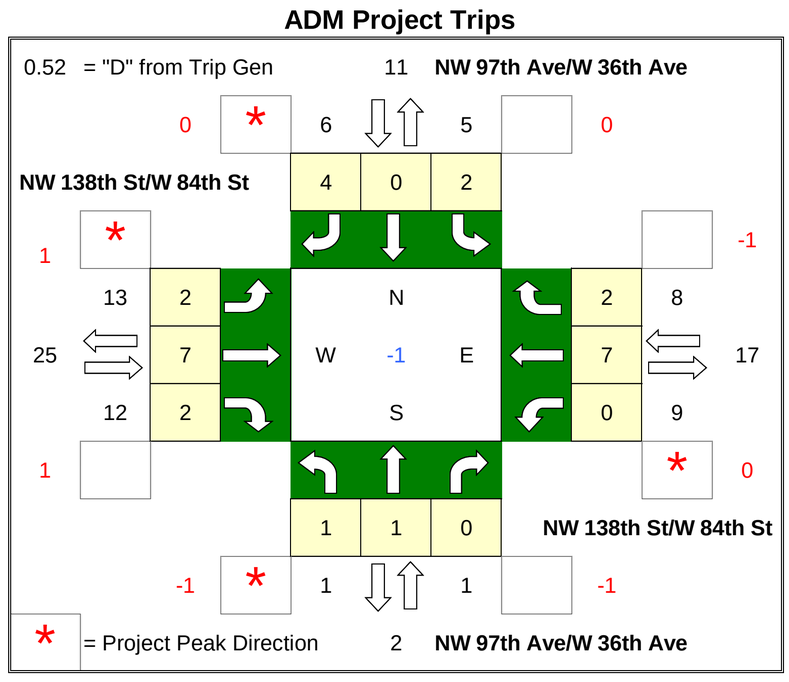
Project Trips

IN= 558

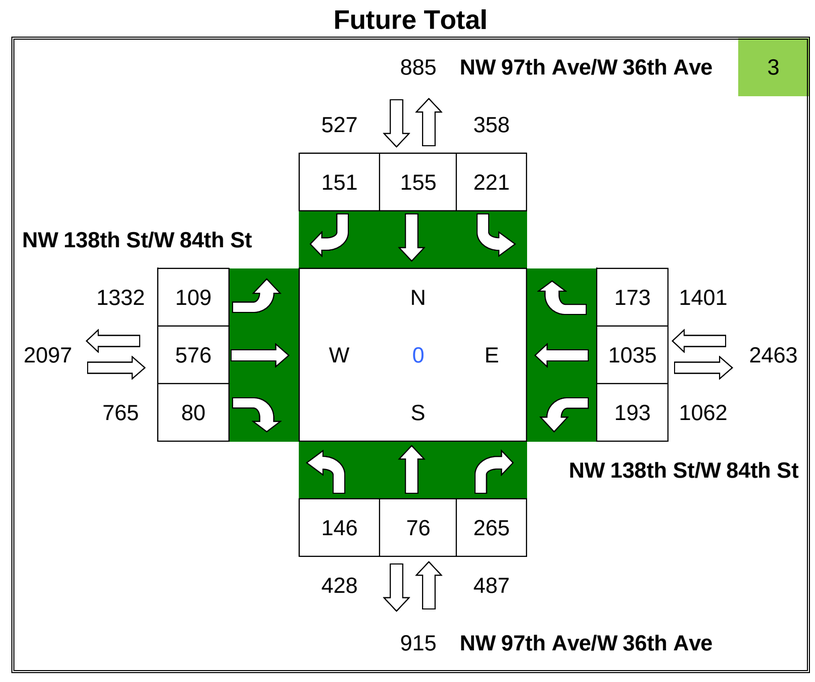
OUT= 596

	PD	#
N =	0.96%	11
E =	1.47%	17
S =	0.18%	2
W =	2.16%	25

ADM Project Trips



Future Total



ADM/Graham

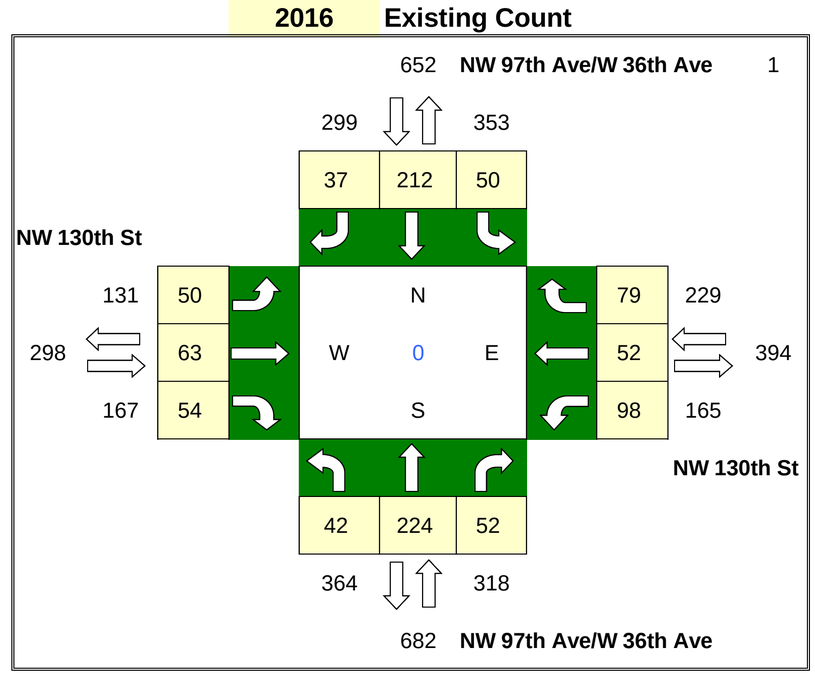
AM Turning Movement Volumes

N/S Roadway: NW 97th Ave/W 36th Ave

E/W Roadway: NW 130th St

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1.6% **Seasonal Factor =** 1.00

PHASE 1

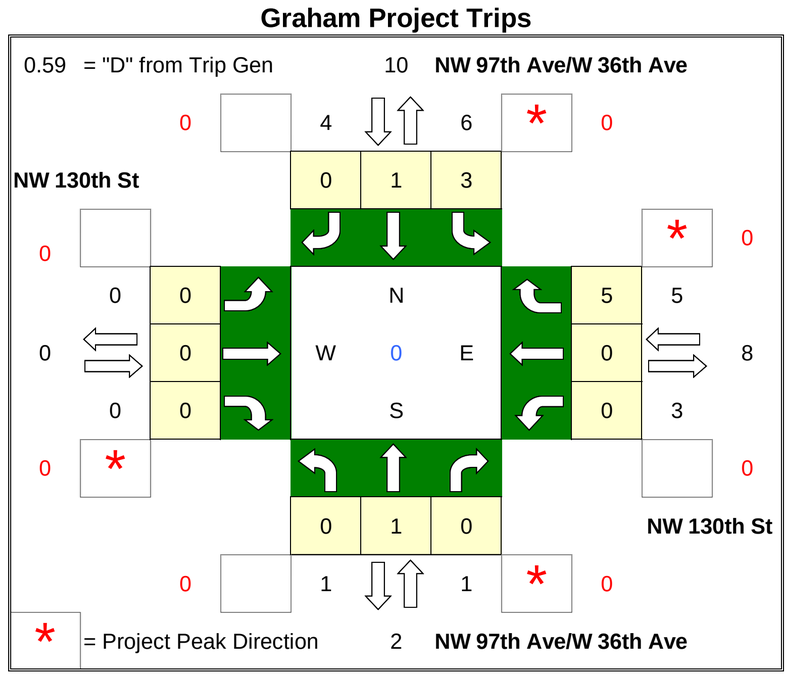
Project Trips

IN= 389

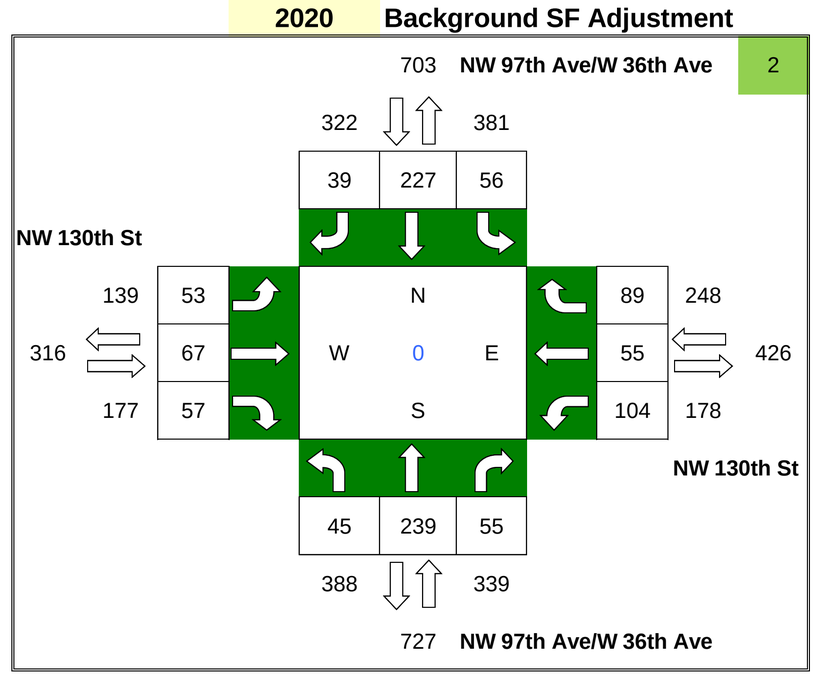
OUT= 275

	PD	#
N =	1.56%	10
E =	1.19%	8
S =	0.37%	2
W =	0.00%	0

Graham Project Trips



2020 Background SF Adjustment



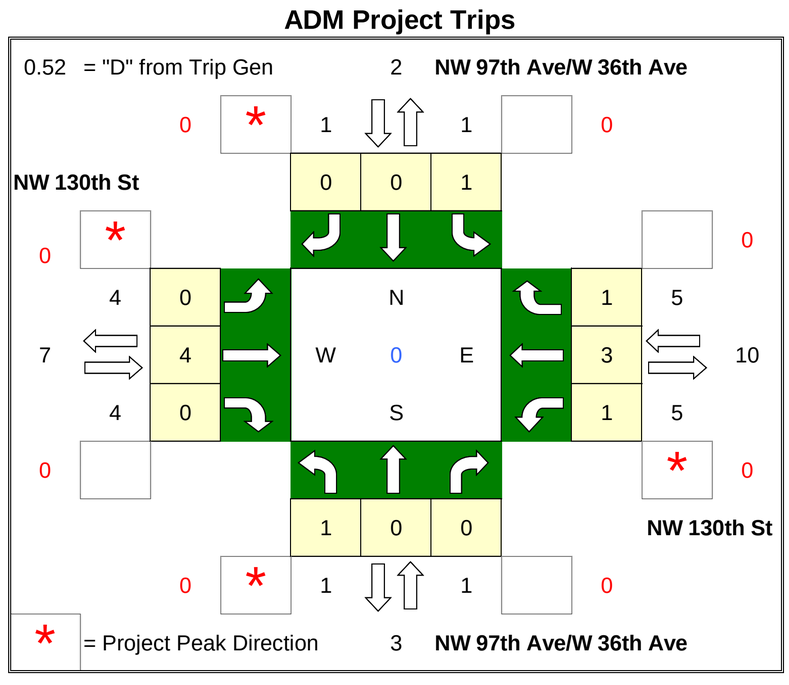
Project Trips

IN= 558

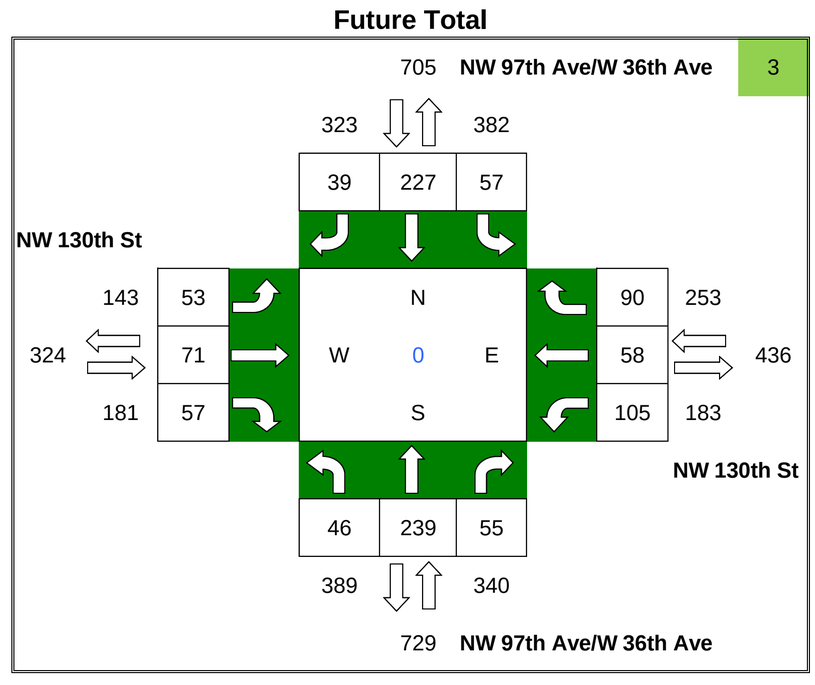
OUT= 596

	PD	#
N =	0.18%	2
E =	0.89%	10
S =	0.25%	3
W =	0.63%	7

ADM Project Trips



Future Total



ADM/Graham

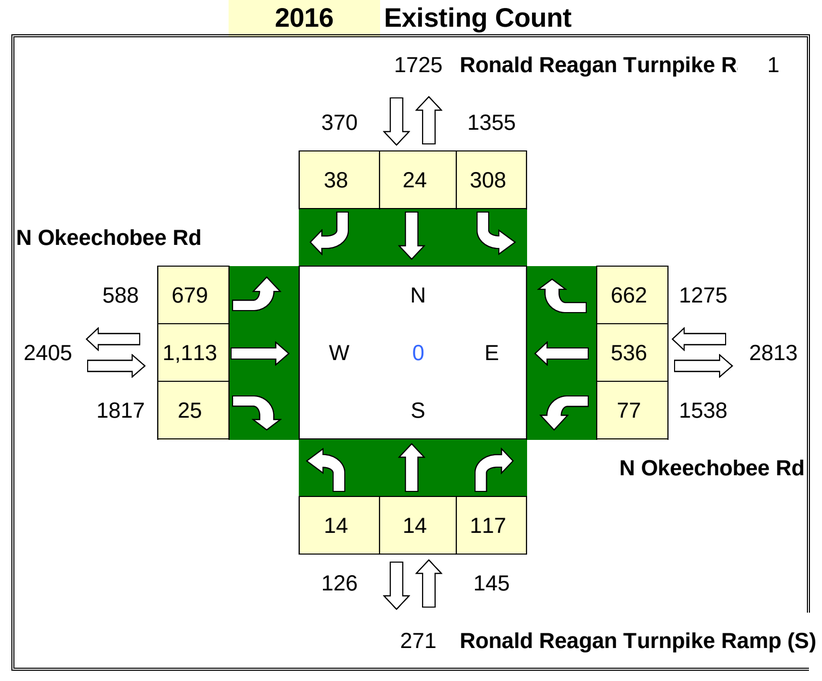
AM Turning Movement Volumes

N/S Roadway: Ronald Reagan Turnpike Ramp (S)

E/W Roadway: N Okeechobee Rd

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1.6% **Seasonal Factor =** 1.04

PHASE 1

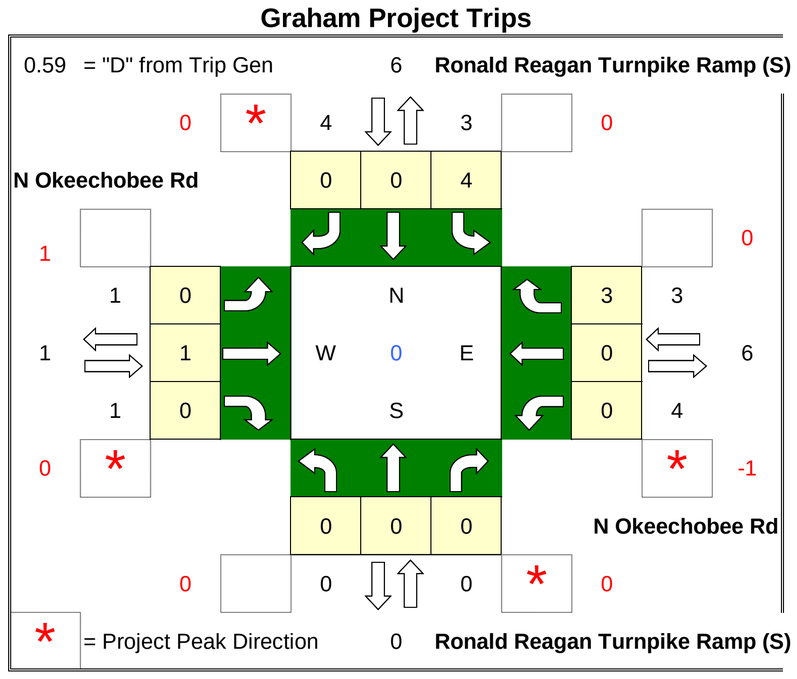
Project Trips

IN= 389

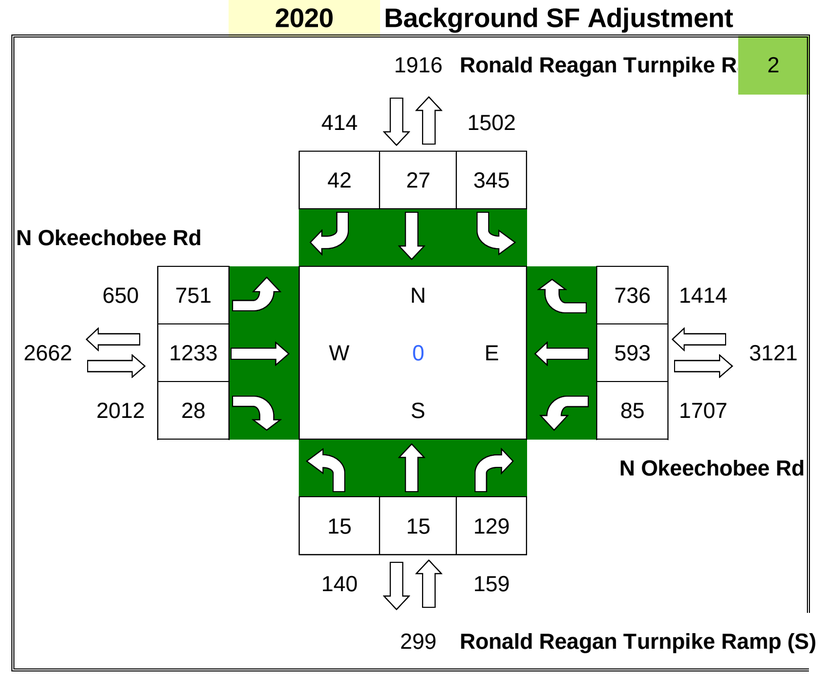
OUT= 275

	PD	#
N =	0.96%	6
E =	0.94%	6
S =	0.00%	0
W =	0.21%	1

Graham Project Trips



2020 Background SF Adjustment



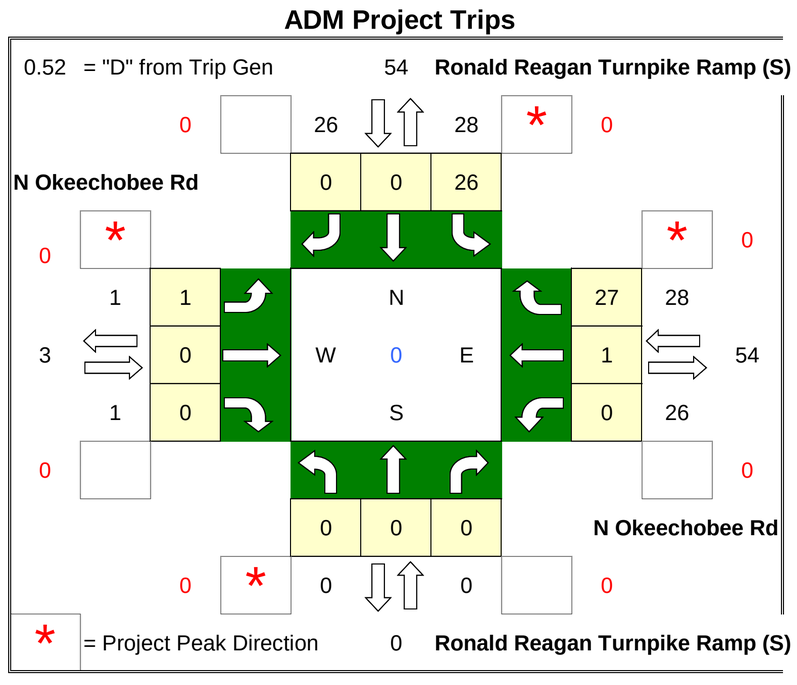
Project Trips

IN= 558

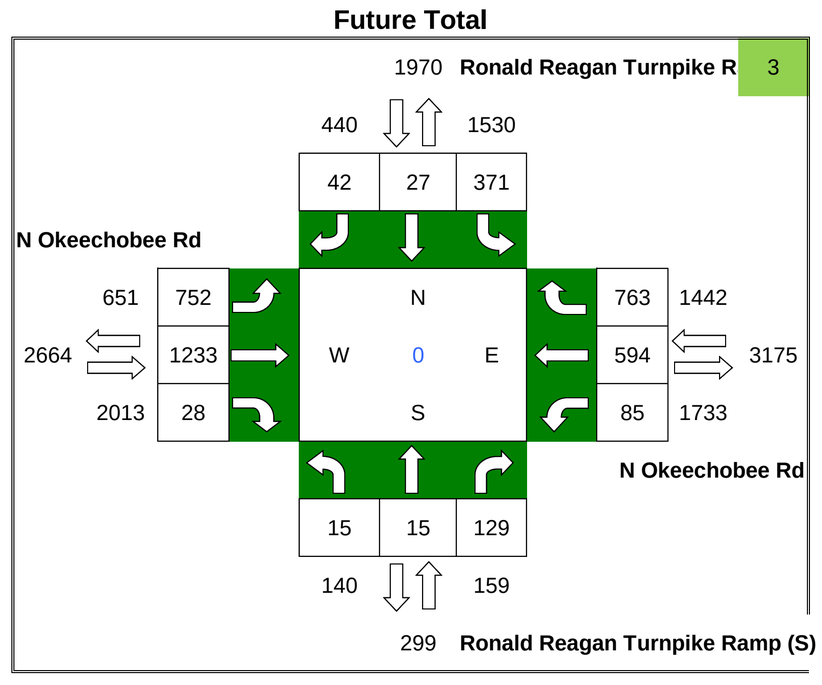
OUT= 596

	PD	#
N =	4.66%	54
E =	4.66%	54
S =	0.00%	0
W =	0.25%	3

ADM Project Trips



Future Total



ADM/Graham

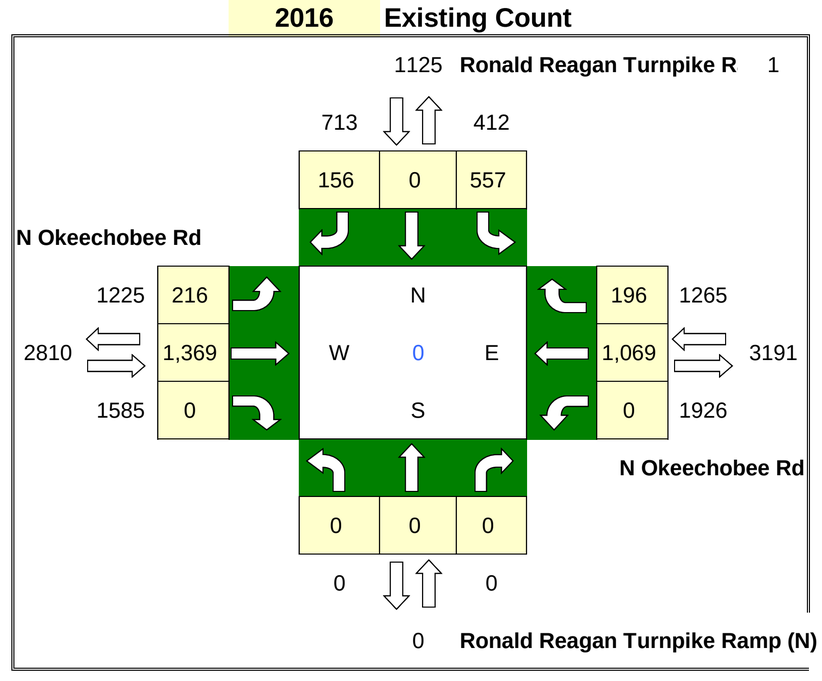
AM Turning Movement Volumes

N/S Roadway: Ronald Reagan Turnpike Ramp (N)

E/W Roadway: N Okeechobee Rd

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1.6% **Seasonal Factor =** 1.04

PHASE 1

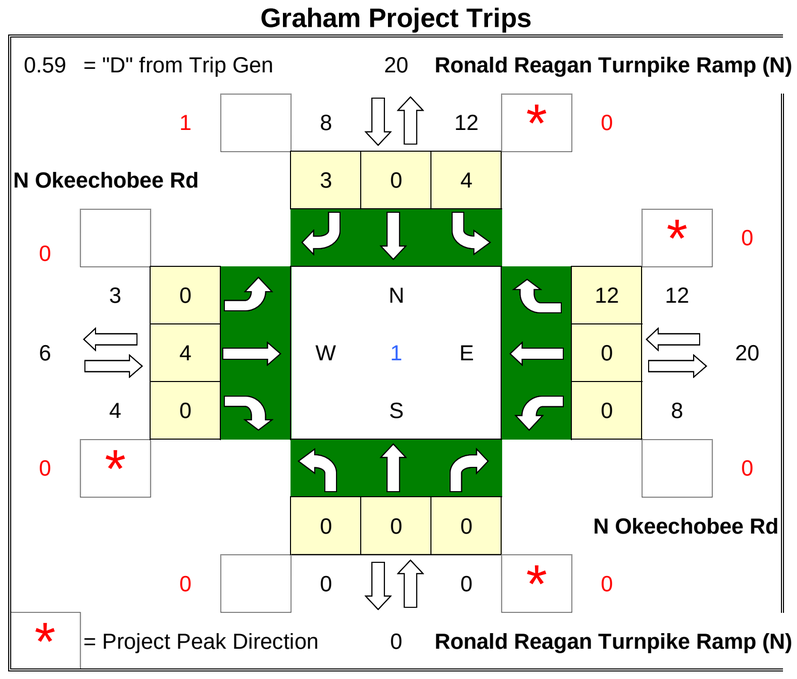
Project Trips

IN= 389

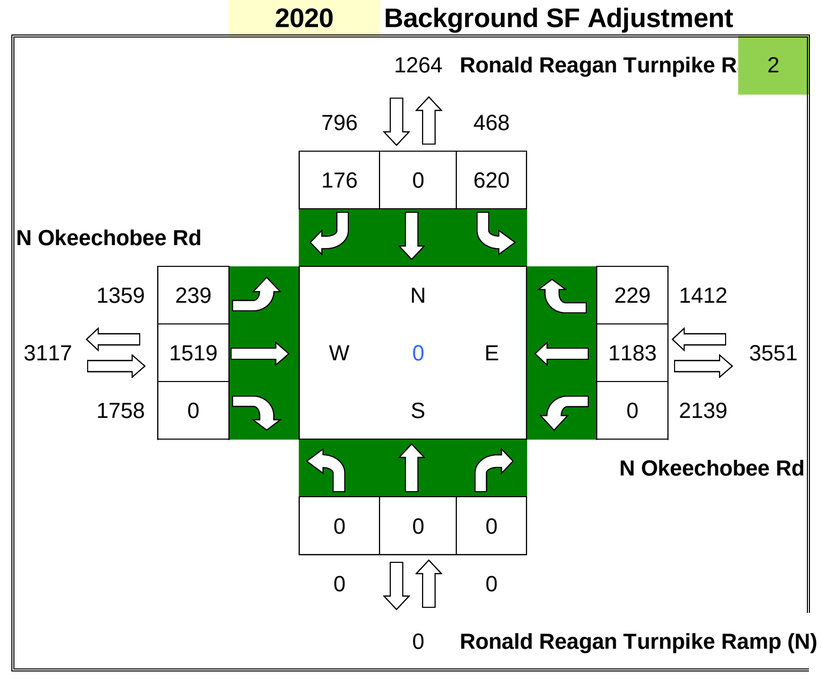
OUT= 275

	PD	#
N =	3.07%	20
E =	3.08%	20
S =	0.00%	0
W =	0.94%	6

Graham Project Trips



2020 Background SF Adjustment



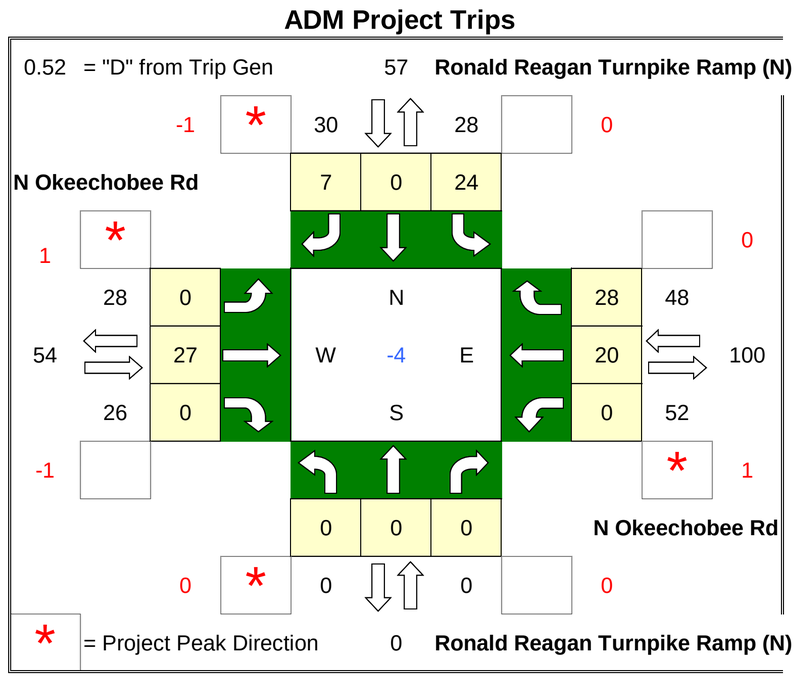
Project Trips

IN= 558

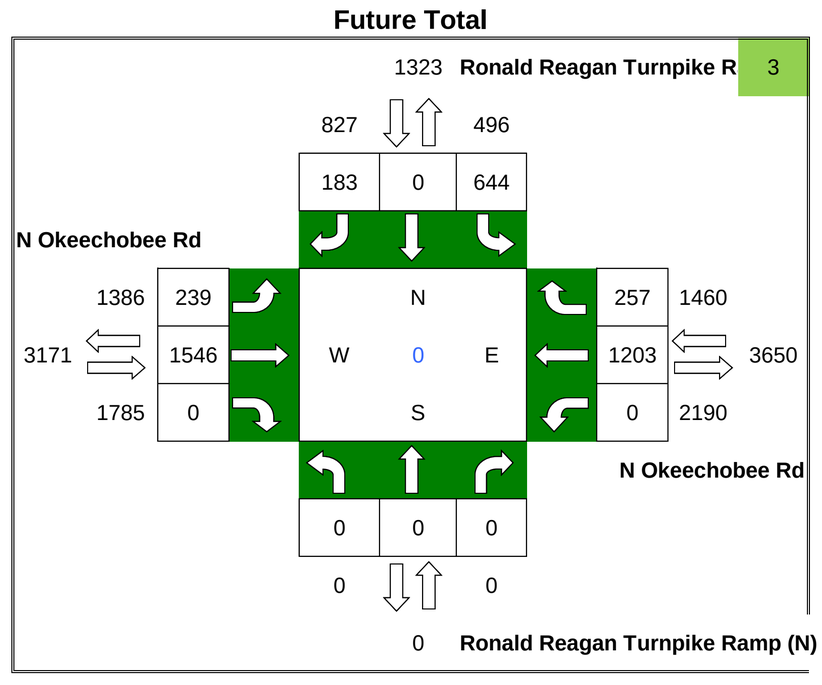
OUT= 596

	PD	#
N =	4.96%	57
E =	8.68%	100
S =	0.00%	0
W =	4.66%	54

ADM Project Trips



Future Total



ADM/Graham

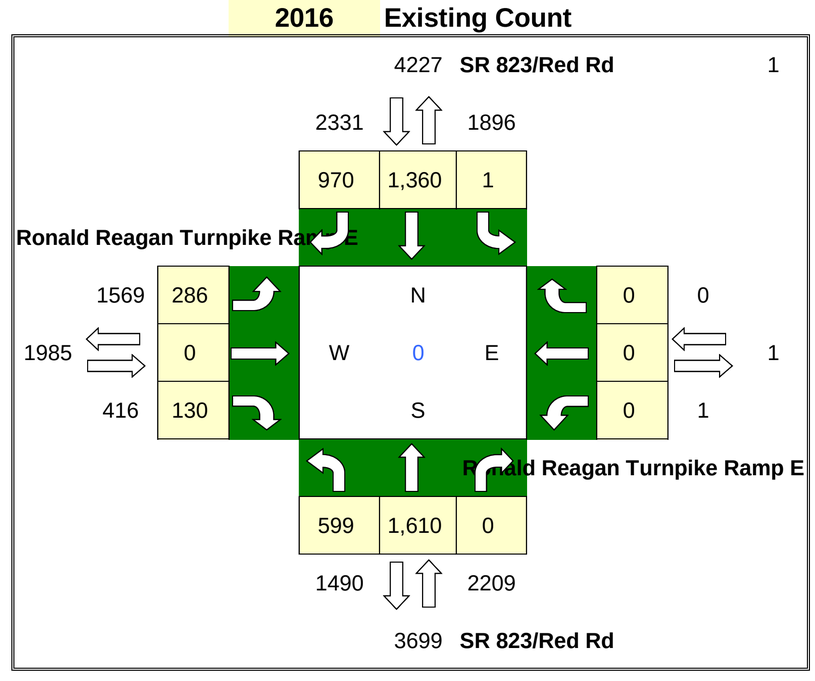
AM Turning Movement Volumes

N/S Roadway: SR 823/Red Rd

E/W Roadway: Ronald Reagan Turnpike Ramp E

Date Taken: 4/20/16

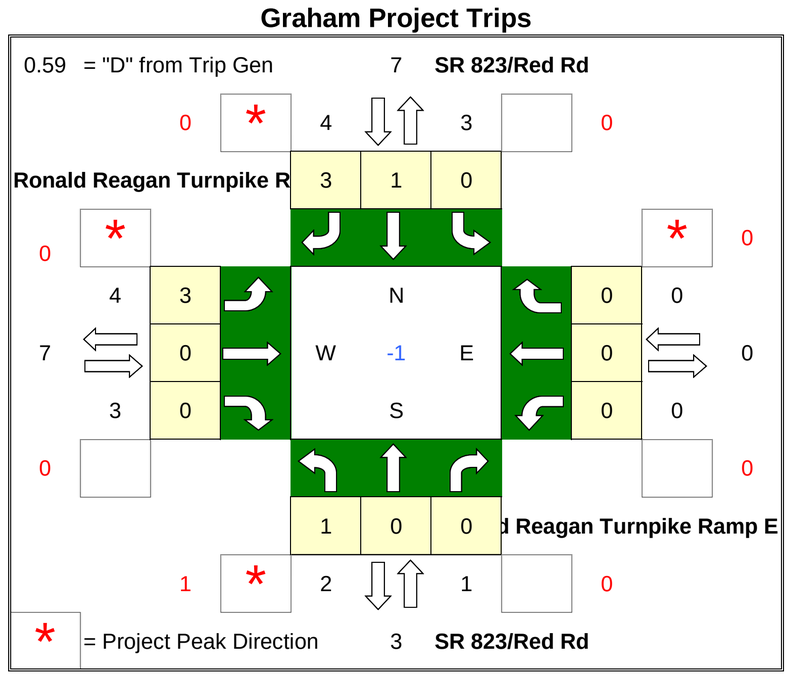
2016 Existing Count



% Annual Growth = 1.9% **Seasonal Factor =** 1.00

PHASE 1

Graham Project Trips

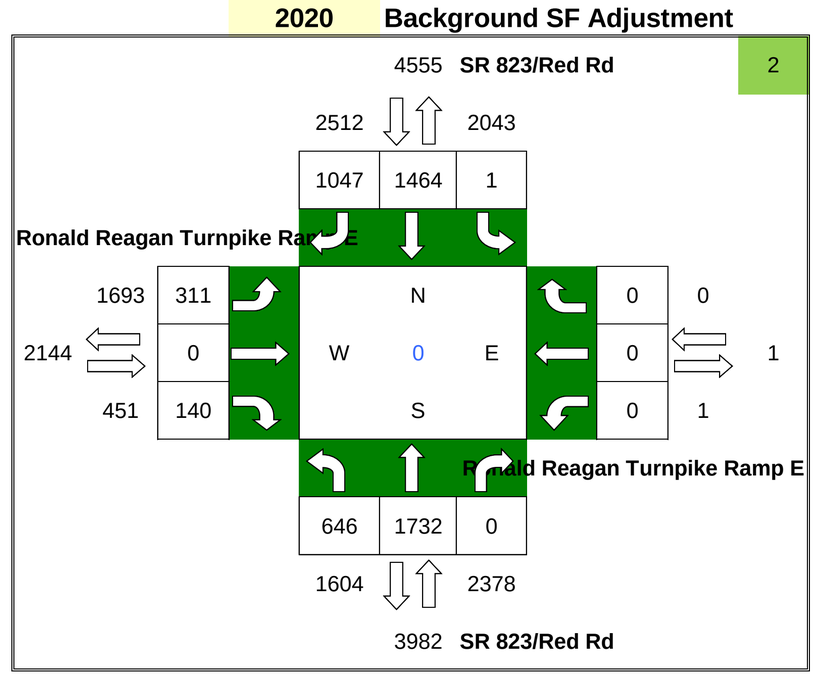


Project Trips

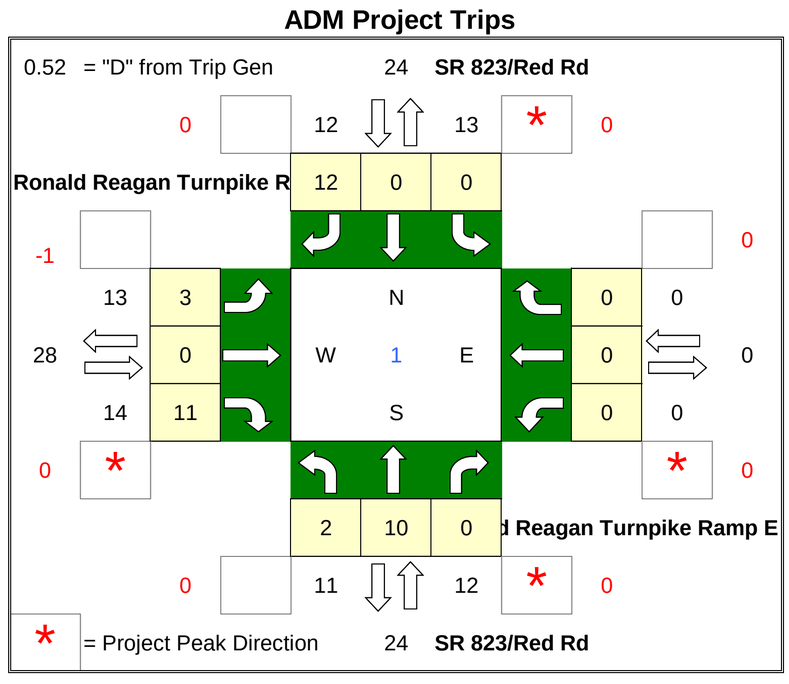
IN=	389
OUT=	275

	PD	#
N =	1.08%	7
E =	0.00%	0
S =	0.43%	3
W =	1.09%	7

2020 Background SF Adjustment



ADM Project Trips

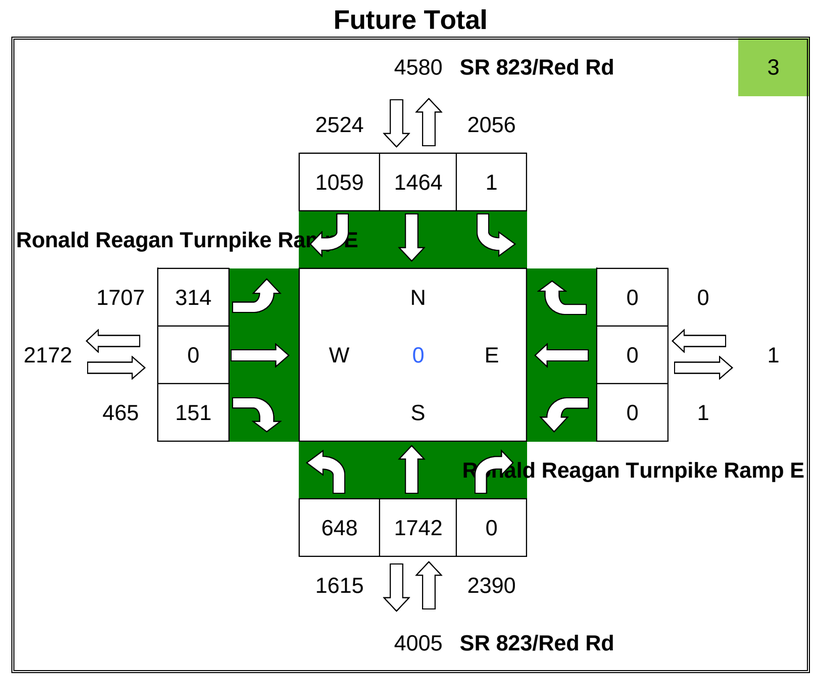


Project Trips

IN=	558
OUT=	596

	PD	#
N =	2.11%	24
E =	0.00%	0
S =	2.06%	24
W =	2.41%	28

Future Total



ADM/Graham

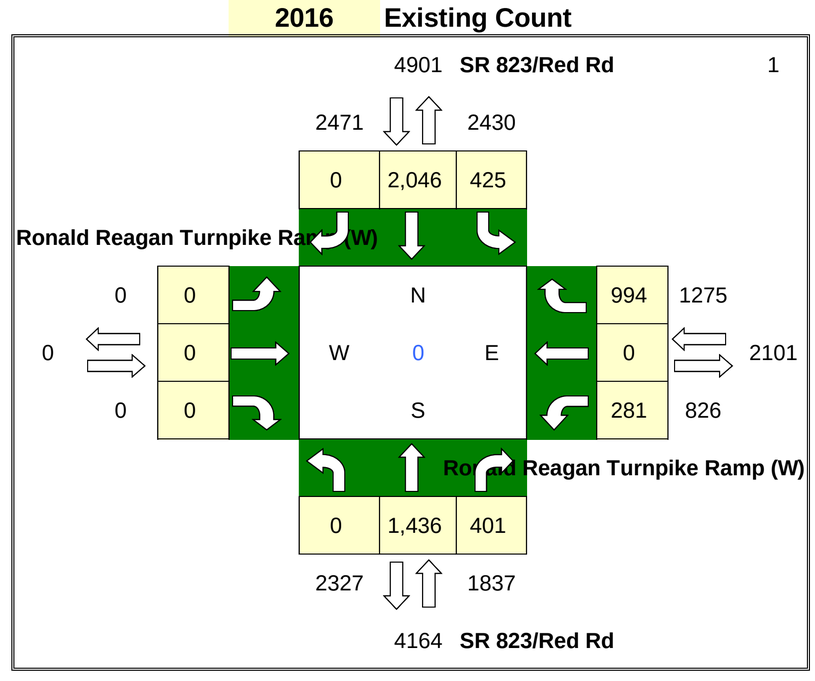
AM Turning Movement Volumes

N/S Roadway: SR 823/Red Rd

E/W Roadway: Ronald Reagan Turnpike Ramp (W)

Date Taken: 4/20/16

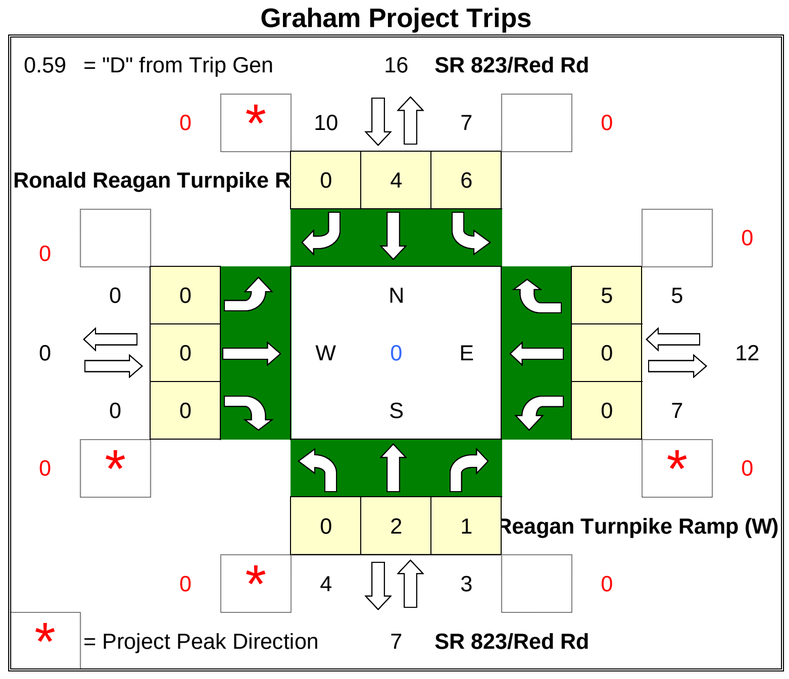
2016 Existing Count



% Annual Growth = 1.9% **Seasonal Factor =** 1.04

PHASE 1

Graham Project Trips

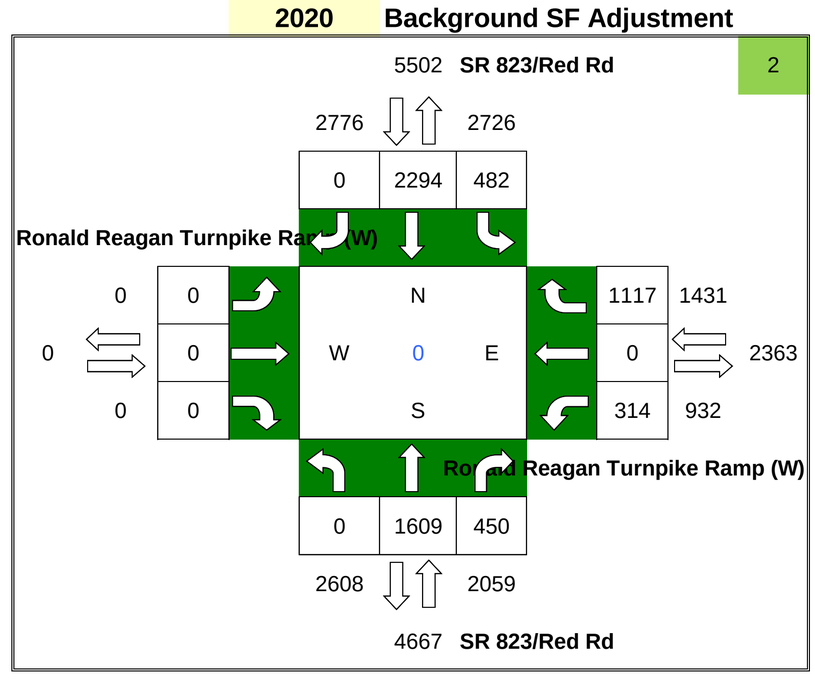


Project Trips

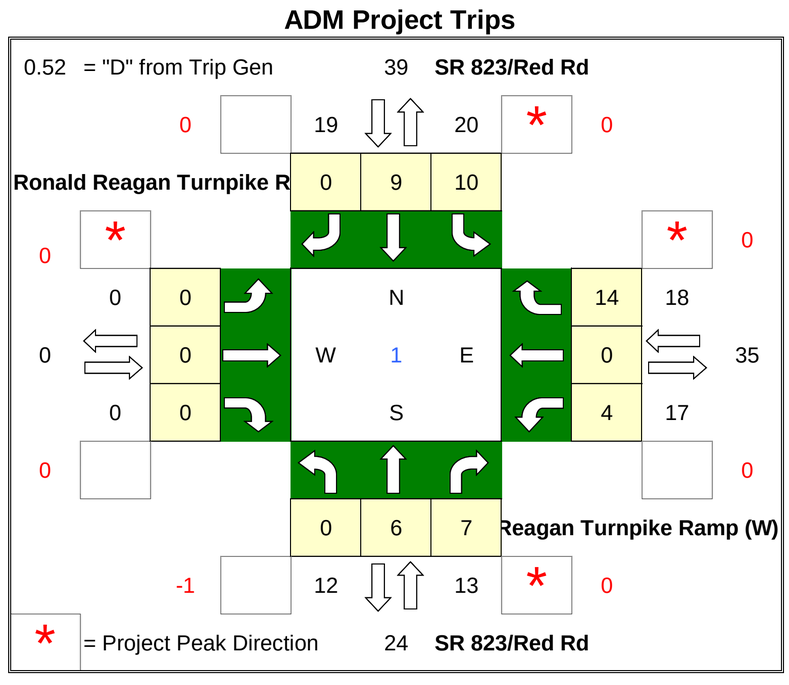
IN=	389
OUT=	275

	PD	#
N =	2.45%	16
E =	1.79%	12
S =	1.08%	7
W =	0.00%	0

2020 Background SF Adjustment



ADM Project Trips

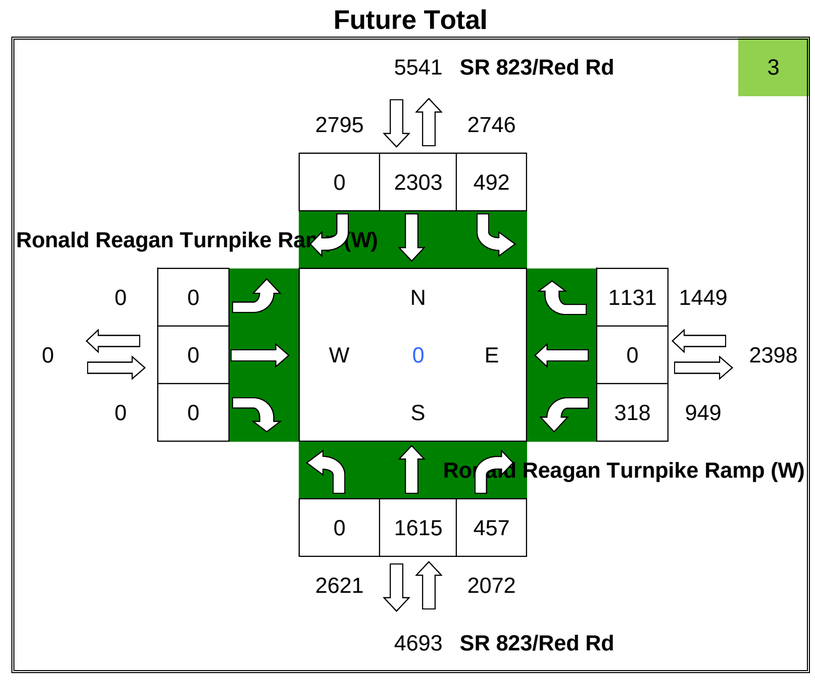


Project Trips

IN=	558
OUT=	596

	PD	#
N =	3.41%	39
E =	3.07%	35
S =	2.11%	24
W =	0.00%	0

Future Total



ADM/Graham

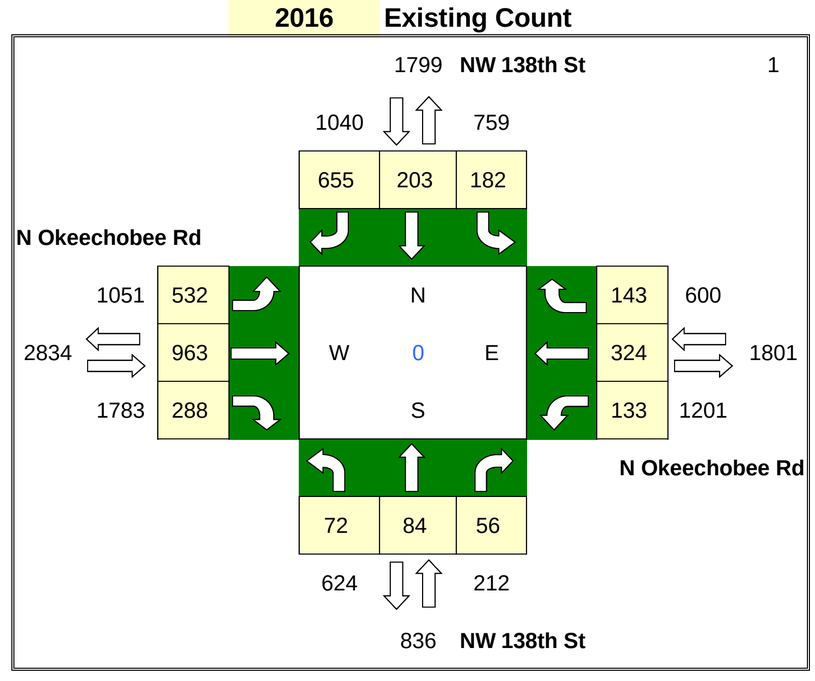
AM Turning Movement Volumes

N/S Roadway: NW 138th St

E/W Roadway: N Okeechobee Rd

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1.6% **Seasonal Factor =** 1.00

PHASE 1

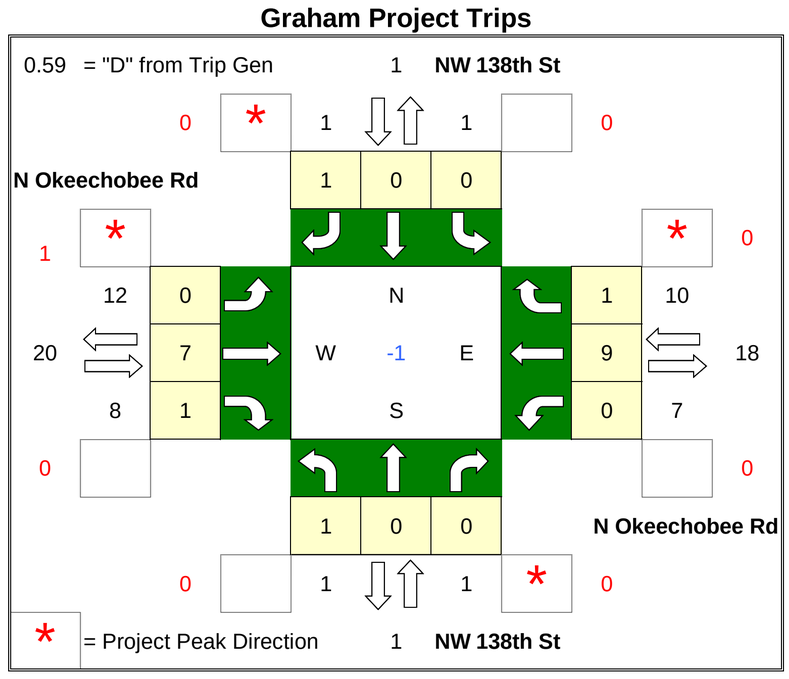
Project Trips

IN= 389

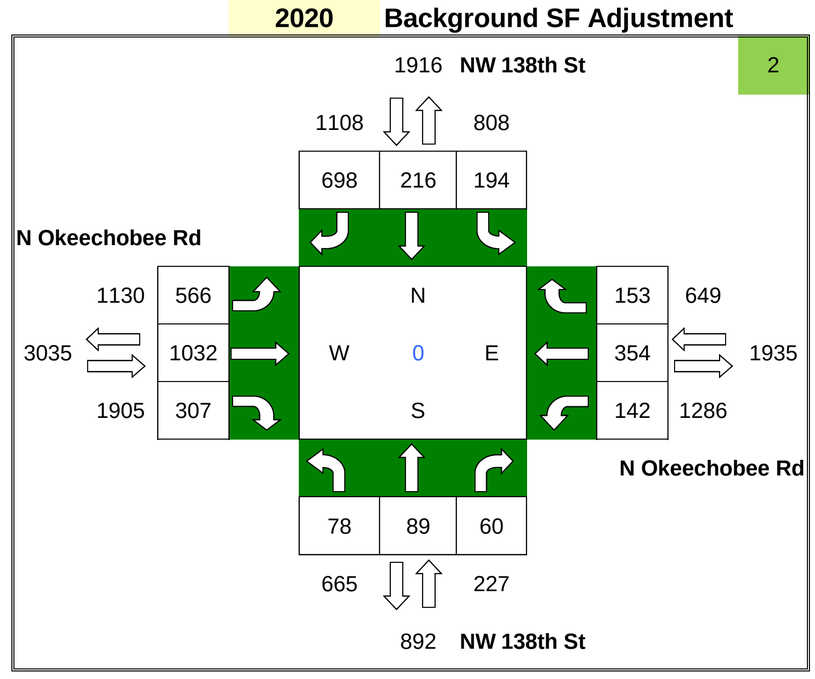
OUT= 275

	PD	#
N =	0.21%	1
E =	2.64%	18
S =	0.22%	1
W =	3.08%	20

Graham Project Trips



2020 Background SF Adjustment



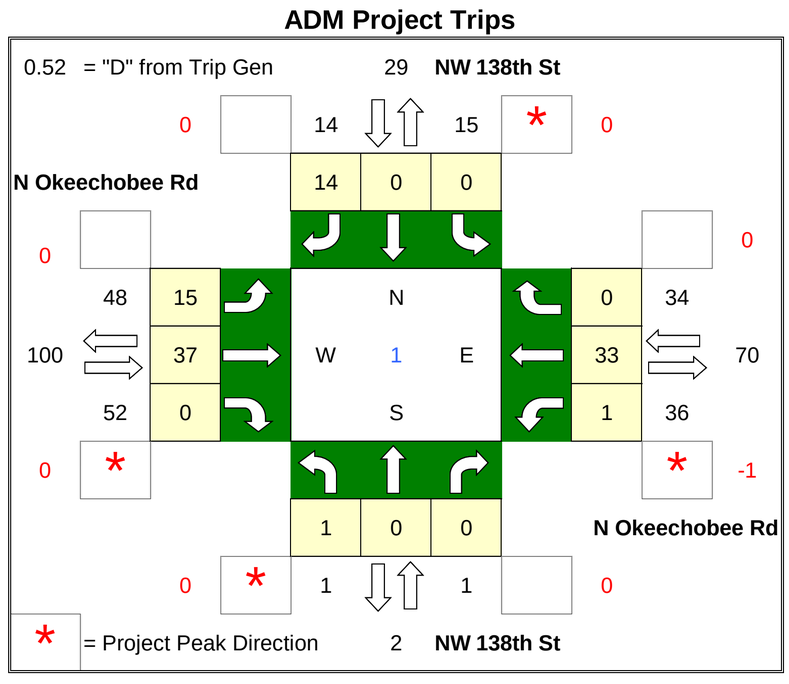
Project Trips

IN= 558

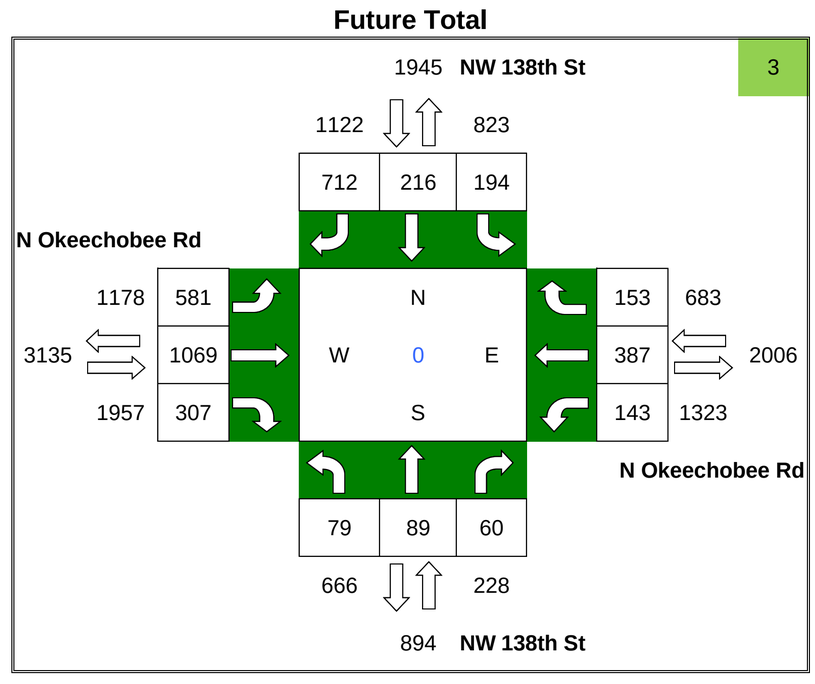
OUT= 596

	PD	#
N =	2.55%	29
E =	6.04%	70
S =	0.13%	2
W =	8.68%	100

ADM Project Trips



Future Total



ADM/Graham

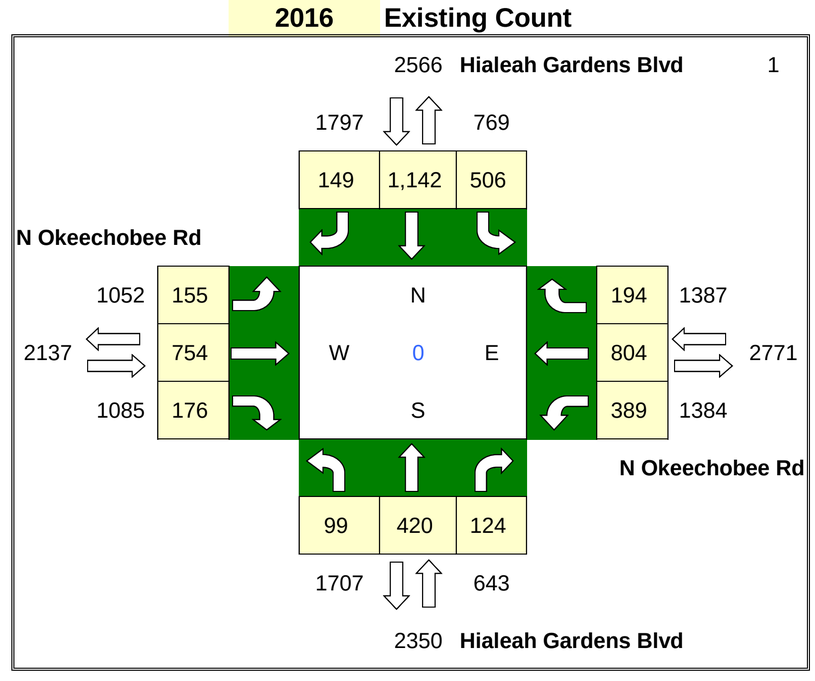
AM Turning Movement Volumes

N/S Roadway: Hialeah Gardens Blvd

E/W Roadway: N Okeechobee Rd

Date Taken: 4/20/16

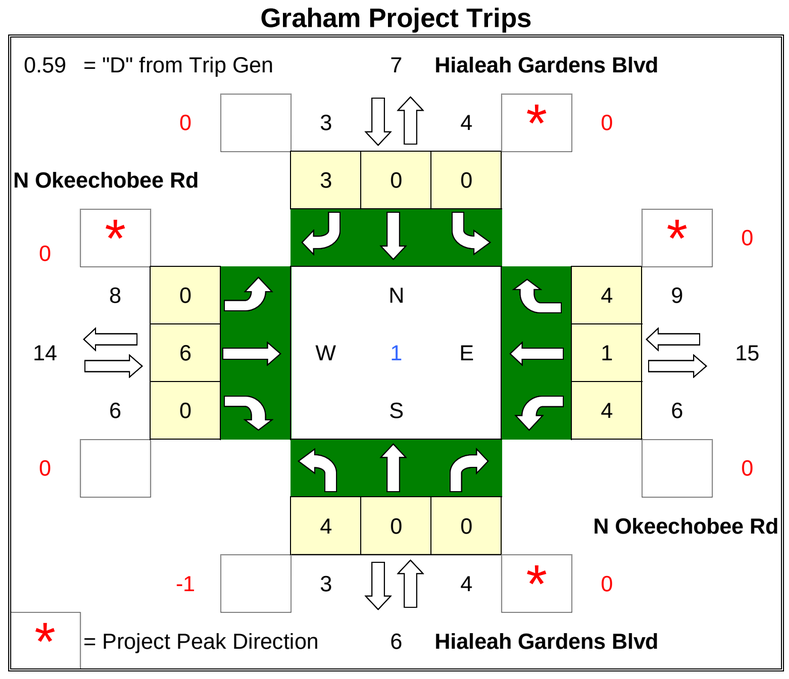
2016 Existing Count



% Annual Growth = 1.6% **Seasonal Factor =** 1.00

PHASE 1

Graham Project Trips



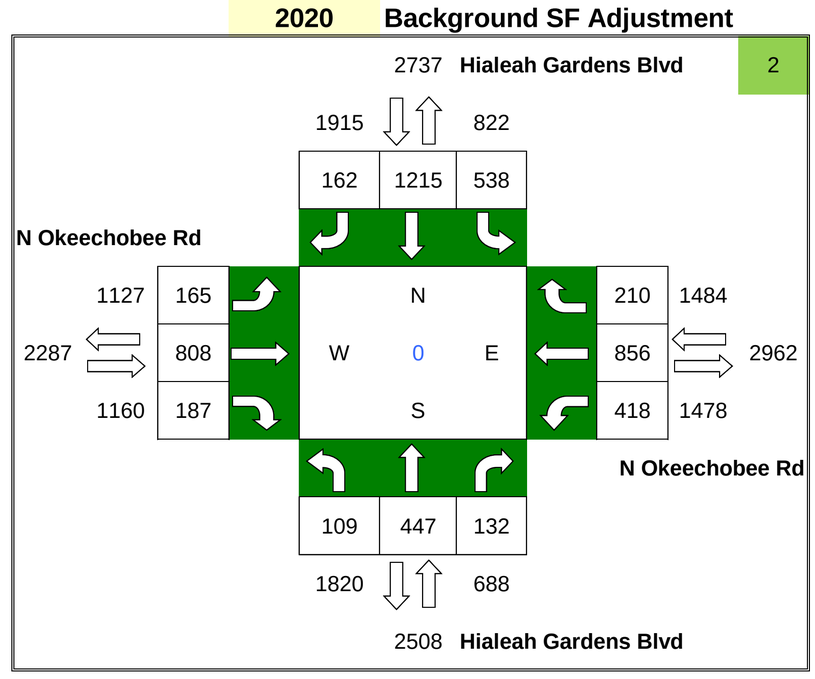
Project Trips

IN= 389

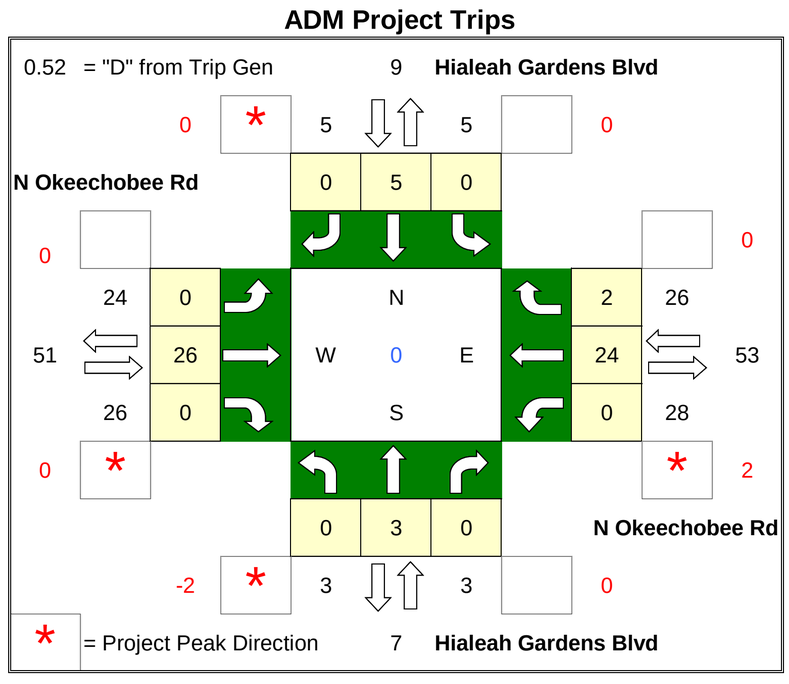
OUT= 275

	PD	#
N =	1.02%	7
E =	2.22%	15
S =	0.94%	6
W =	2.15%	14

2020 Background SF Adjustment



ADM Project Trips



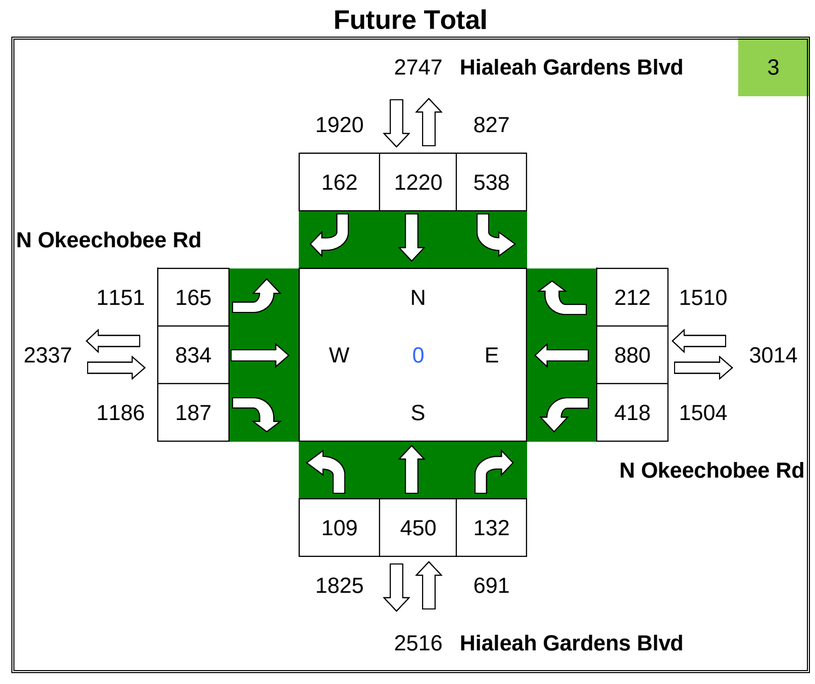
Project Trips

IN= 558

OUT= 596

	PD	#
N =	0.81%	9
E =	4.63%	53
S =	0.58%	7
W =	4.39%	51

Future Total



ADM/Graham

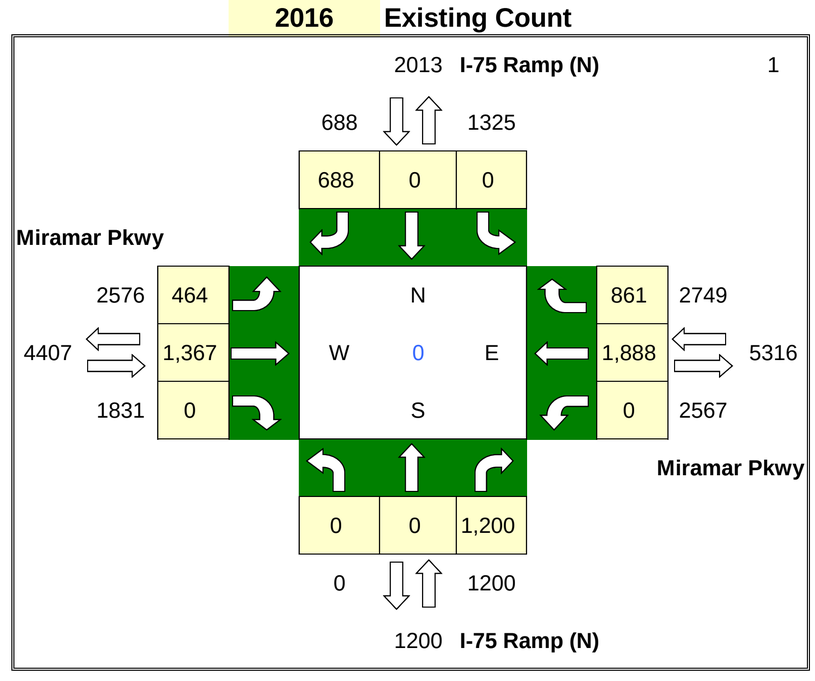
AM Turning Movement Volumes

N/S Roadway: I-75 Ramp (N)

E/W Roadway: Miramar Pkwy

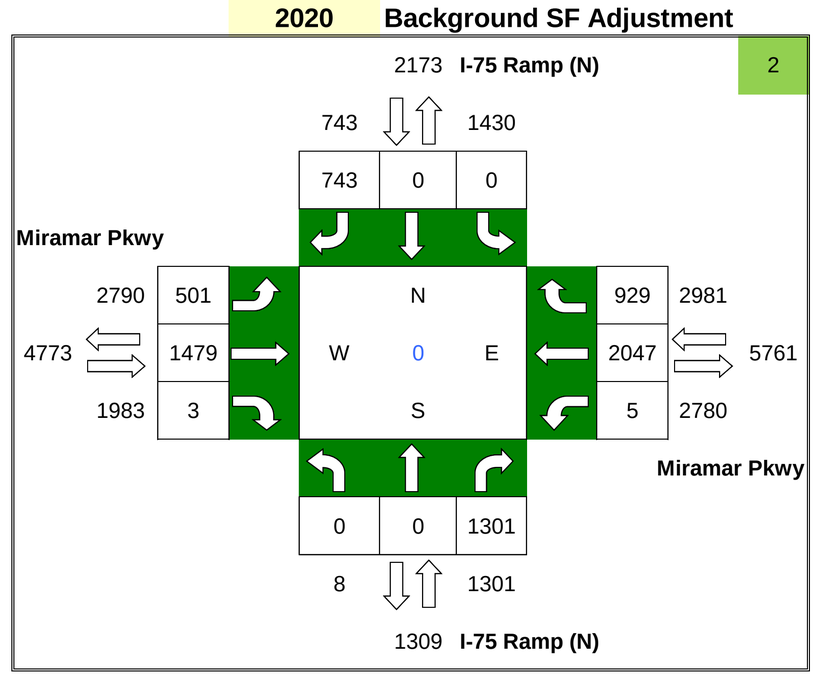
Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1.2% **Seasonal Factor =** 1.03

2020 Background SF Adjustment



PHASE 1

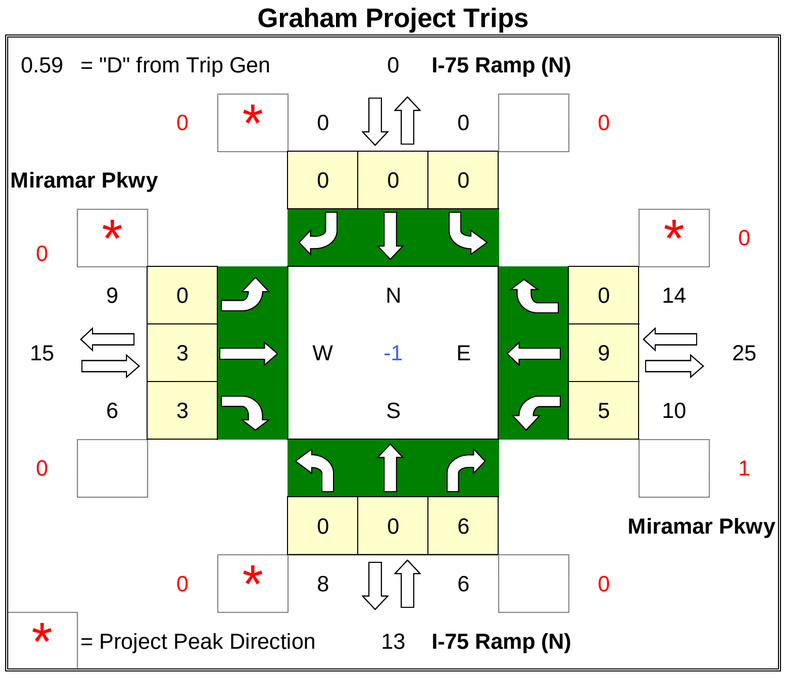
Graham Project Trips

Project Trips

IN= 389

OUT= 275

	PD	#
N =	0.05%	0
E =	3.71%	25
S =	2.00%	13
W =	2.32%	15



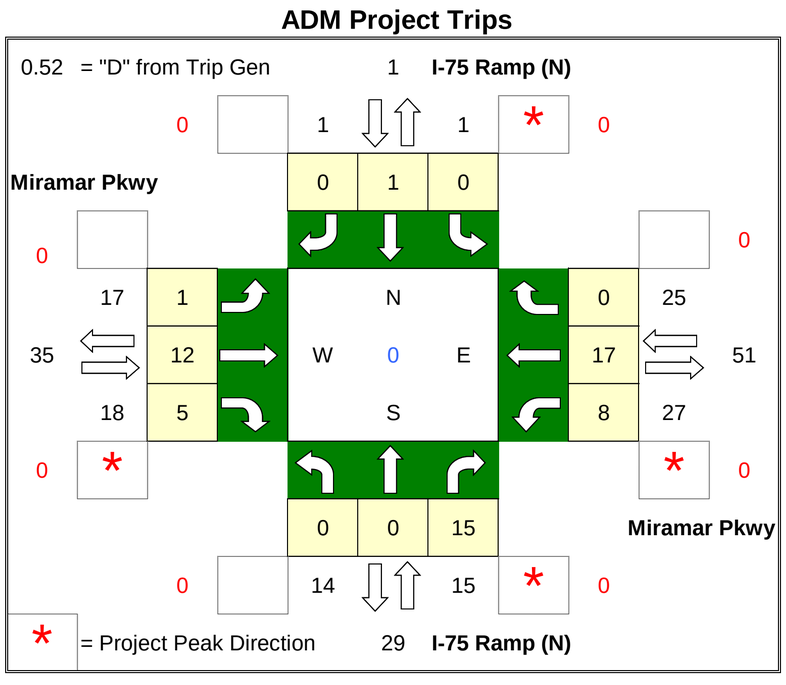
ADM Project Trips

Project Trips

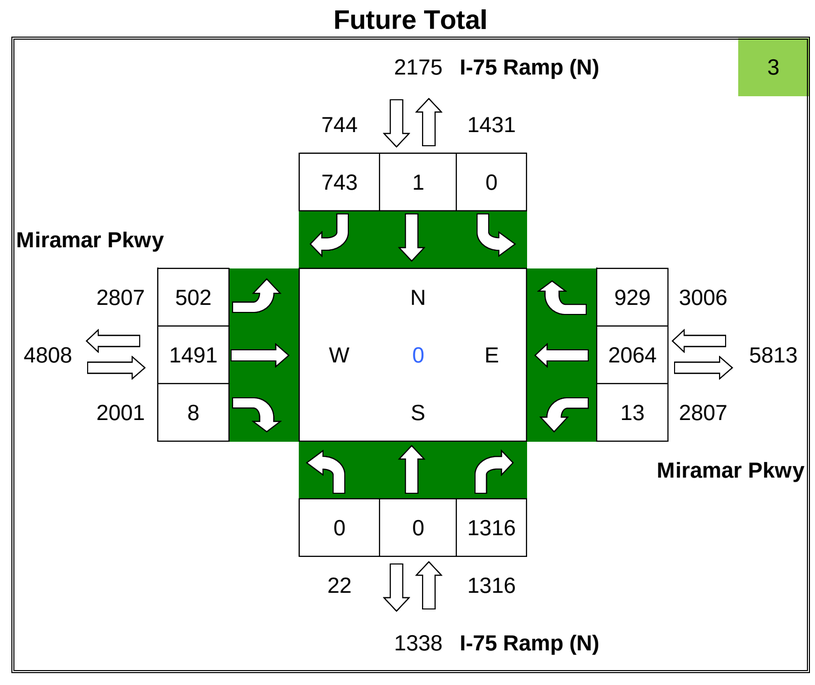
IN= 558

OUT= 596

	PD	#
N =	0.09%	1
E =	4.46%	51
S =	2.50%	29
W =	3.04%	35



Future Total



ADM/Graham

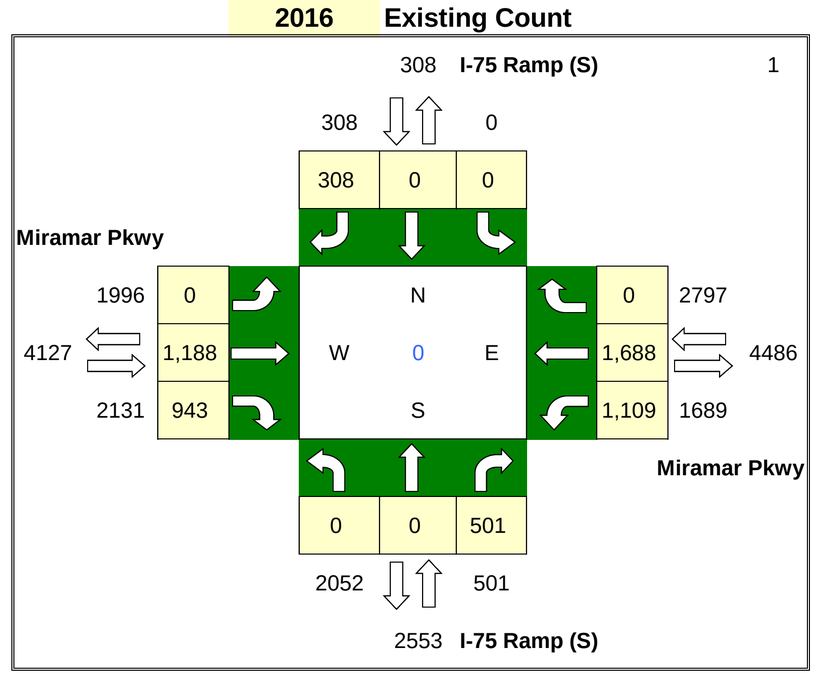
AM Turning Movement Volumes

N/S Roadway: I-75 Ramp (S)

E/W Roadway: Miramar Pkwy

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1.2% **Seasonal Factor =** 1.03

PHASE 1

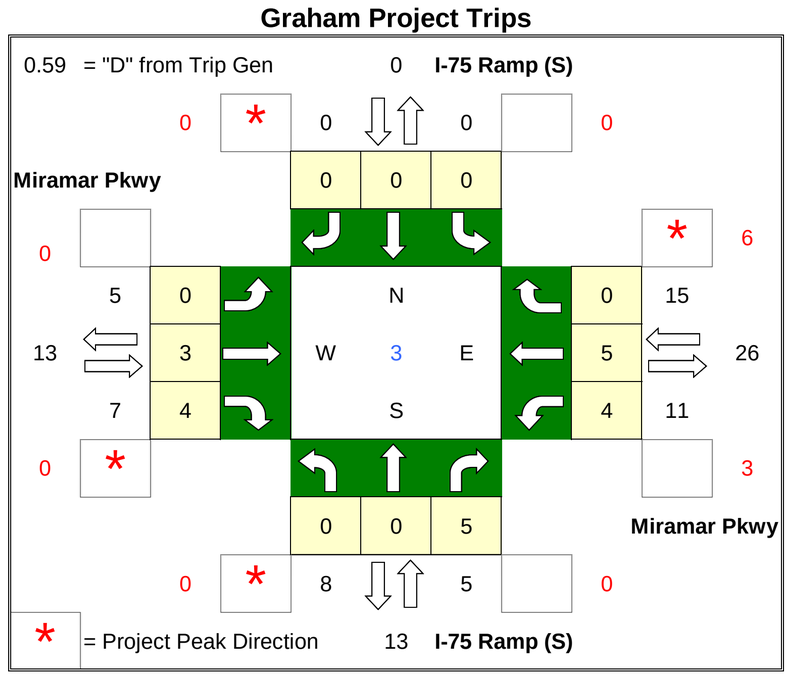
Graham Project Trips

Project Trips

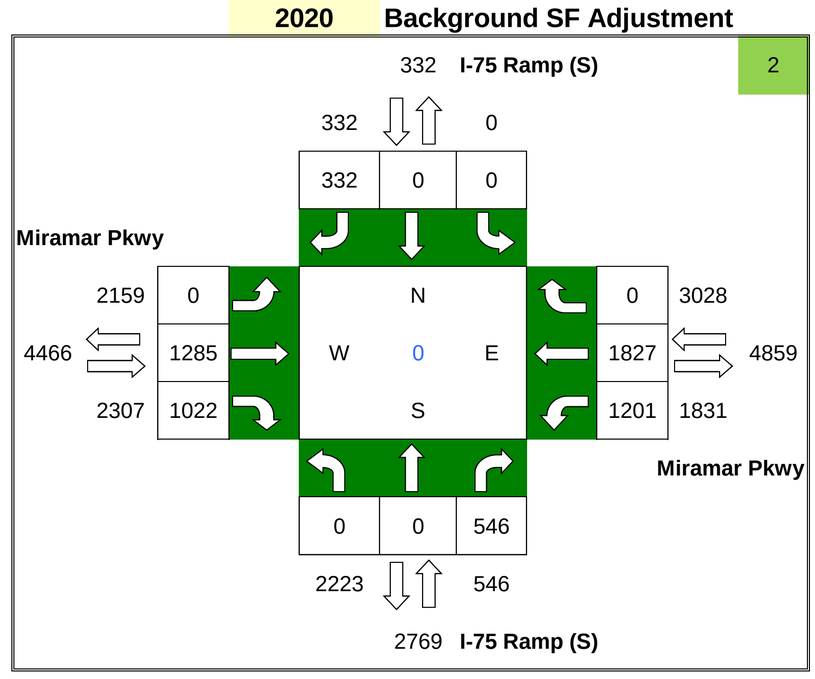
IN= 389

OUT= 275

	PD	#
N =	0.00%	0
E =	3.91%	26
S =	1.99%	13
W =	1.92%	13



2020 Background SF Adjustment



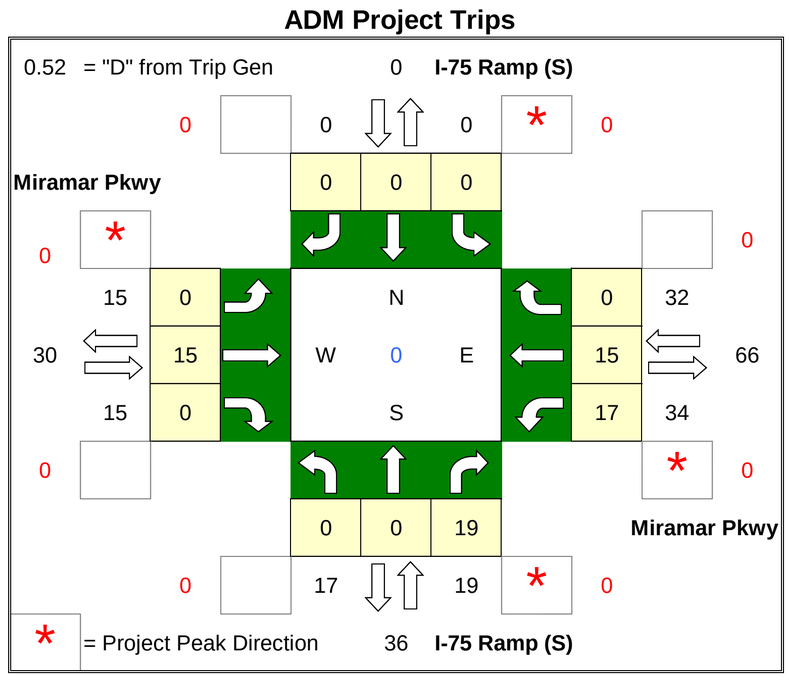
ADM Project Trips

Project Trips

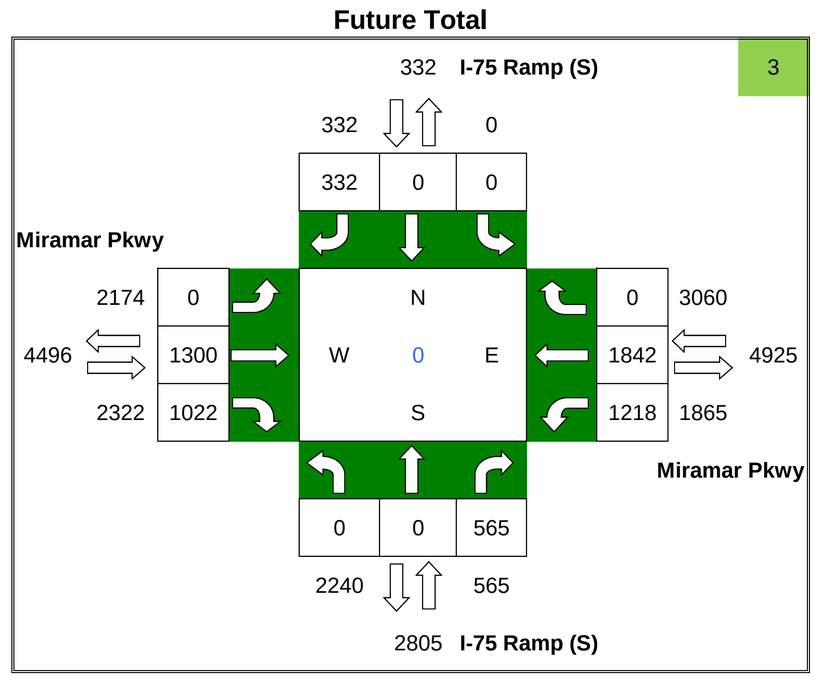
IN= 558

OUT= 596

	PD	#
N =	0.00%	0
E =	5.73%	66
S =	3.13%	36
W =	2.60%	30



Future Total



ADM/Graham

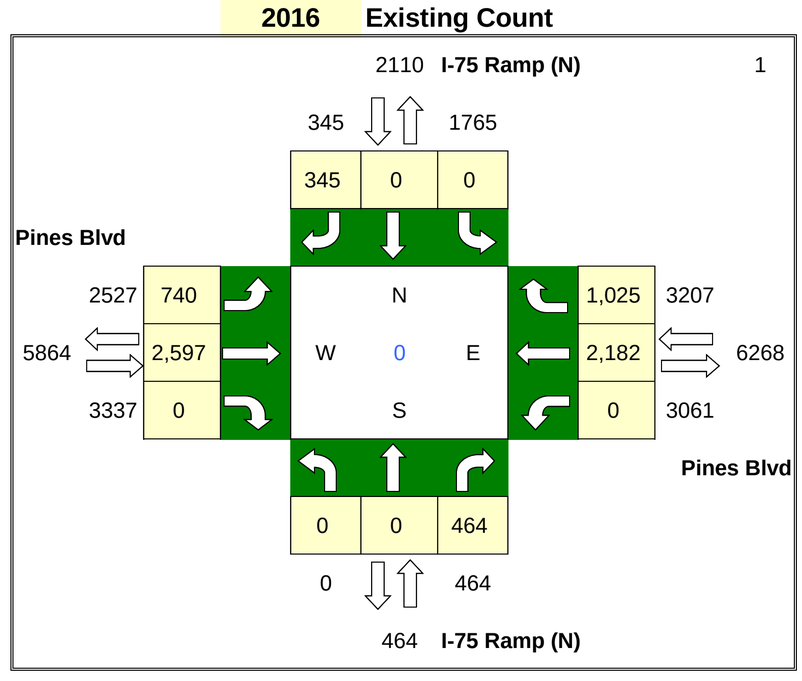
AM Turning Movement Volumes

N/S Roadway: I-75 Ramp (N)

E/W Roadway: Pines Blvd

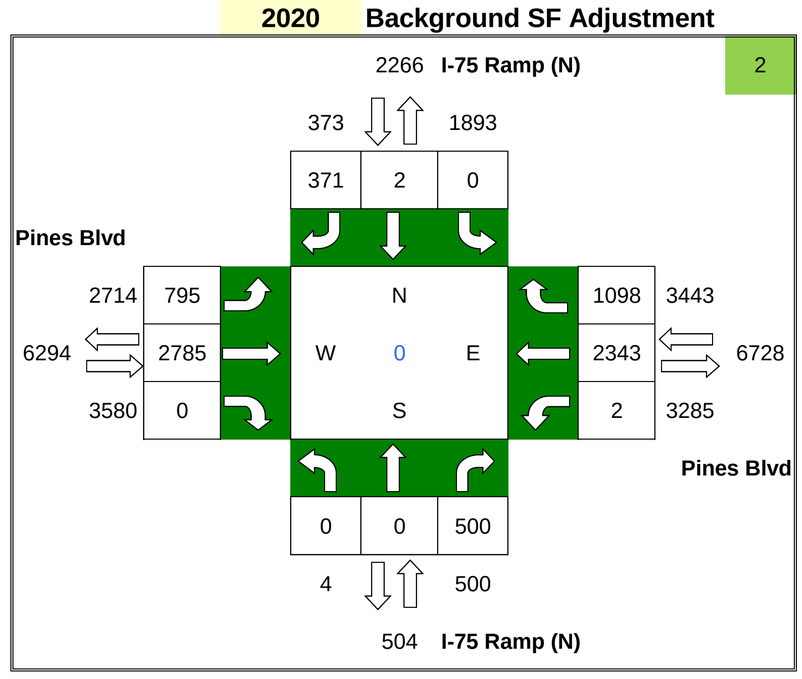
Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1% **Seasonal Factor =** 1.03

2020 Background SF Adjustment



PHASE 1

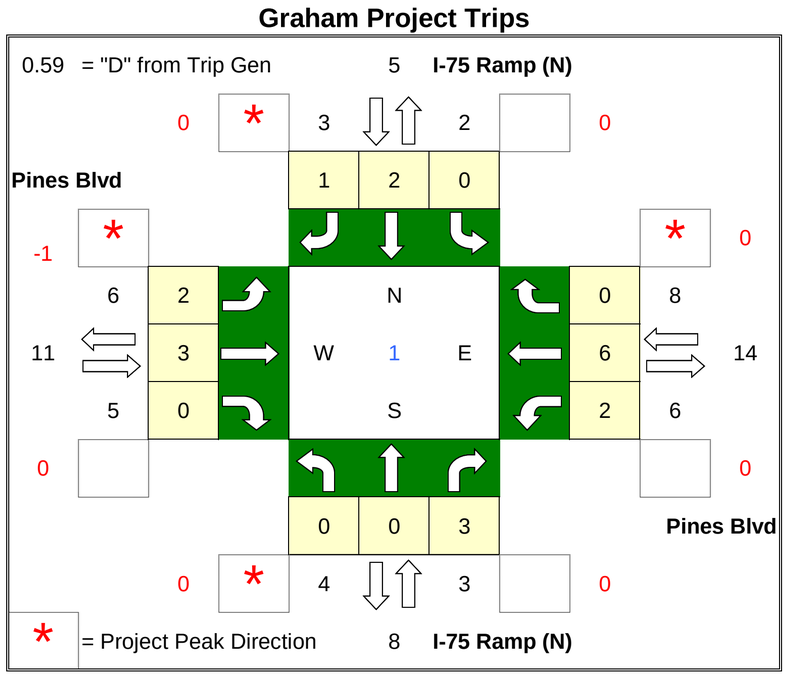
Graham Project Trips

Project Trips

IN= 389

OUT= 275

	PD	#
N =	0.69%	5
E =	2.11%	14
S =	1.14%	8
W =	1.66%	11



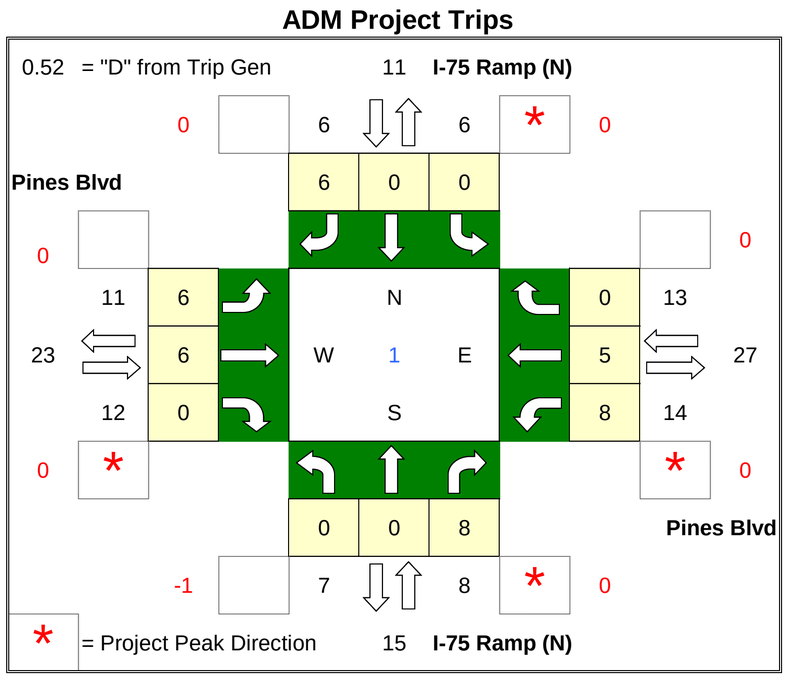
ADM Project Trips

Project Trips

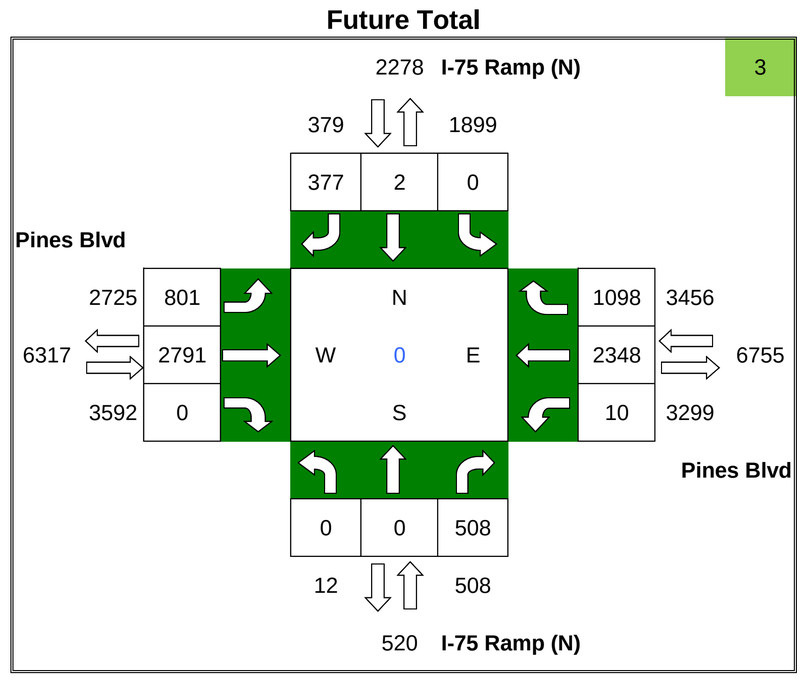
IN= 558

OUT= 596

	PD	#
N =	0.99%	11
E =	2.37%	27
S =	1.34%	15
W =	2.02%	23



Future Total



ADM/Graham

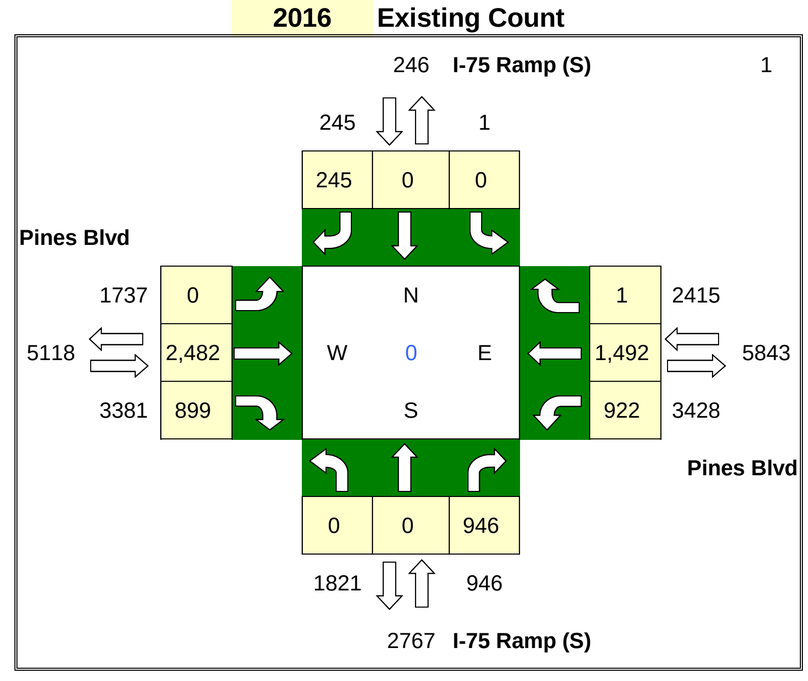
AM Turning Movement Volumes

N/S Roadway: I-75 Ramp (S)

E/W Roadway: Pines Blvd

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1% **Seasonal Factor =** 1.03

PHASE 1

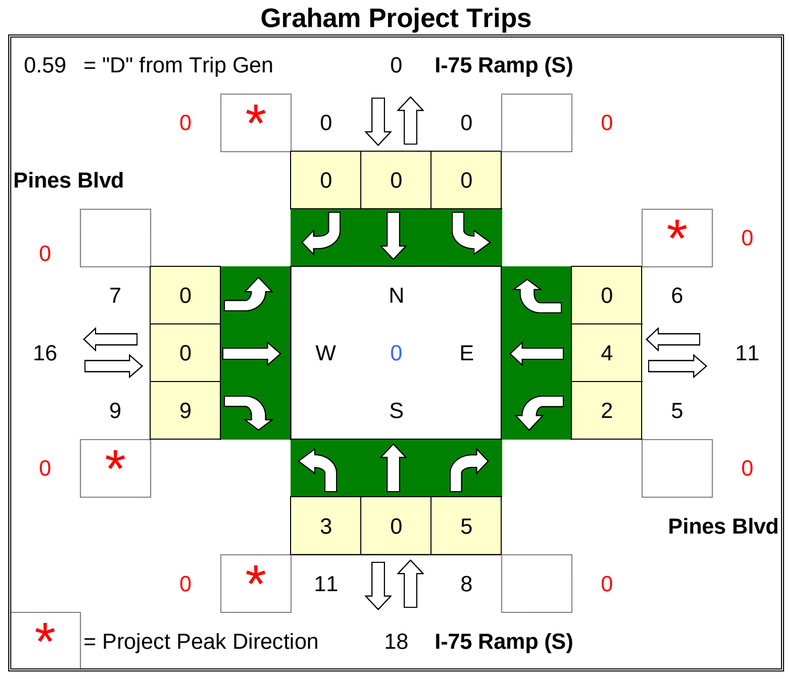
Project Trips

IN= 389

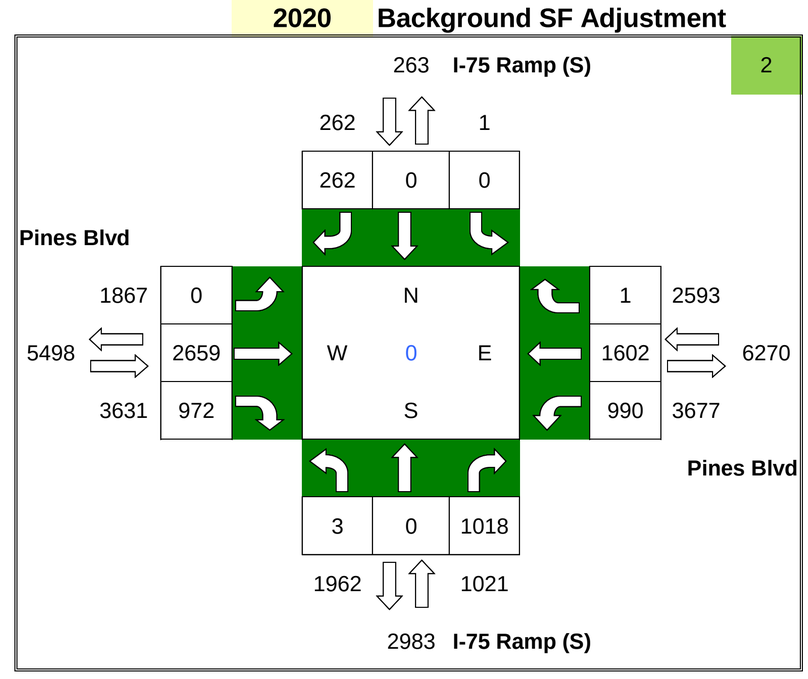
OUT= 275

	PD	#
N =	0.00%	0
E =	1.66%	11
S =	2.76%	18
W =	2.39%	16

Graham Project Trips



2020 Background SF Adjustment



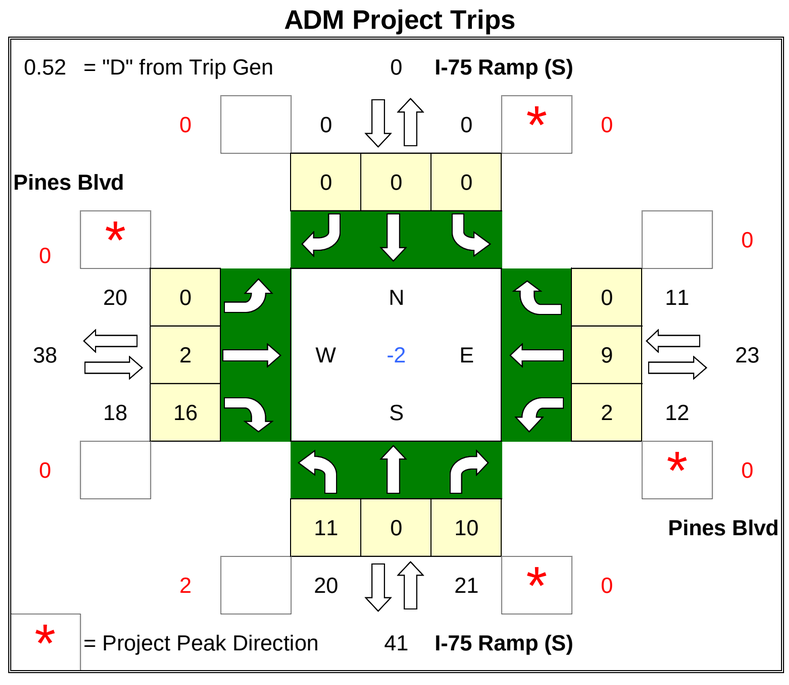
Project Trips

IN= 558

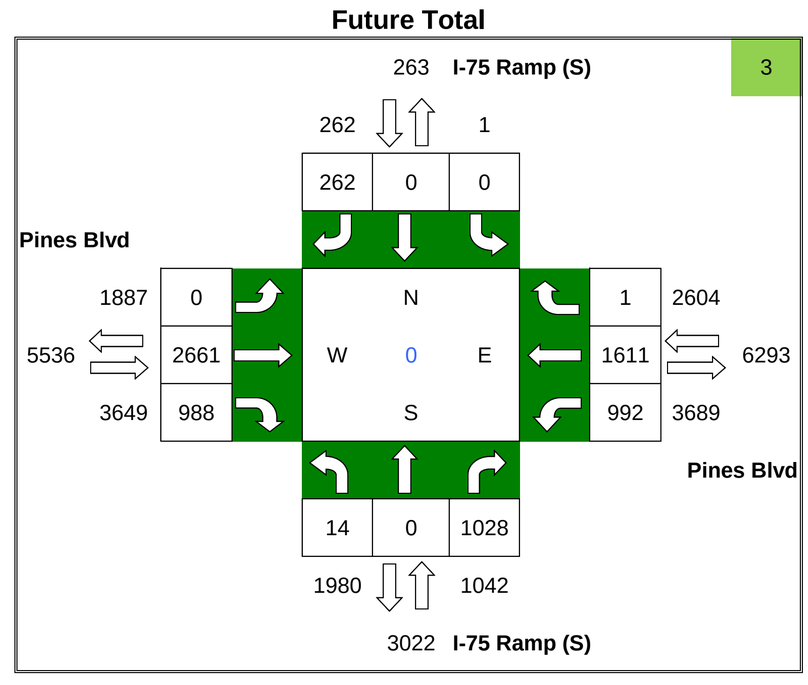
OUT= 596

	PD	#
N =	0.00%	0
E =	2.02%	23
S =	3.53%	41
W =	3.31%	38

ADM Project Trips



Future Total



ADM/Graham

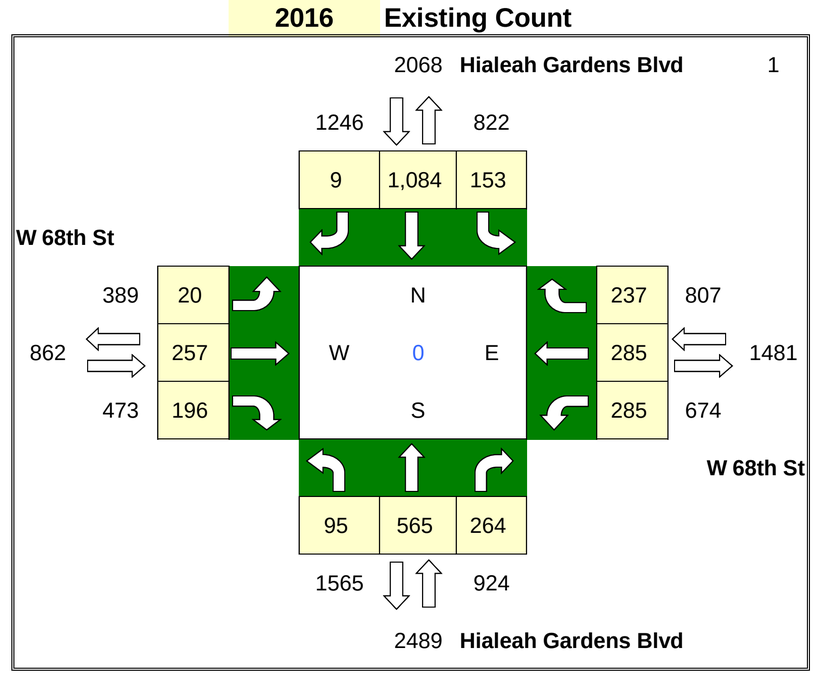
AM Turning Movement Volumes

N/S Roadway: Hialeah Gardens Blvd

E/W Roadway: W 68th St

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1.6% **Seasonal Factor =** 1.00

PHASE 1

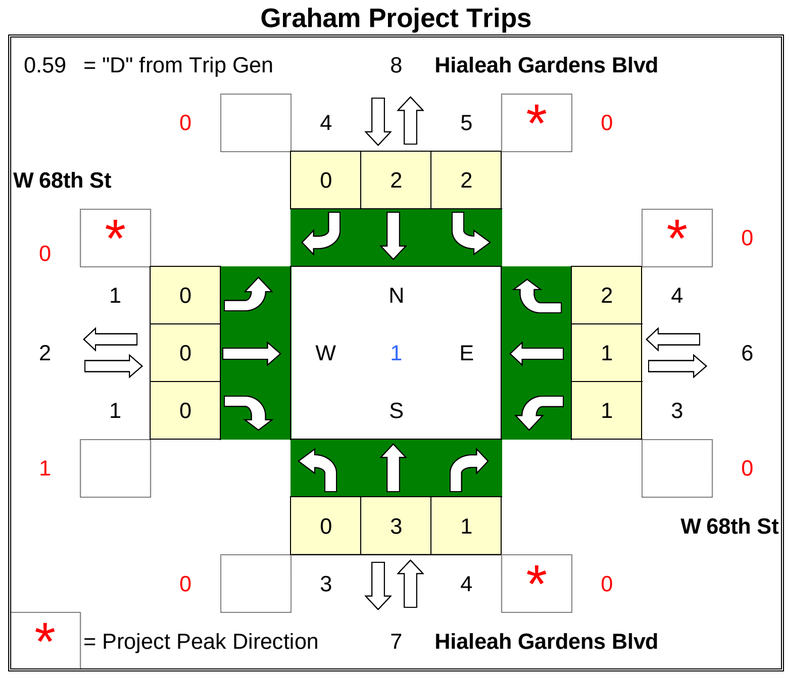
Graham Project Trips

Project Trips

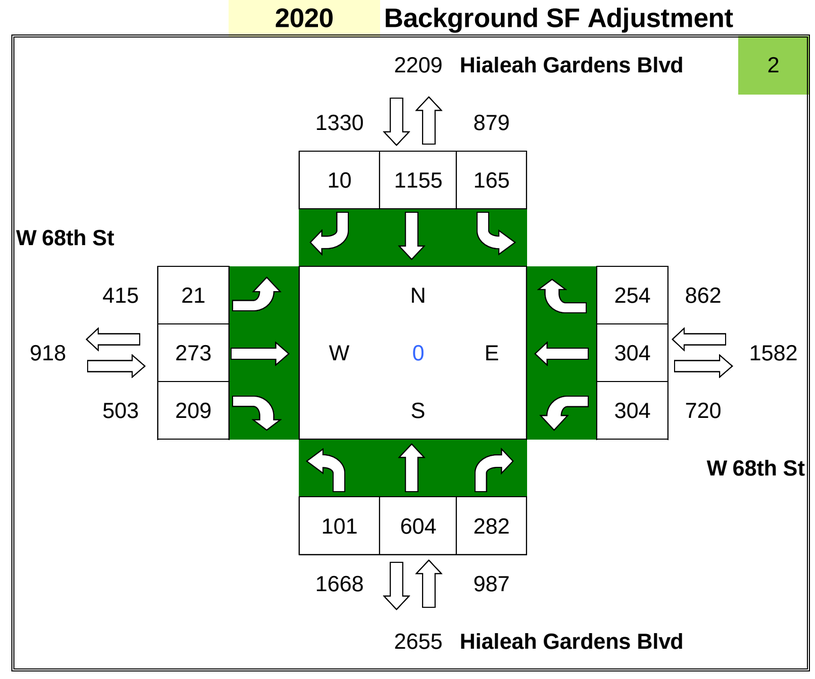
IN= 389

OUT= 275

	PD	#
N =	1.28%	8
E =	0.93%	6
S =	1.02%	7
W =	0.28%	2



2020 Background SF Adjustment



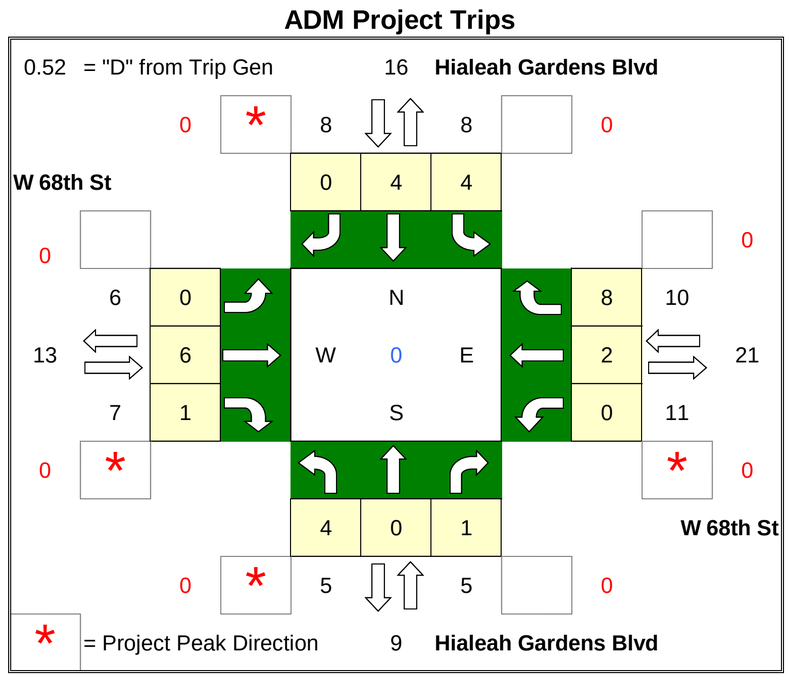
ADM Project Trips

Project Trips

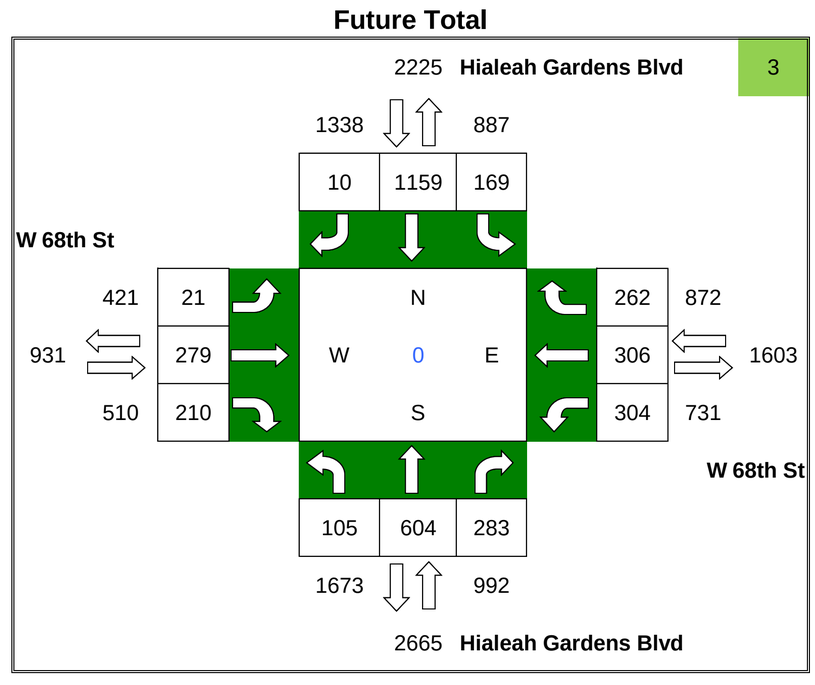
IN= 558

OUT= 596

	PD	#
N =	1.36%	16
E =	1.80%	21
S =	0.81%	9
W =	1.13%	13



Future Total



ADM/Graham

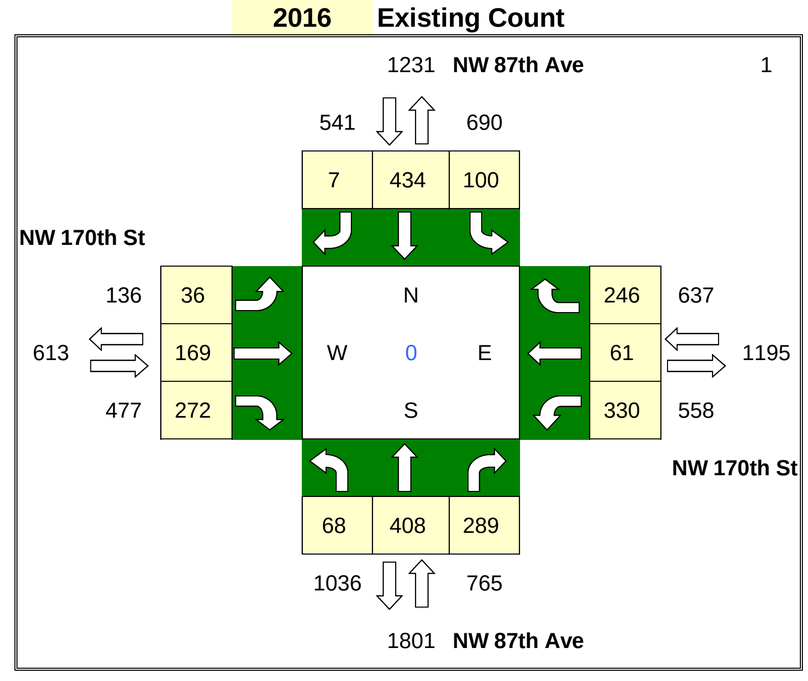
AM Turning Movement Volumes

N/S Roadway: NW 87th Ave

E/W Roadway: NW 170th St

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1%

Seasonal Factor = 1.00

PHASE 1

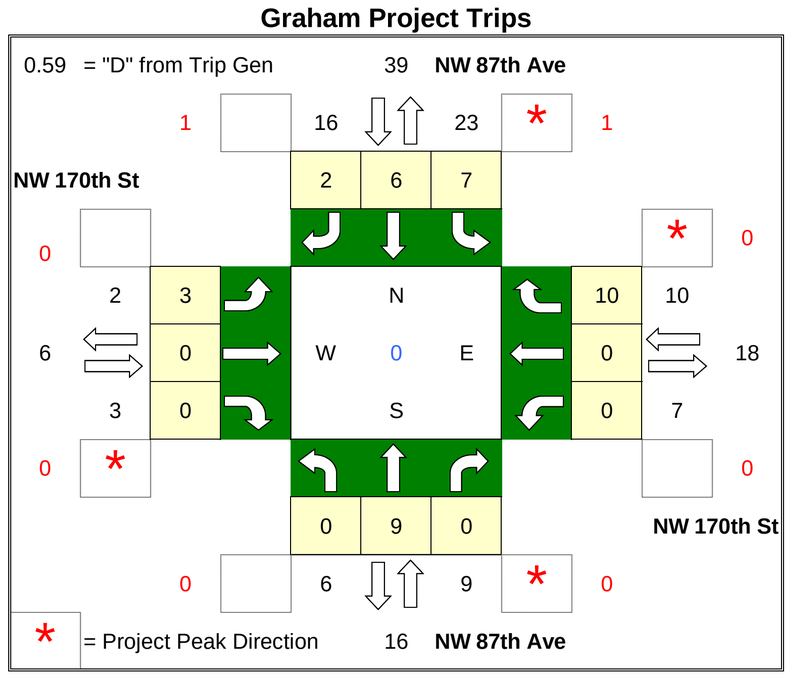
Graham Project Trips

Project Trips

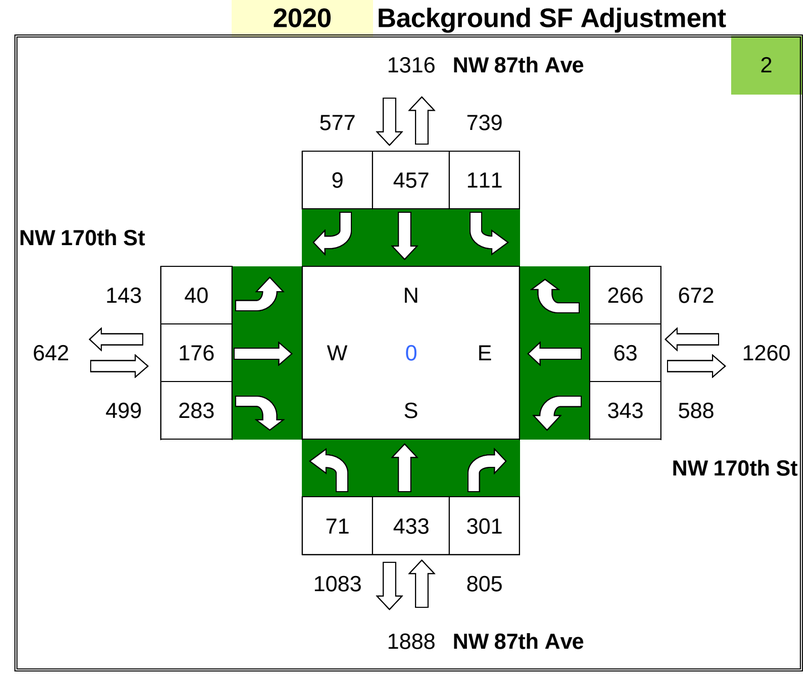
IN= 389

OUT= 275

	PD	#
N =	5.89%	39
E =	2.67%	18
S =	2.36%	16
W =	0.87%	6



2020 Background SF Adjustment



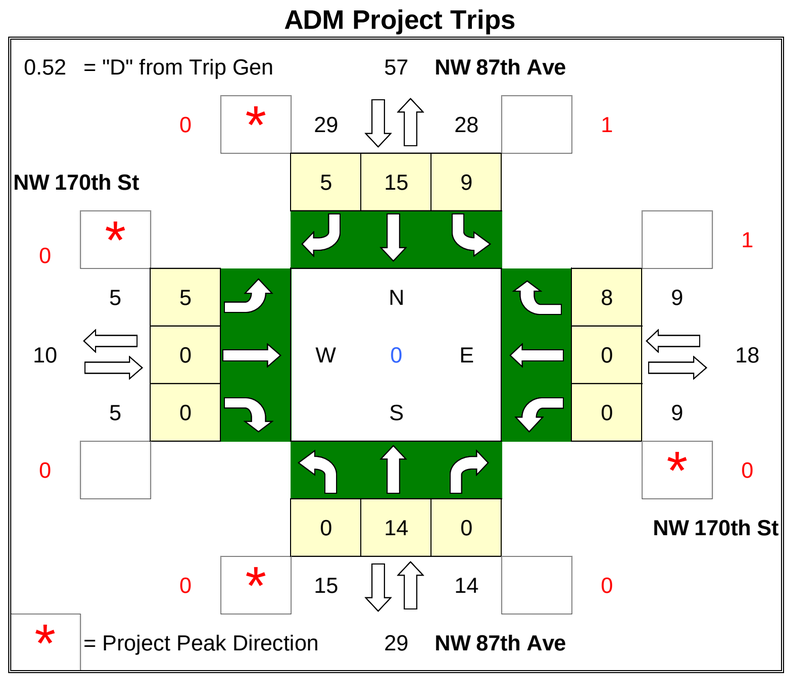
ADM Project Trips

Project Trips

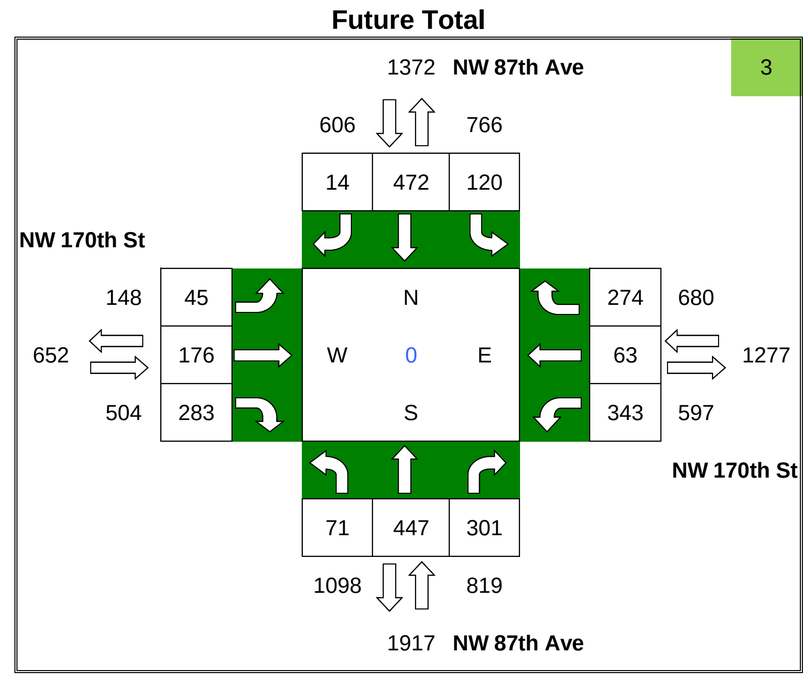
IN= 558

OUT= 596

	PD	#
N =	4.93%	57
E =	1.59%	18
S =	2.51%	29
W =	0.83%	10



Future Total



ADM/Graham

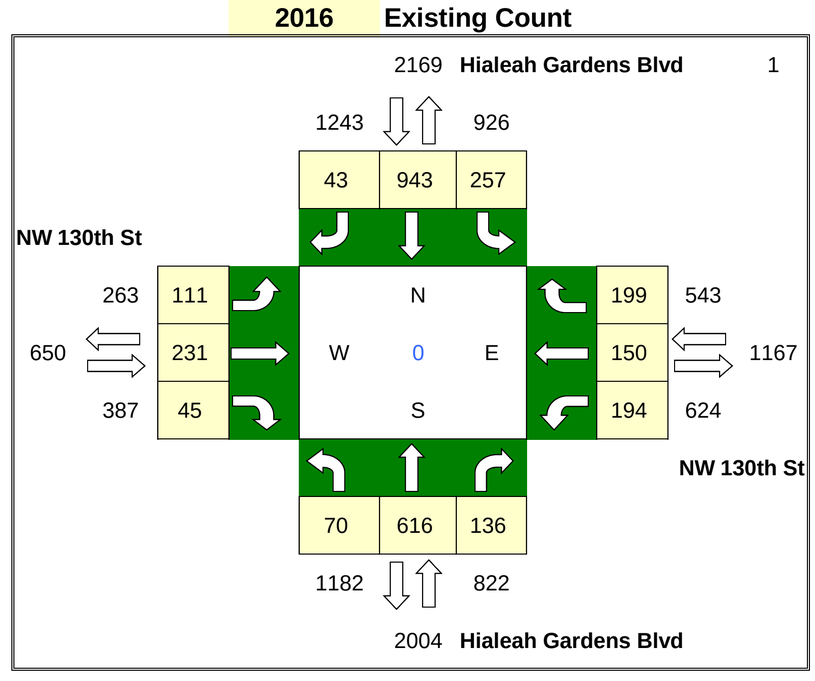
AM Turning Movement Volumes

N/S Roadway: Hialeah Gardens Blvd

E/W Roadway: NW 130th St

Date Taken: 4/20/16

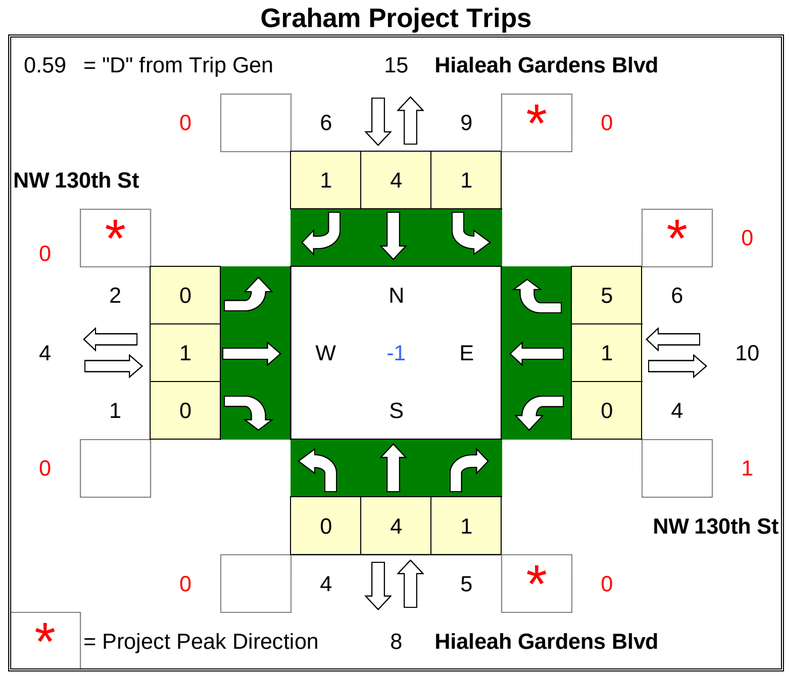
2016 Existing Count



% Annual Growth = 1.6% **Seasonal Factor =** 1.00

PHASE 1

Graham Project Trips



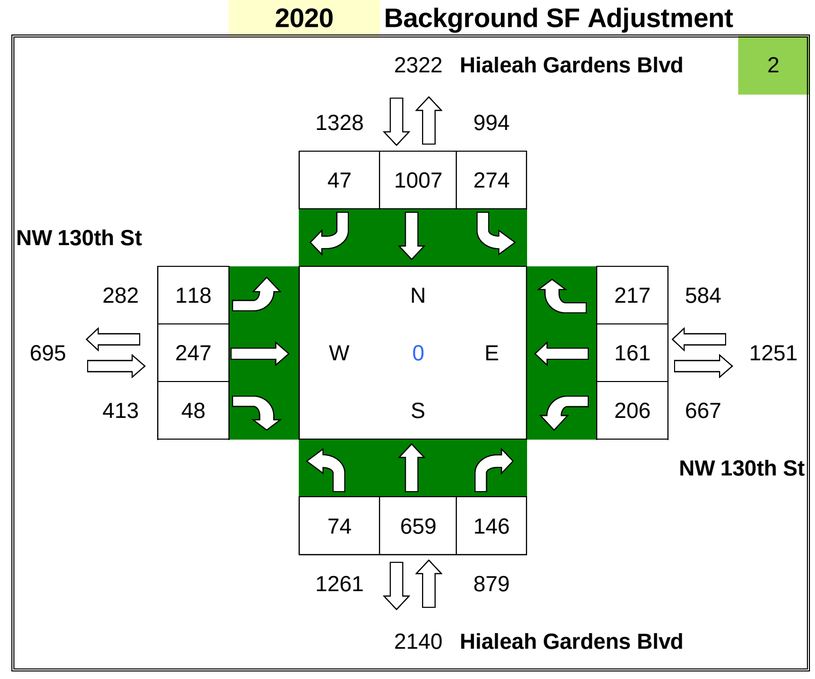
Project Trips

IN= 389

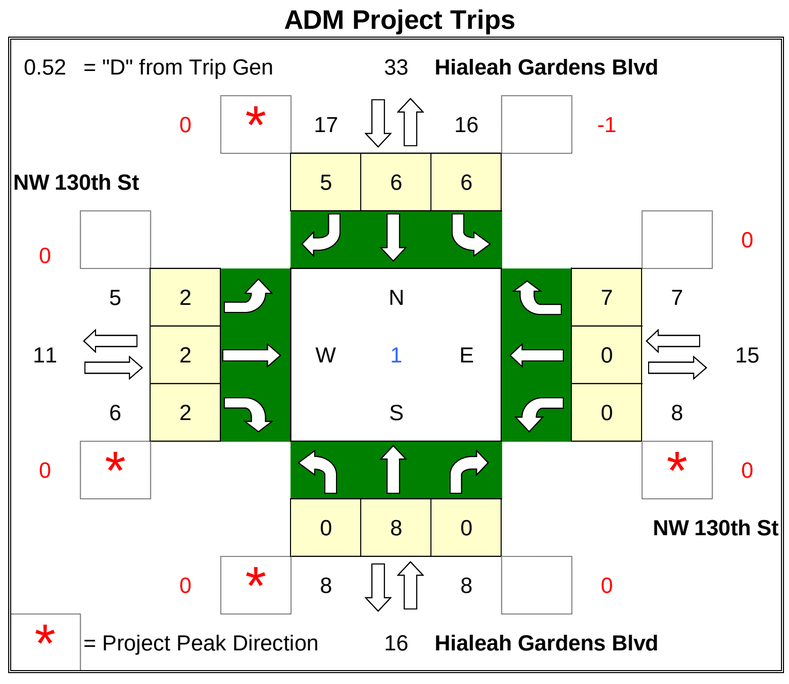
OUT= 275

	PD	#
N =	2.24%	15
E =	1.49%	10
S =	1.28%	8
W =	0.53%	4

2020 Background SF Adjustment



ADM Project Trips



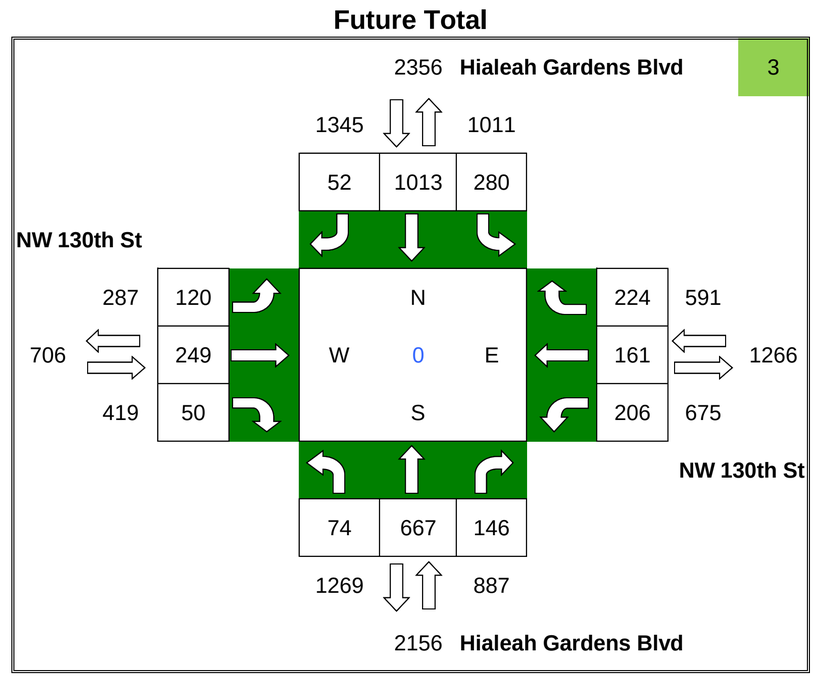
Project Trips

IN= 558

OUT= 596

	PD	#
N =	2.84%	33
E =	1.34%	15
S =	1.36%	16
W =	0.93%	11

Future Total



ADM/Graham

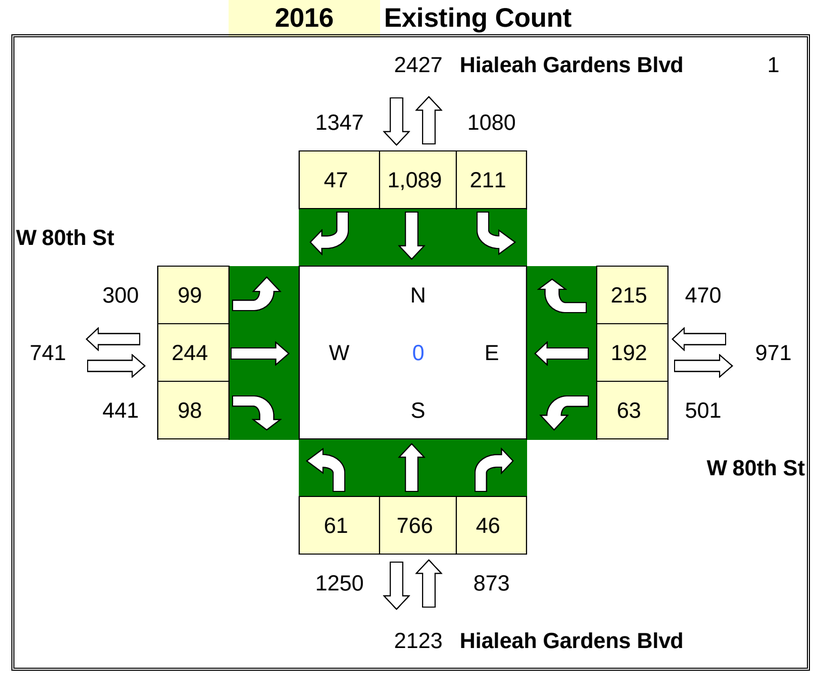
AM Turning Movement Volumes

N/S Roadway: Hialeah Gardens Blvd

E/W Roadway: W 80th St

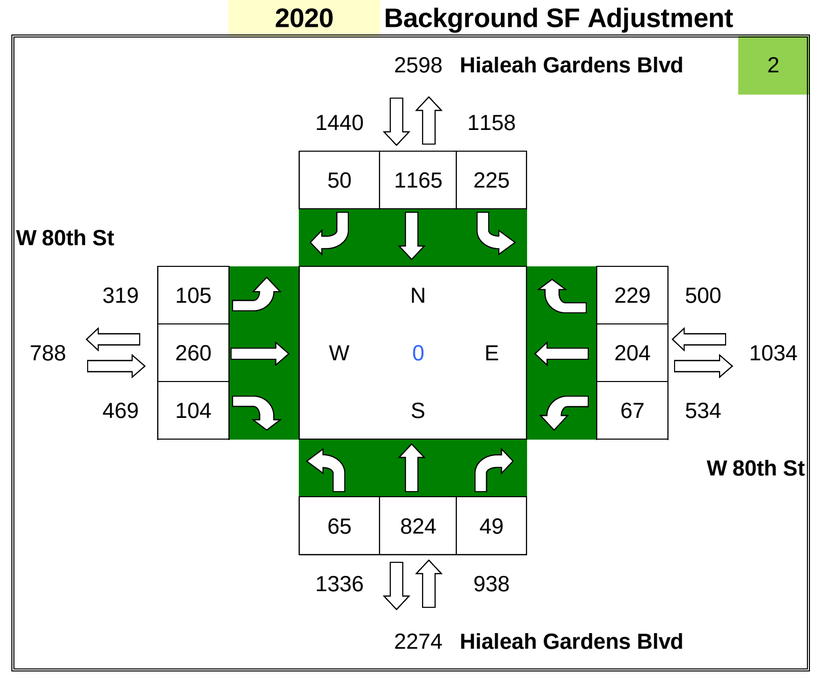
Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1.6% **Seasonal Factor =** 1.00

2020 Background SF Adjustment



PHASE 1

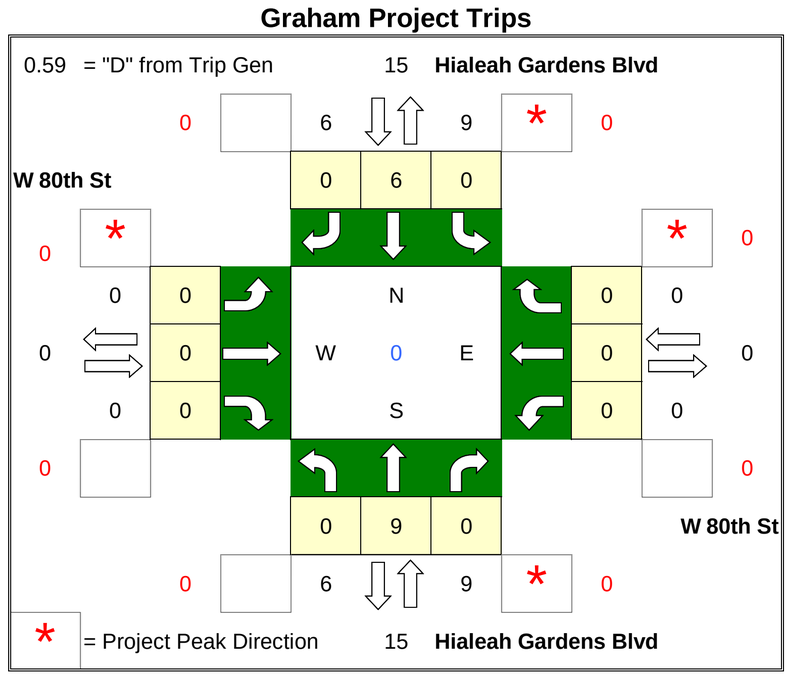
Graham Project Trips

Project Trips

IN= 389

OUT= 275

	PD	#
N =	2.24%	15
E =	0.00%	0
S =	2.24%	15
W =	0.00%	0



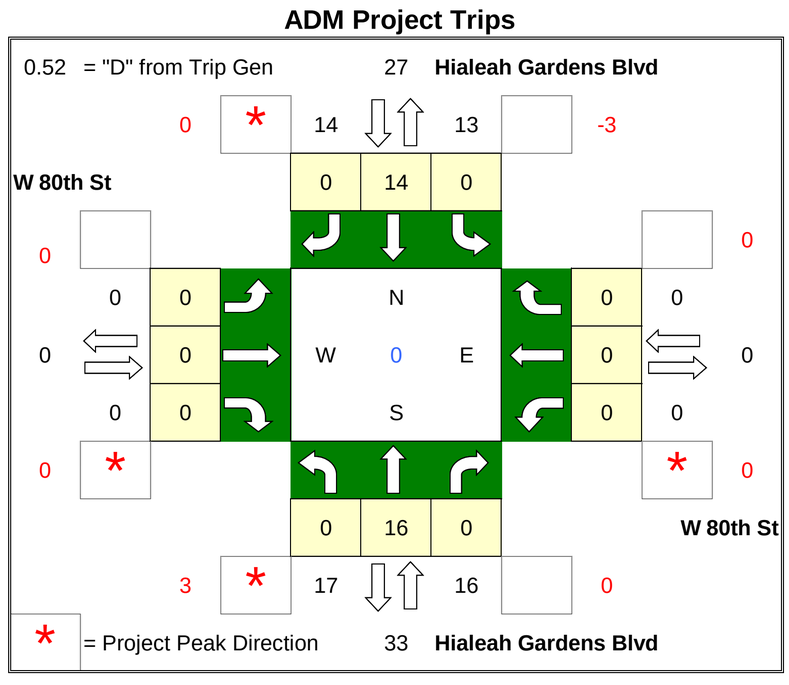
ADM Project Trips

Project Trips

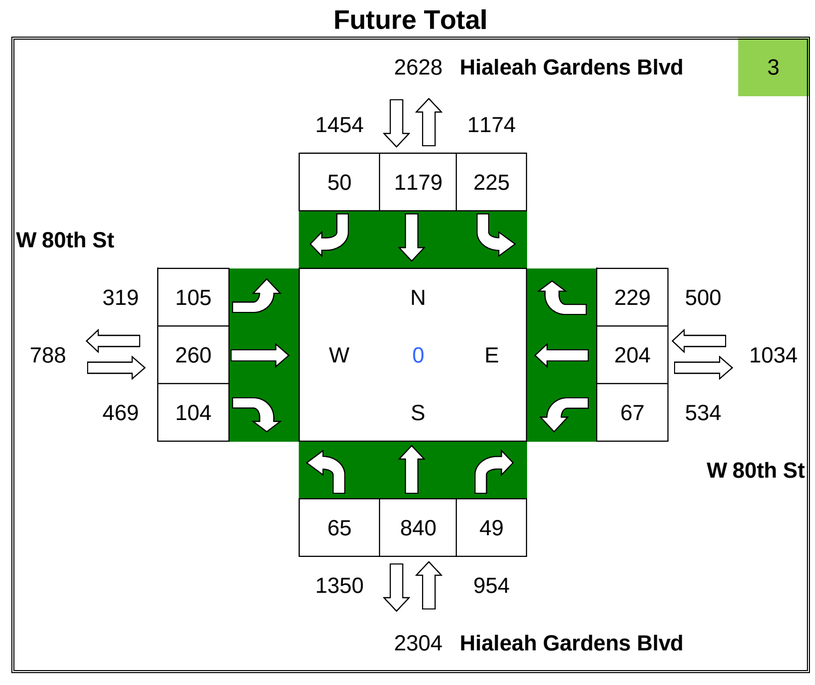
IN= 558

OUT= 596

	PD	#
N =	2.36%	27
E =	0.00%	0
S =	2.84%	33
W =	0.00%	0



Future Total



ADM/Graham

AM Turning Movement Volumes

Hialeah Gardens Blvd & W 84th St (TMC 53)

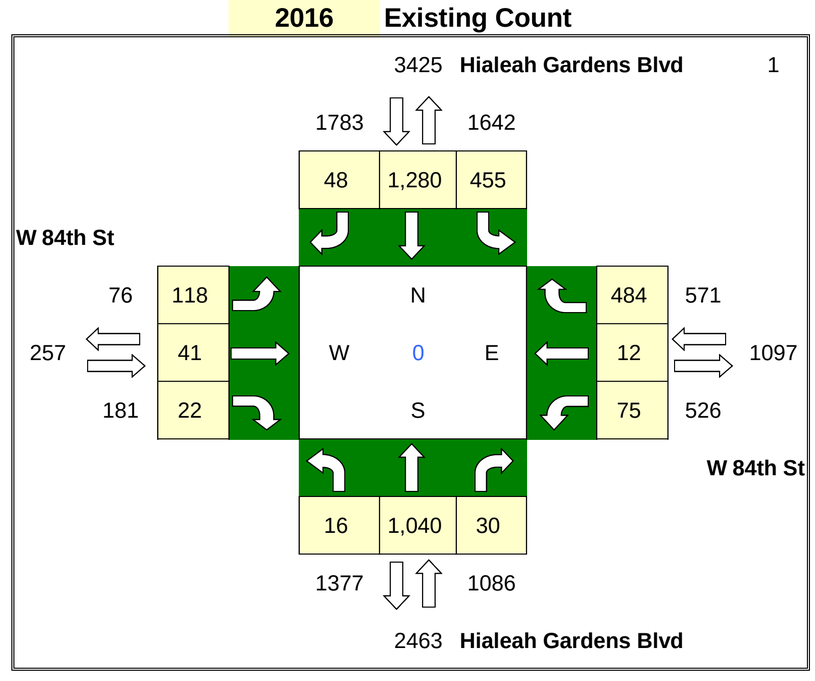
N/S Roadway: Hialeah Gardens Blvd

E/W Roadway: W 84th St

Date Taken: 4/20/16

W 84th St

2016 Existing Count



% Annual Growth = 1.6% **Seasonal Factor =** 1.00

PHASE 1

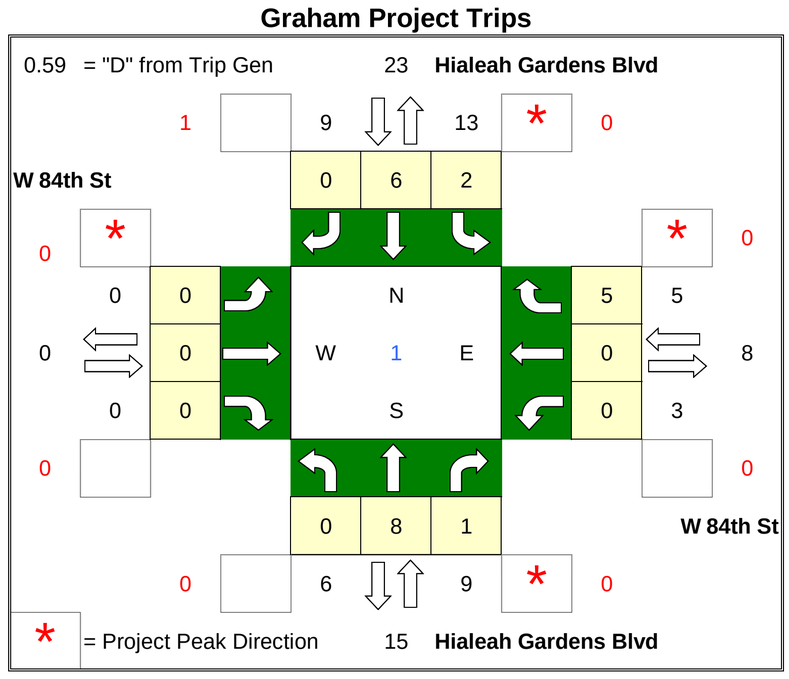
Project Trips

IN= 389

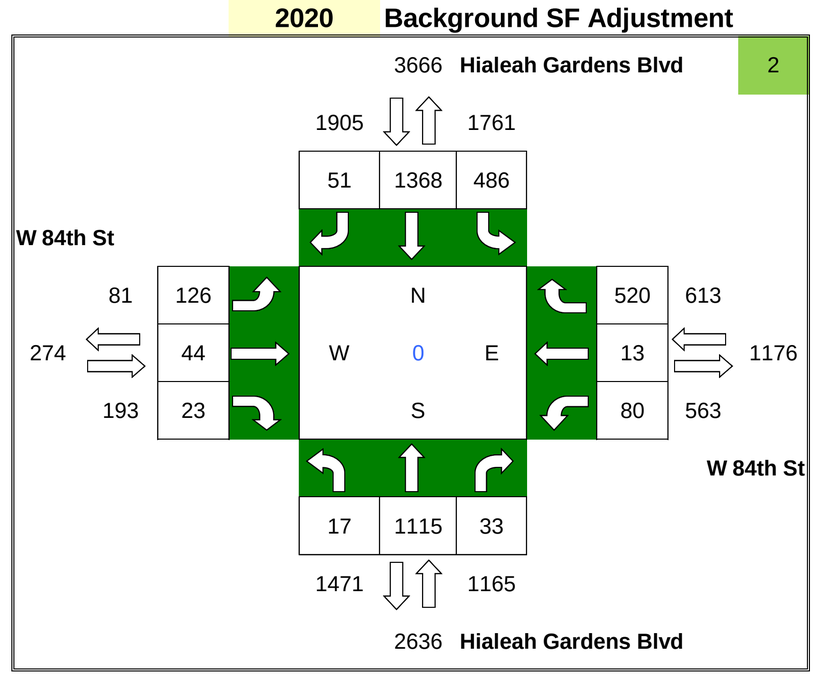
OUT= 275

	PD	#
N =	3.41%	23
E =	1.17%	8
S =	2.24%	15
W =	0.00%	0

Graham Project Trips



2020 Background SF Adjustment



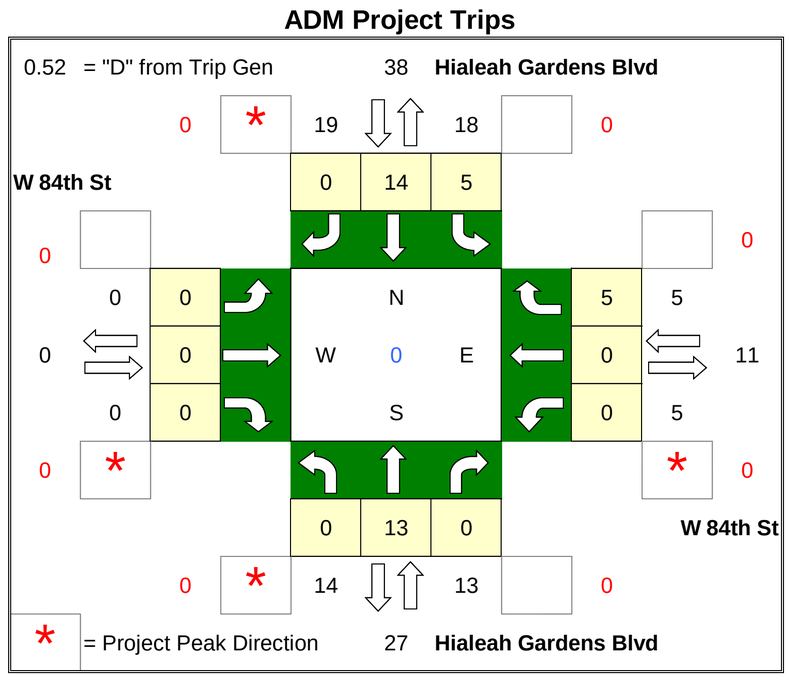
Project Trips

IN= 558

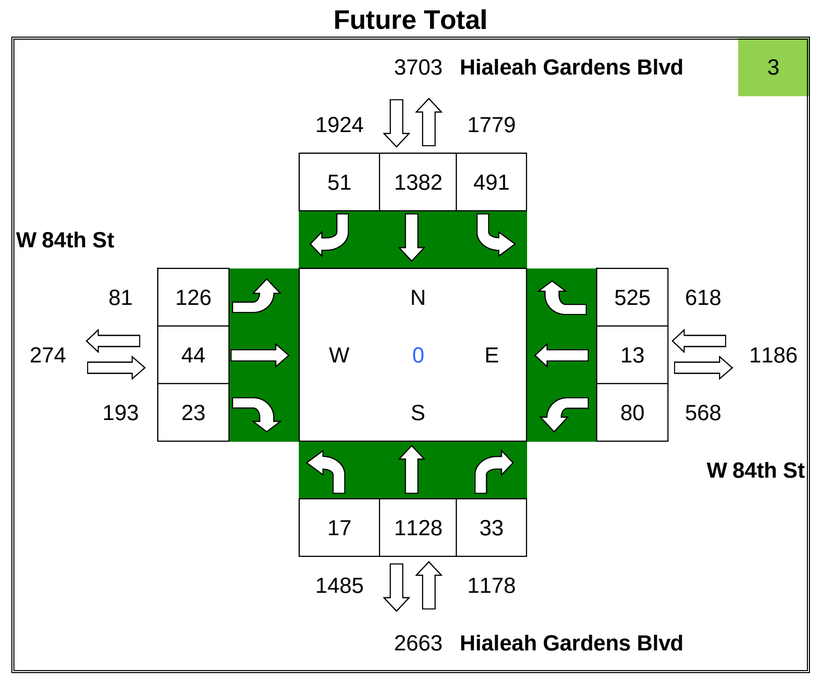
OUT= 596

	PD	#
N =	3.25%	38
E =	0.92%	11
S =	2.36%	27
W =	0.00%	0

ADM Project Trips



Future Total



ADM/Graham

AM Turning Movement Volumes

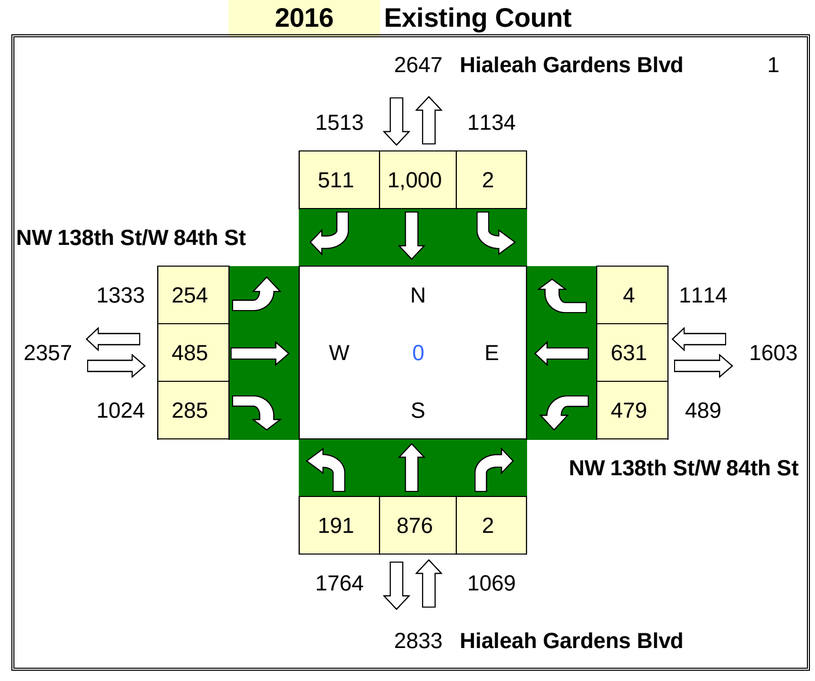
Hialeah Gardens Blvd & W 84th St (TMC 53)

N/S Roadway: Hialeah Gardens Blvd

E/W Roadway: NW 138th St/W 84th St

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1.6% **Seasonal Factor =** 1.00

PHASE 1

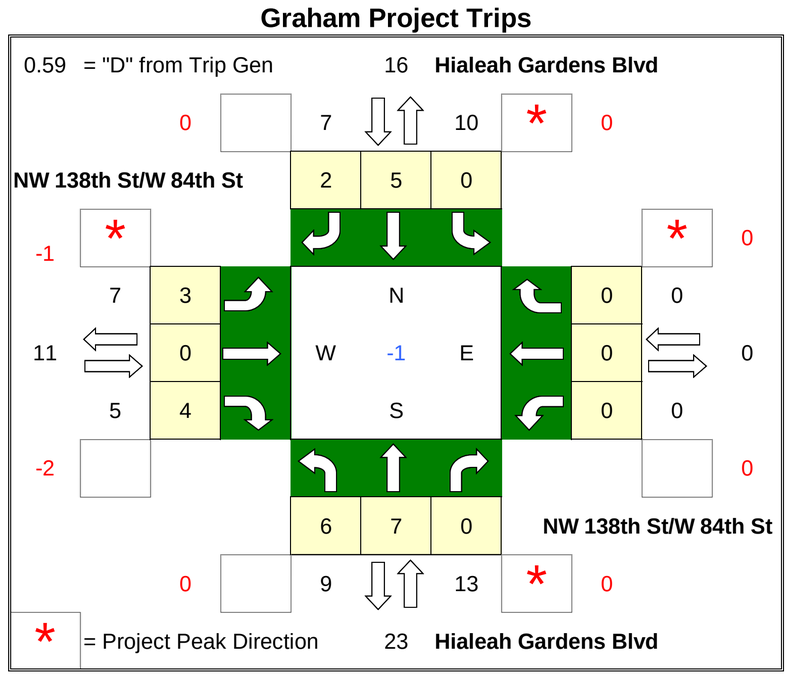
Project Trips

IN= 389

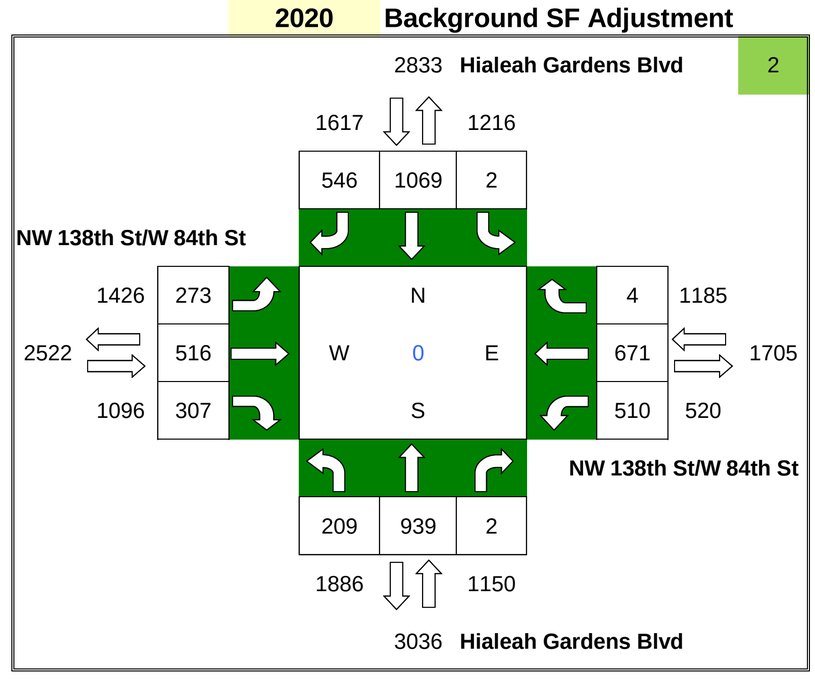
OUT= 275

	PD	#
N =	2.47%	16
E =	0.00%	0
S =	3.41%	23
W =	1.71%	11

Graham Project Trips



2020 Background SF Adjustment



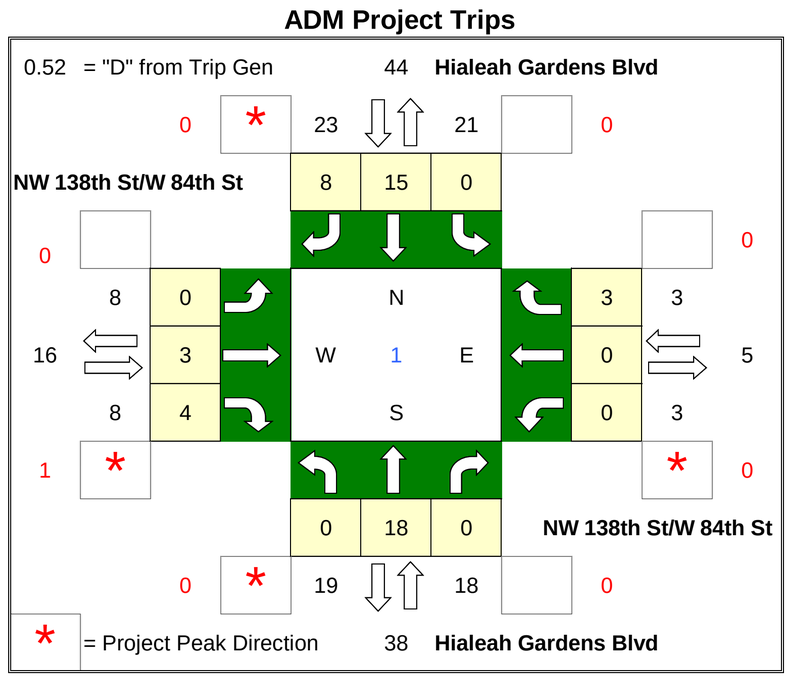
Project Trips

IN= 558

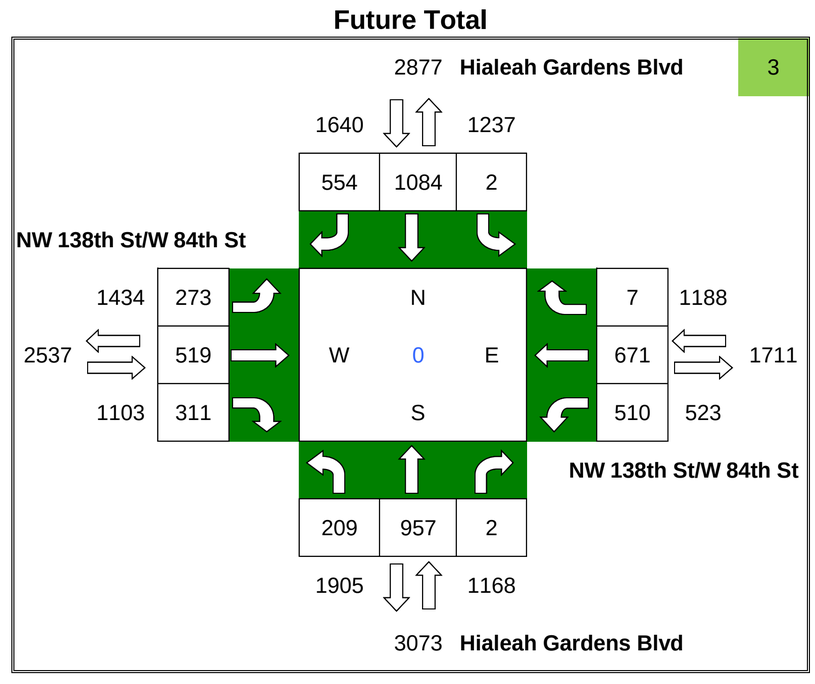
OUT= 596

	PD	#
N =	3.80%	44
E =	0.47%	5
S =	3.25%	38
W =	1.36%	16

ADM Project Trips



Future Total



APPENDIX I-K2:
2020 PM Background with Combined

ADM/Graham

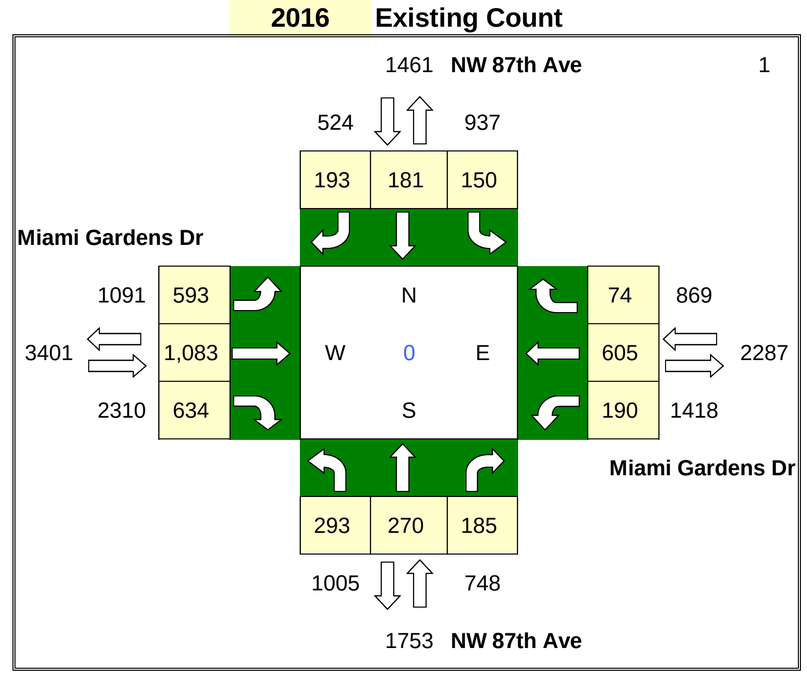
PM Turning Movement Volumes

N/S Roadway: NW 87th Ave

E/W Roadway: Miami Gardens Dr

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1%

Seasonal Factor = 1.00

PHASE 1

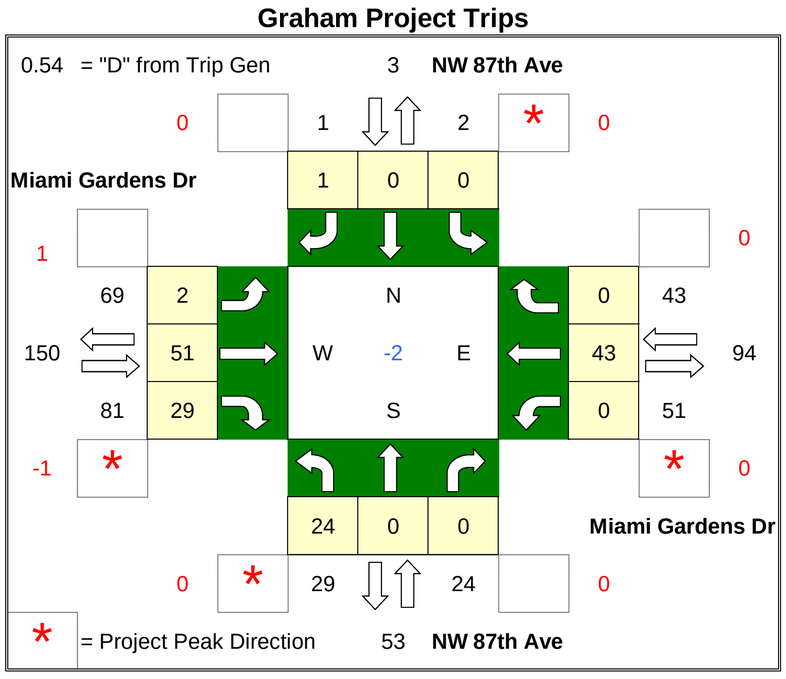
Project Trips

IN= 396

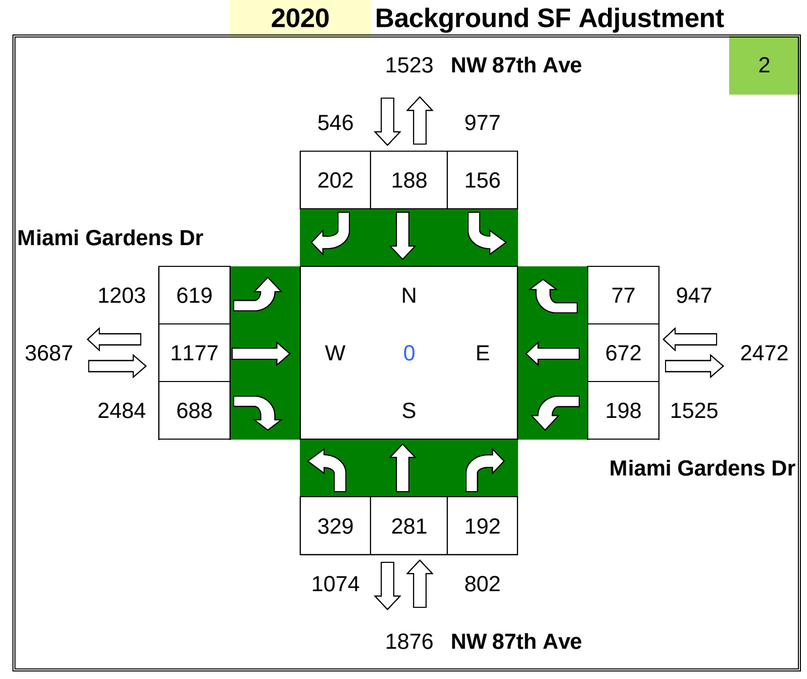
OUT= 467

	PD	#
N =	0.35%	3
E =	10.91%	94
S =	6.12%	53
W =	17.37%	150

Graham Project Trips



2020 Background SF Adjustment



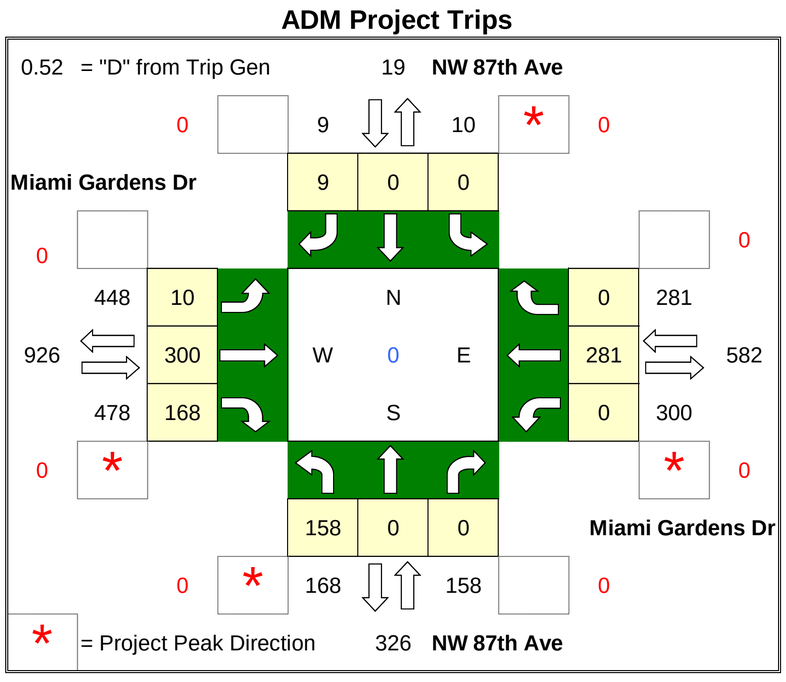
Project Trips

IN= 2,577

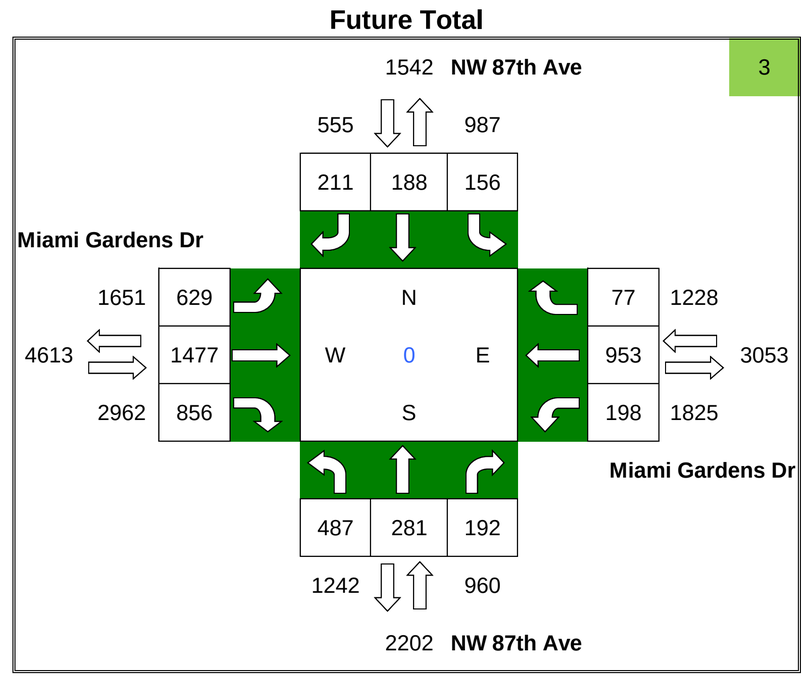
OUT= 2,753

	PD	#
N =	0.35%	19
E =	10.91%	582
S =	6.12%	326
W =	17.37%	926

ADM Project Trips



Future Total



ADM/Graham

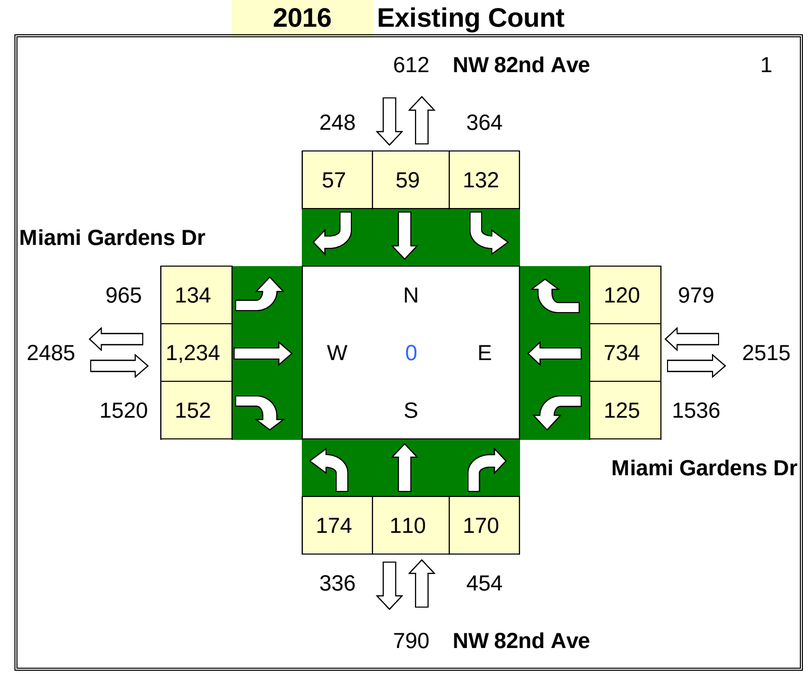
PM Turning Movement Volumes

N/S Roadway: NW 82nd Ave

E/W Roadway: Miami Gardens Dr

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1%

Seasonal Factor = 1.00

PHASE 1

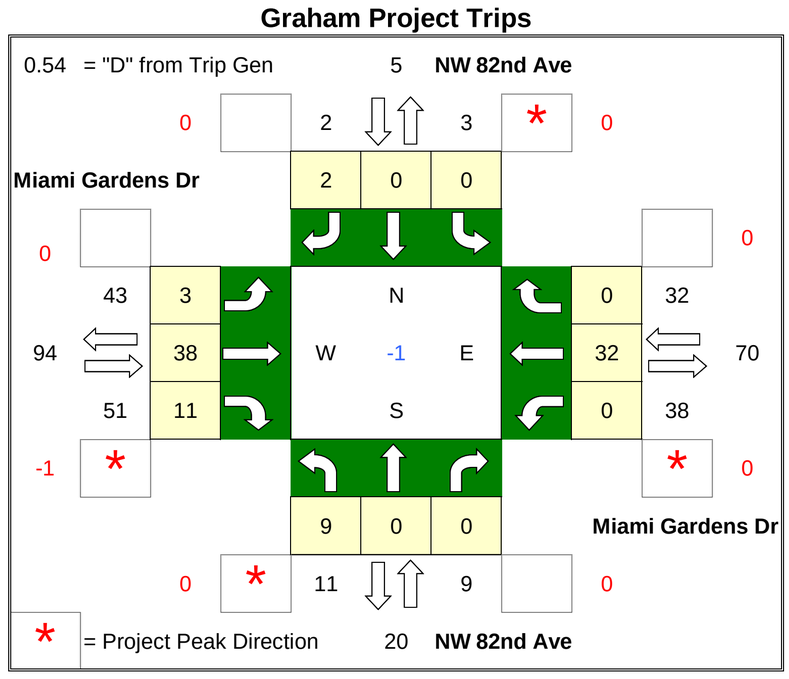
Project Trips

IN= 396

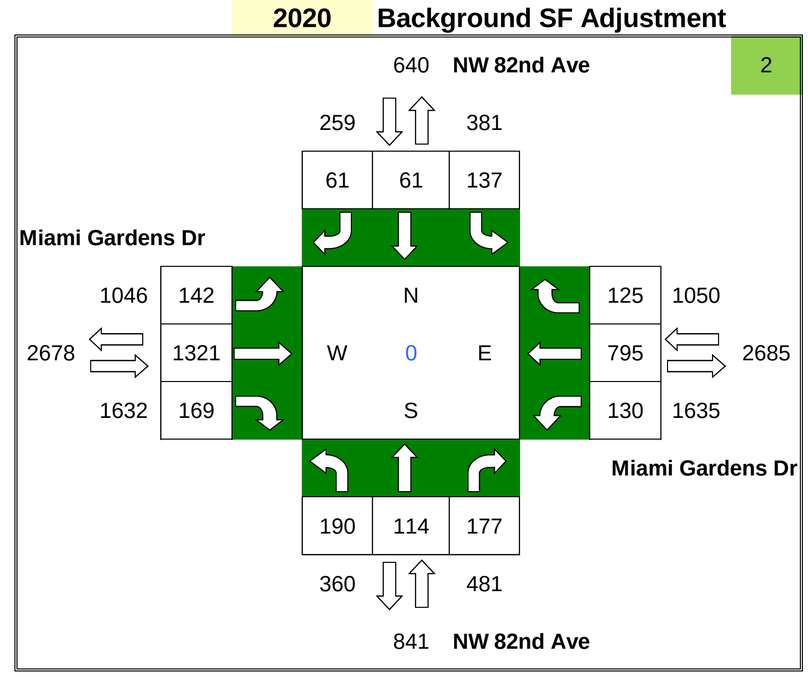
OUT= 467

	PD	#
N =	0.54%	5
E =	8.10%	70
S =	2.27%	20
W =	10.91%	94

Graham Project Trips



2020 Background SF Adjustment



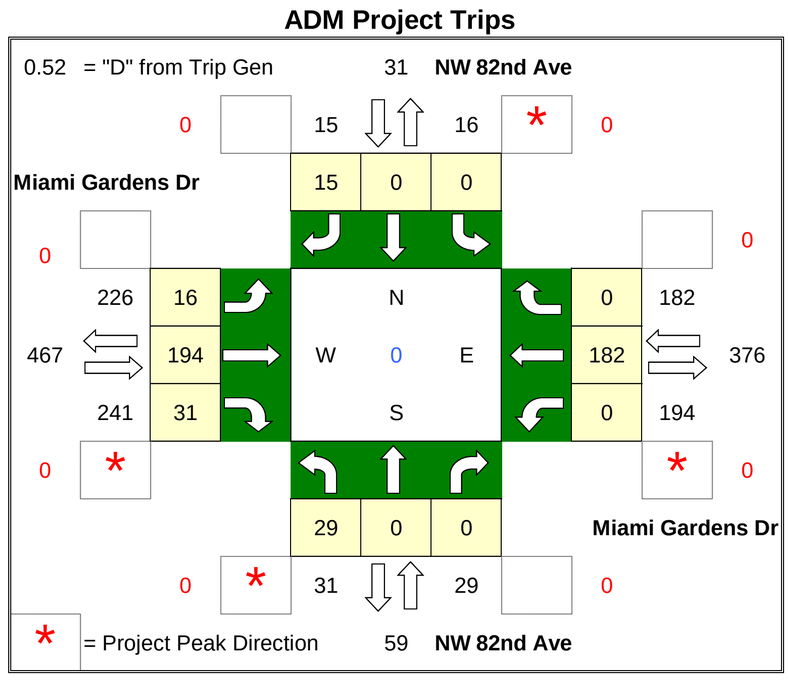
Project Trips

IN= 2,577

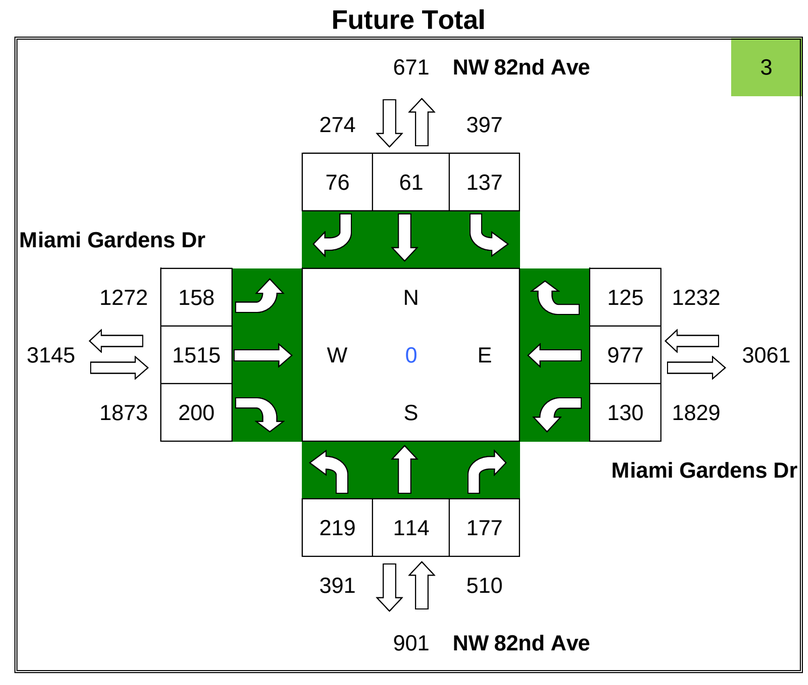
OUT= 2,753

	PD	#
N =	0.59%	31
E =	7.06%	376
S =	1.11%	59
W =	8.76%	467

ADM Project Trips



Future Total



ADM/Graham

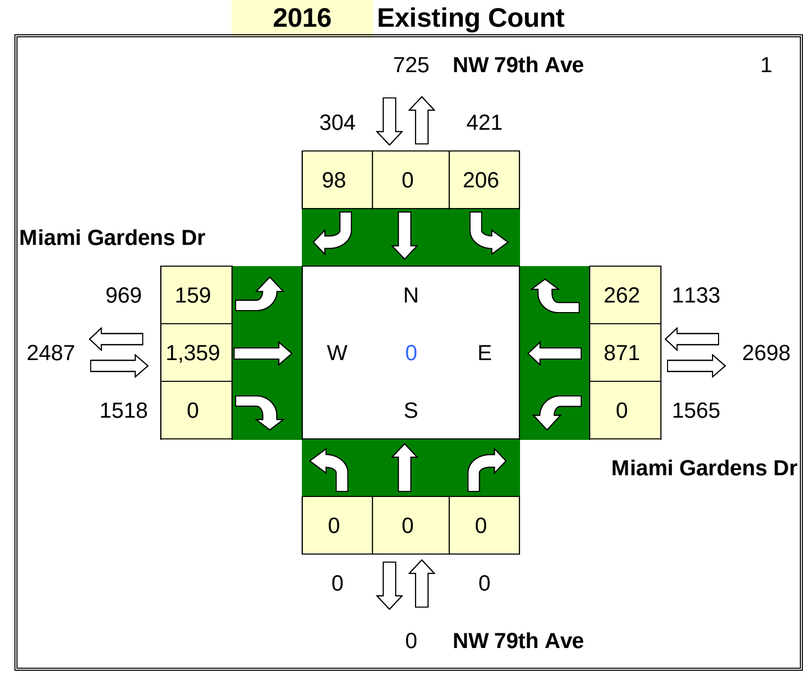
PM Turning Movement Volumes

N/S Roadway: NW 79th Ave

E/W Roadway: Miami Gardens Dr

Date Taken: 4/20/16

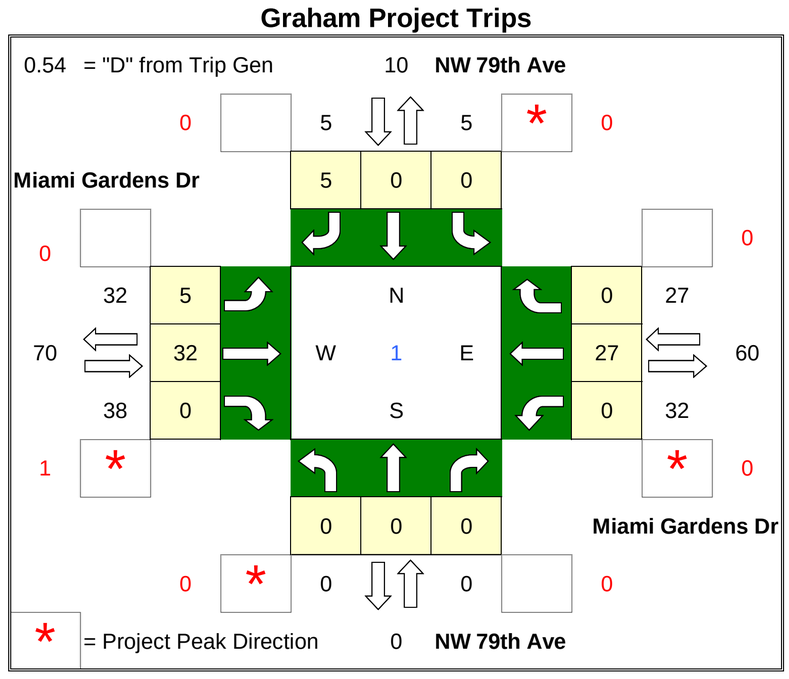
2016 Existing Count



% Annual Growth = 1% **Seasonal Factor =** 1.00

PHASE 1

Graham Project Trips

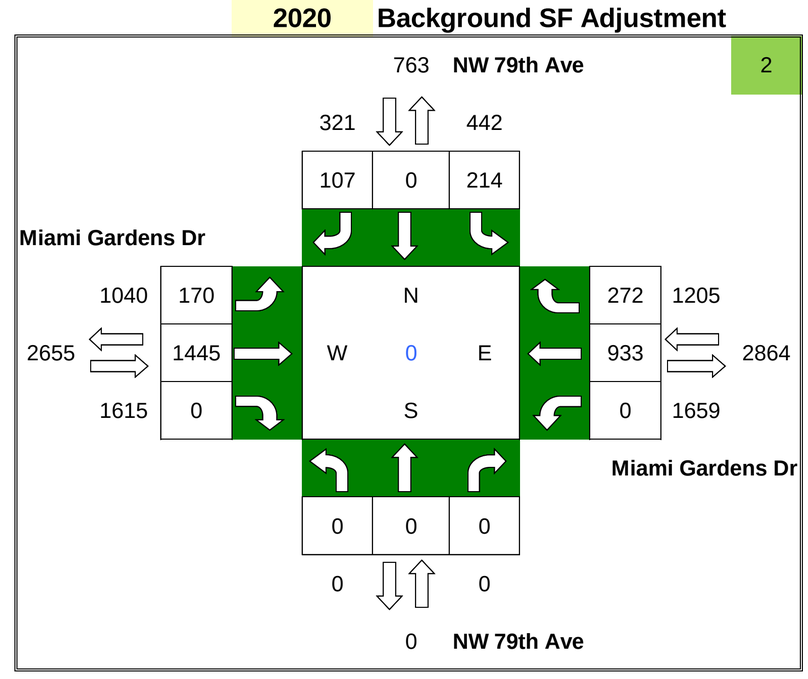


Project Trips

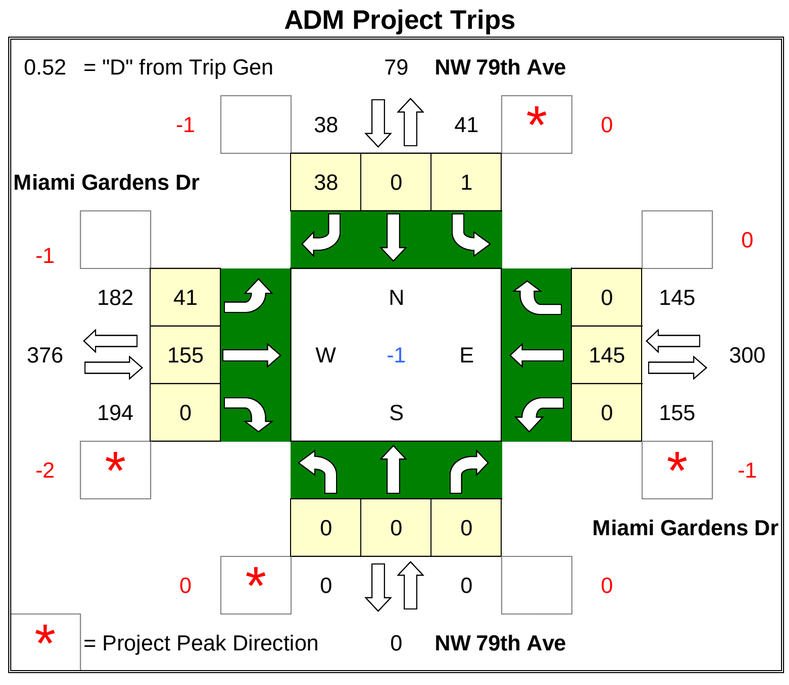
IN=	396
OUT=	467

	PD	#
N =	1.16%	10
E =	6.94%	60
S =	0.00%	0
W =	8.10%	70

2020 Background SF Adjustment



ADM Project Trips

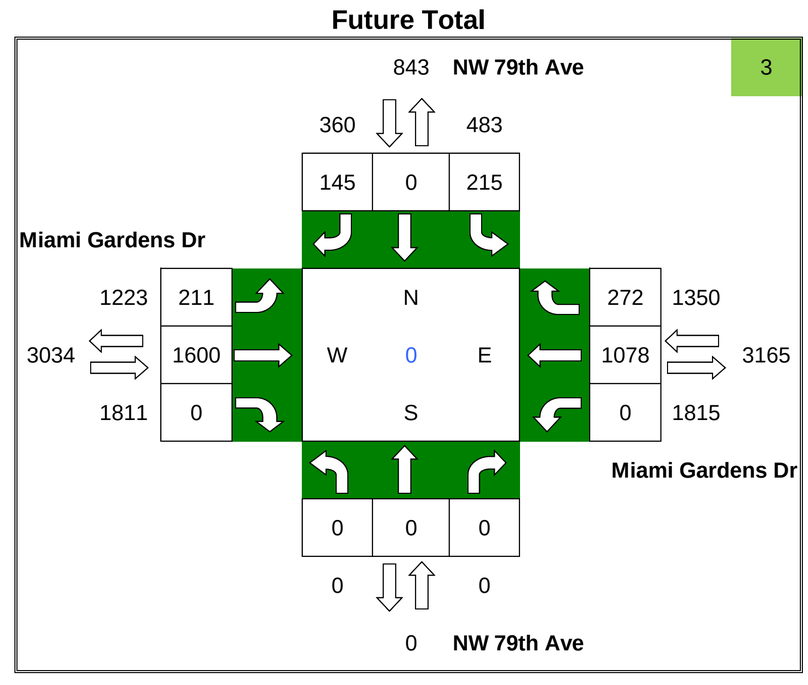


Project Trips

IN=	2,577
OUT=	2,753

	PD	#
N =	1.49%	79
E =	5.63%	300
S =	0.00%	0
W =	7.06%	376

Future Total



ADM/Graham

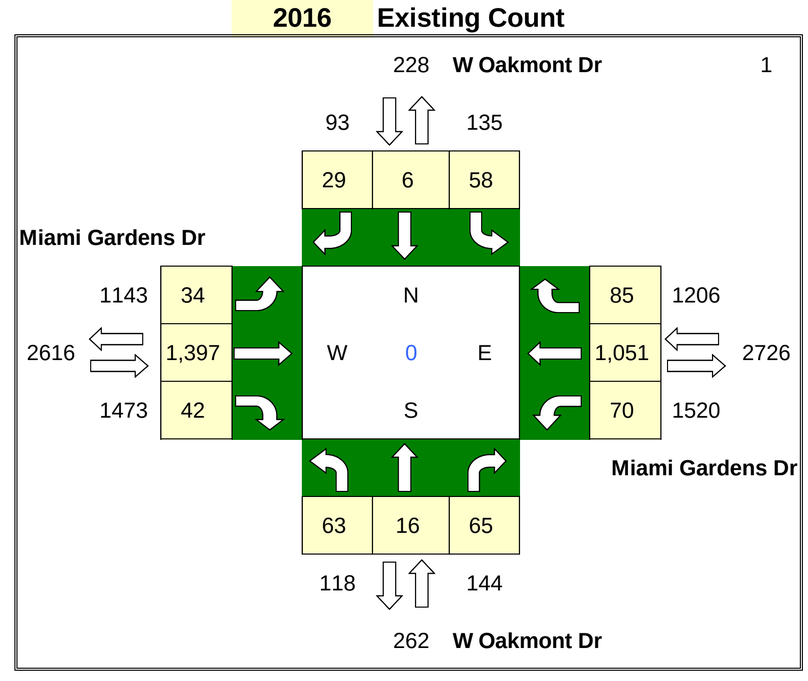
PM Turning Movement Volumes

N/S Roadway: W Oakmont Dr

E/W Roadway: Miami Gardens Dr

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1% **Seasonal Factor =** 1.00

PHASE 1

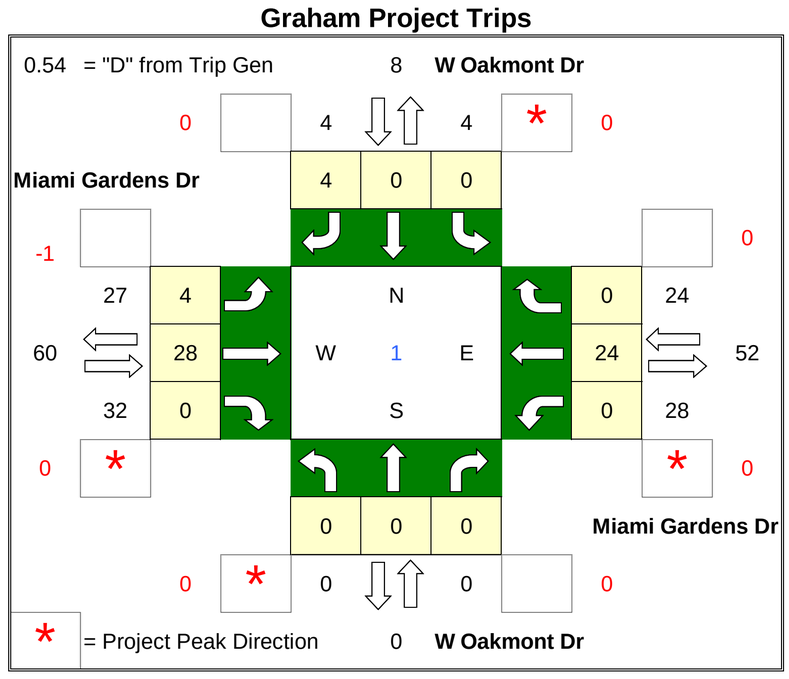
Project Trips

IN= 396

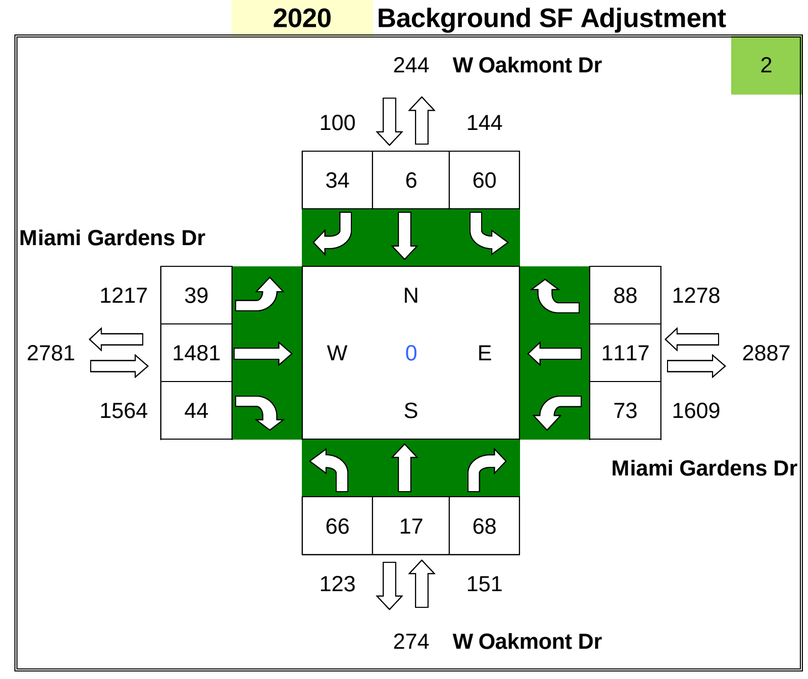
OUT= 467

	PD	#
N =	0.89%	8
E =	6.05%	52
S =	0.00%	0
W =	6.94%	60

Graham Project Trips



2020 Background SF Adjustment



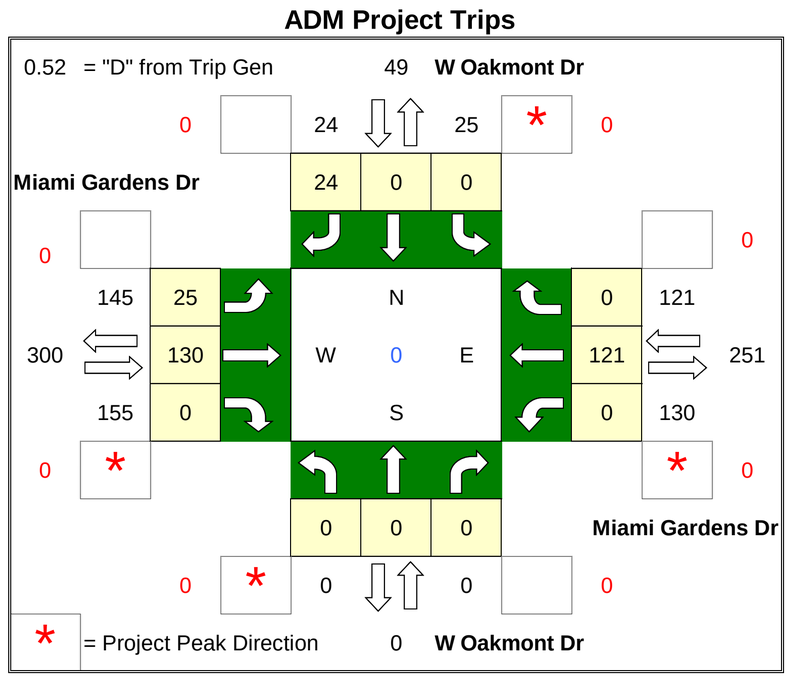
Project Trips

IN= 2,577

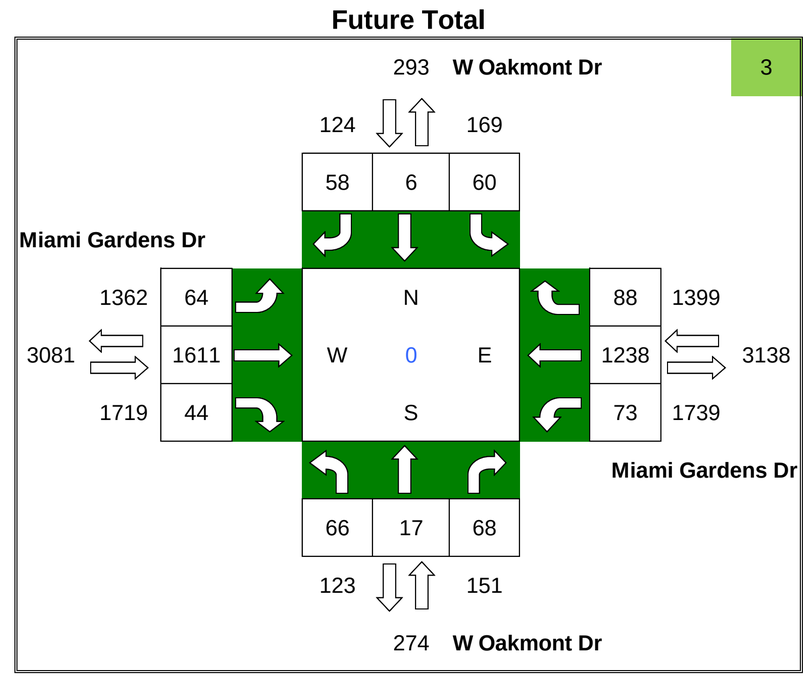
OUT= 2,753

	PD	#
N =	0.92%	49
E =	4.71%	251
S =	0.00%	0
W =	5.63%	300

ADM Project Trips



Future Total



ADM/Graham

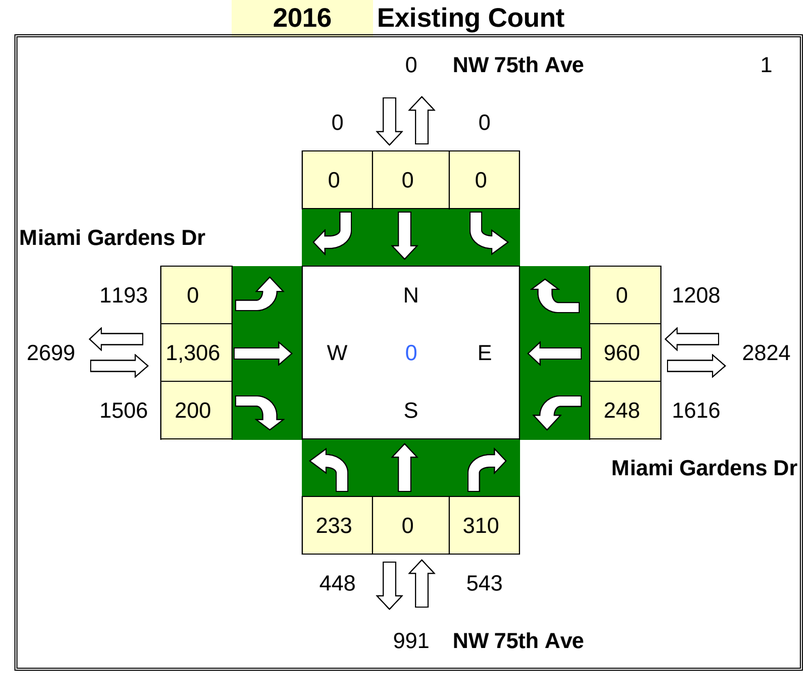
PM Turning Movement Volumes

N/S Roadway: NW 75th Ave

E/W Roadway: Miami Gardens Dr

Date Taken: 4/20/16

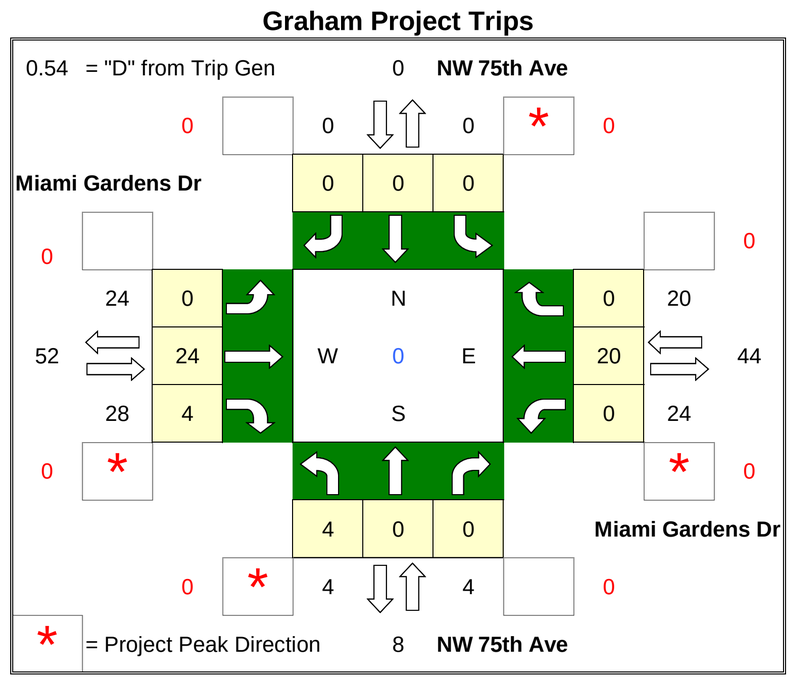
2016 Existing Count



% Annual Growth = 1% **Seasonal Factor =** 1.00

PHASE 1

Graham Project Trips



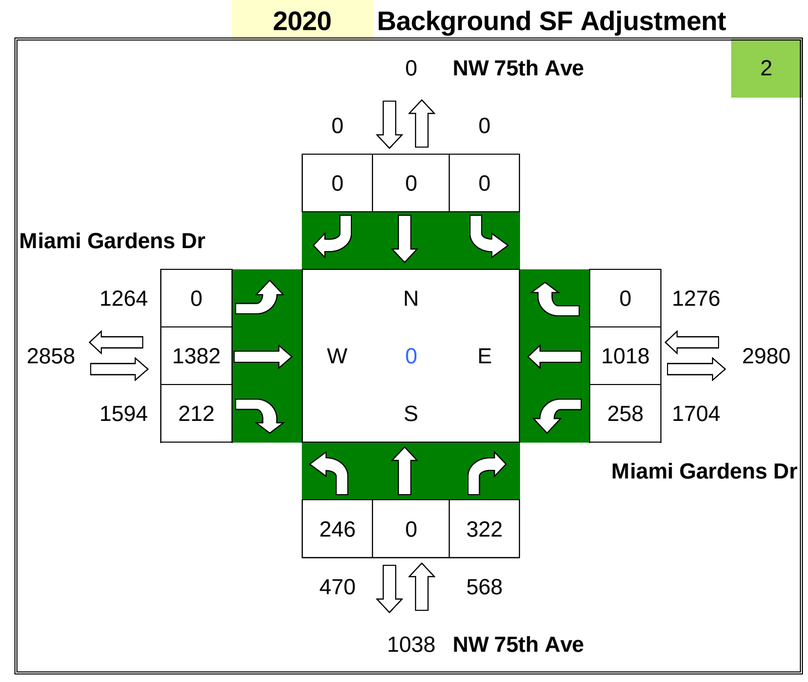
Project Trips

IN= 396

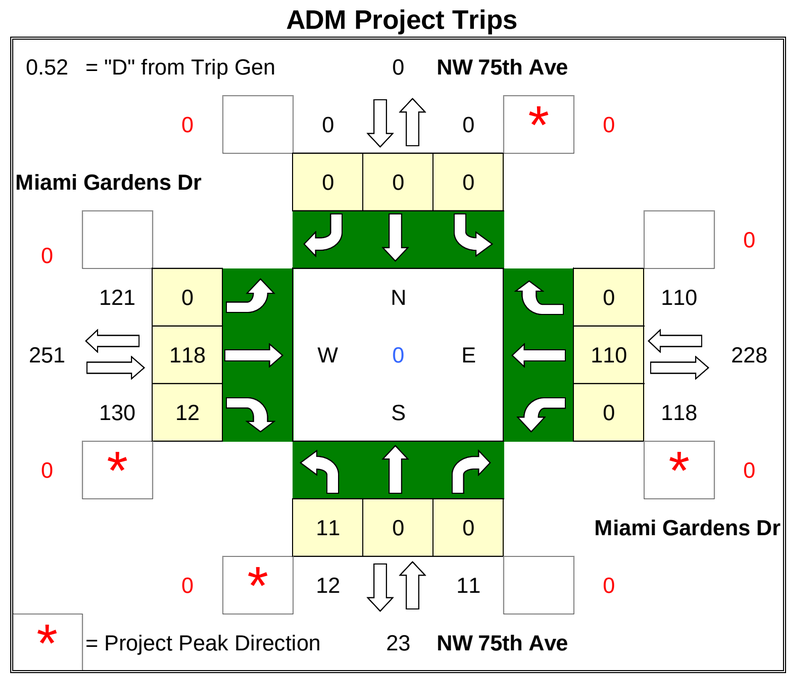
OUT= 467

	PD	#
N =	0.00%	0
E =	5.12%	44
S =	0.94%	8
W =	6.05%	52

2020 Background SF Adjustment



ADM Project Trips



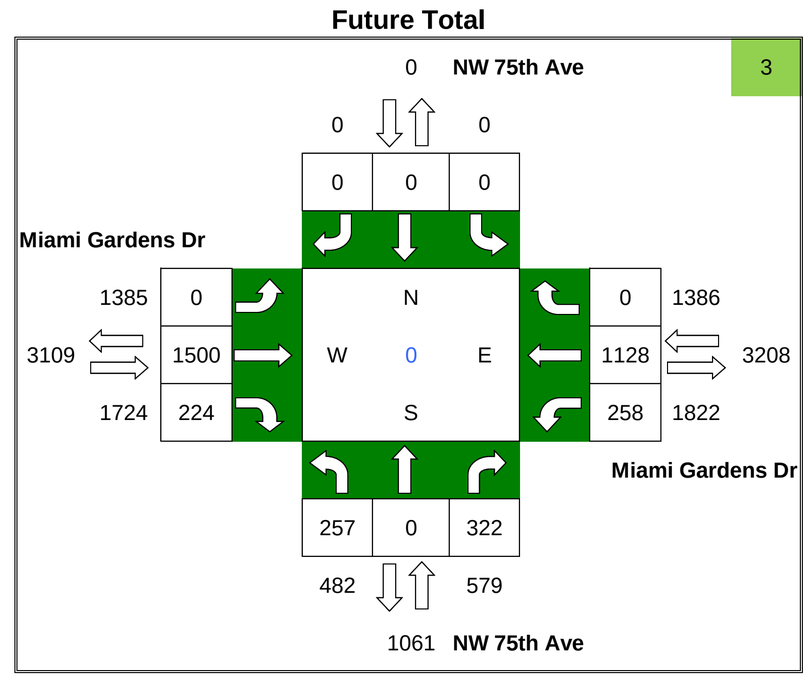
Project Trips

IN= 2,577

OUT= 2,753

	PD	#
N =	0.00%	0
E =	4.28%	228
S =	0.44%	23
W =	4.71%	251

Future Total



ADM/Graham

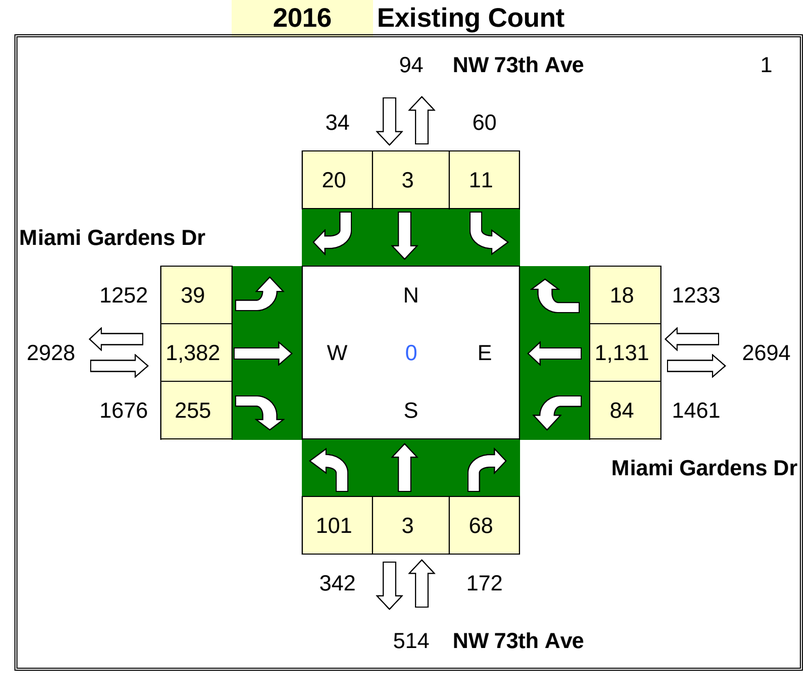
PM Turning Movement Volumes

N/S Roadway: NW 73th Ave

E/W Roadway: Miami Gardens Dr

Date Taken: 4/20/16

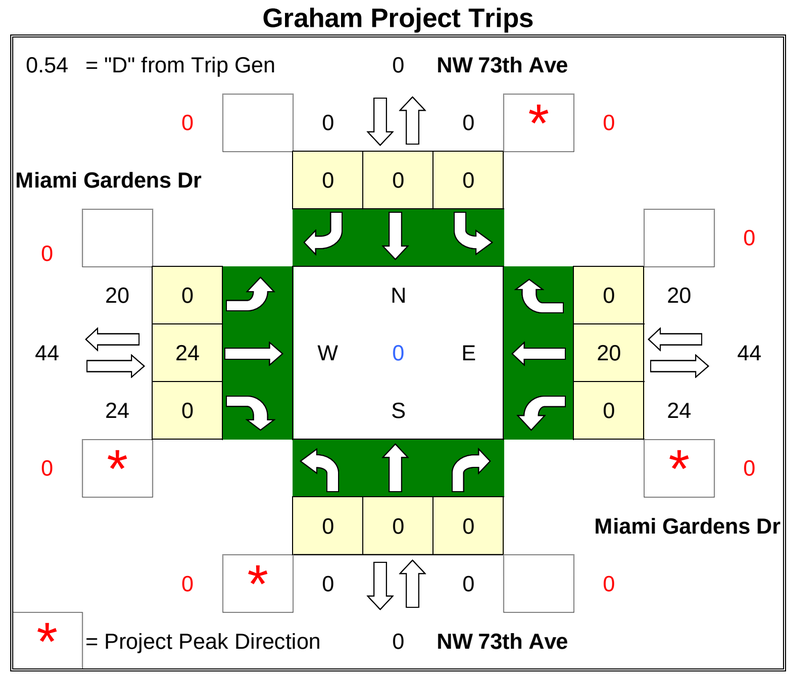
2016 Existing Count



% Annual Growth = 1% **Seasonal Factor =** 1.00

PHASE 1

Graham Project Trips



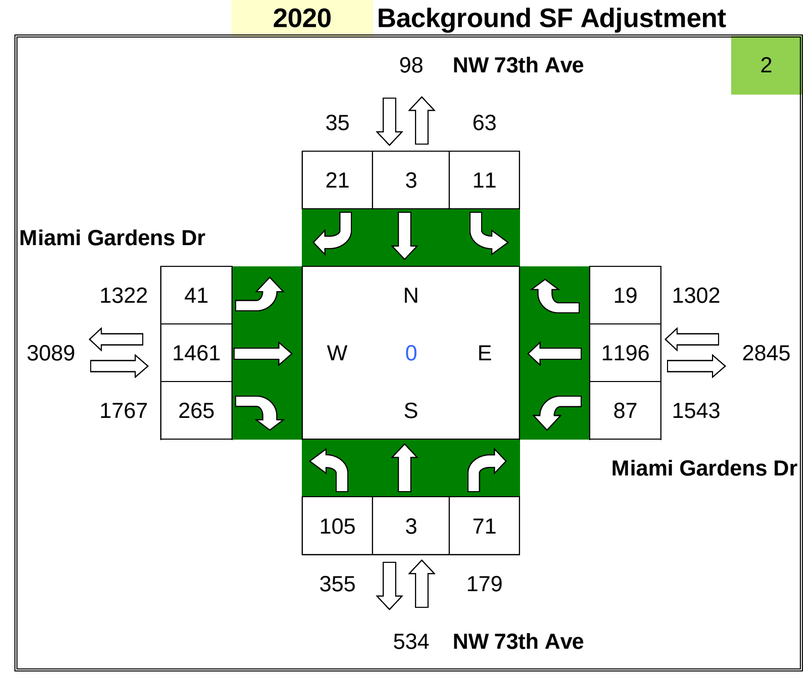
Project Trips

IN= 396

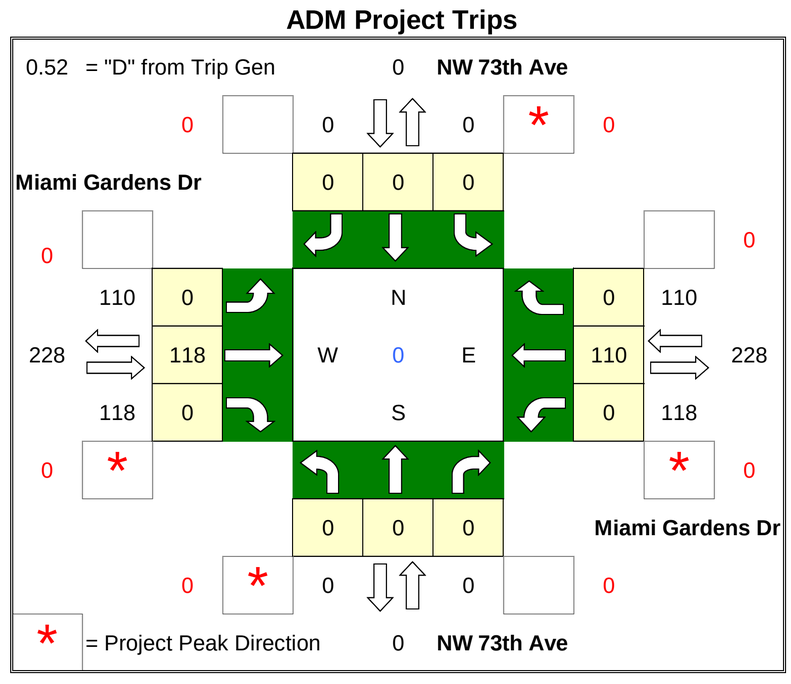
OUT= 467

	PD	#
N =	0.00%	0
E =	5.12%	44
S =	0.00%	0
W =	5.12%	44

2020 Background SF Adjustment



ADM Project Trips



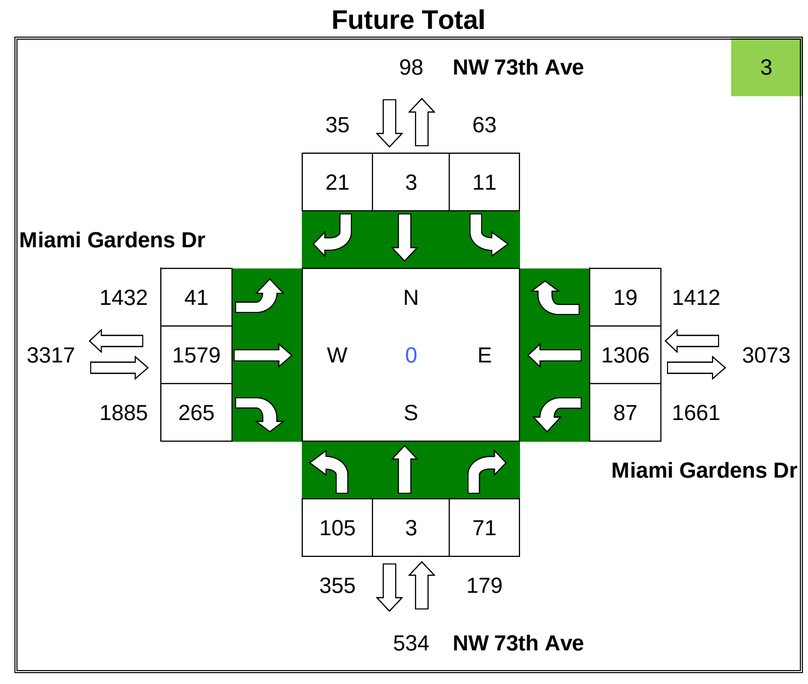
Project Trips

IN= 2,577

OUT= 2,753

	PD	#
N =	0.00%	0
E =	4.28%	228
S =	0.00%	0
W =	4.28%	228

Future Total



ADM/Graham

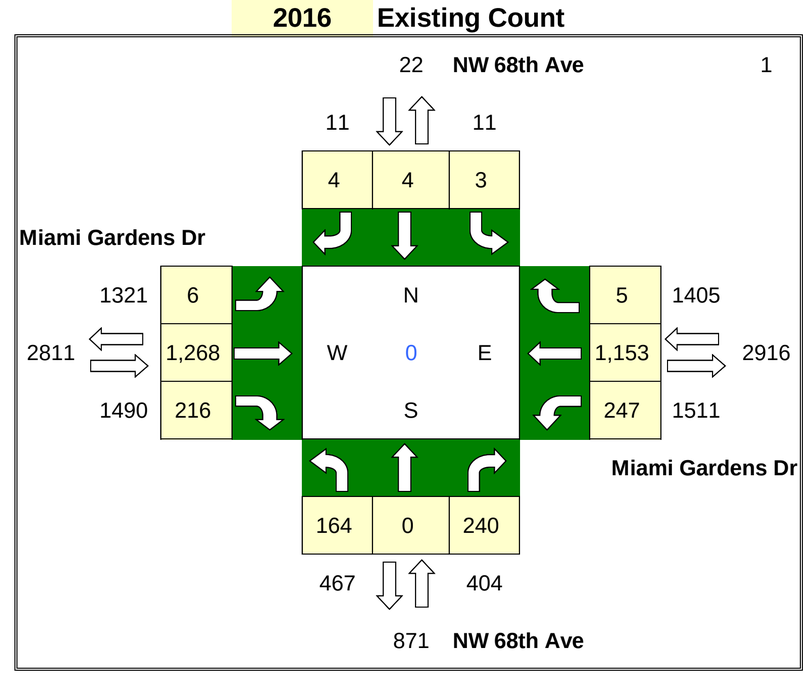
PM Turning Movement Volumes

N/S Roadway: NW 68th Ave

E/W Roadway: Miami Gardens Dr

Date Taken: 4/20/16

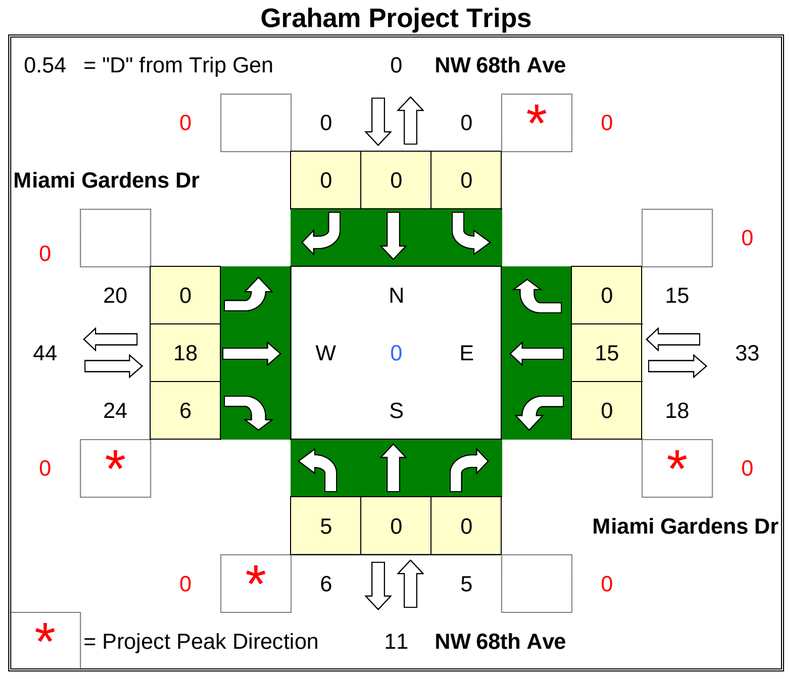
2016 Existing Count



% Annual Growth = 1% **Seasonal Factor =** 1.00

PHASE 1

Graham Project Trips

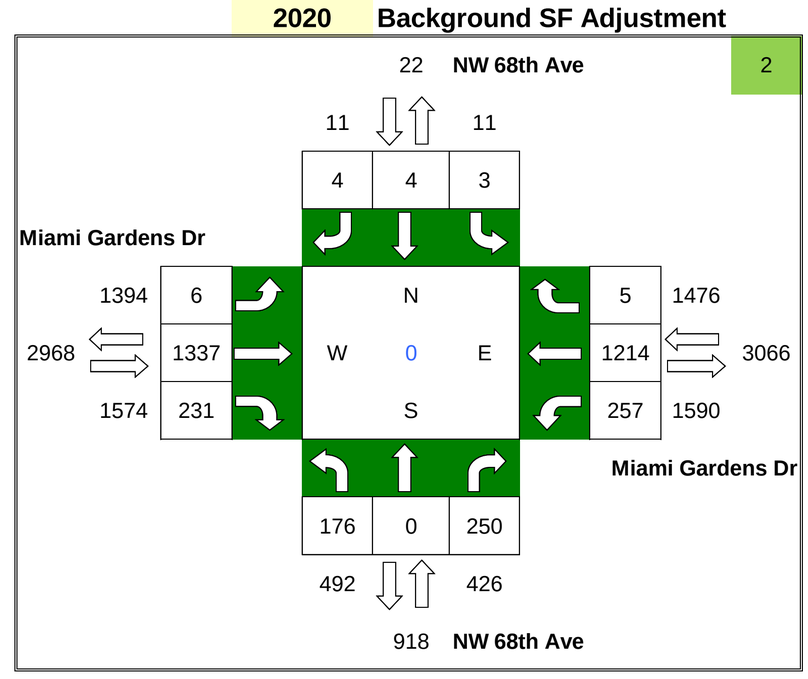


Project Trips

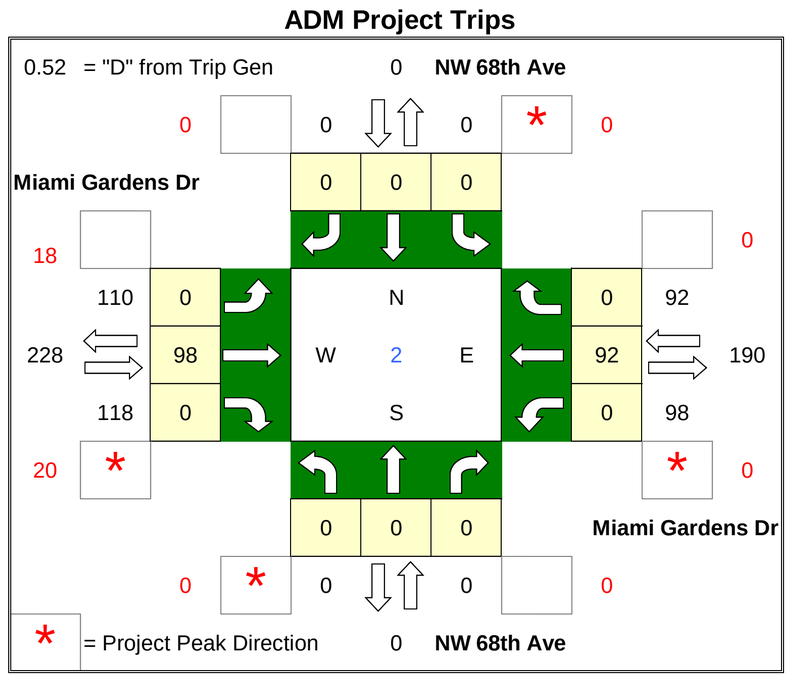
IN=	396
OUT=	467

	PD	#
N =	0.00%	0
E =	3.86%	33
S =	1.26%	11
W =	5.12%	44

2020 Background SF Adjustment



ADM Project Trips

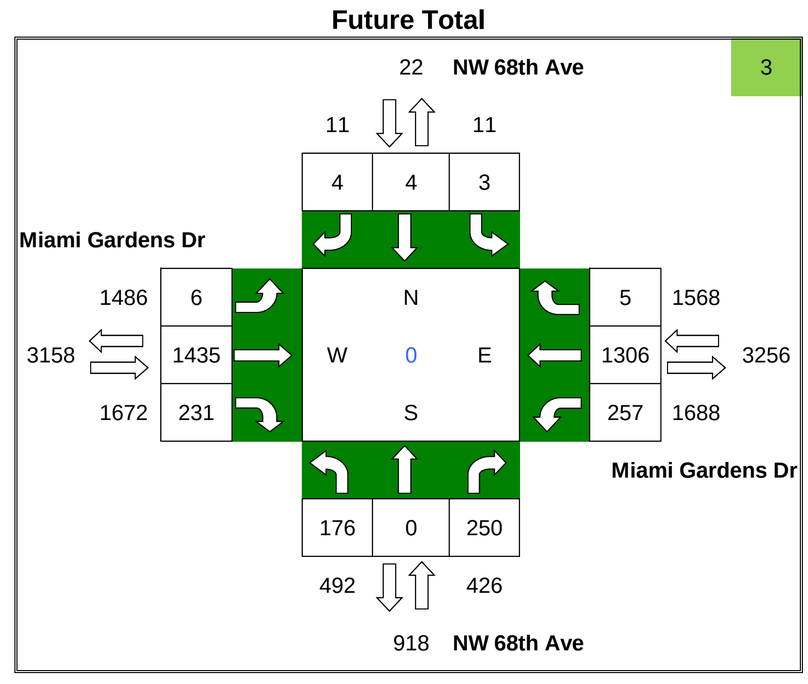


Project Trips

IN=	2,577
OUT=	2,753

	PD	#
N =	0.00%	0
E =	3.56%	190
S =	0.00%	0
W =	4.28%	228

Future Total



ADM/Graham

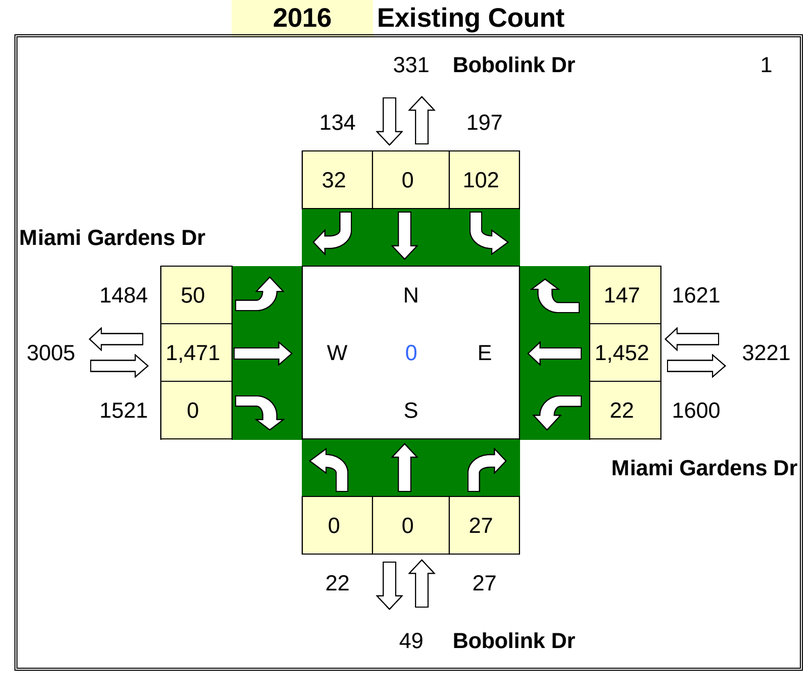
PM Turning Movement Volumes

N/S Roadway: Bobolink Dr

E/W Roadway: Miami Gardens Dr

Date Taken: 4/20/16

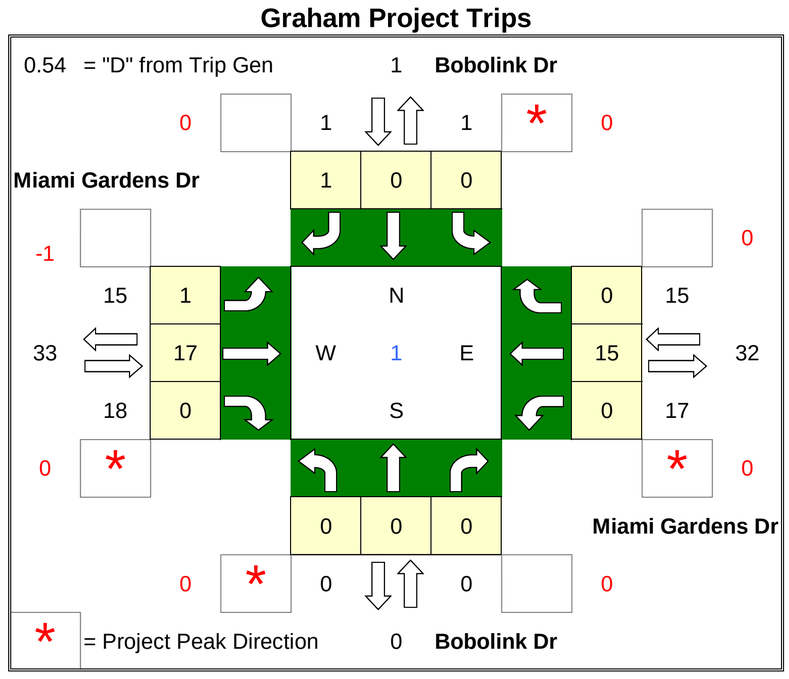
2016 Existing Count



% Annual Growth = 1% **Seasonal Factor =** 1.00

PHASE 1

Graham Project Trips



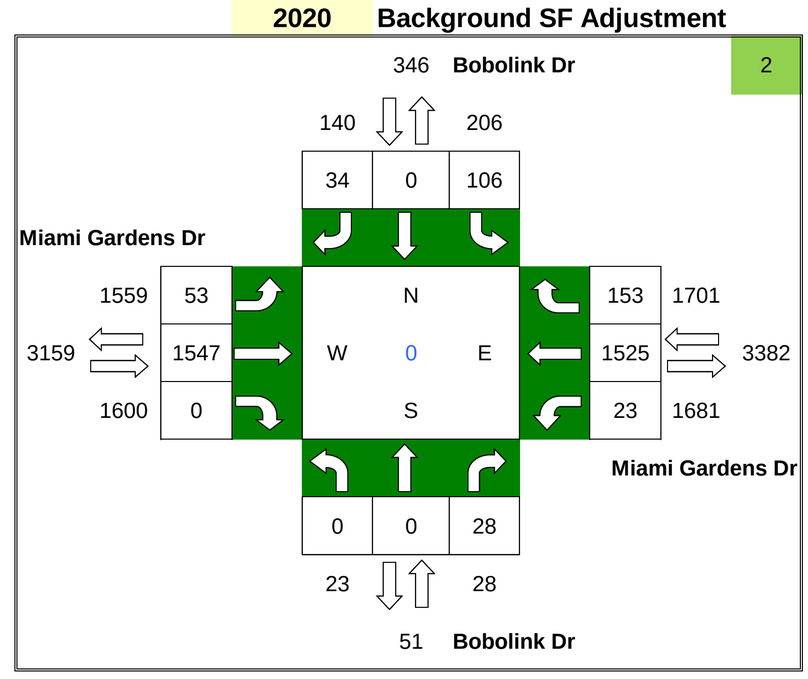
Project Trips

IN= 396

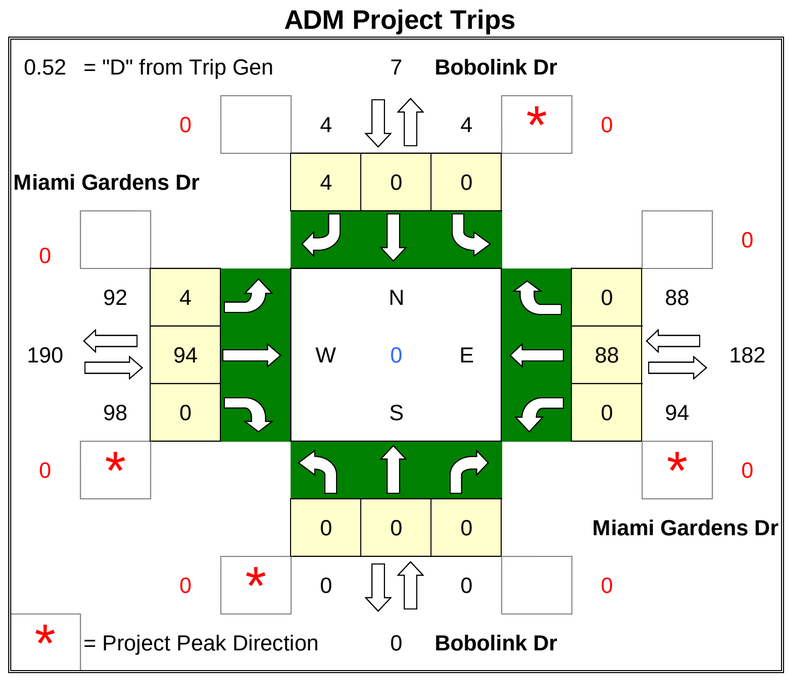
OUT= 467

	PD	#
N =	0.13%	1
E =	3.73%	32
S =	0.00%	0
W =	3.86%	33

2020 Background SF Adjustment



ADM Project Trips



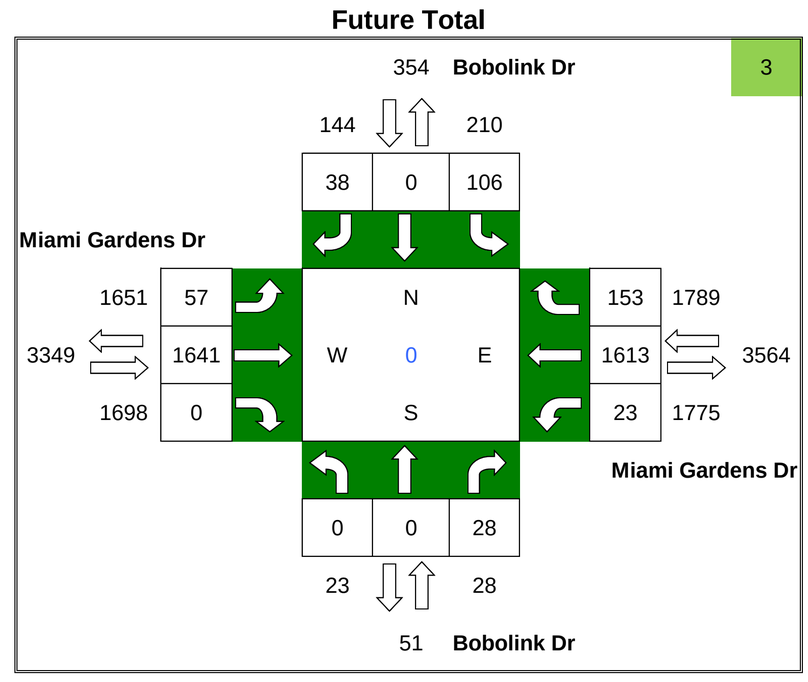
Project Trips

IN= 2,577

OUT= 2,753

	PD	#
N =	0.14%	7
E =	3.42%	182
S =	0.00%	0
W =	3.56%	190

Future Total



ADM/Graham

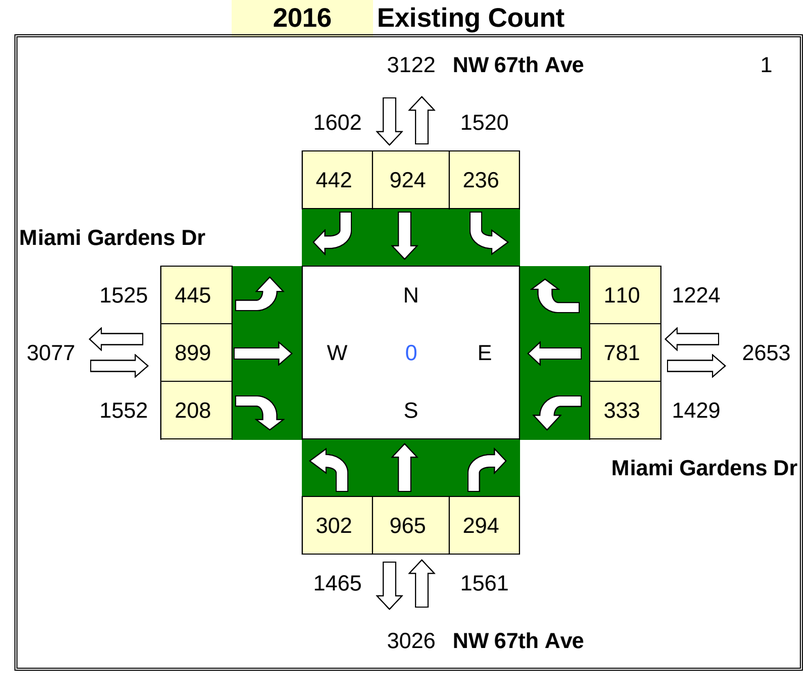
PM Turning Movement Volumes

N/S Roadway: NW 67th Ave

E/W Roadway: Miami Gardens Dr

Date Taken: 4/20/16

2016 Existing Count

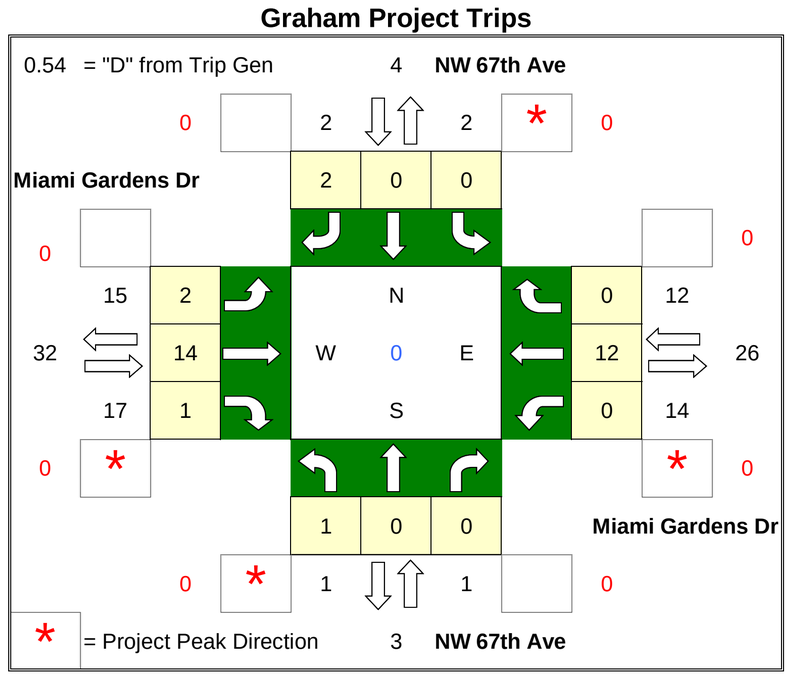


% Annual Growth = 1%

Seasonal Factor = 1.00

PHASE 1

Graham Project Trips



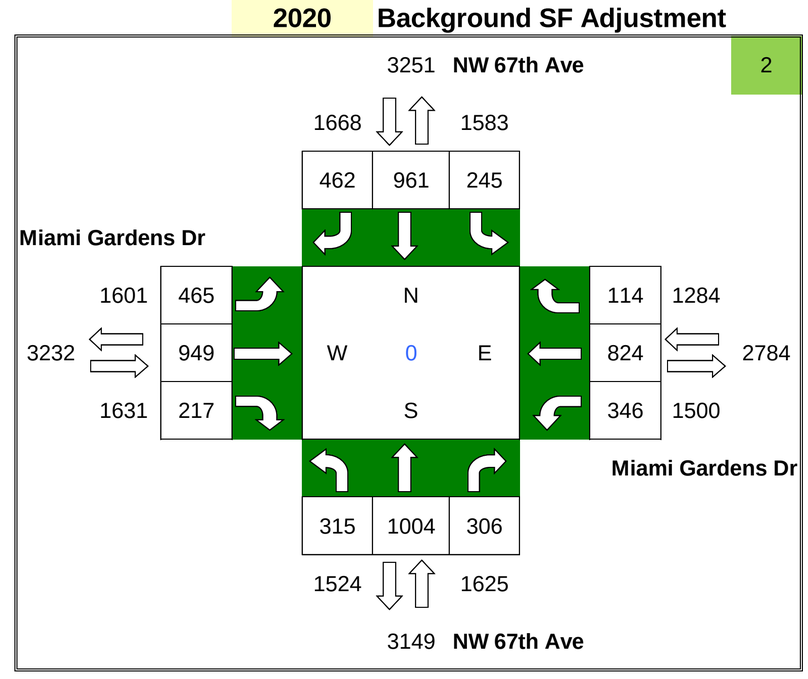
Project Trips

IN= 396

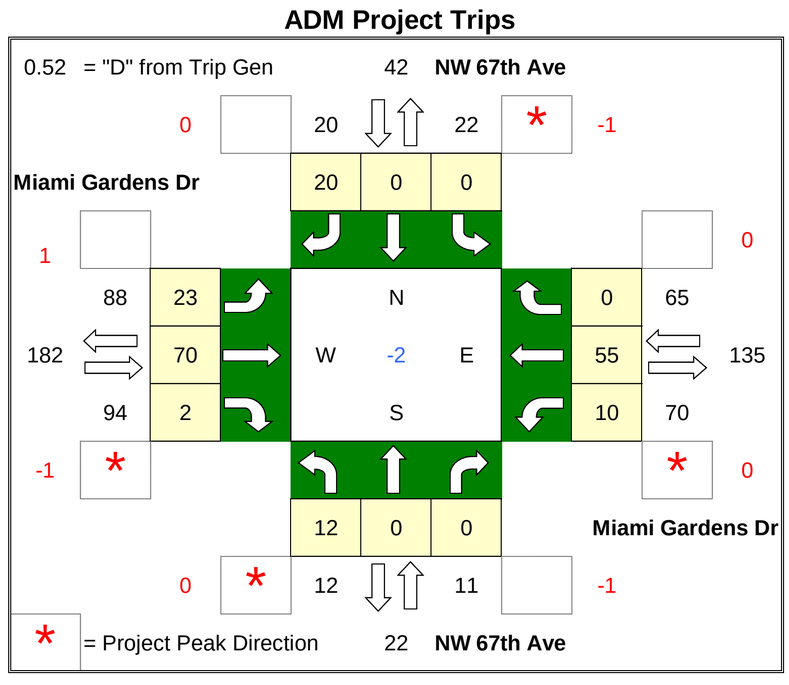
OUT= 467

	PD	#
N =	0.45%	4
E =	2.96%	26
S =	0.31%	3
W =	3.73%	32

2020 Background SF Adjustment



ADM Project Trips



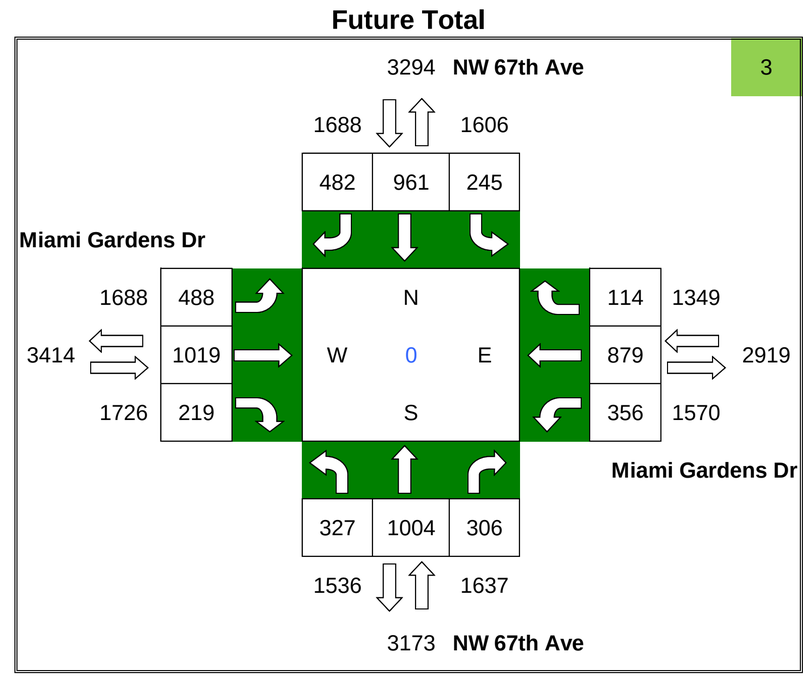
Project Trips

IN= 2,577

OUT= 2,753

	PD	#
N =	0.79%	42
E =	2.53%	135
S =	0.42%	22
W =	3.42%	182

Future Total



ADM/Graham

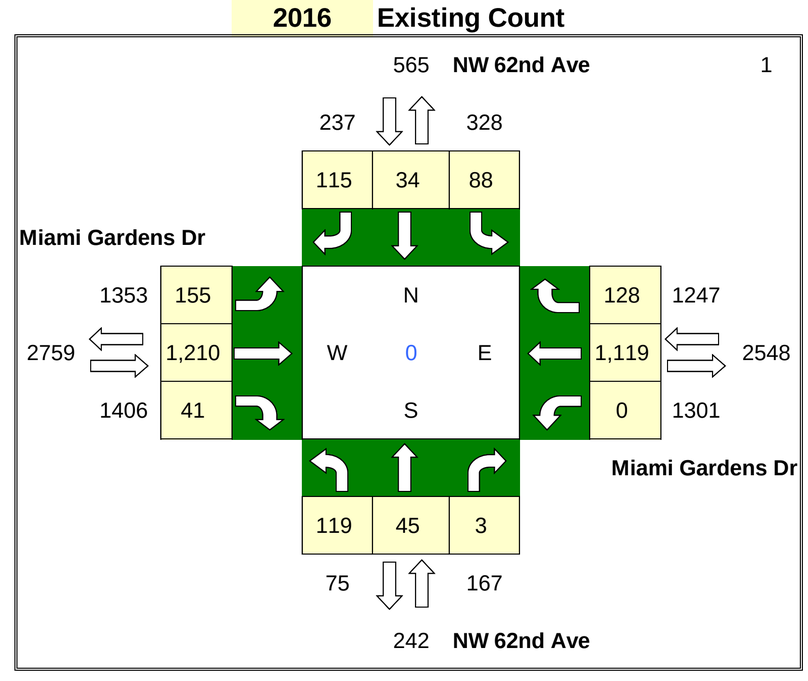
PM Turning Movement Volumes

N/S Roadway: NW 62nd Ave

E/W Roadway: Miami Gardens Dr

Date Taken: 4/20/16

2016 Existing Count

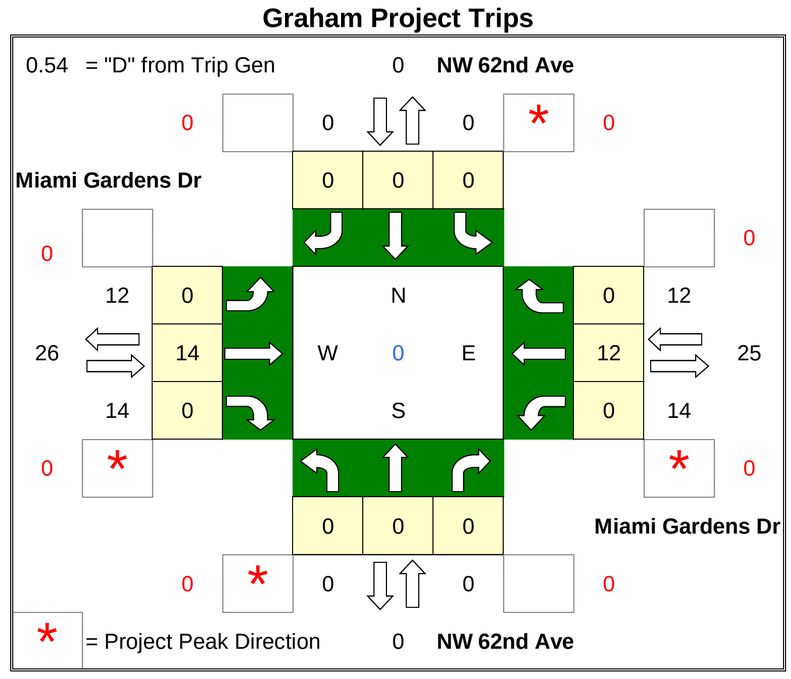


% Annual Growth = 1%

Seasonal Factor = 1.00

PHASE 1

Graham Project Trips

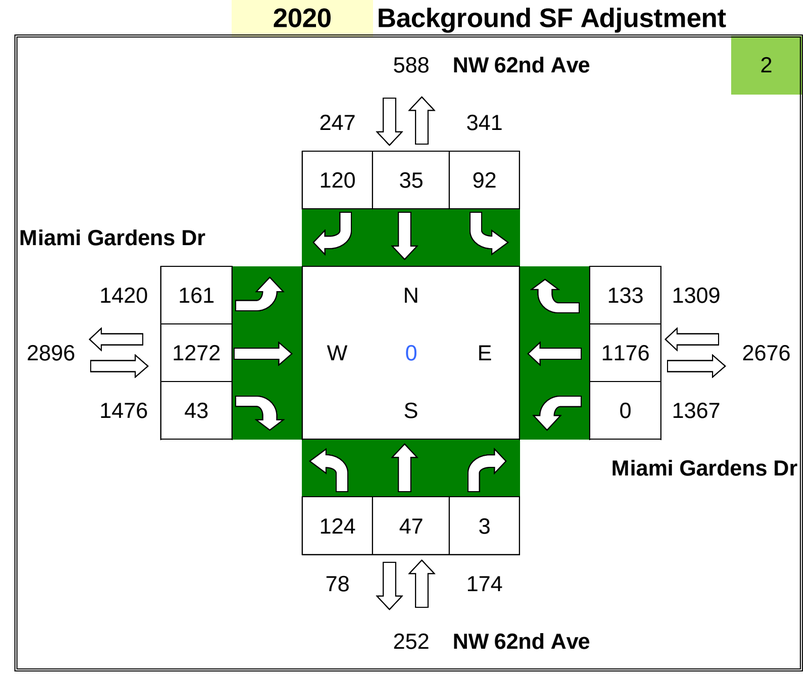


Project Trips

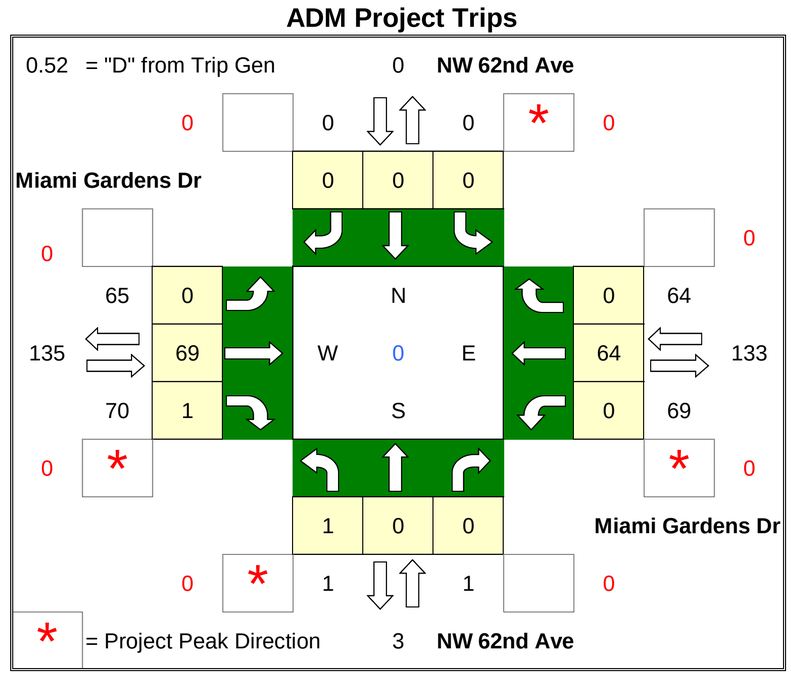
IN=	396
OUT=	467

	PD	#
N =	0.00%	0
E =	2.92%	25
S =	0.04%	0
W =	2.96%	26

2020 Background SF Adjustment



ADM Project Trips

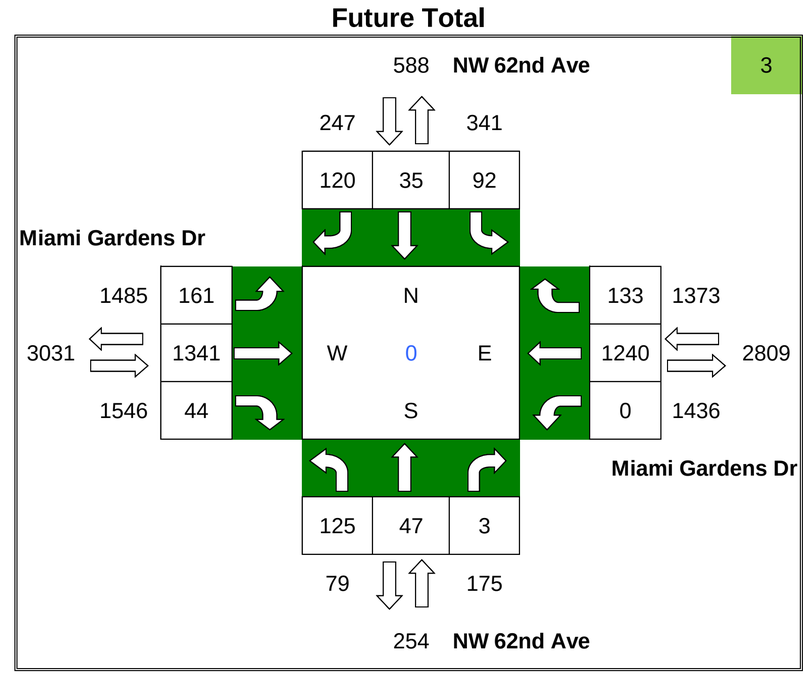


Project Trips

IN=	2,577
OUT=	2,753

	PD	#
N =	0.00%	0
E =	2.49%	133
S =	0.05%	3
W =	2.53%	135

Future Total



ADM/Graham

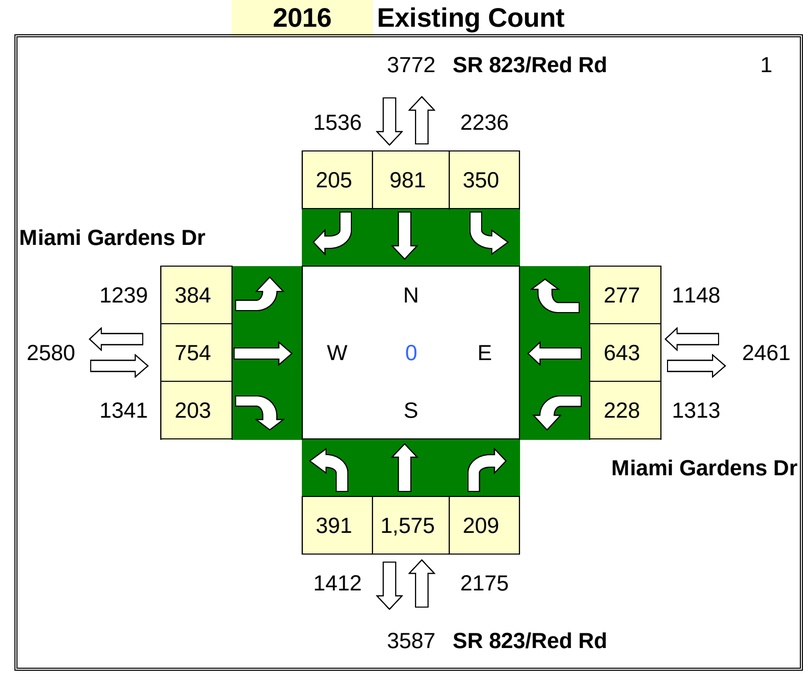
PM Turning Movement Volumes

N/S Roadway: SR 823/Red Rd

E/W Roadway: Miami Gardens Dr

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1%

Seasonal Factor = 1.00

PHASE 1

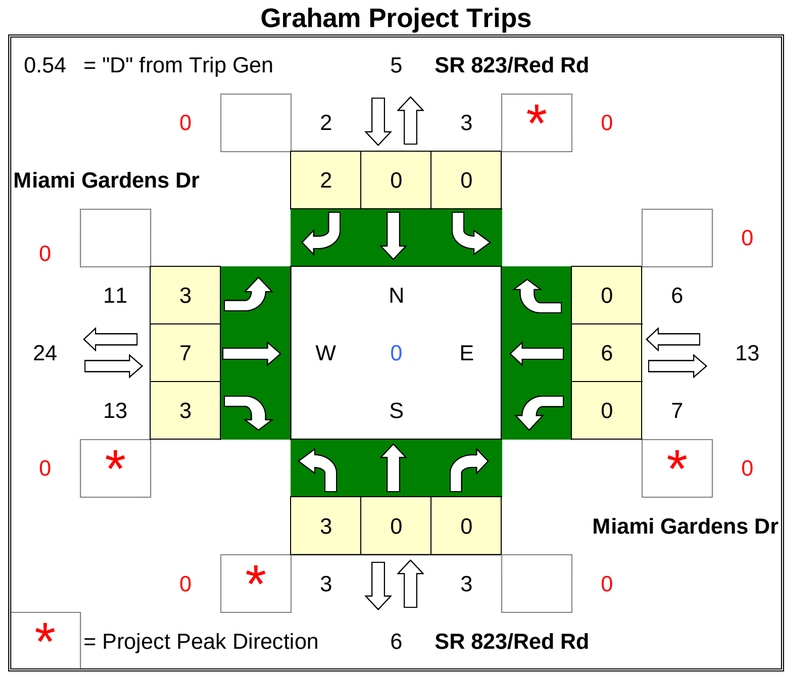
Project Trips

IN= 396

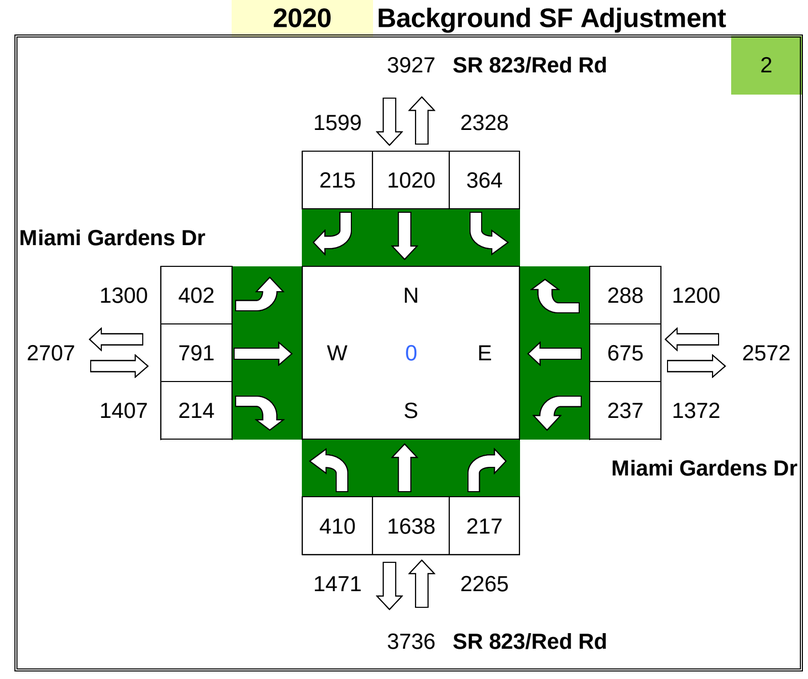
OUT= 467

	PD	#
N =	0.58%	5
E =	1.55%	13
S =	0.69%	6
W =	2.81%	24

Graham Project Trips



2020 Background SF Adjustment



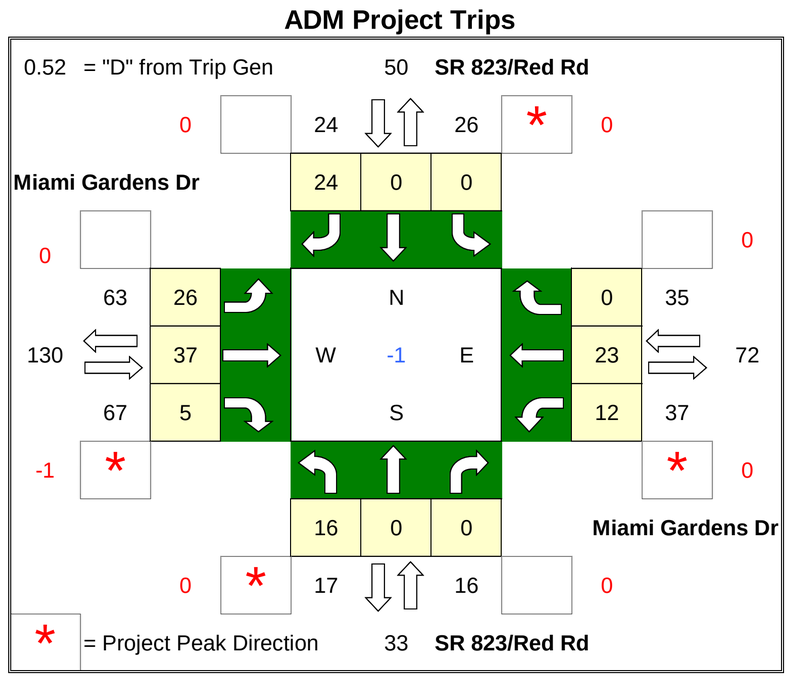
Project Trips

IN= 2,577

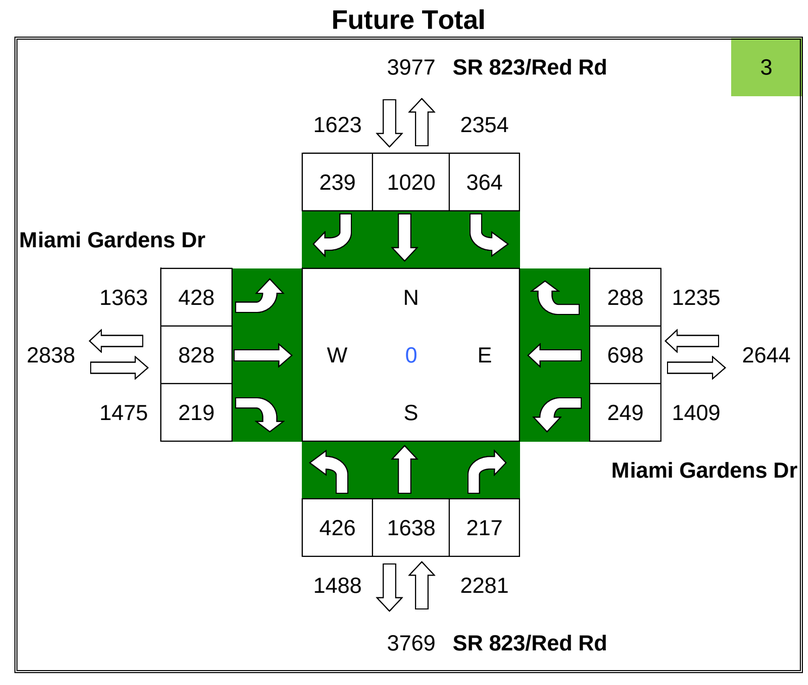
OUT= 2,753

	PD	#
N =	0.93%	50
E =	1.35%	72
S =	0.62%	33
W =	2.43%	130

ADM Project Trips



Future Total



ADM/Graham

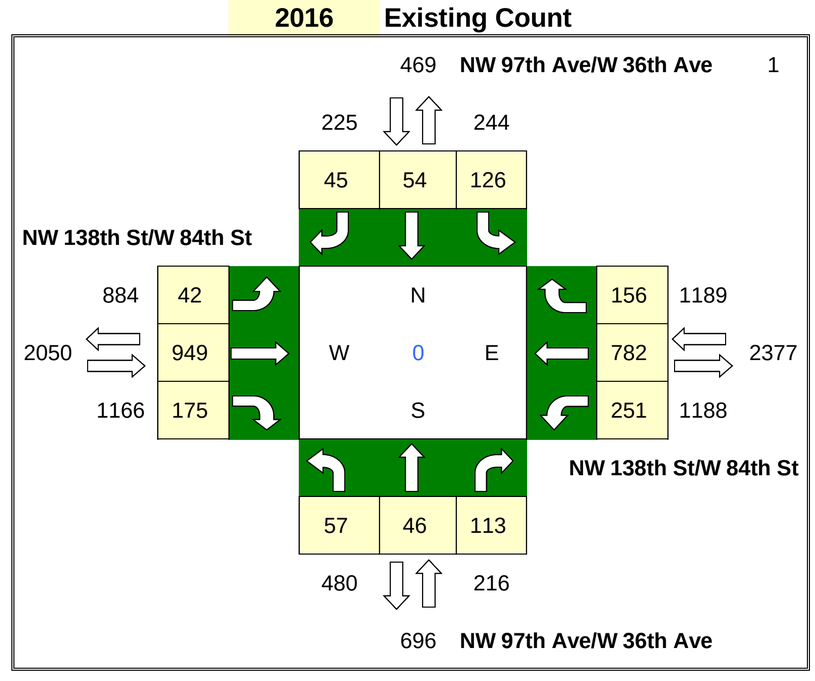
PM Turning Movement Volumes

N/S Roadway: NW 97th Ave/W 36th Ave

E/W Roadway: NW 138th St/W 84th St

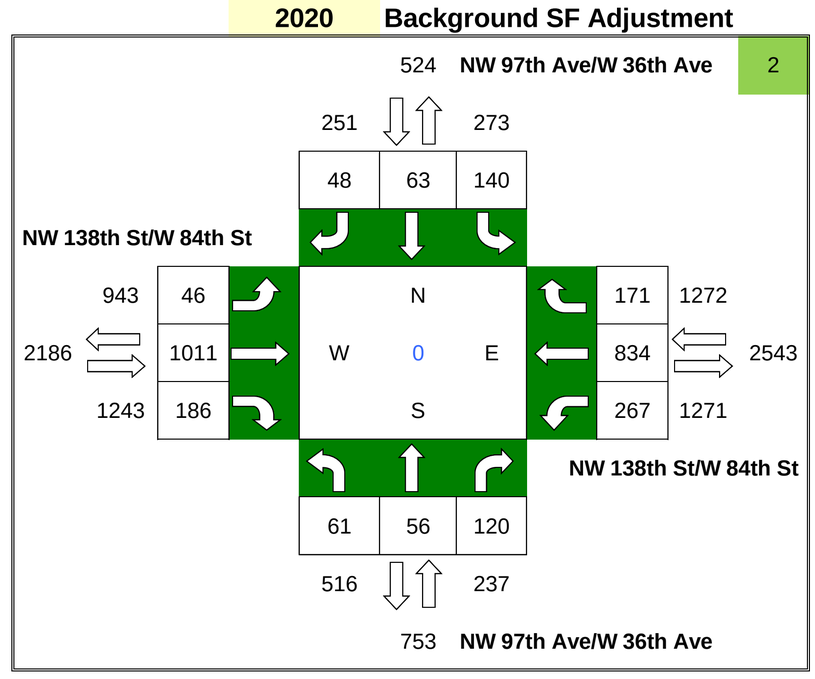
Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1.6% **Seasonal Factor =** 1.00

2020 Background SF Adjustment



PHASE 1

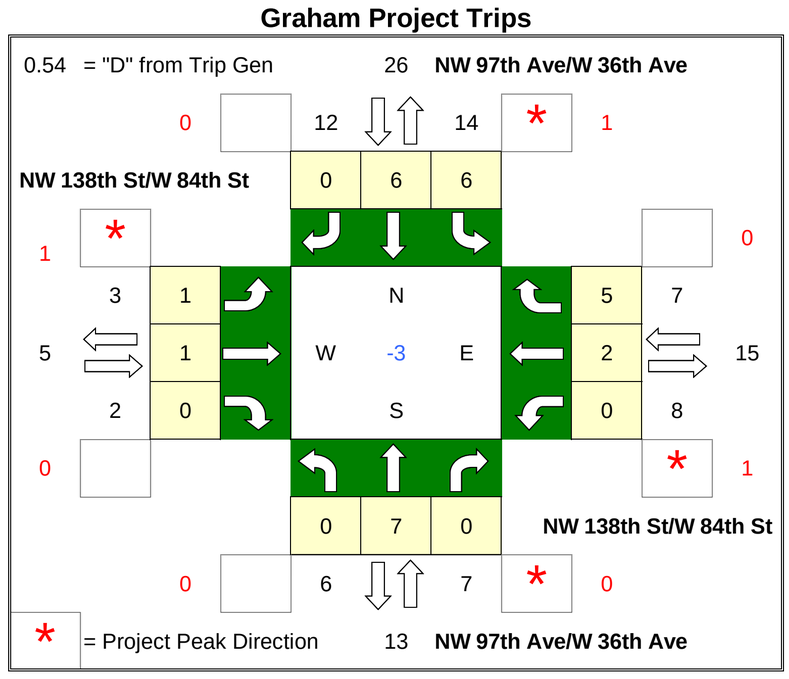
Project Trips

IN= 396

OUT= 467

	PD	#
N =	3.07%	26
E =	1.71%	15
S =	1.56%	13
W =	0.58%	5

Graham Project Trips



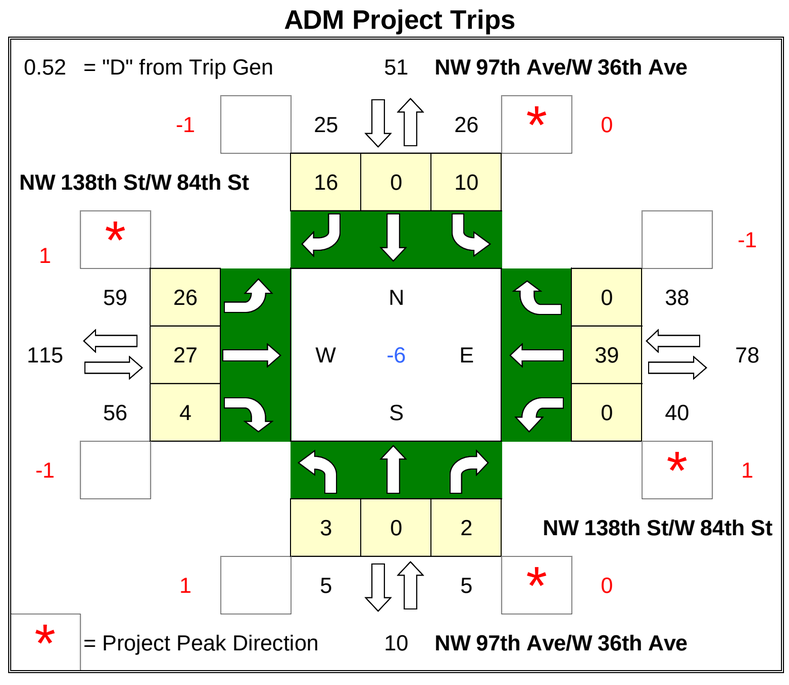
Project Trips

IN= 2,577

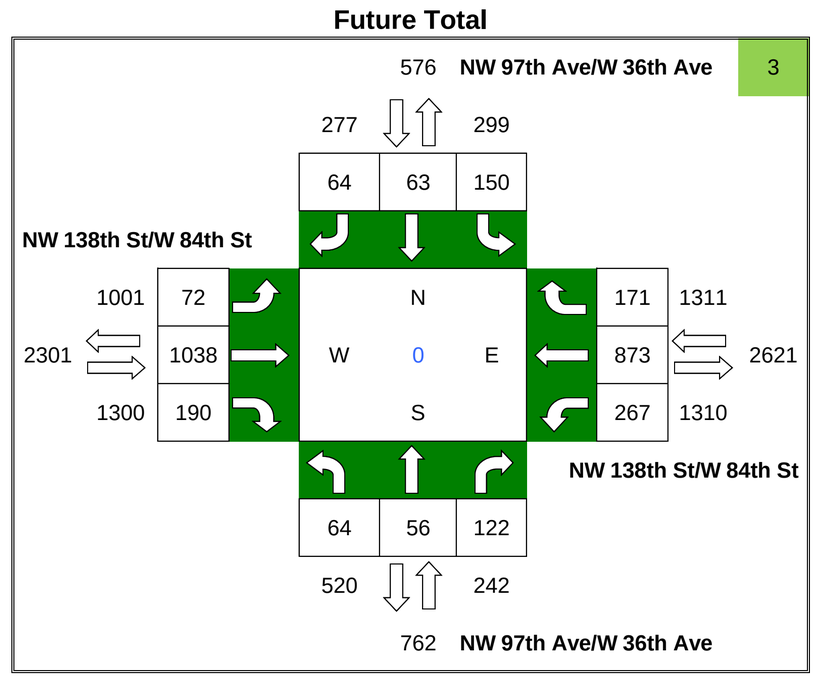
OUT= 2,753

	PD	#
N =	0.96%	51
E =	1.47%	78
S =	0.18%	10
W =	2.16%	115

ADM Project Trips



Future Total



ADM/Graham

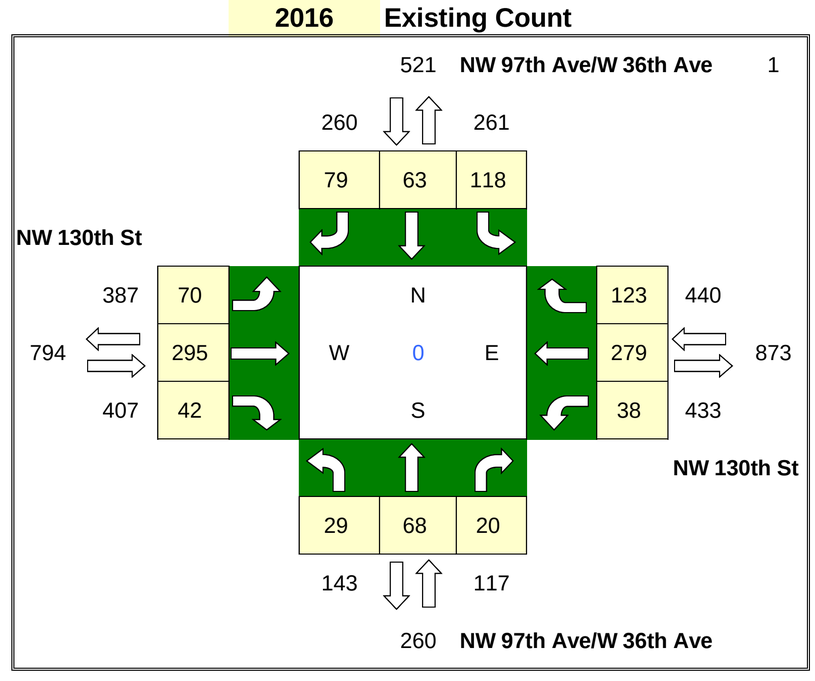
PM Turning Movement Volumes

N/S Roadway: NW 97th Ave/W 36th Ave

E/W Roadway: NW 130th St

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1.6% **Seasonal Factor =** 1.00

PHASE 1

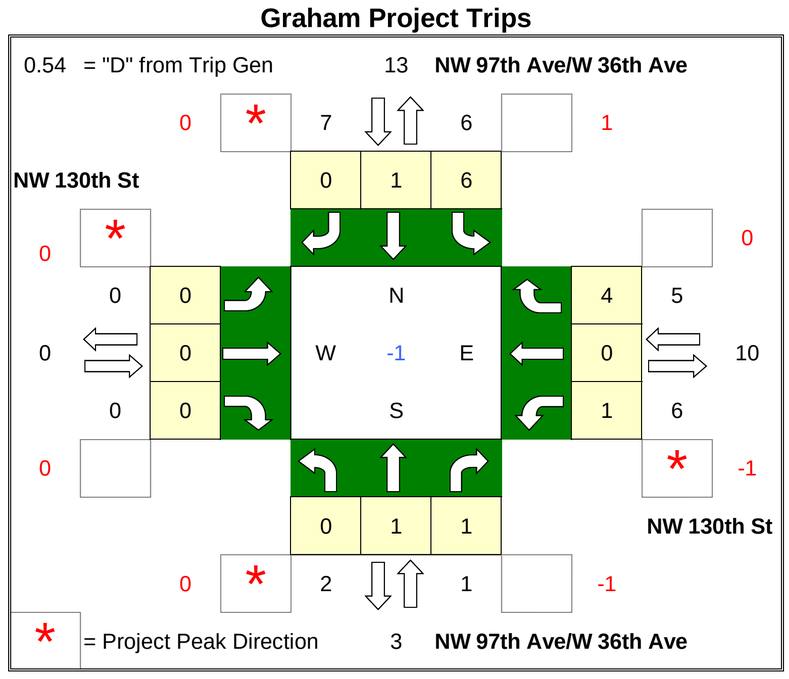
Project Trips

IN= 396

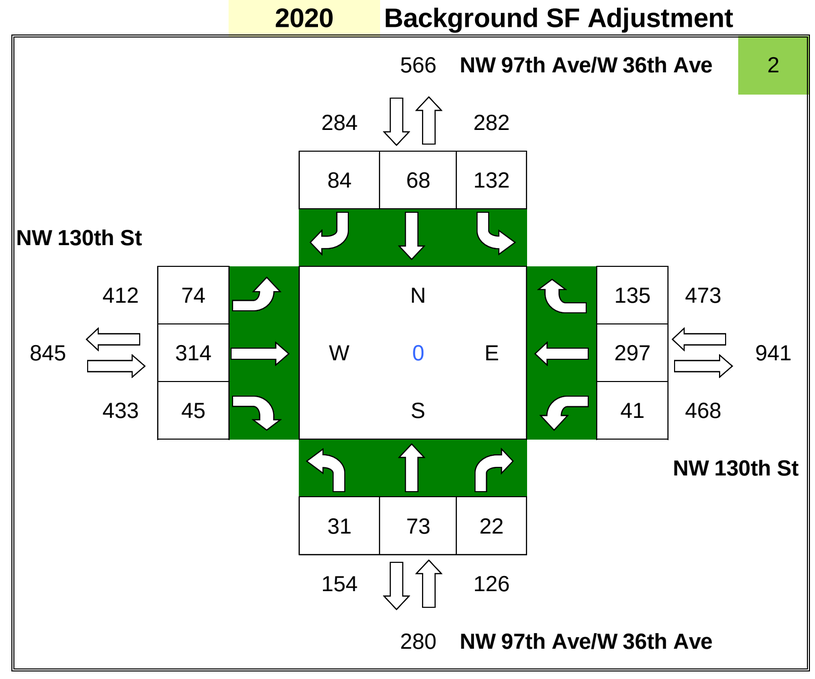
OUT= 467

	PD	#
N =	1.56%	13
E =	1.19%	10
S =	0.37%	3
W =	0.00%	0

Graham Project Trips



2020 Background SF Adjustment



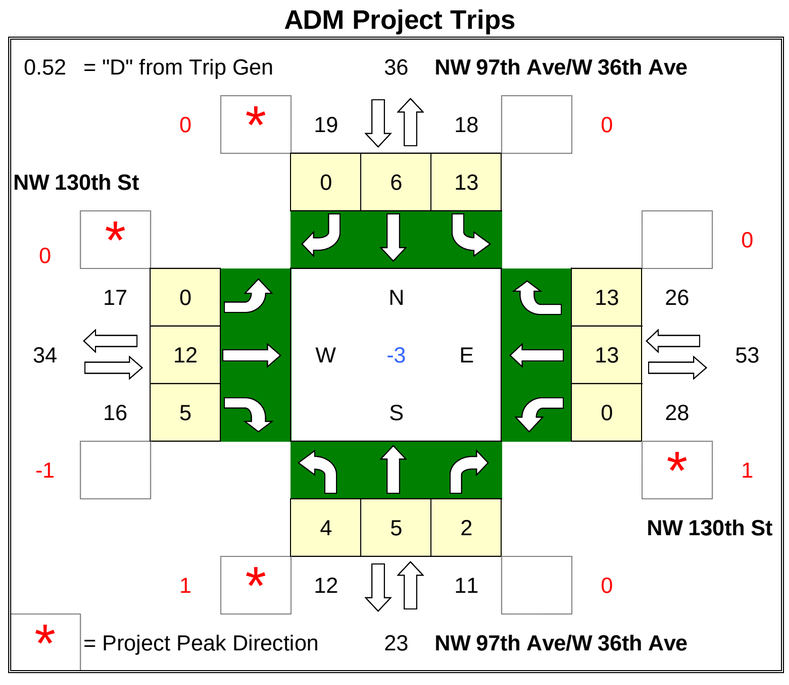
Project Trips

IN= 2,577

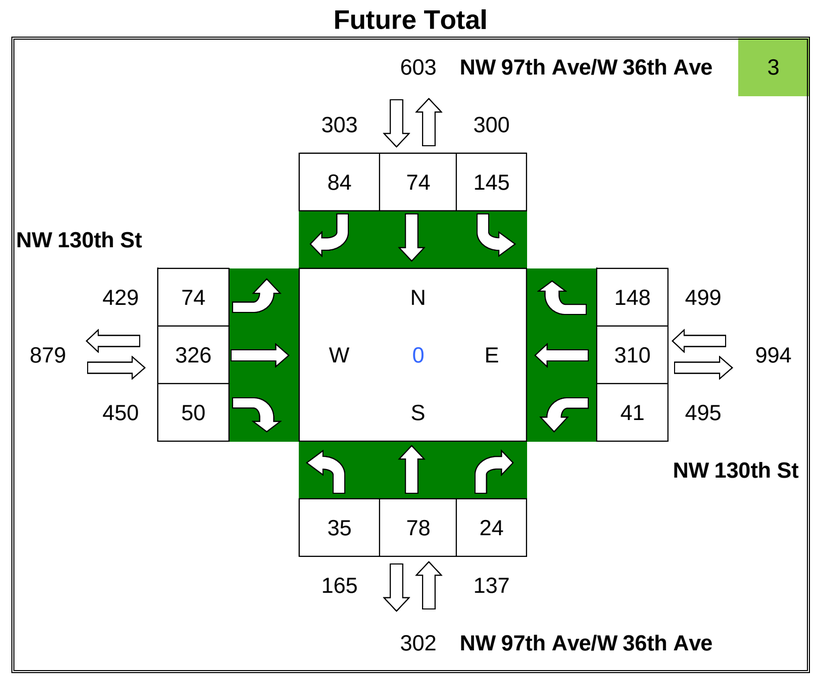
OUT= 2,753

	PD	#
N =	0.68%	36
E =	1.00%	53
S =	0.43%	23
W =	0.63%	34

ADM Project Trips



Future Total



ADM/Graham

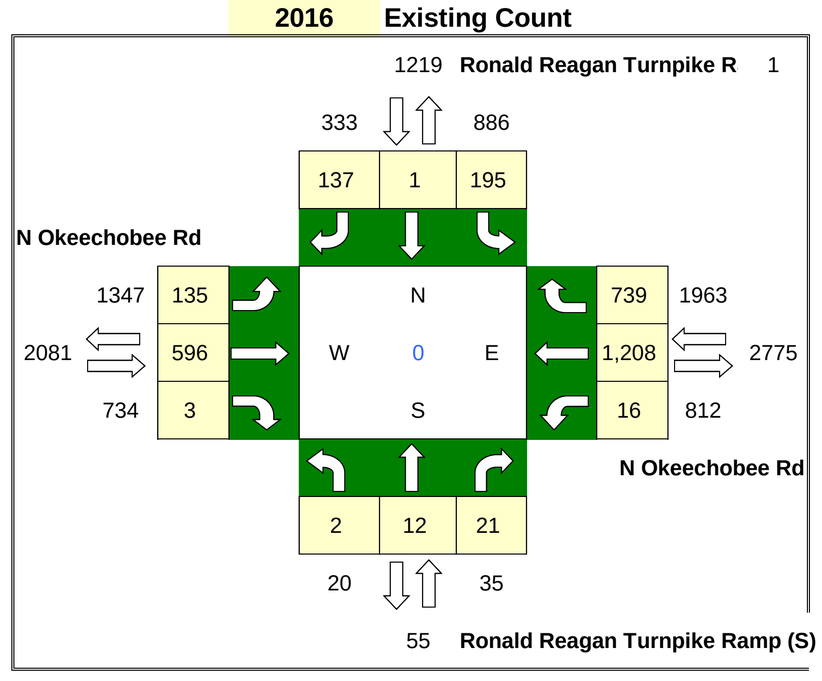
PM Turning Movement Volumes

N/S Roadway: Ronald Reagan Turnpike Ramp (S)

E/W Roadway: N Okeechobee Rd

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1.6% **Seasonal Factor =** 1.04

PHASE 1

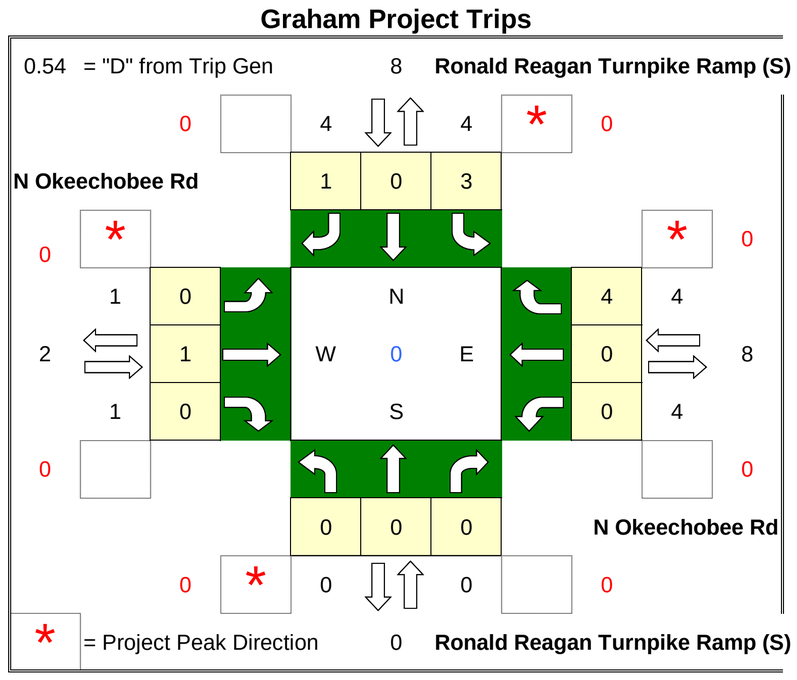
Graham Project Trips

Project Trips

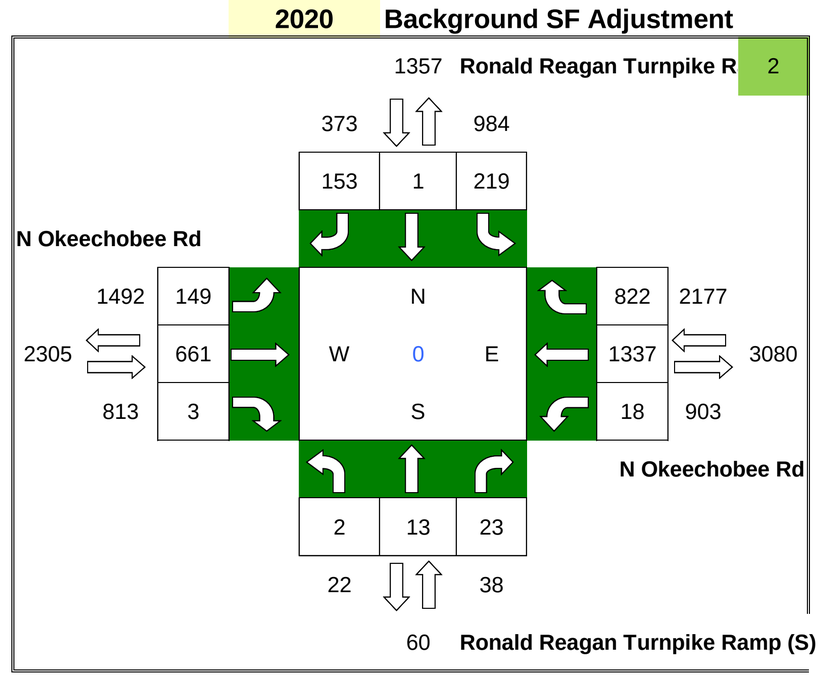
IN= 396

OUT= 467

	PD	#
N =	0.96%	8
E =	0.94%	8
S =	0.00%	0
W =	0.21%	2



2020 Background SF Adjustment



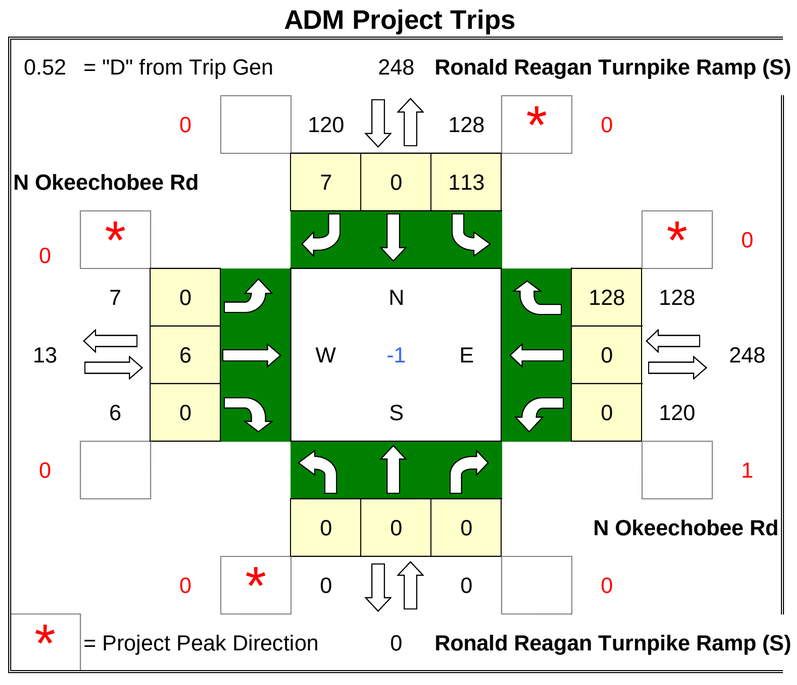
ADM Project Trips

Project Trips

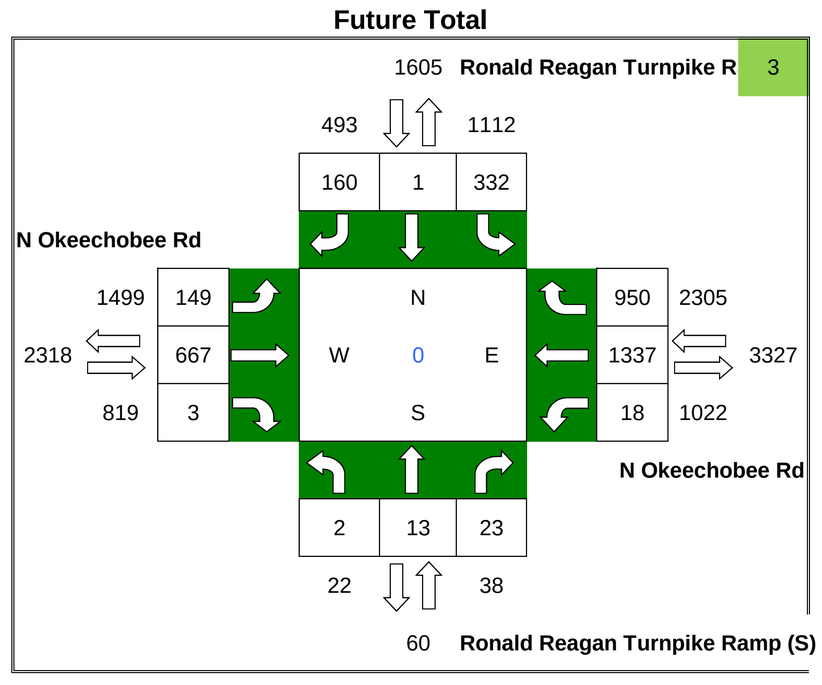
IN= 2,577

OUT= 2,753

	PD	#
N =	4.66%	248
E =	4.66%	248
S =	0.00%	0
W =	0.25%	13



Future Total



ADM/Graham

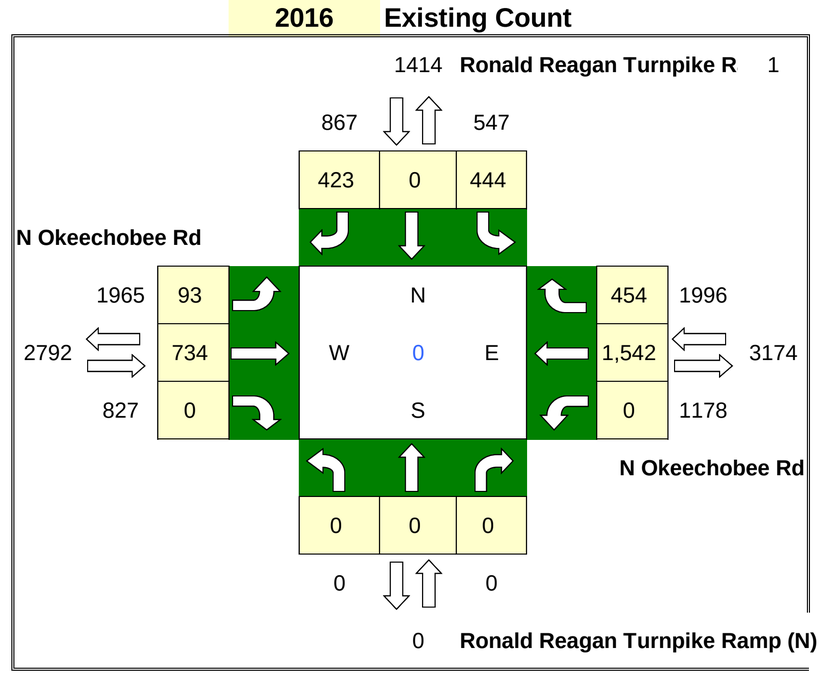
PM Turning Movement Volumes

N/S Roadway: Ronald Reagan Turnpike Ramp (N)

E/W Roadway: N Okeechobee Rd

Date Taken: 4/20/16

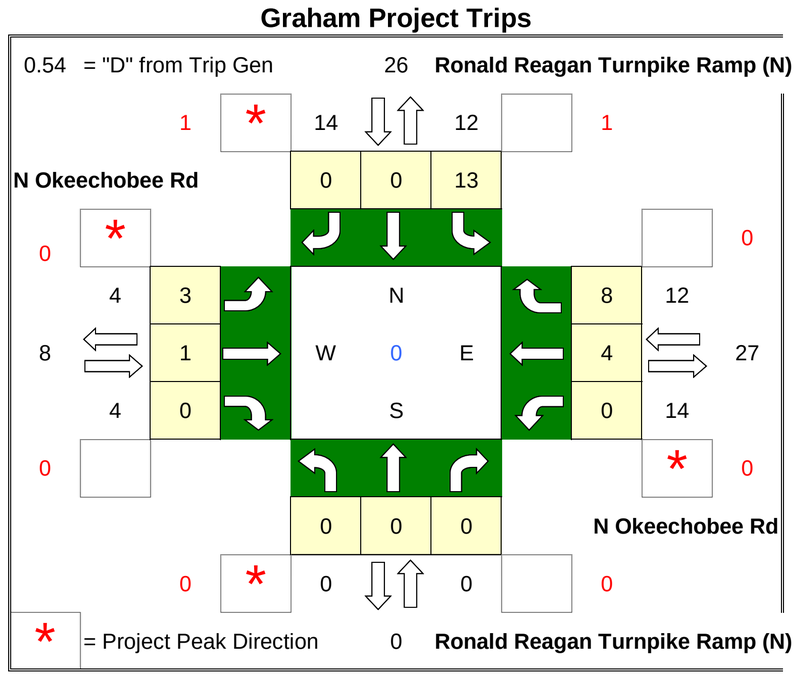
2016 Existing Count



% Annual Growth = 1.6% **Seasonal Factor =** 1.04

PHASE 1

Graham Project Trips



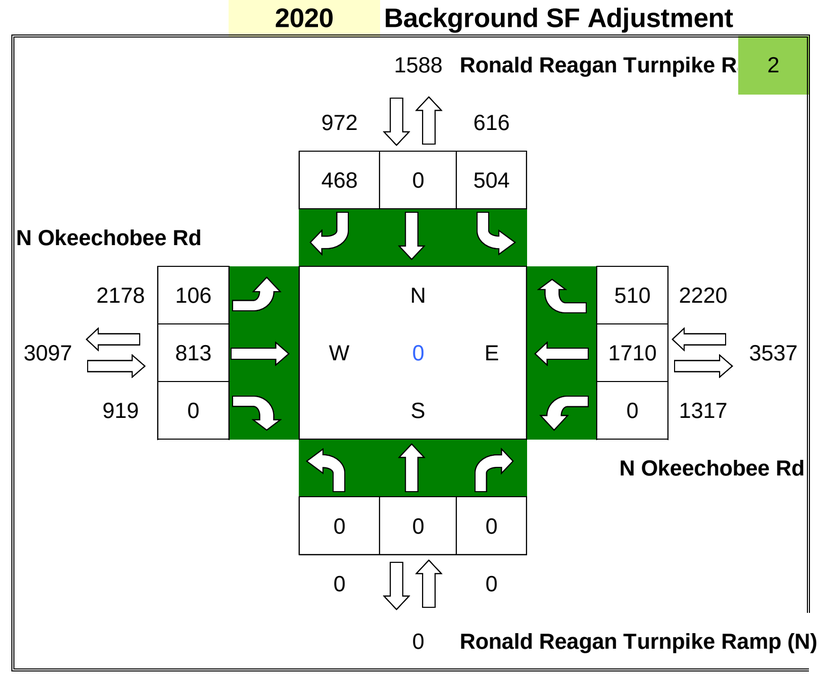
Project Trips

IN= 396

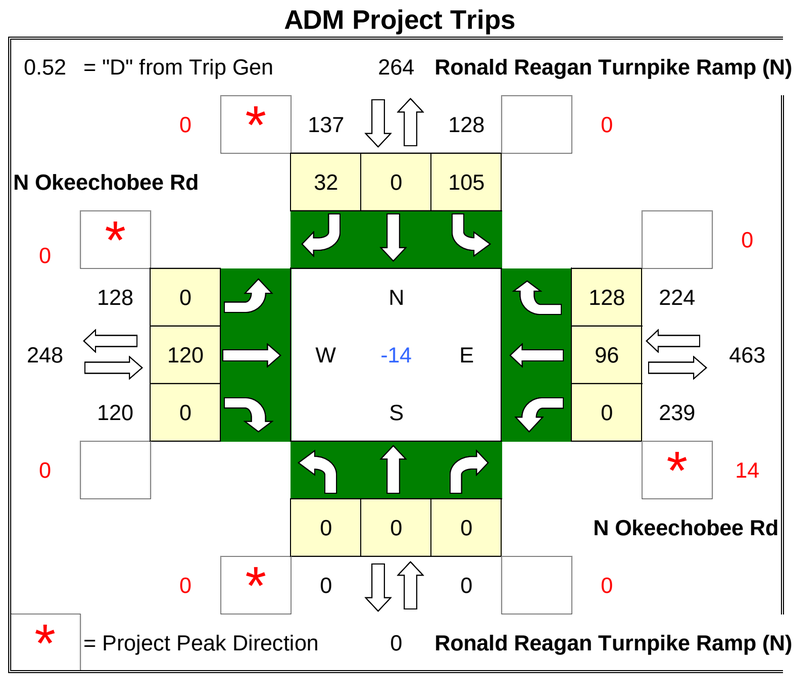
OUT= 467

	PD	#
N =	3.07%	26
E =	3.08%	27
S =	0.00%	0
W =	0.94%	8

2020 Background SF Adjustment



ADM Project Trips



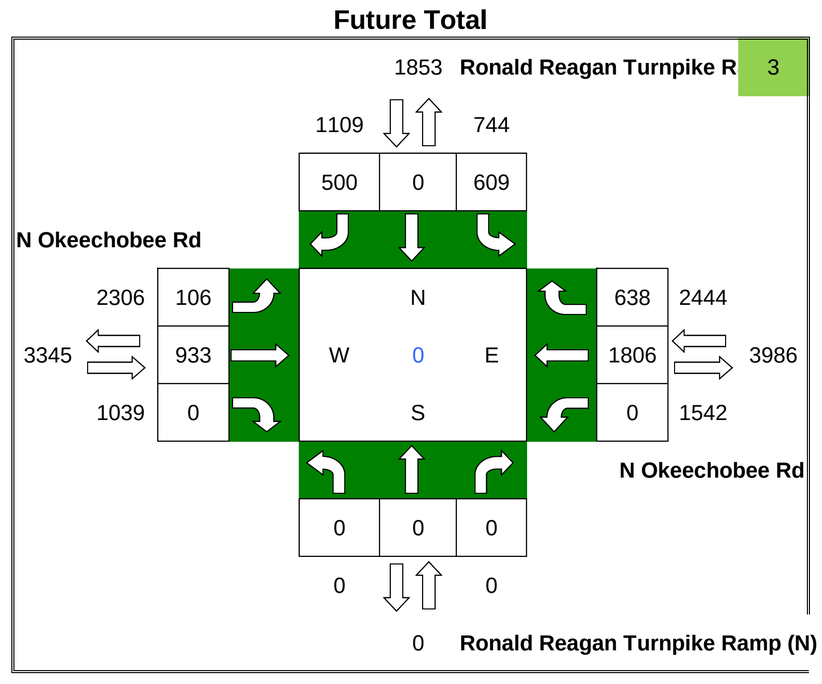
Project Trips

IN= 2,577

OUT= 2,753

	PD	#
N =	4.96%	264
E =	8.68%	463
S =	0.00%	0
W =	4.66%	248

Future Total



ADM/Graham

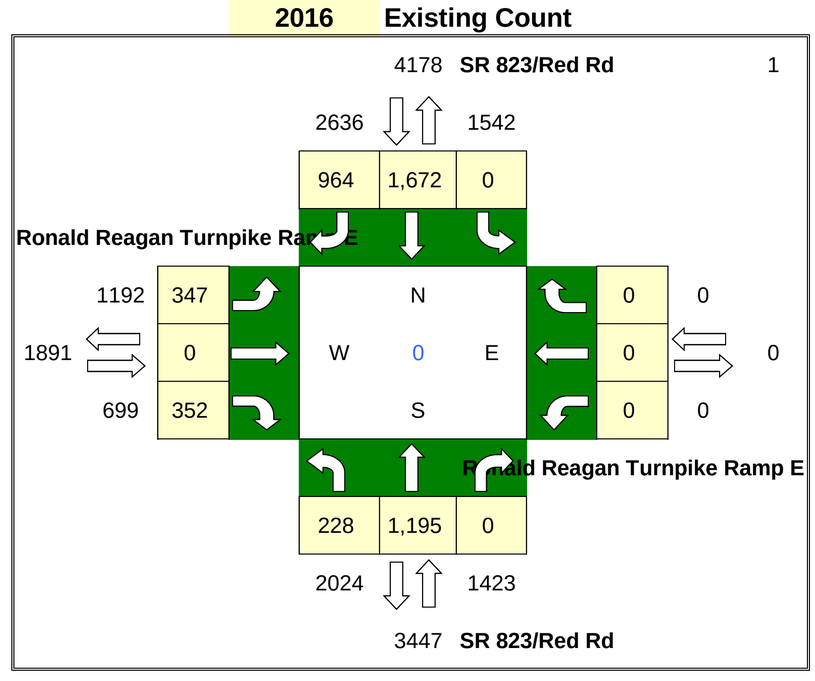
PM Turning Movement Volumes

N/S Roadway: SR 823/Red Rd

E/W Roadway: Ronald Reagan Turnpike Ramp E

Date Taken: 4/20/16

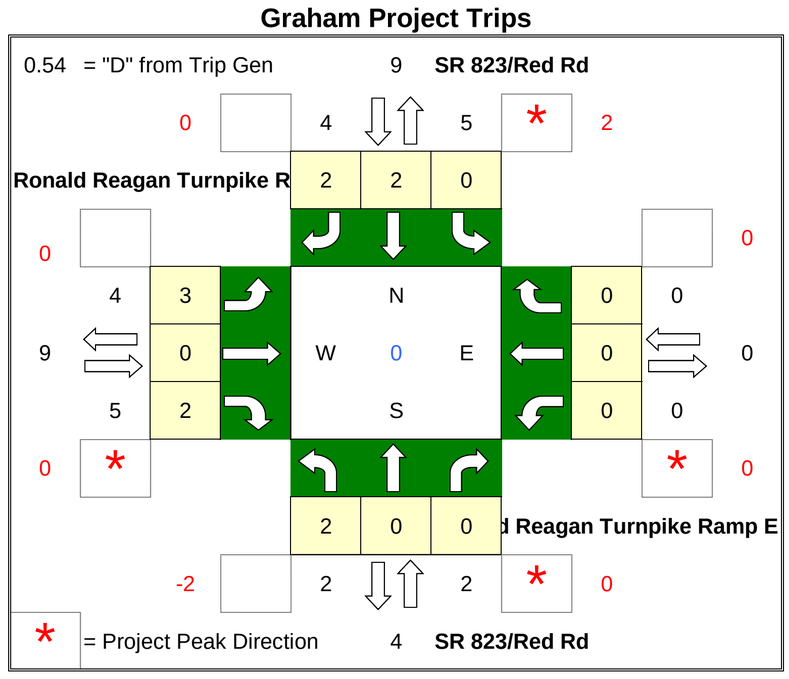
2016 Existing Count



% Annual Growth = 1.9% **Seasonal Factor =** 1.04

PHASE 1

Graham Project Trips

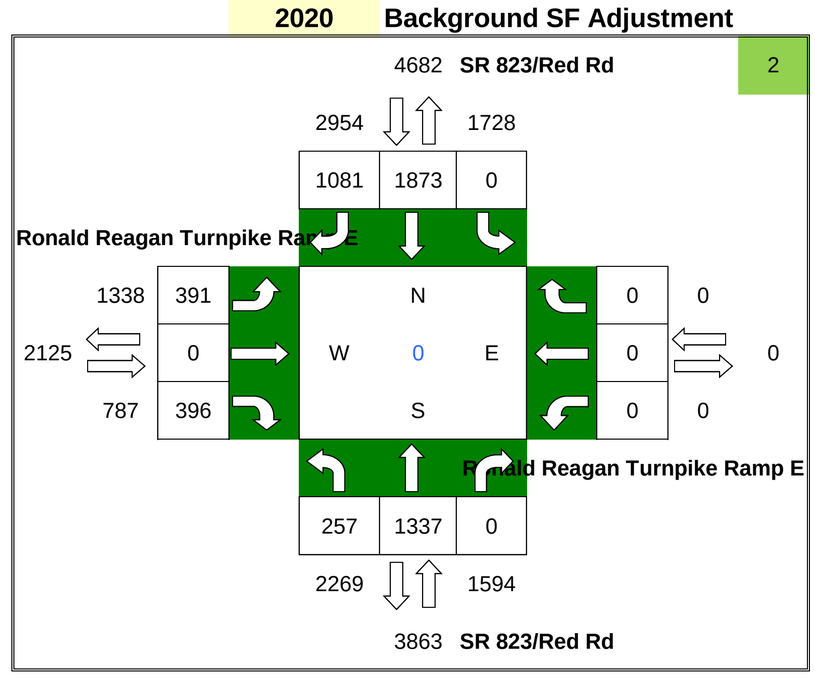


Project Trips

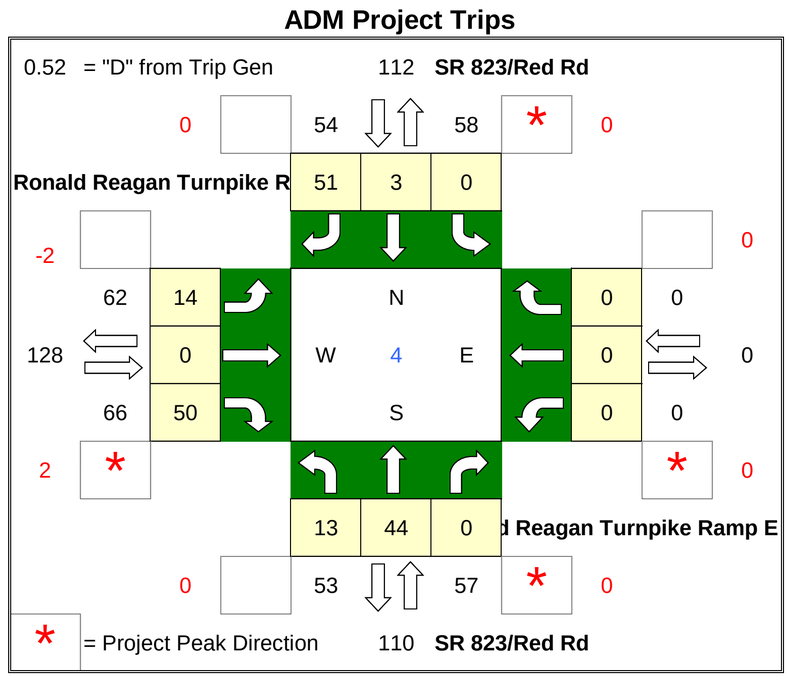
IN=	396
OUT=	467

	PD	#
N =	1.08%	9
E =	0.00%	0
S =	0.43%	4
W =	1.09%	9

2020 Background SF Adjustment



ADM Project Trips

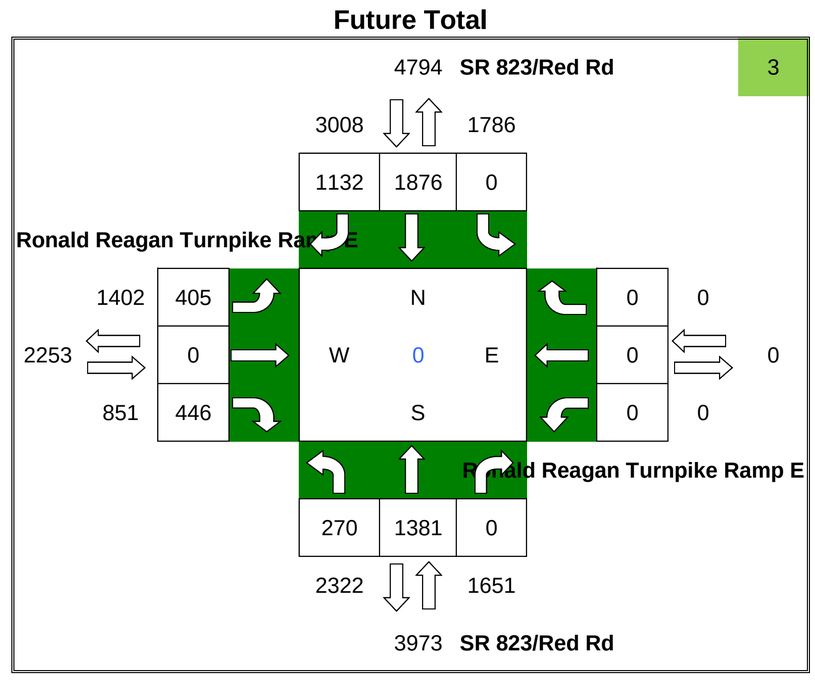


Project Trips

IN=	2,577
OUT=	2,753

	PD	#
N =	2.11%	112
E =	0.00%	0
S =	2.06%	110
W =	2.41%	128

Future Total



ADM/Graham

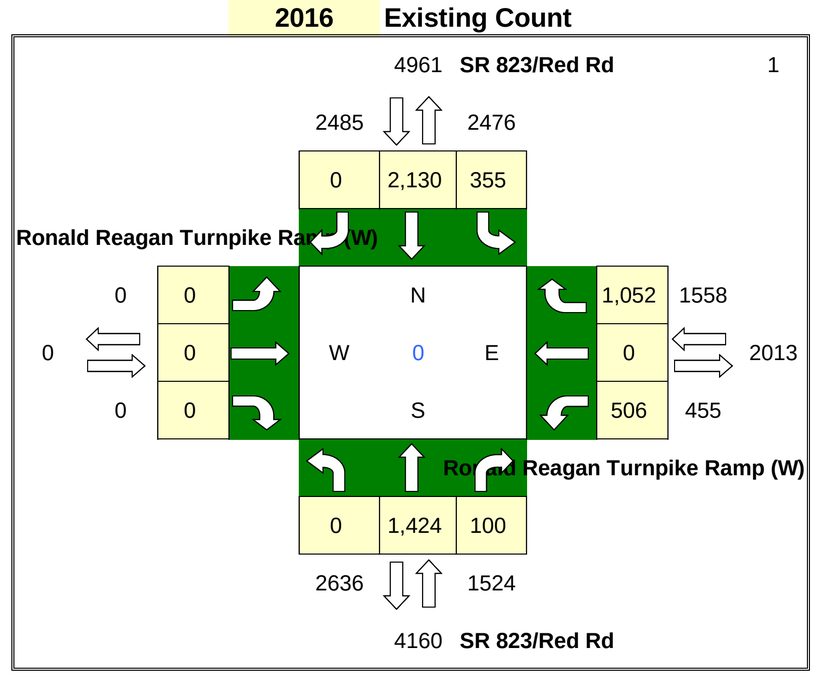
PM Turning Movement Volumes

N/S Roadway: SR 823/Red Rd

E/W Roadway: Ronald Reagan Turnpike Ramp (W)

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1.9% **Seasonal Factor =** 1.04

PHASE 1

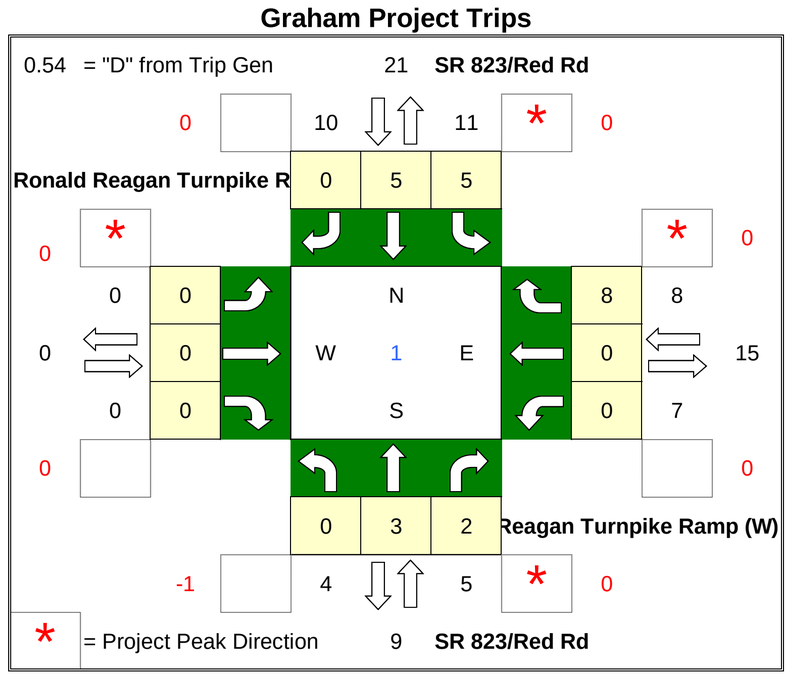
Project Trips

IN= 396

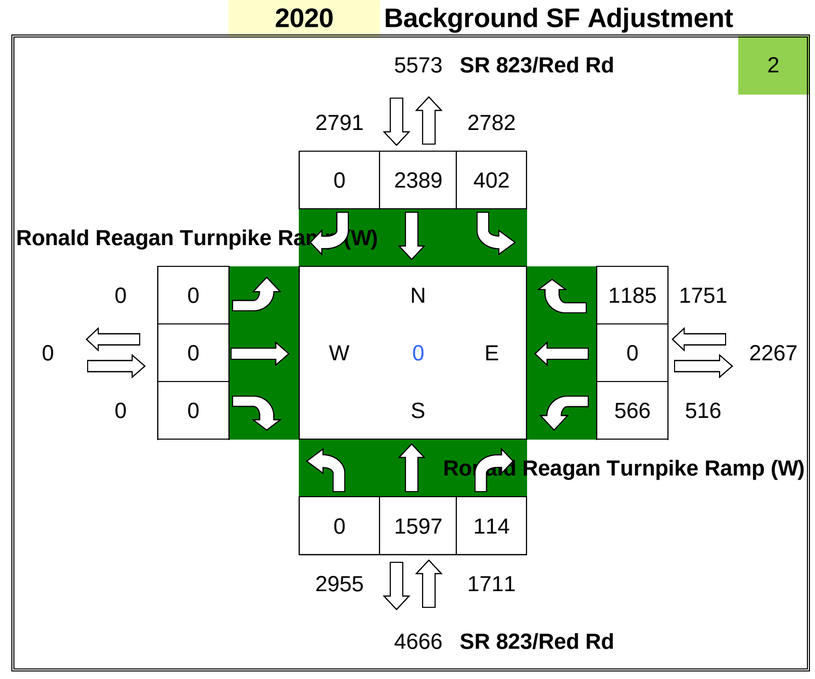
OUT= 467

	PD	#
N =	2.45%	21
E =	1.79%	15
S =	1.08%	9
W =	0.00%	0

Graham Project Trips



2020 Background SF Adjustment



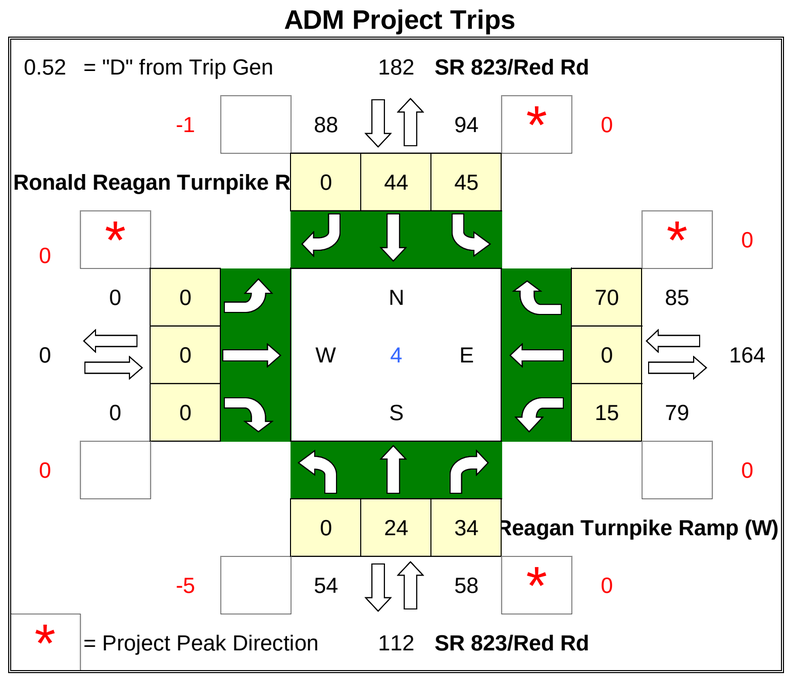
Project Trips

IN= 2,577

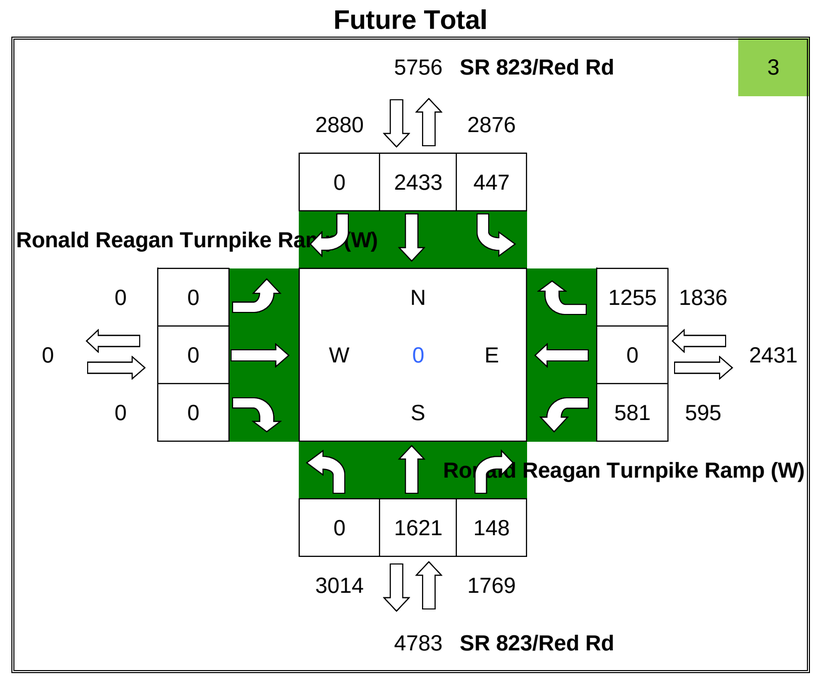
OUT= 2,753

	PD	#
N =	3.41%	182
E =	3.07%	164
S =	2.11%	112
W =	0.00%	0

ADM Project Trips



Future Total



ADM/Graham

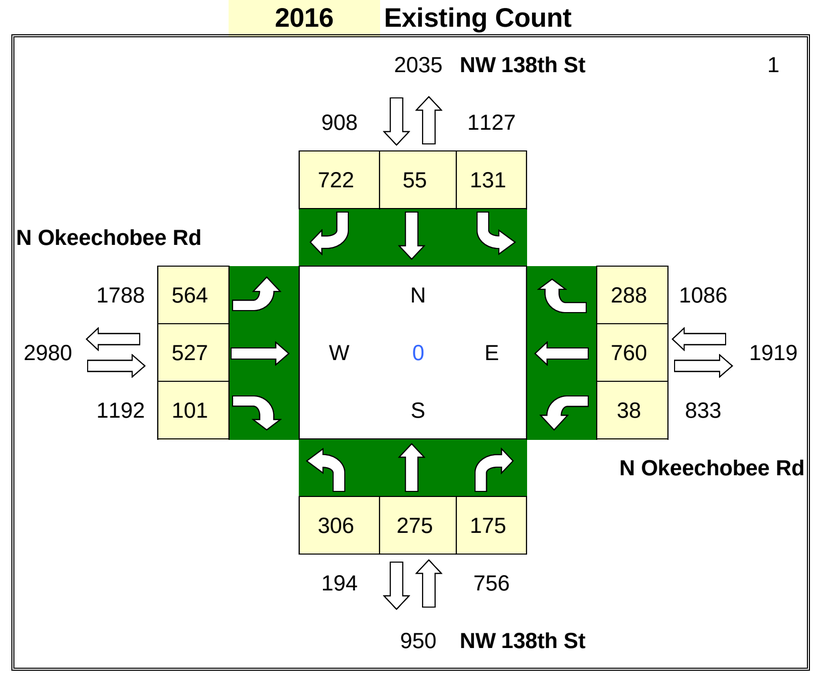
PM Turning Movement Volumes

N/S Roadway: NW 138th St

E/W Roadway: N Okeechobee Rd

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1.6% **Seasonal Factor =** 1.00

PHASE 1

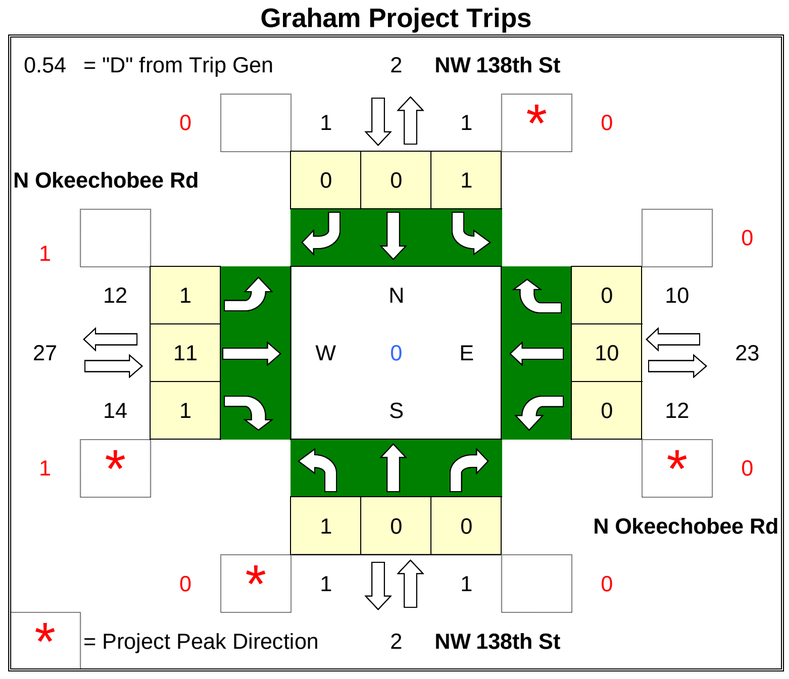
Project Trips

IN= 396

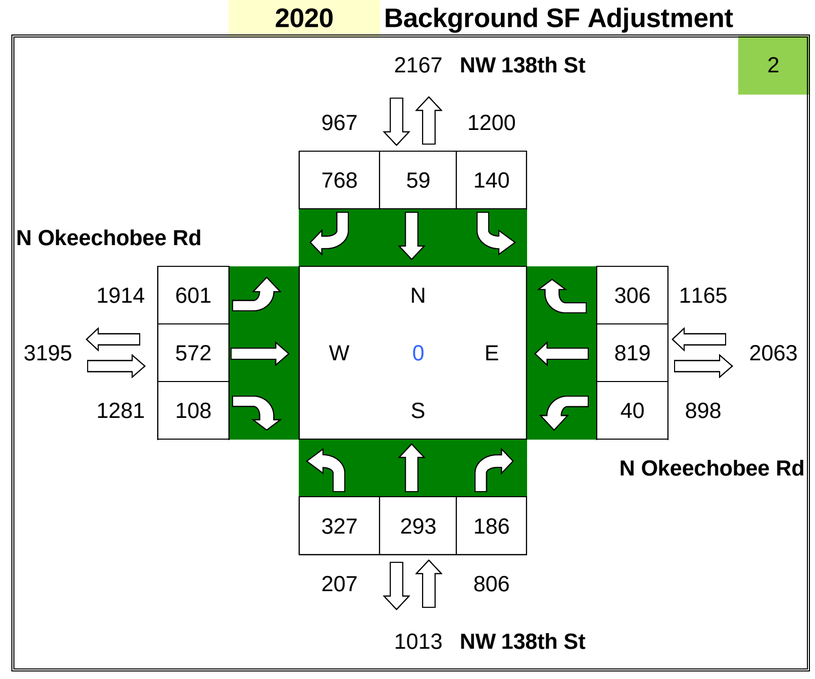
OUT= 467

	PD	#
N =	0.21%	2
E =	2.64%	23
S =	0.22%	2
W =	3.08%	27

Graham Project Trips



2020 Background SF Adjustment



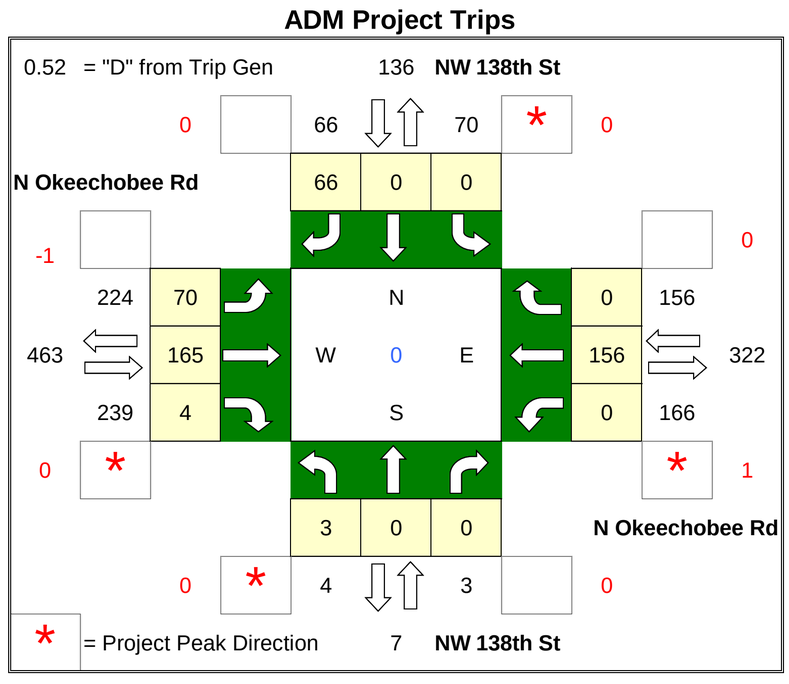
Project Trips

IN= 2,577

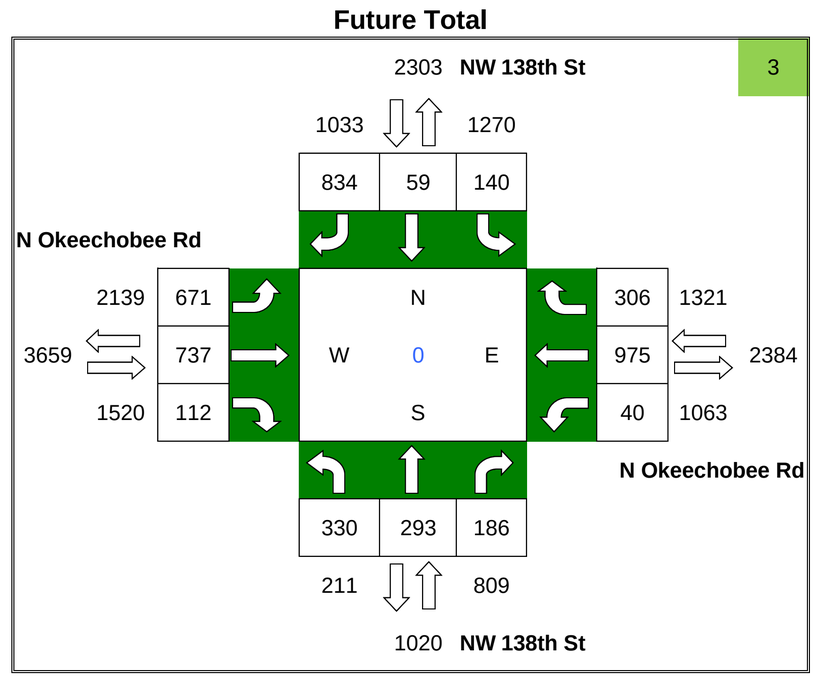
OUT= 2,753

	PD	#
N =	2.55%	136
E =	6.04%	322
S =	0.13%	7
W =	8.68%	463

ADM Project Trips



Future Total



ADM/Graham

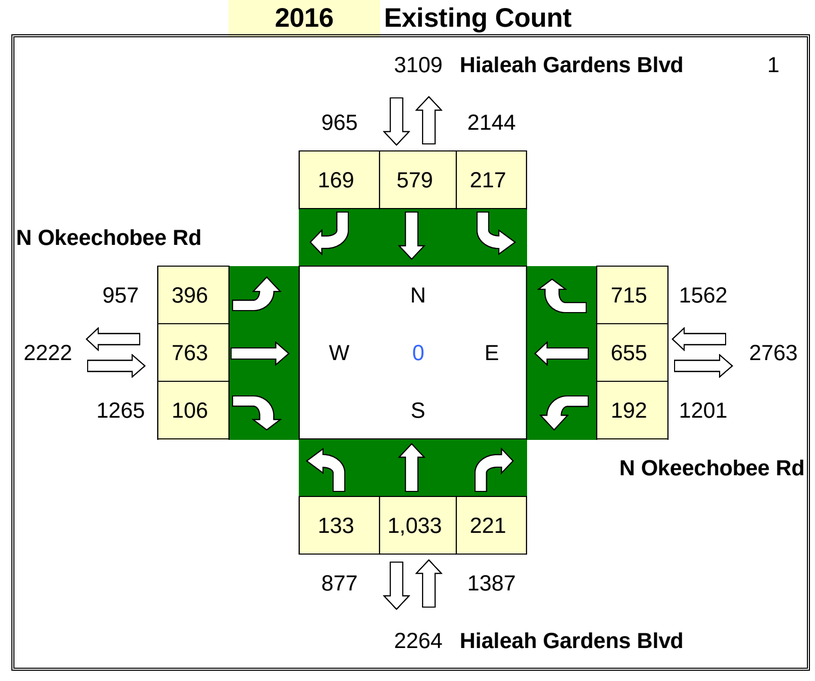
PM Turning Movement Volumes

N/S Roadway: Hialeah Gardens Blvd

E/W Roadway: N Okeechobee Rd

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1.6% **Seasonal Factor =** 1.00

PHASE 1

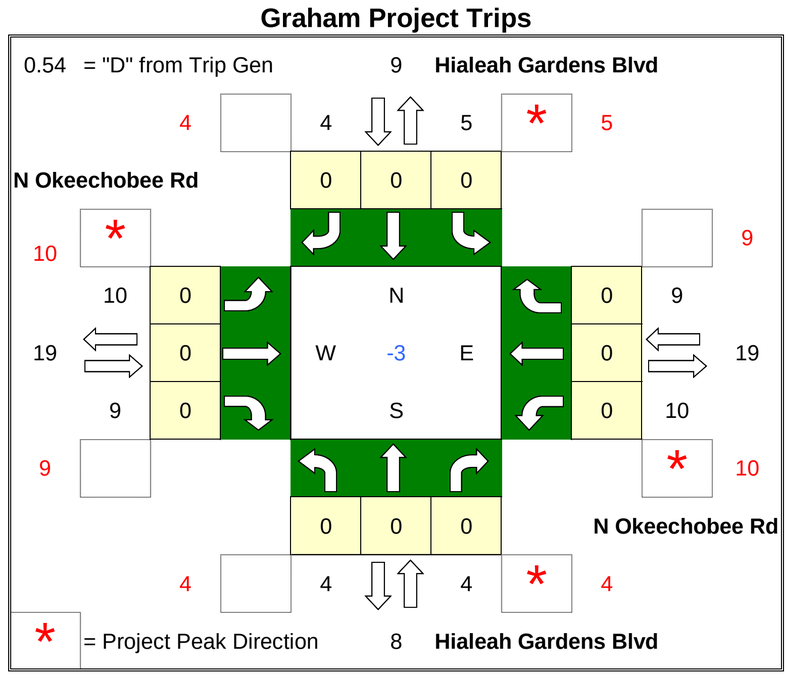
Graham Project Trips

Project Trips

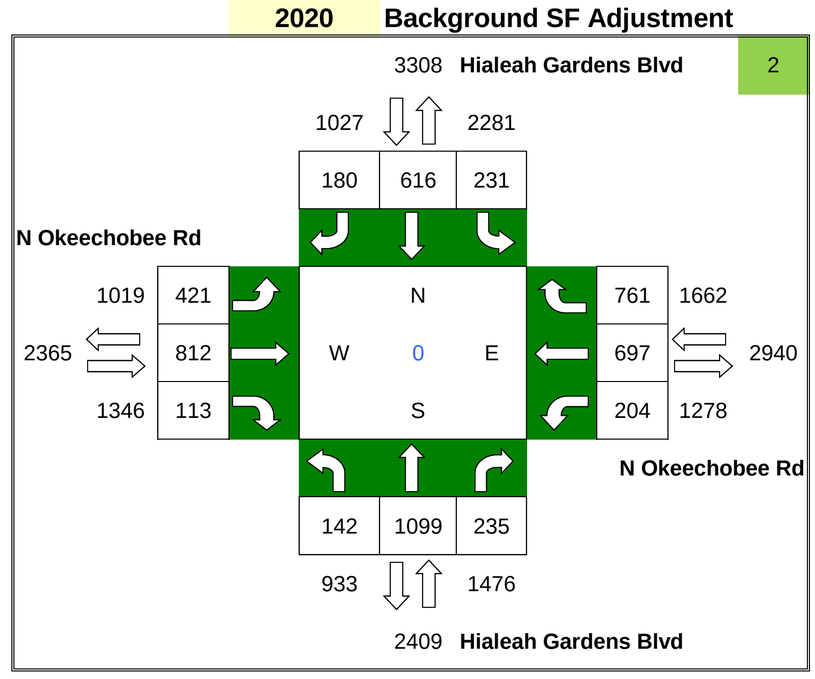
IN= 396

OUT= 467

	PD	#
N =	1.02%	9
E =	2.22%	19
S =	0.94%	8
W =	2.15%	19



2020 Background SF Adjustment



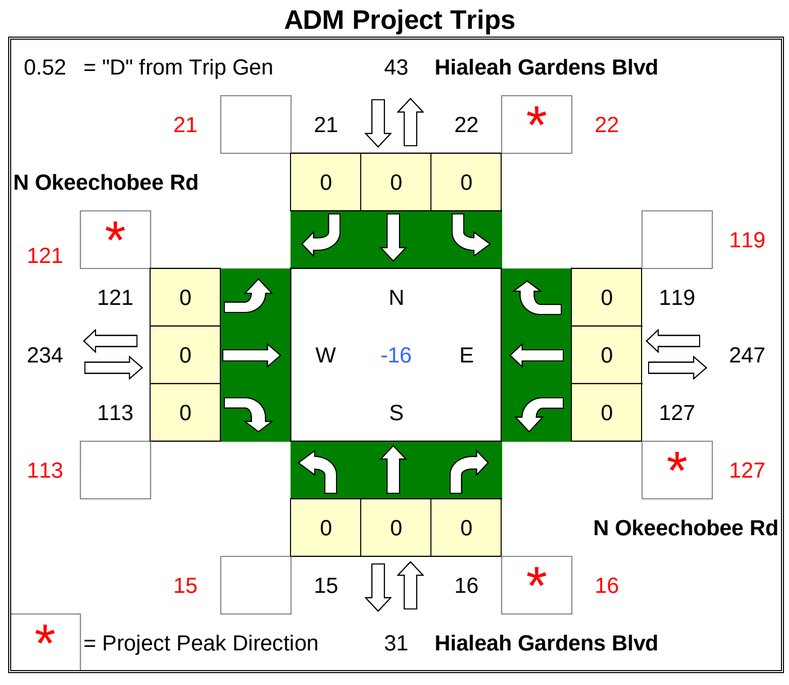
ADM Project Trips

Project Trips

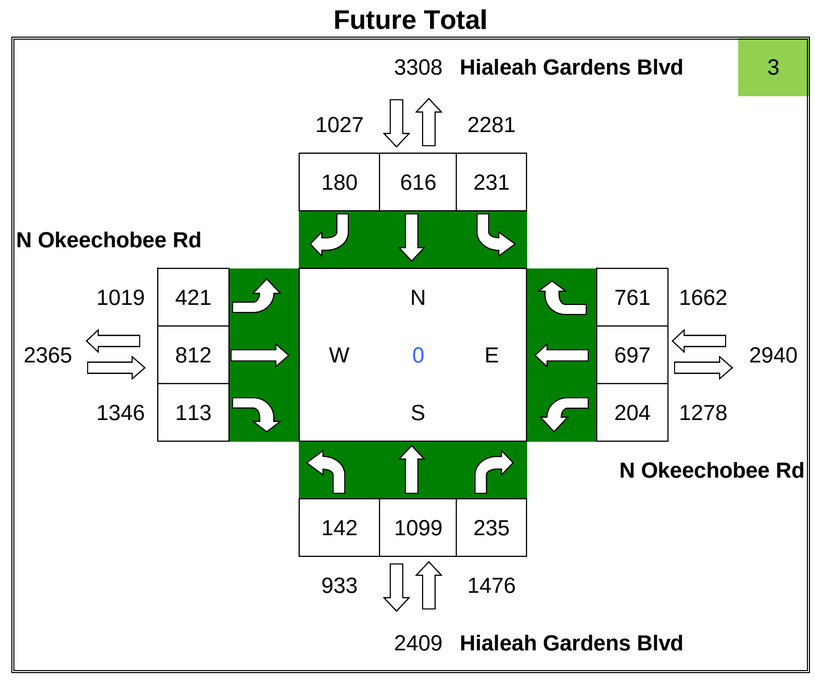
IN= 2,577

OUT= 2,753

	PD	#
N =	0.81%	43
E =	4.63%	247
S =	0.58%	31
W =	4.39%	234



Future Total



ADM/Graham

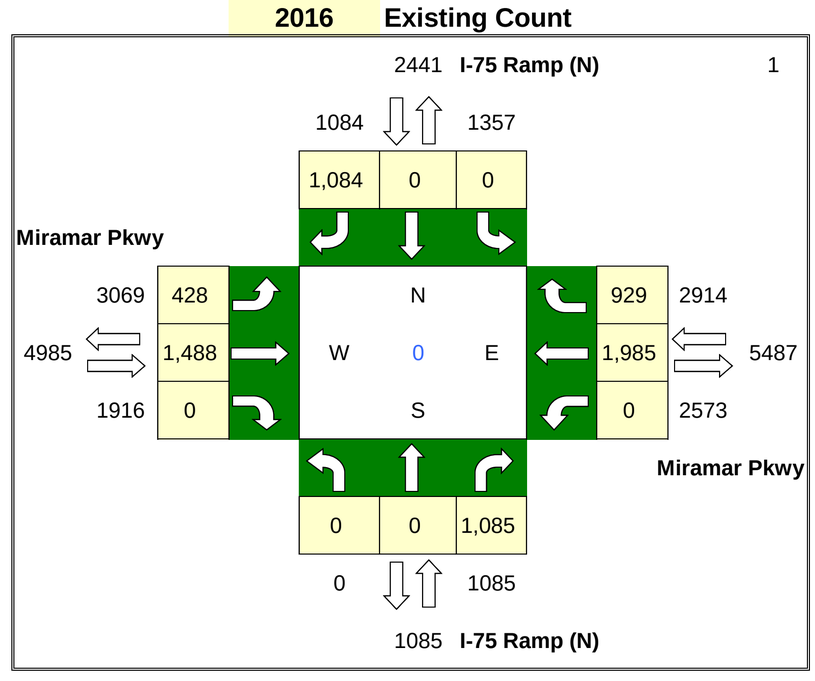
PM Turning Movement Volumes

N/S Roadway: I-75 Ramp (N)

E/W Roadway: Miramar Pkwy

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1.2% **Seasonal Factor =** 1.03

PHASE 1

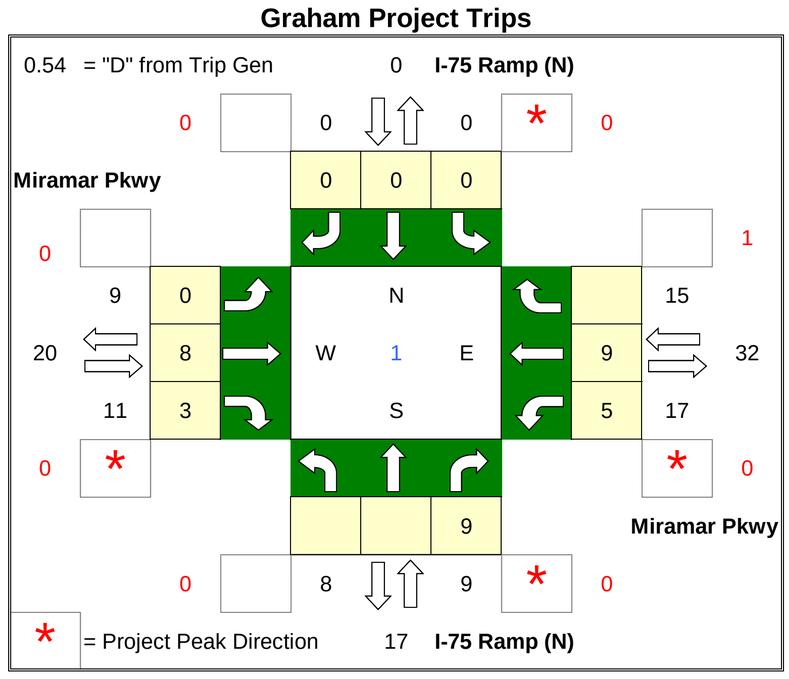
Project Trips

IN= 396

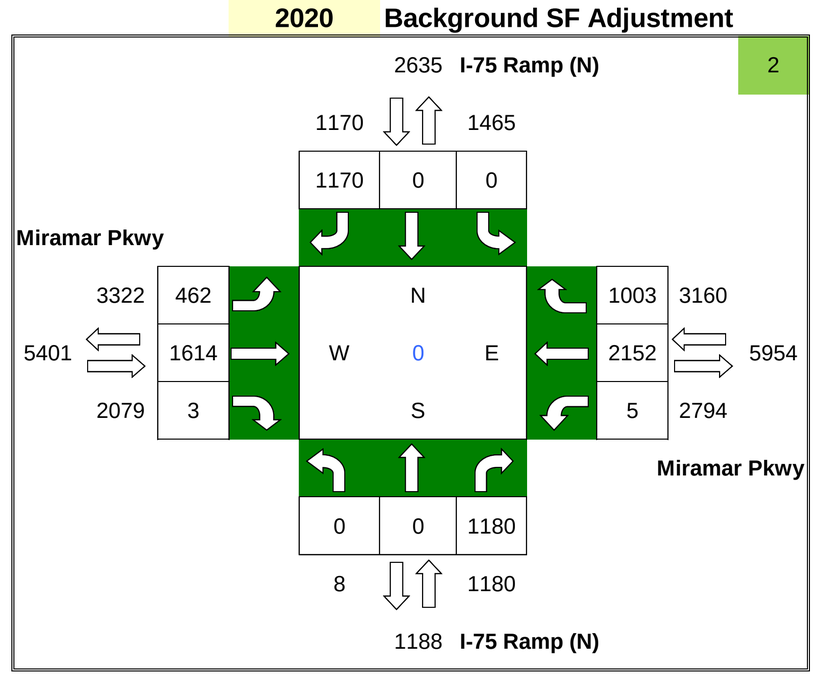
OUT= 467

	PD	#
N =	0.05%	0
E =	3.71%	32
S =	2.00%	17
W =	2.32%	20

Graham Project Trips



2020 Background SF Adjustment



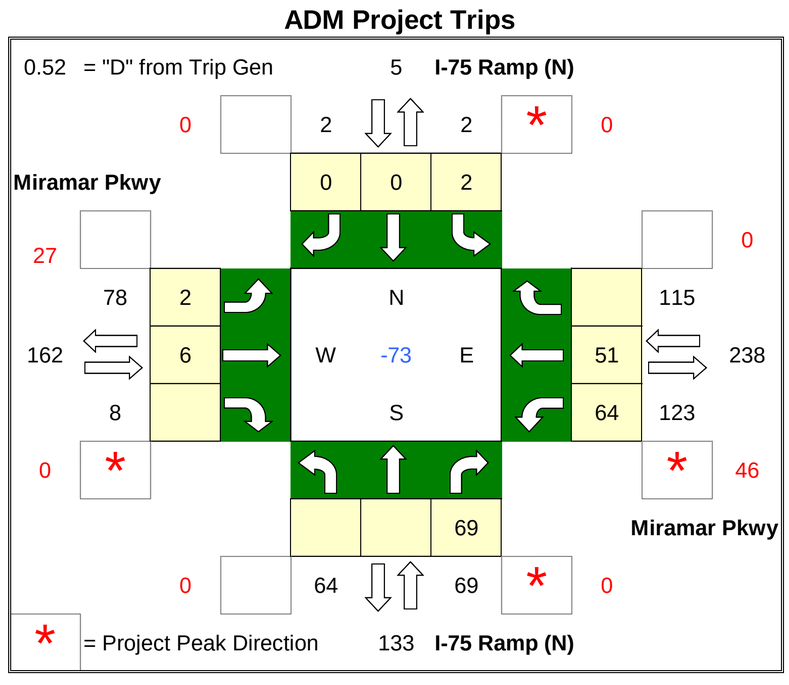
Project Trips

IN= 2,577

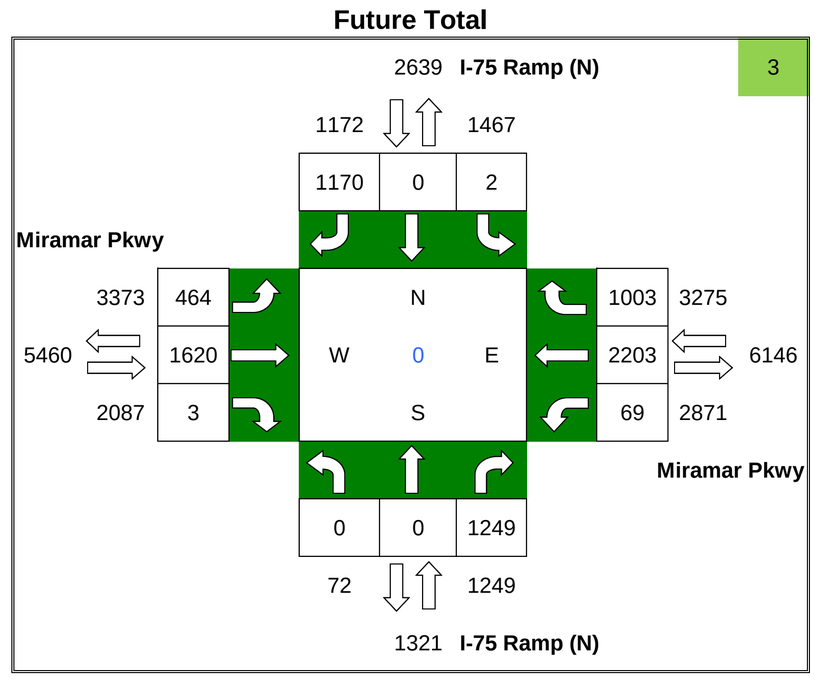
OUT= 2,753

	PD	#
N =	0.09%	5
E =	4.46%	238
S =	2.50%	133
W =	3.04%	162

ADM Project Trips



Future Total



ADM/Graham

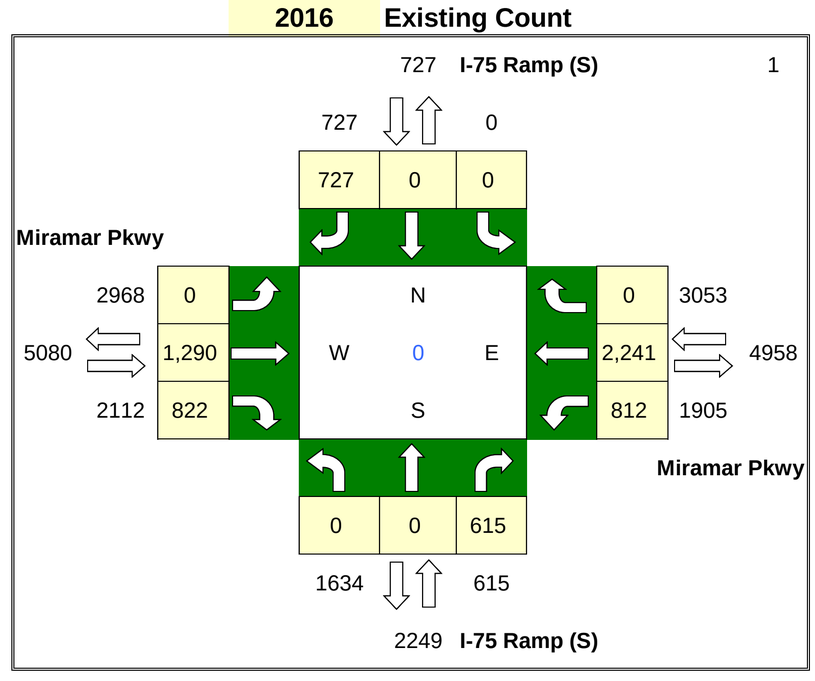
PM Turning Movement Volumes

N/S Roadway: I-75 Ramp (S)

E/W Roadway: Miramar Pkwy

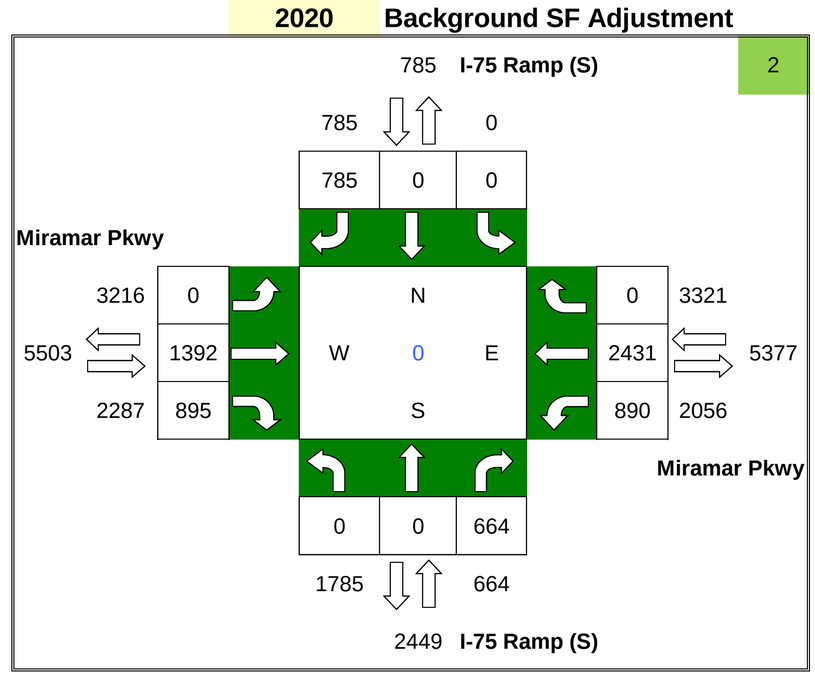
Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1.2% **Seasonal Factor =** 1.03

2020 Background SF Adjustment



PHASE 1

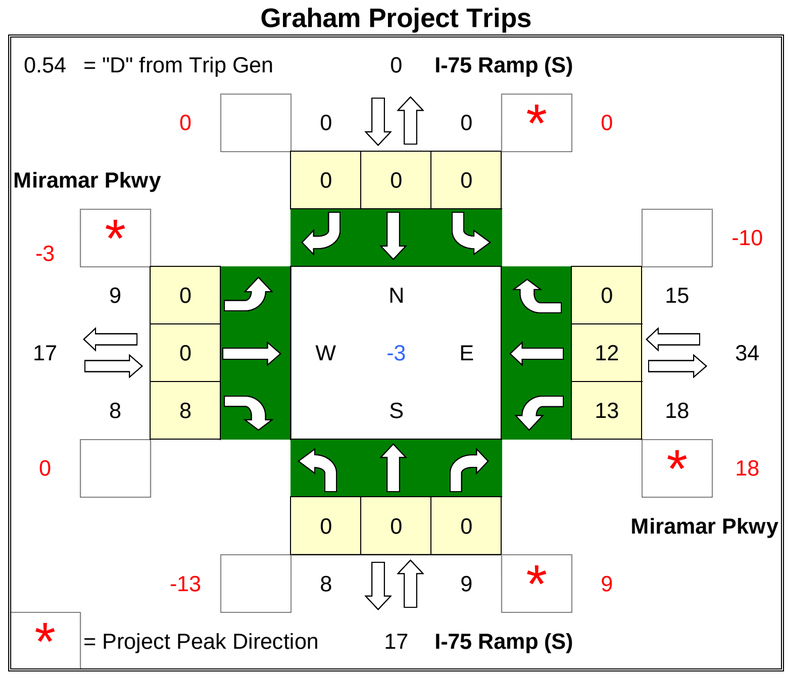
Project Trips

IN= 396

OUT= 467

	PD	#
N =	0.00%	0
E =	3.91%	34
S =	1.99%	17
W =	1.92%	17

Graham Project Trips



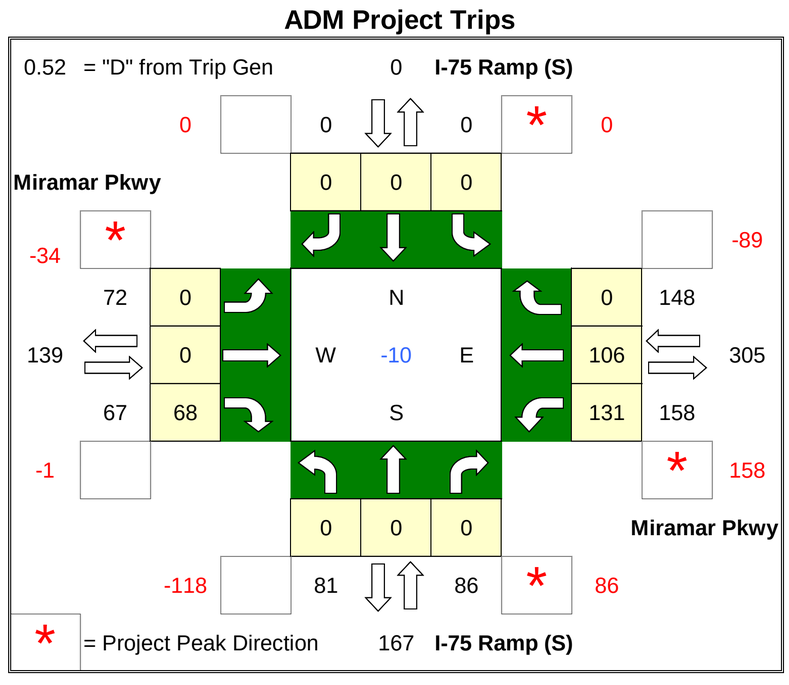
Project Trips

IN= 2,577

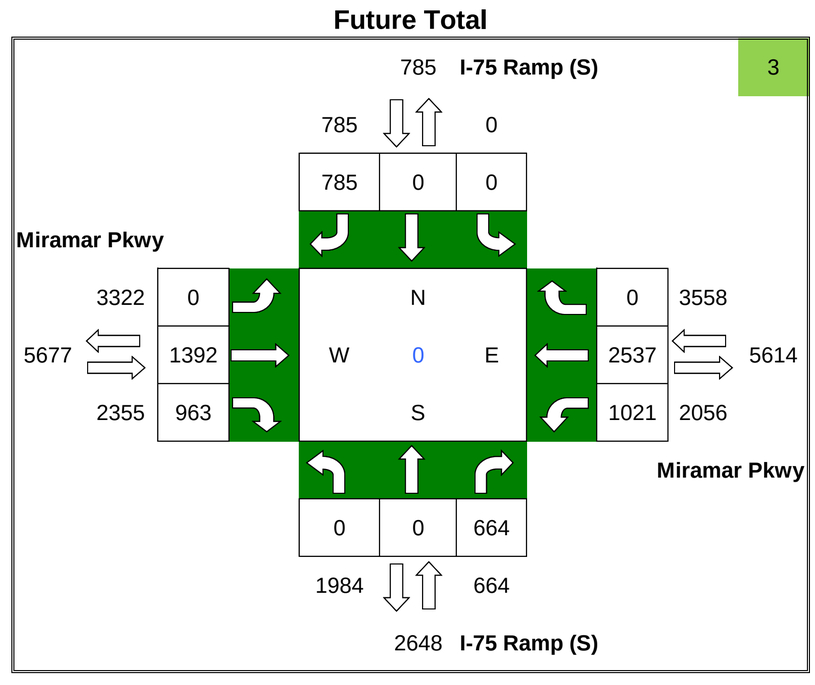
OUT= 2,753

	PD	#
N =	0.00%	0
E =	5.73%	305
S =	3.13%	167
W =	2.60%	139

ADM Project Trips



Future Total



ADM/Graham

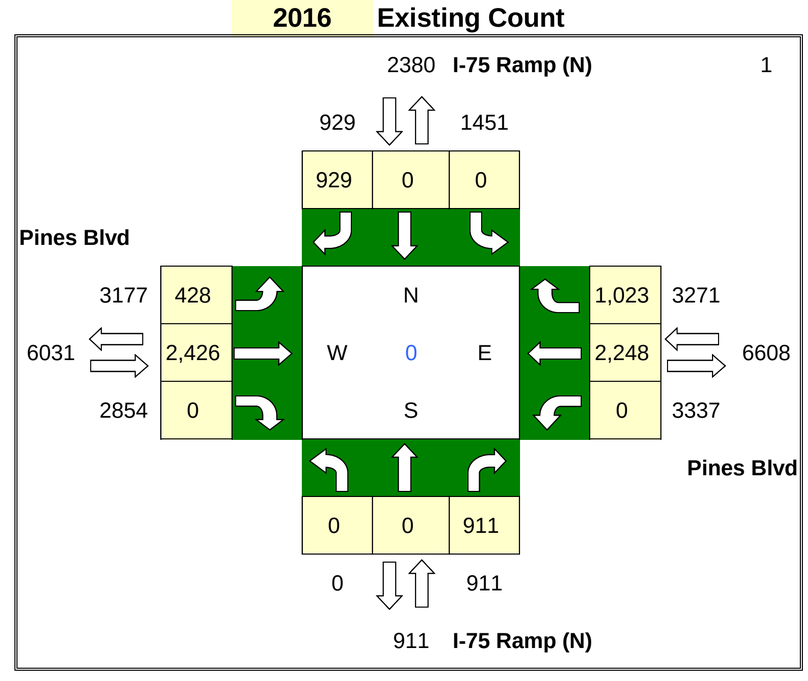
PM Turning Movement Volumes

N/S Roadway: I-75 Ramp (N)

E/W Roadway: Pines Blvd

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1% **Seasonal Factor =** 1.03

PHASE 1

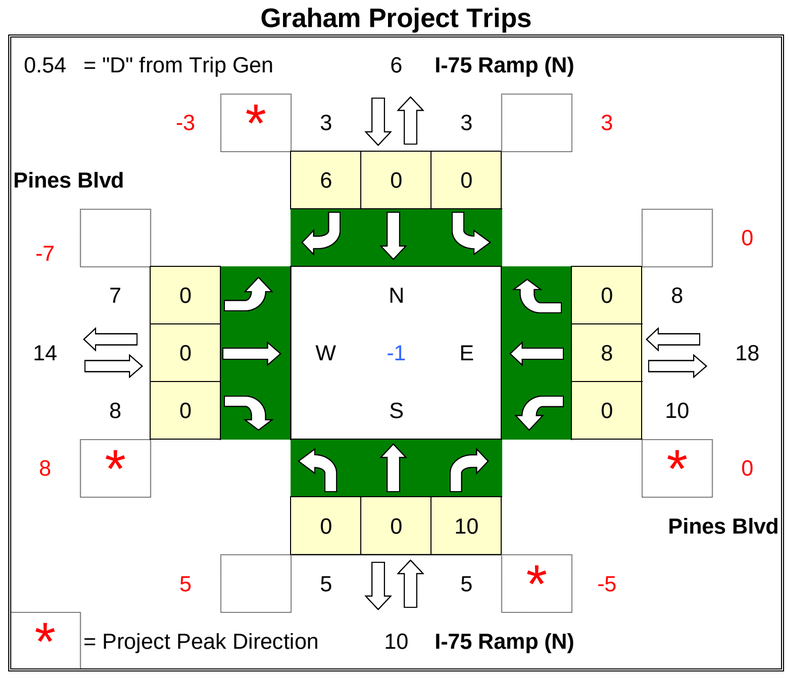
Project Trips

IN= 396

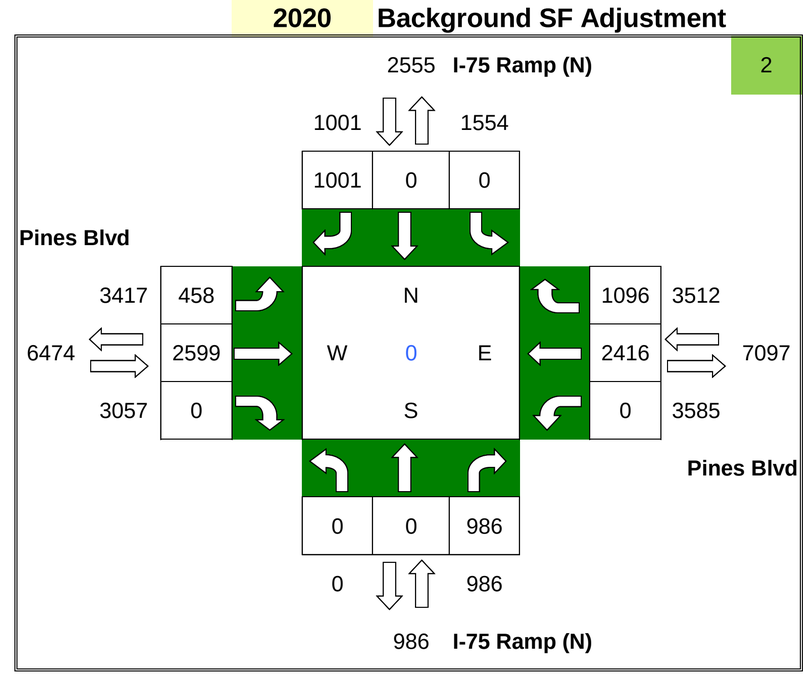
OUT= 467

	PD	#
N =	0.69%	6
E =	2.11%	18
S =	1.14%	10
W =	1.66%	14

Graham Project Trips



2020 Background SF Adjustment



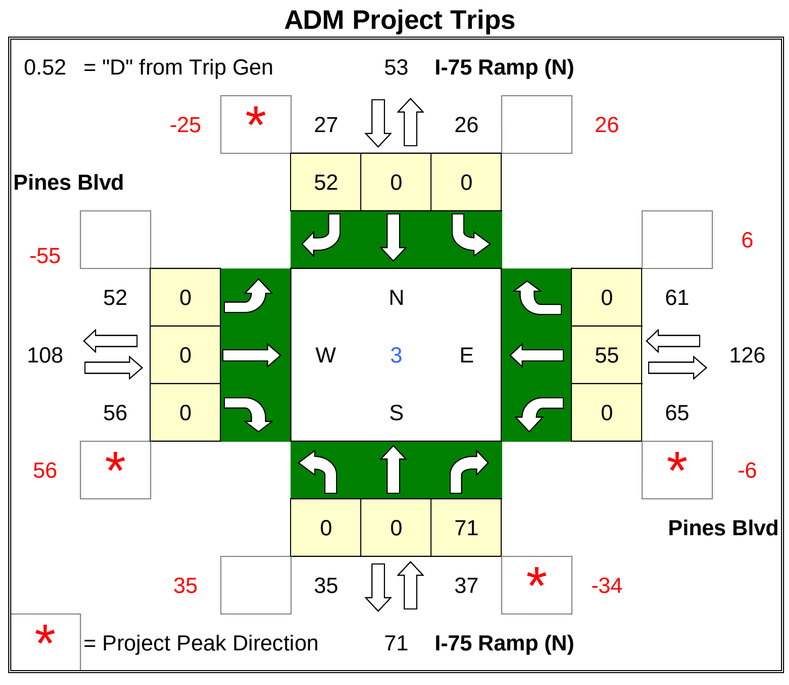
Project Trips

IN= 2,577

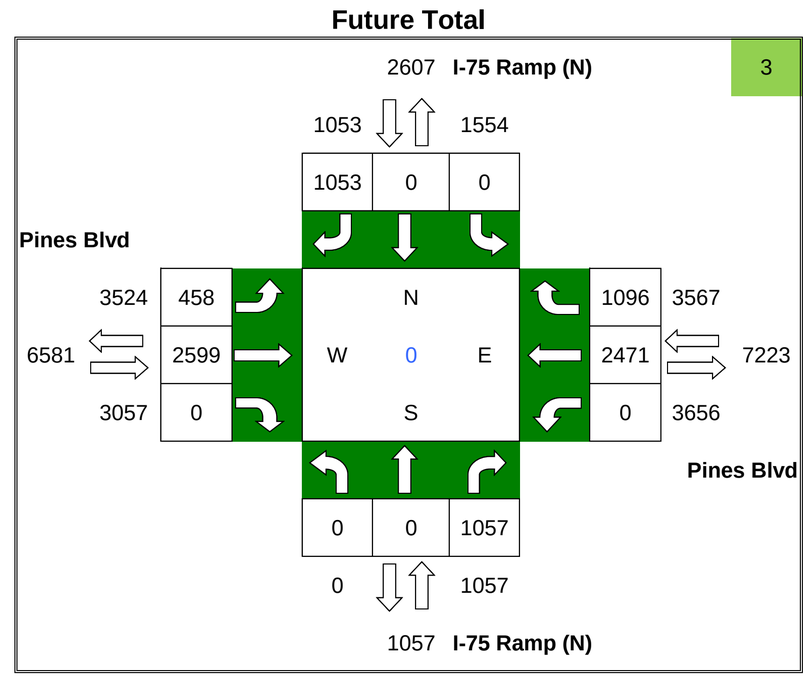
OUT= 2,753

	PD	#
N =	0.99%	53
E =	2.37%	126
S =	1.34%	71
W =	2.02%	108

ADM Project Trips



Future Total



ADM/Graham

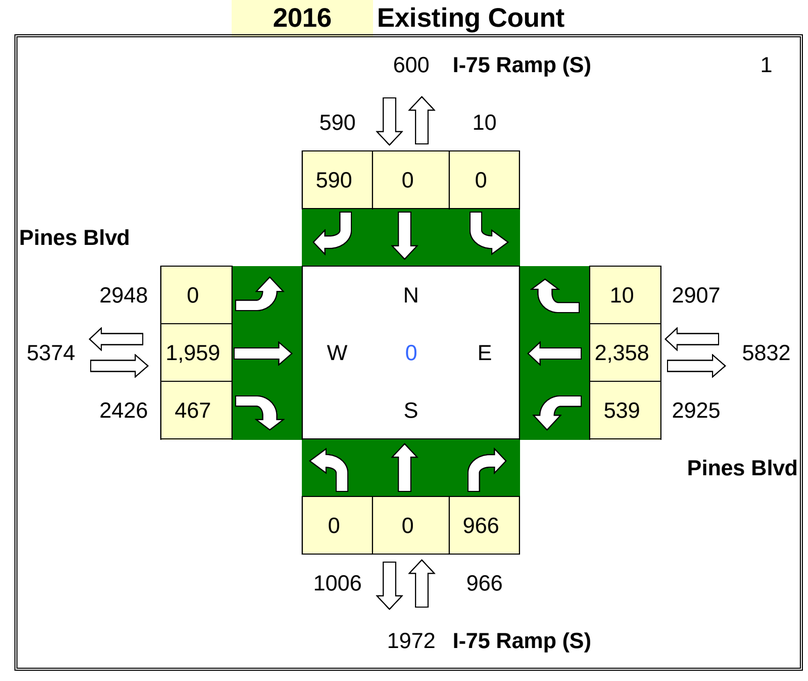
PM Turning Movement Volumes

N/S Roadway: I-75 Ramp (S)

E/W Roadway: Pines Blvd

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1% **Seasonal Factor =** 1.03

PHASE 1

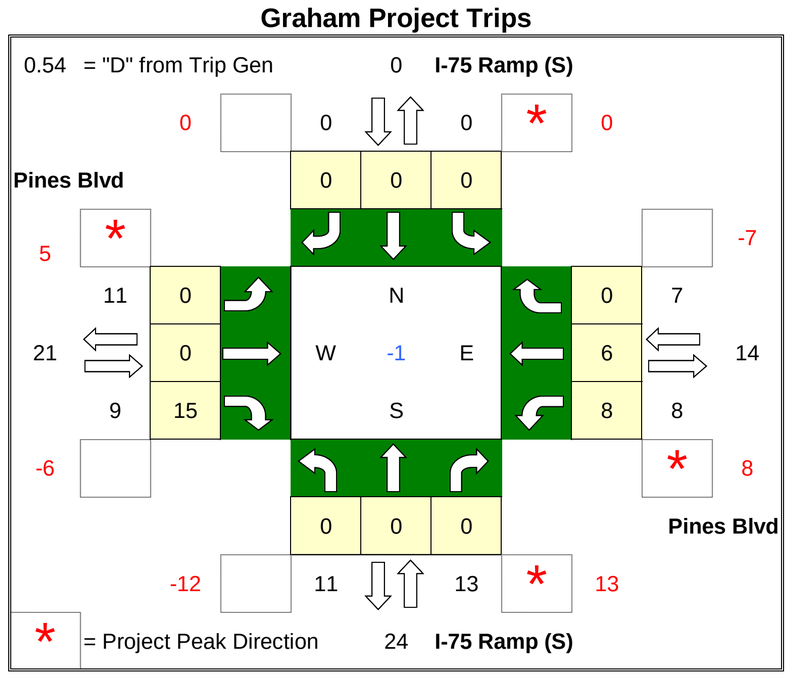
Project Trips

IN= 396

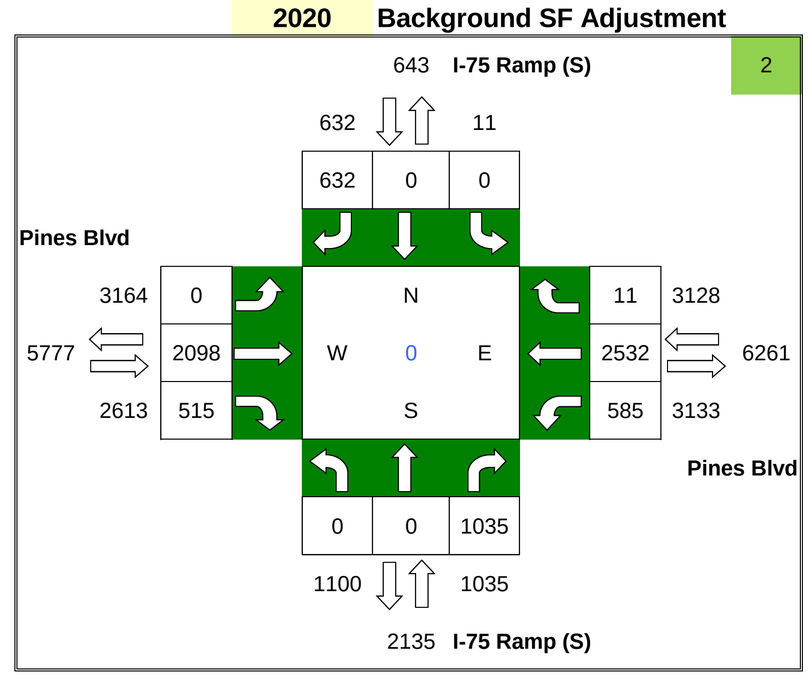
OUT= 467

	PD	#
N =	0.00%	0
E =	1.66%	14
S =	2.76%	24
W =	2.39%	21

Graham Project Trips



2020 Background SF Adjustment



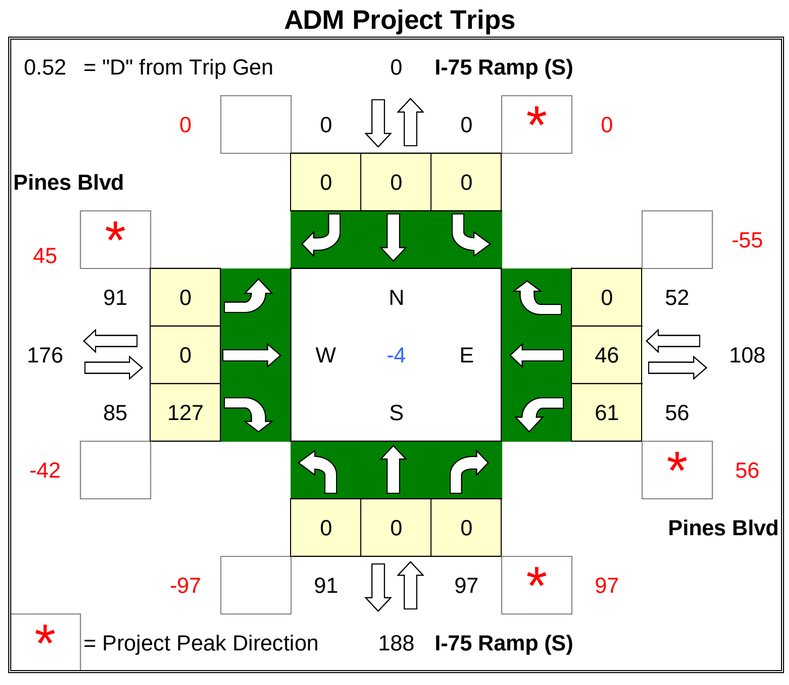
Project Trips

IN= 2,577

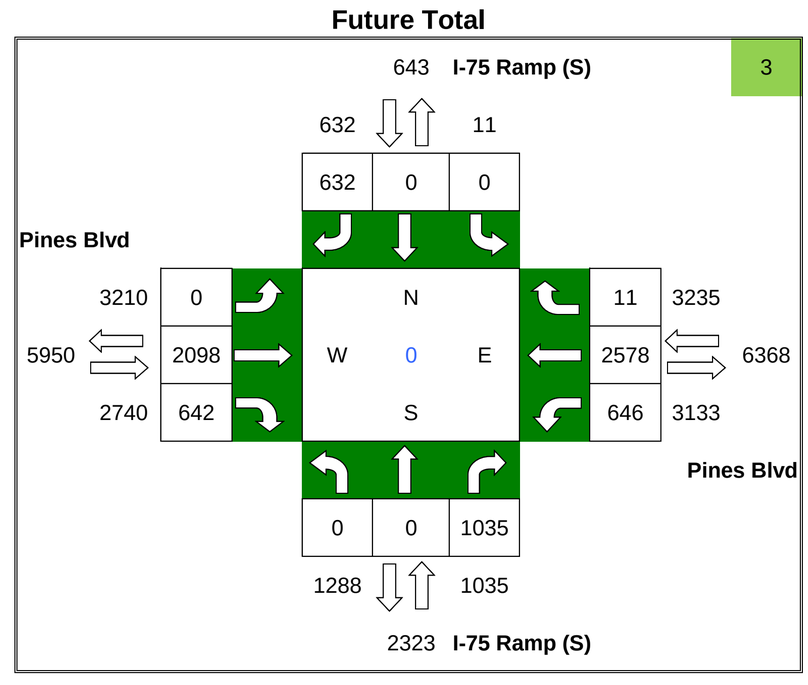
OUT= 2,753

	PD	#
N =	0.00%	0
E =	2.02%	108
S =	3.53%	188
W =	3.31%	176

ADM Project Trips



Future Total



ADM/Graham

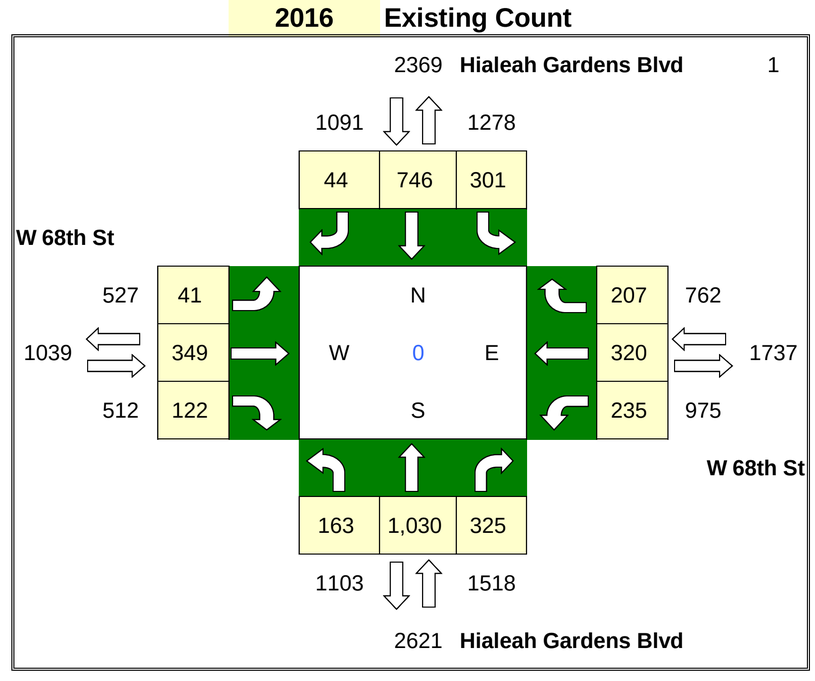
PM Turning Movement Volumes

N/S Roadway: Hialeah Gardens Blvd

E/W Roadway: W 68th St

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1.6% **Seasonal Factor =** 1.00

PHASE 1

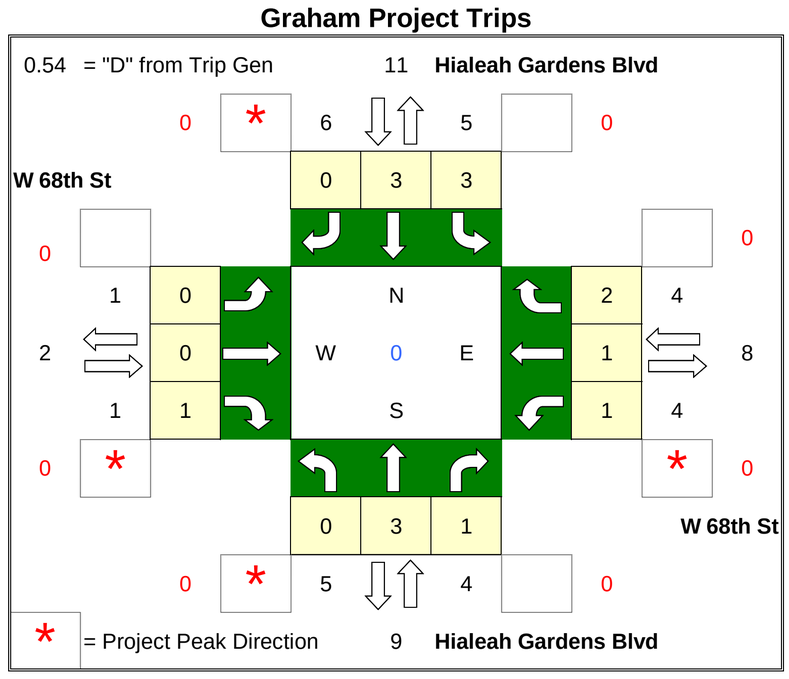
Project Trips

IN= 396

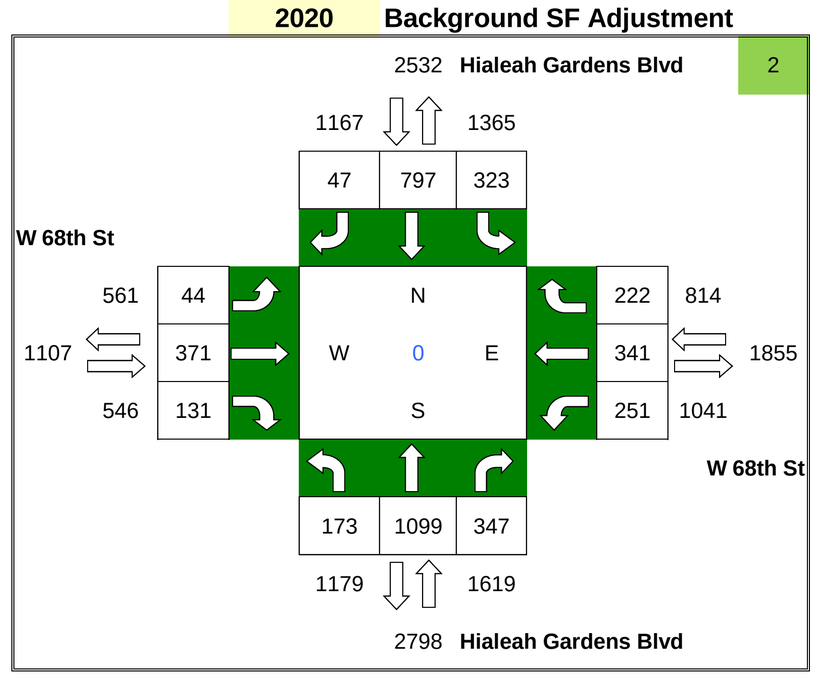
OUT= 467

	PD	#
N =	1.28%	11
E =	0.93%	8
S =	1.02%	9
W =	0.28%	2

Graham Project Trips



2020 Background SF Adjustment



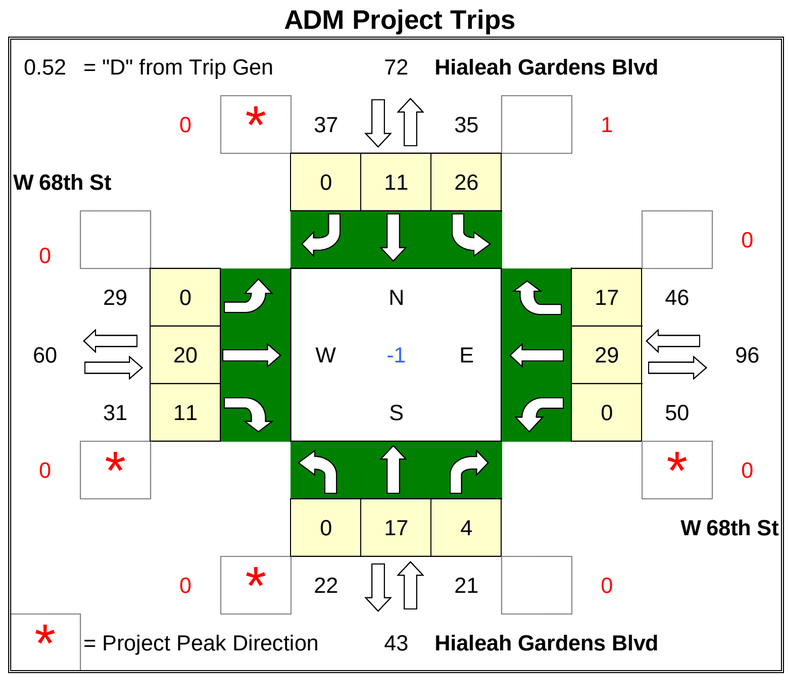
Project Trips

IN= 2,577

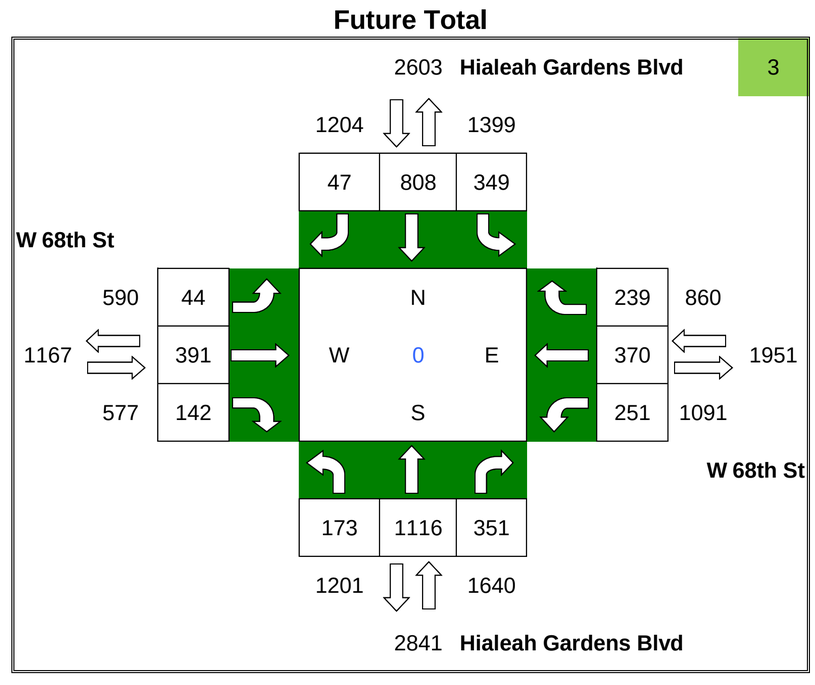
OUT= 2,753

	PD	#
N =	1.36%	72
E =	1.80%	96
S =	0.81%	43
W =	1.13%	60

ADM Project Trips



Future Total



ADM/Graham

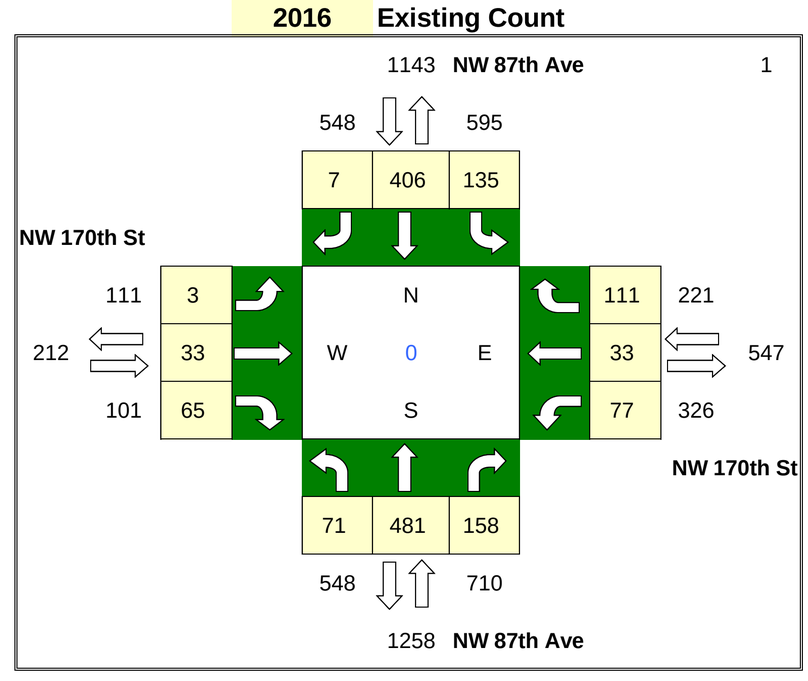
PM Turning Movement Volumes

N/S Roadway: NW 87th Ave

E/W Roadway: NW 170th St

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1%

Seasonal Factor = 1.00

PHASE 1

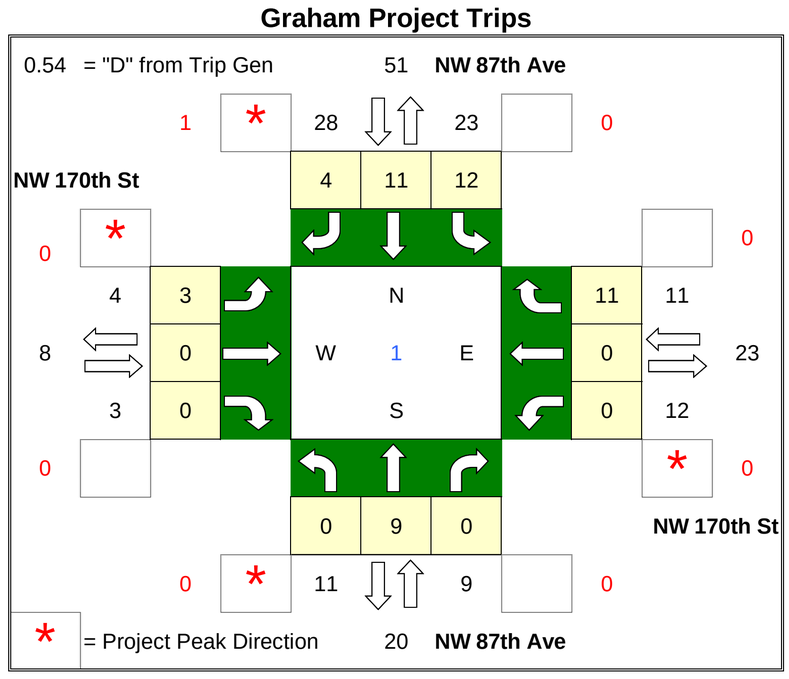
Graham Project Trips

Project Trips

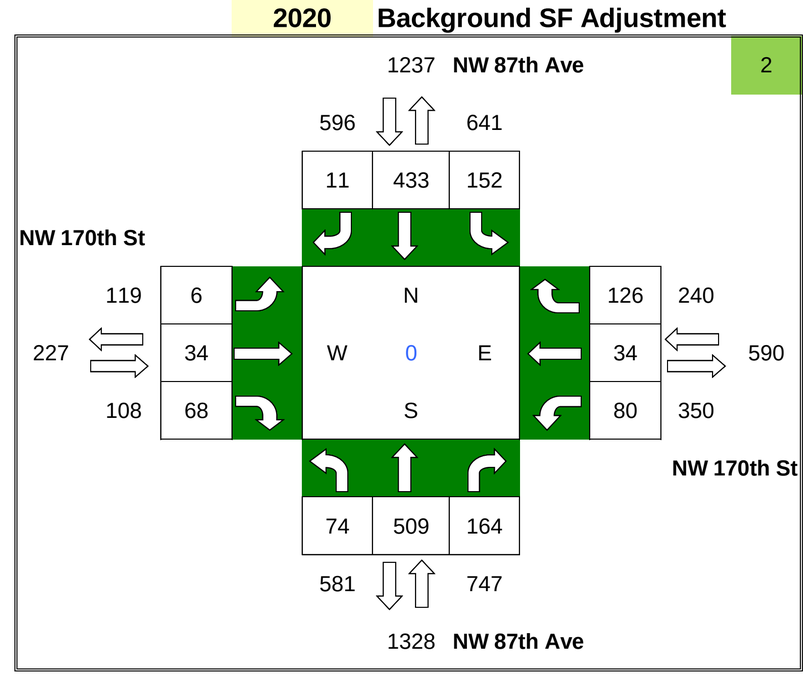
IN= 396

OUT= 467

	PD	#
N =	5.89%	51
E =	2.67%	23
S =	2.36%	20
W =	0.87%	8



2020 Background SF Adjustment



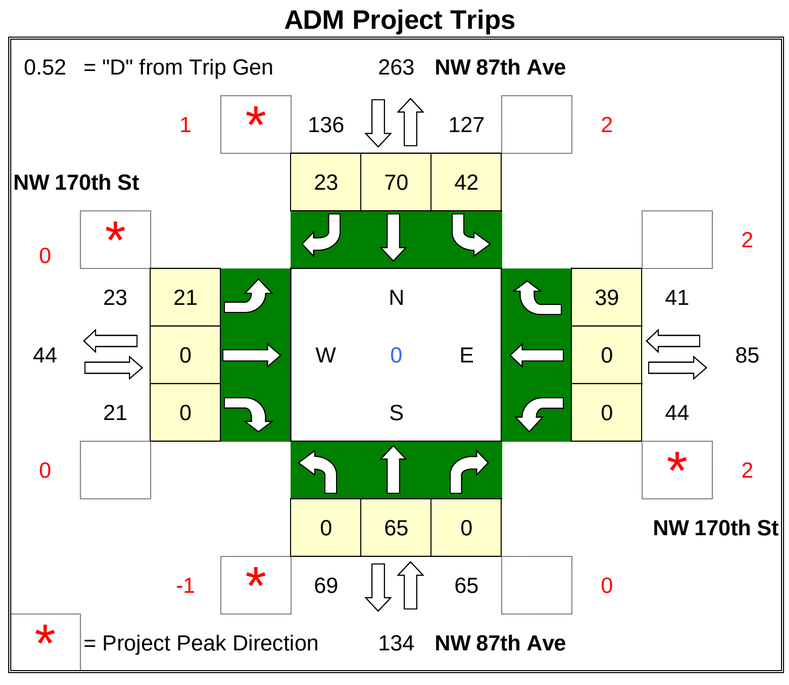
ADM Project Trips

Project Trips

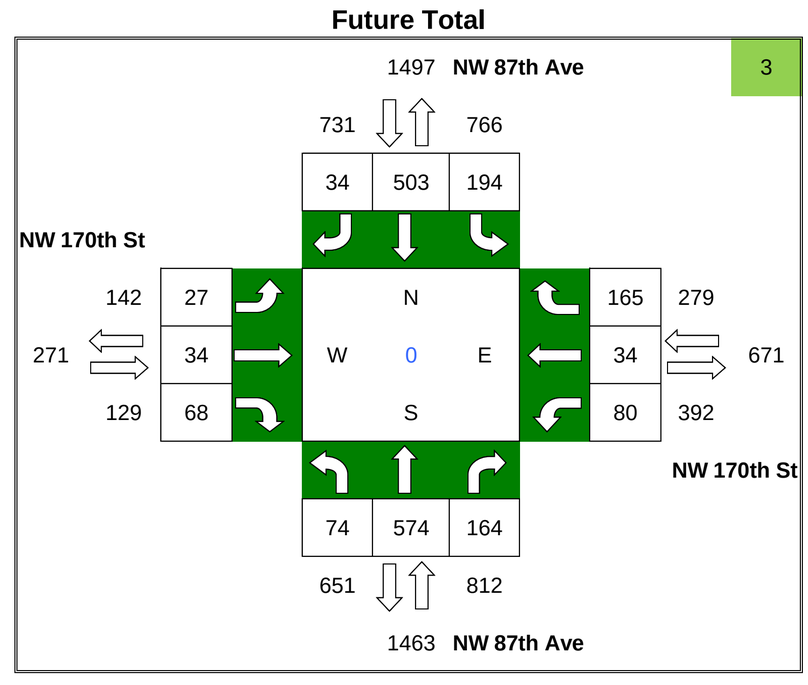
IN= 2,577

OUT= 2,753

	PD	#
N =	4.93%	263
E =	1.59%	85
S =	2.51%	134
W =	0.83%	44



Future Total



ADM/Graham

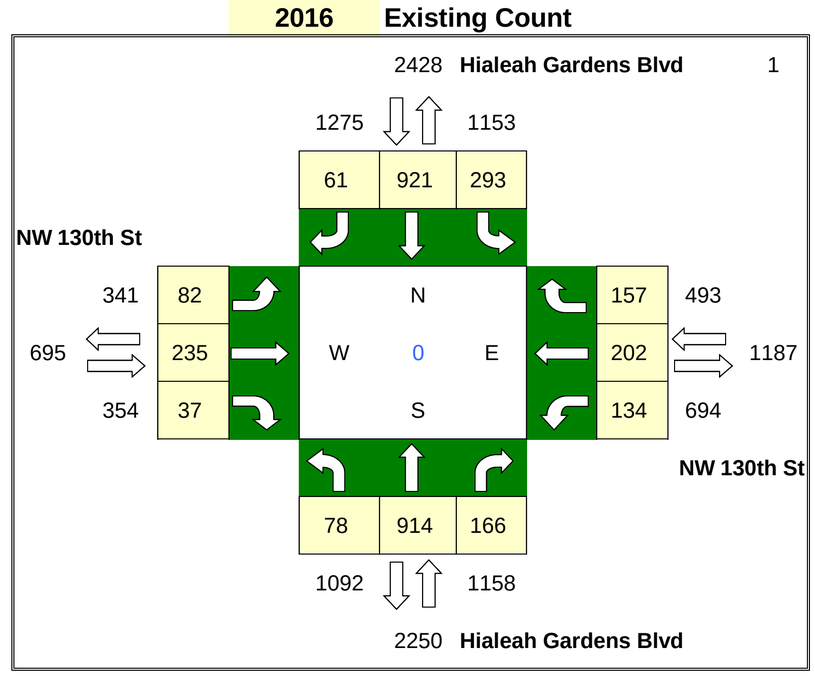
PM Turning Movement Volumes

N/S Roadway: Hialeah Gardens Blvd

E/W Roadway: NW 130th St

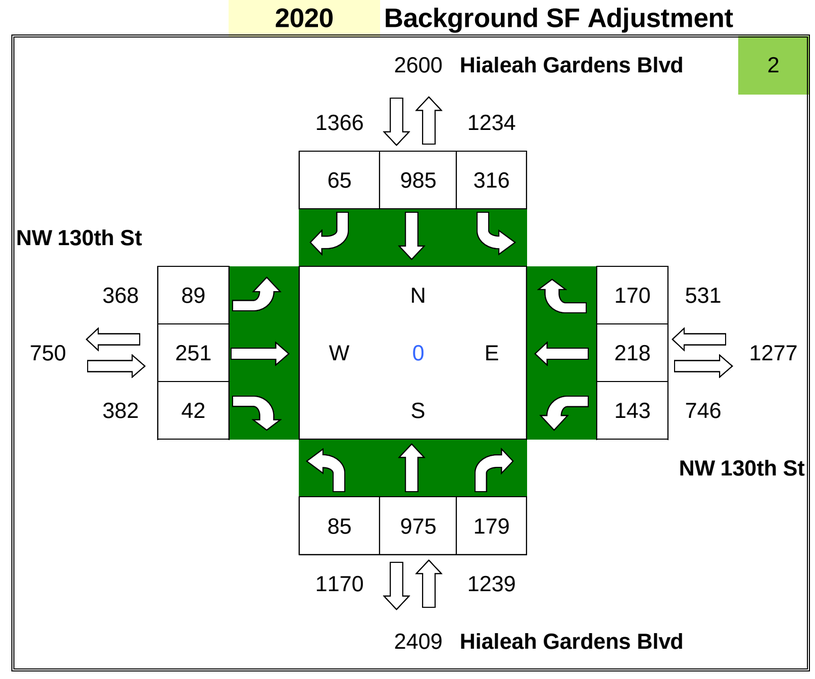
Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1.6% **Seasonal Factor =** 1.00

2020 Background SF Adjustment



PHASE 1

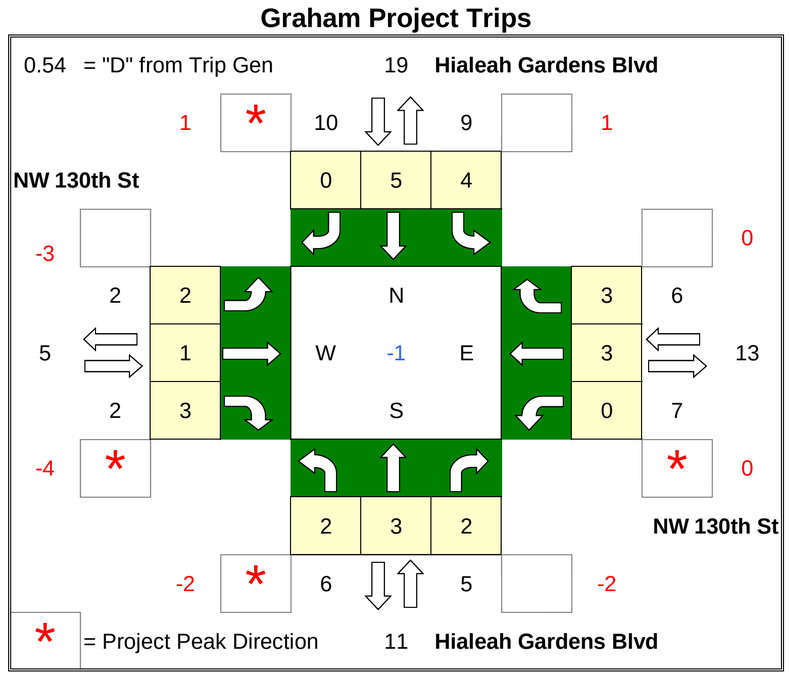
Graham Project Trips

Project Trips

IN= 396

OUT= 467

	PD	#
N =	2.24%	19
E =	1.49%	13
S =	1.28%	11
W =	0.53%	5



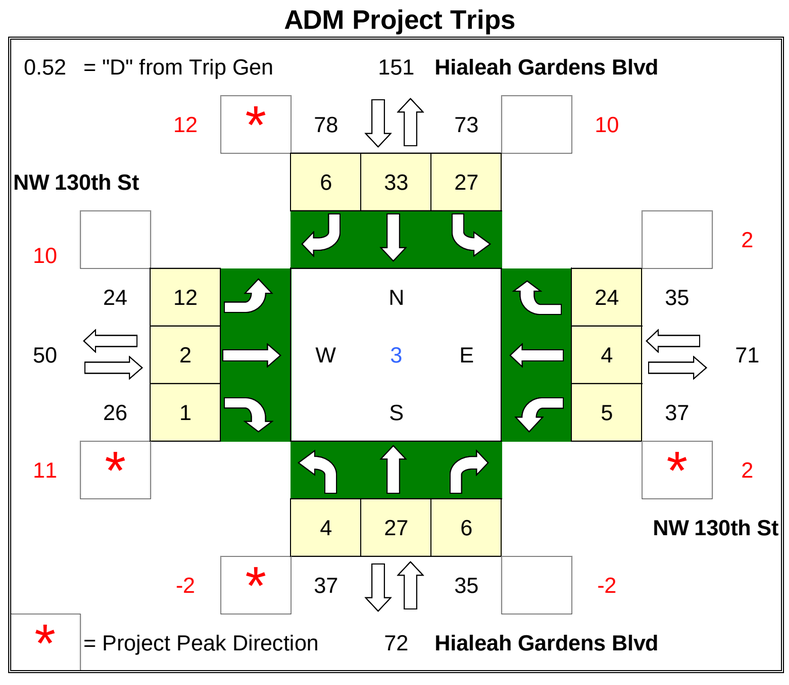
ADM Project Trips

Project Trips

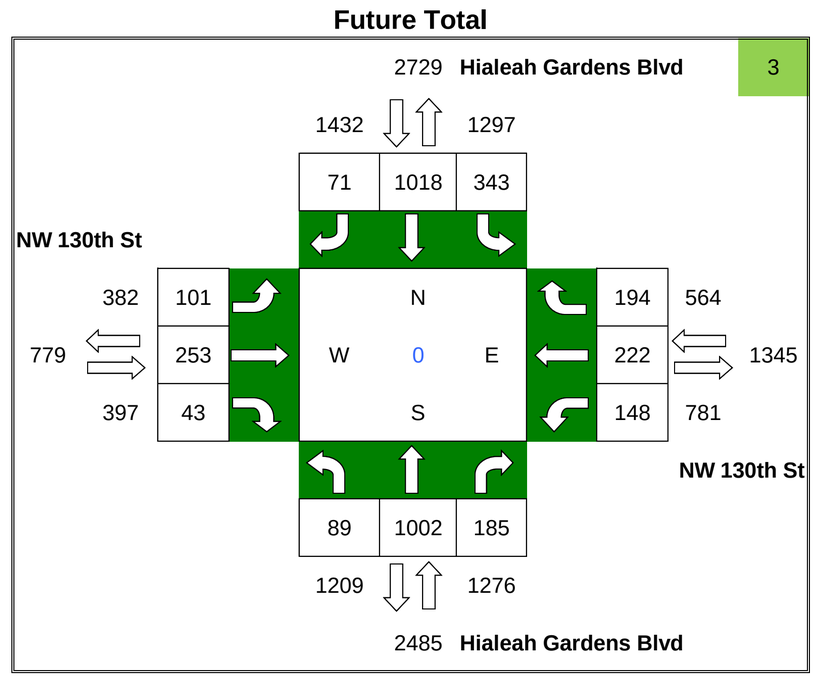
IN= 2,577

OUT= 2,753

	PD	#
N =	2.84%	151
E =	1.34%	71
S =	1.36%	72
W =	0.93%	50



Future Total



ADM/Graham

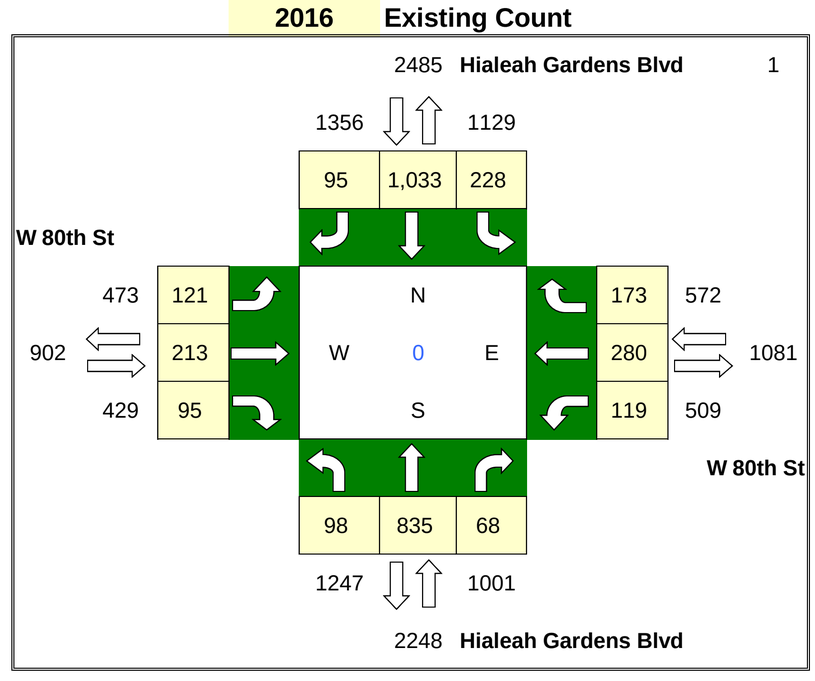
PM Turning Movement Volumes

N/S Roadway: Hialeah Gardens Blvd

E/W Roadway: W 80th St

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1.6% **Seasonal Factor =** 1.00

PHASE 1

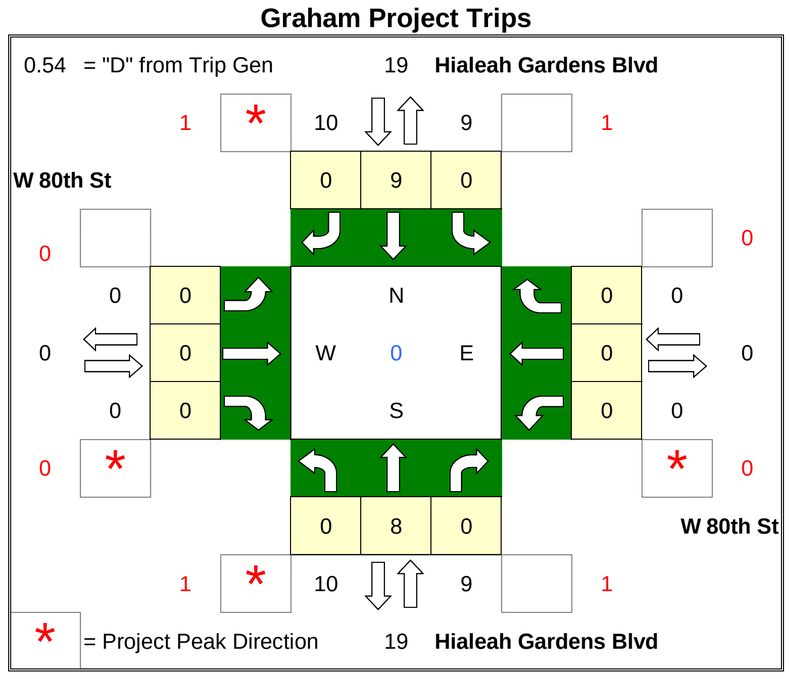
Project Trips

IN= 396

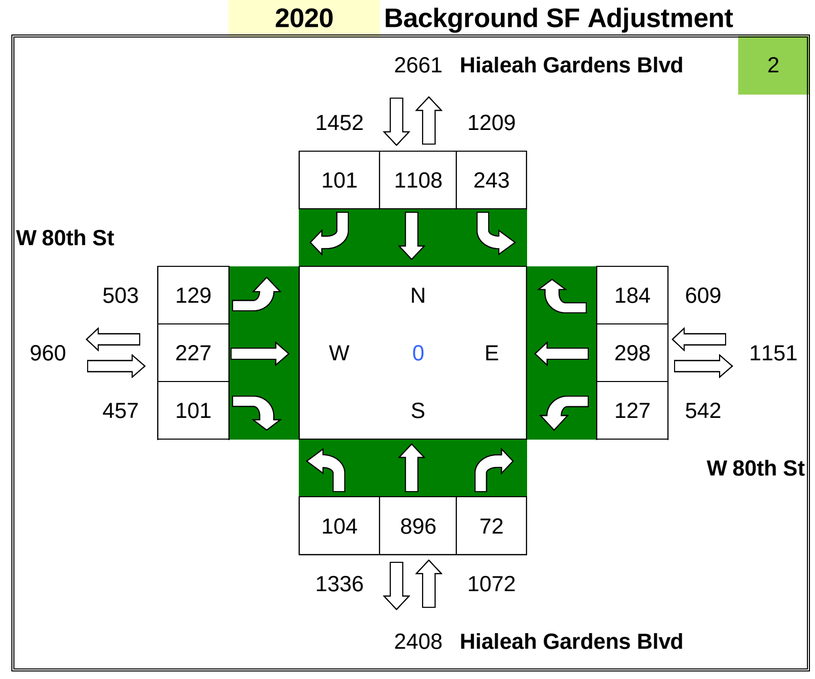
OUT= 467

	PD	#
N =	2.24%	19
E =	0.00%	0
S =	2.24%	19
W =	0.00%	0

Graham Project Trips



2020 Background SF Adjustment



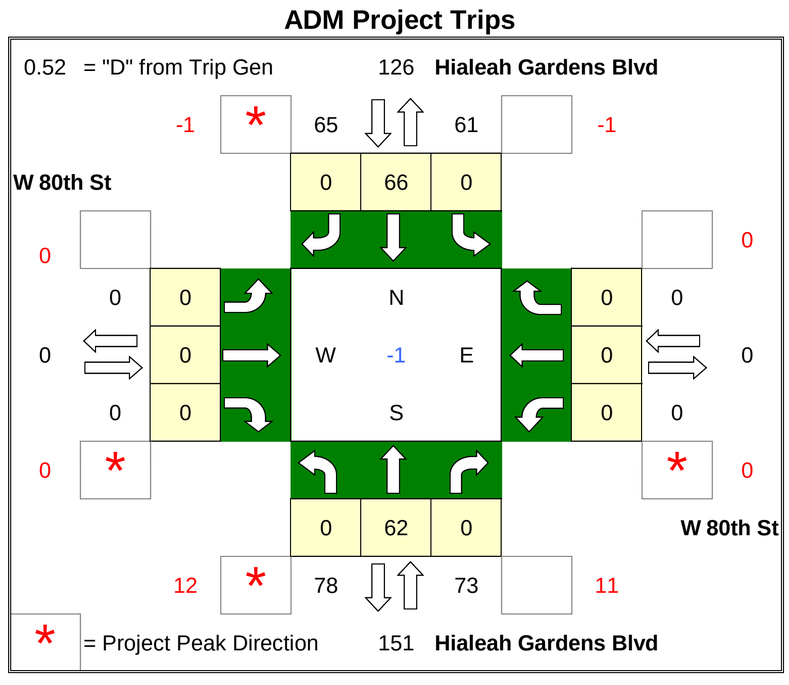
Project Trips

IN= 2,577

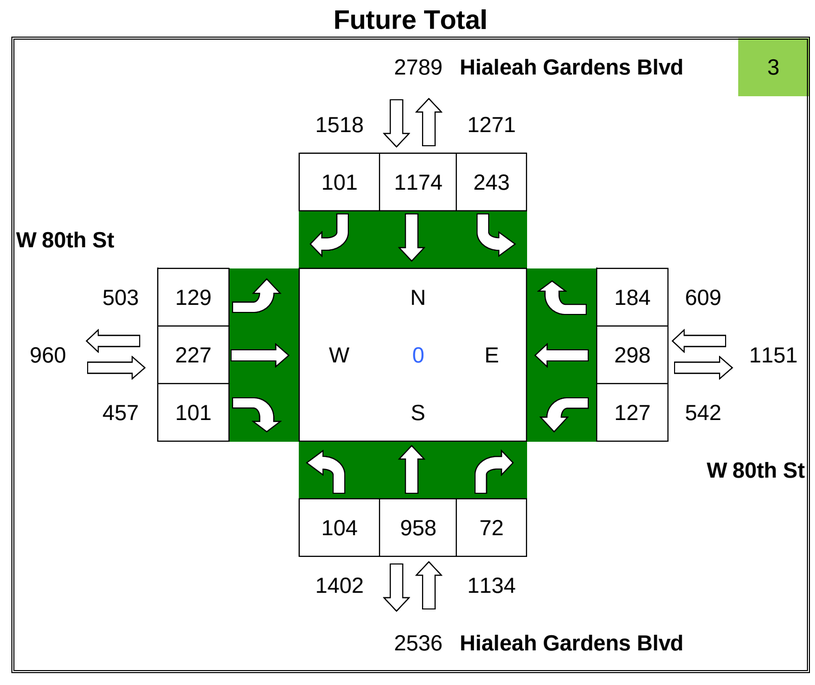
OUT= 2,753

	PD	#
N =	2.36%	126
E =	0.00%	0
S =	2.84%	151
W =	0.00%	0

ADM Project Trips



Future Total



ADM/Graham

PM Turning Movement Volumes

Hialeah Gardens Blvd & W 84th St (TMC 53)

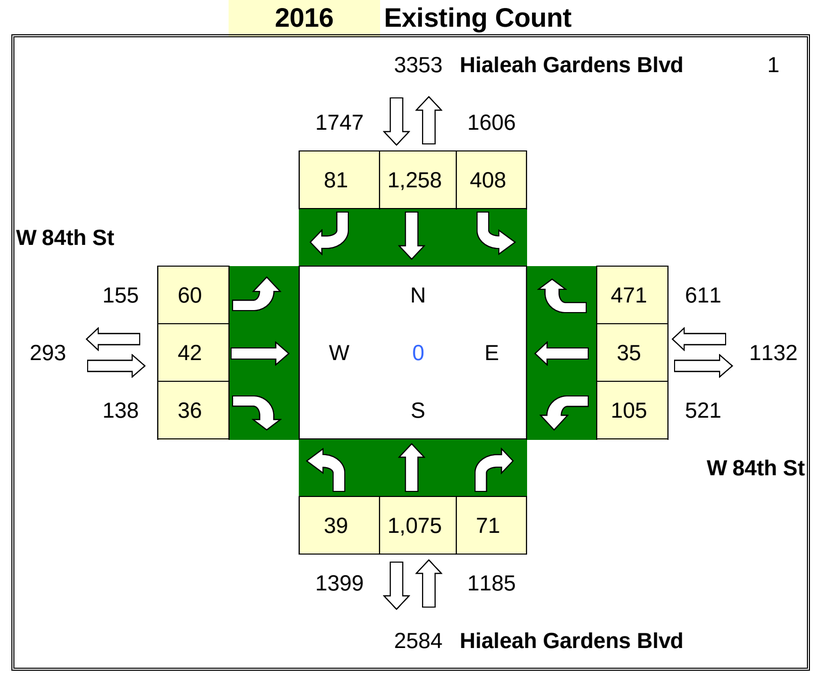
N/S Roadway: Hialeah Gardens Blvd

E/W Roadway: W 84th St

Date Taken: 4/20/16

W 84th St

2016 Existing Count



% Annual Growth = 1.6% **Seasonal Factor =** 1.00

PHASE 1

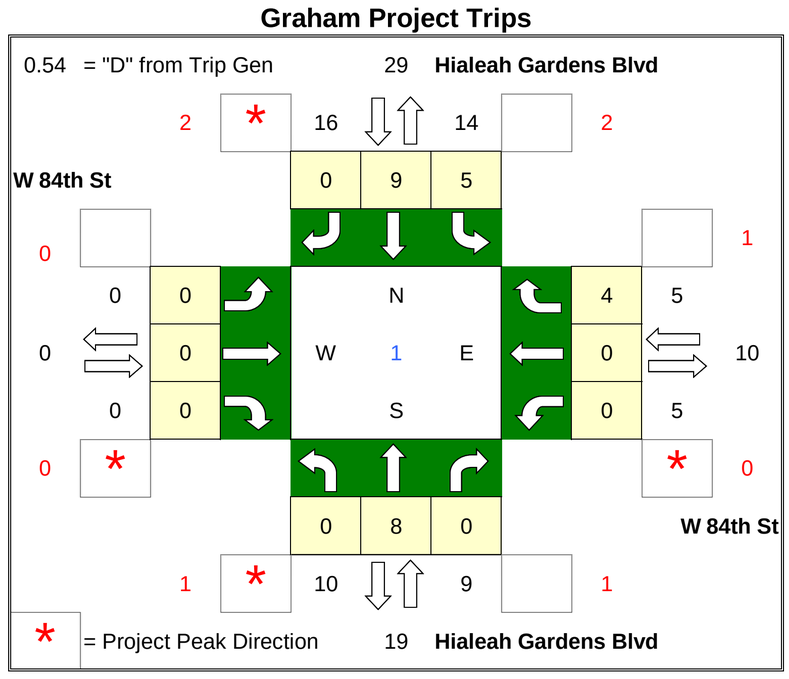
Project Trips

IN= 396

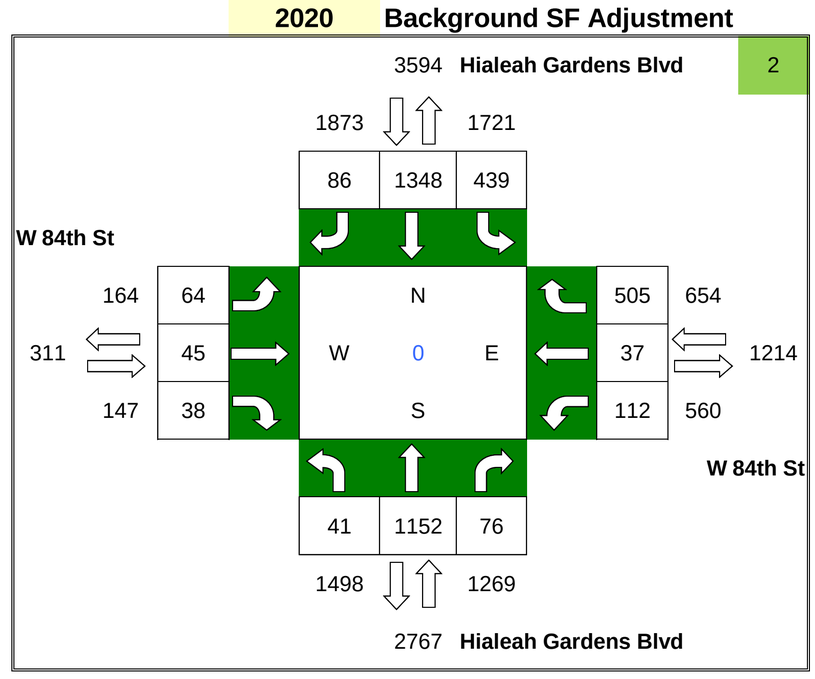
OUT= 467

	PD	#
N =	3.41%	29
E =	1.17%	10
S =	2.24%	19
W =	0.00%	0

Graham Project Trips



2020 Background SF Adjustment



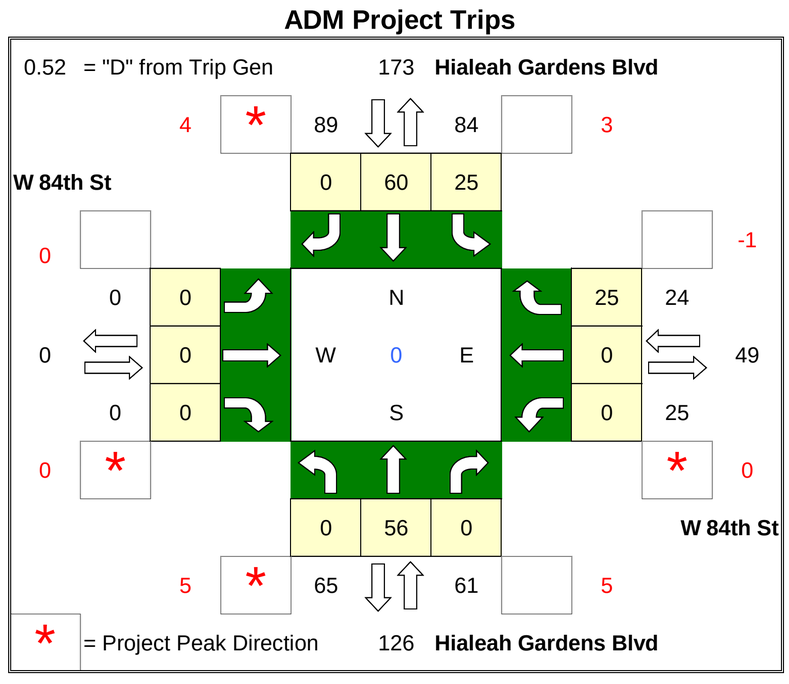
Project Trips

IN= 2,577

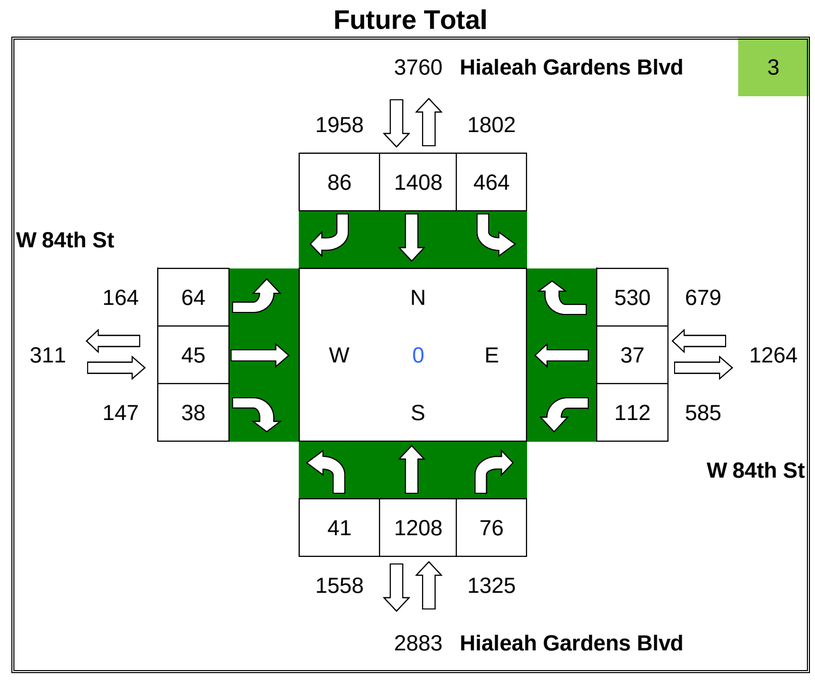
OUT= 2,753

	PD	#
N =	3.25%	173
E =	0.92%	49
S =	2.36%	126
W =	0.00%	0

ADM Project Trips



Future Total



ADM/Graham

PM Turning Movement Volumes

Hialeah Gardens Blvd & W 84th St (TMC 53)

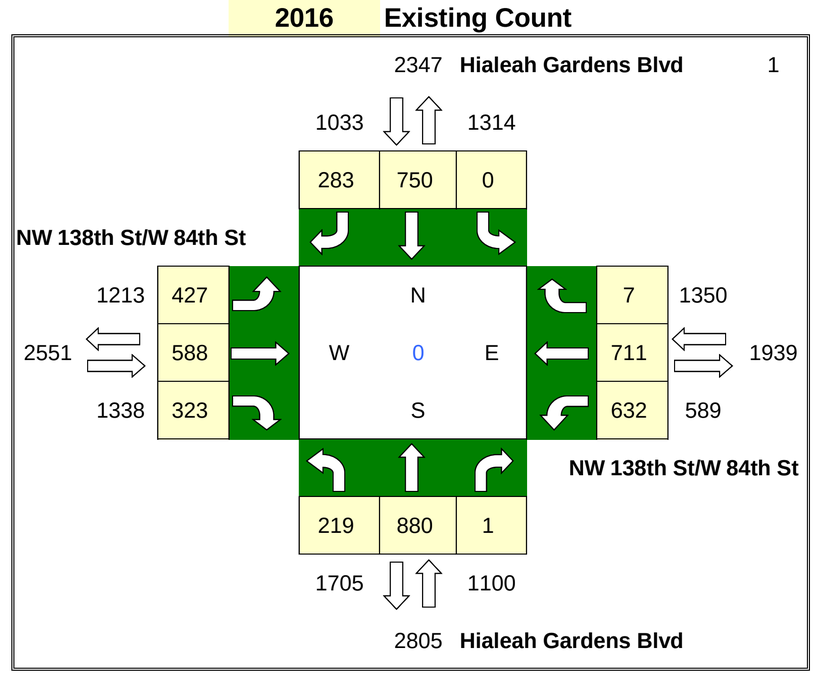
N/S Roadway: Hialeah Gardens Blvd

E/W Roadway: NW 138th St/W 84th St

Date Taken: 4/20/16

W 84th St

2016 Existing Count



% Annual Growth = 1.6% **Seasonal Factor =** 1.00

PHASE 1

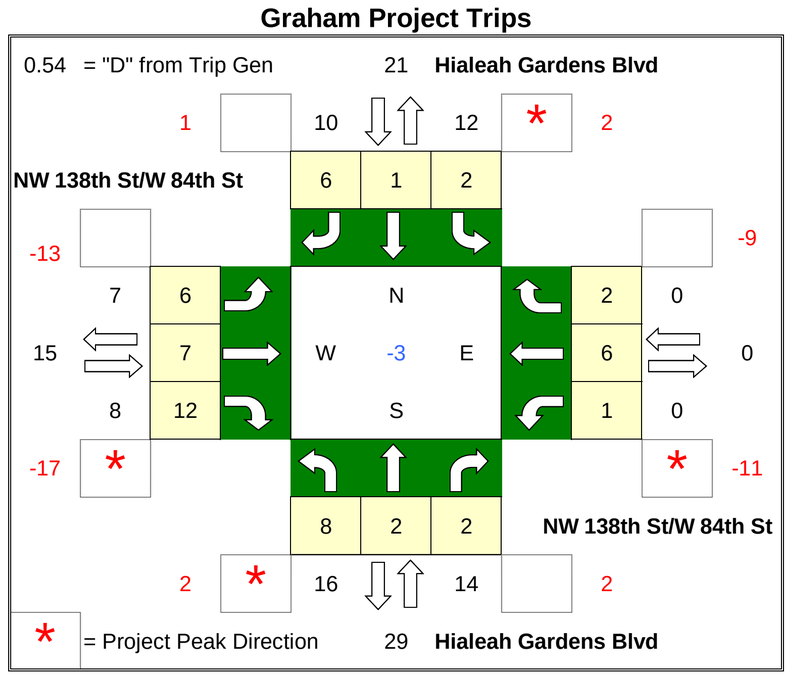
Project Trips

IN= 396

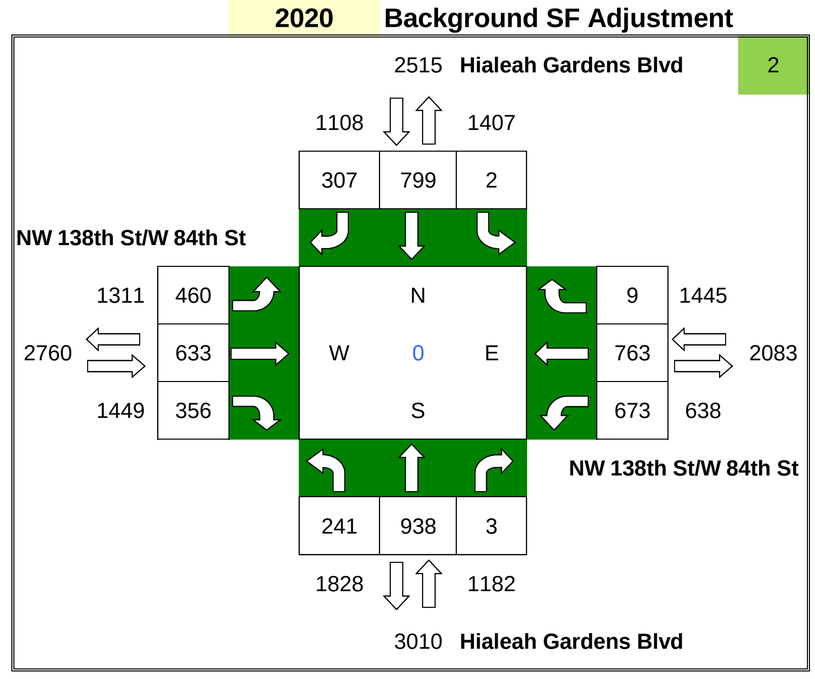
OUT= 467

	PD	#
N =	2.47%	21
E =	0.00%	0
S =	3.41%	29
W =	1.71%	15

Graham Project Trips



2020 Background SF Adjustment



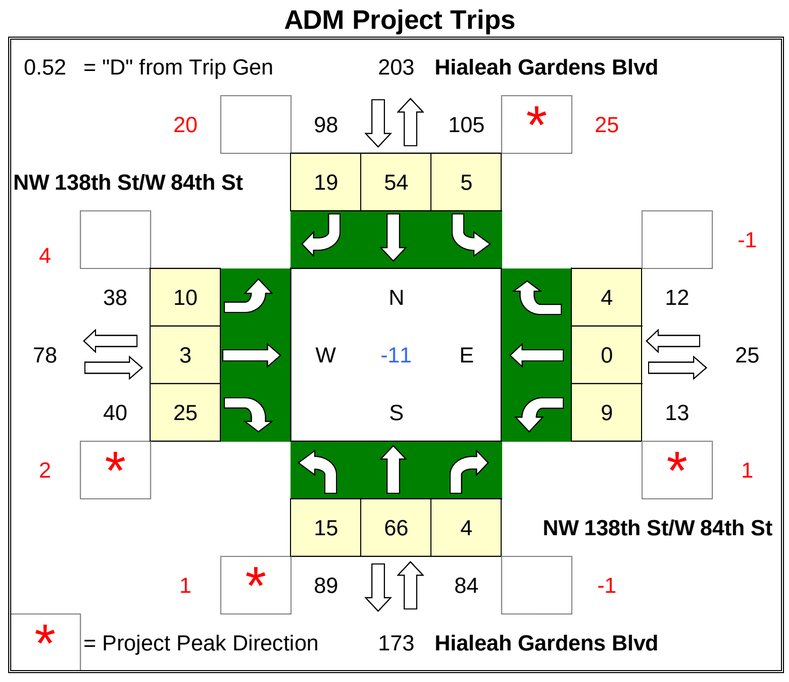
Project Trips

IN= 2,577

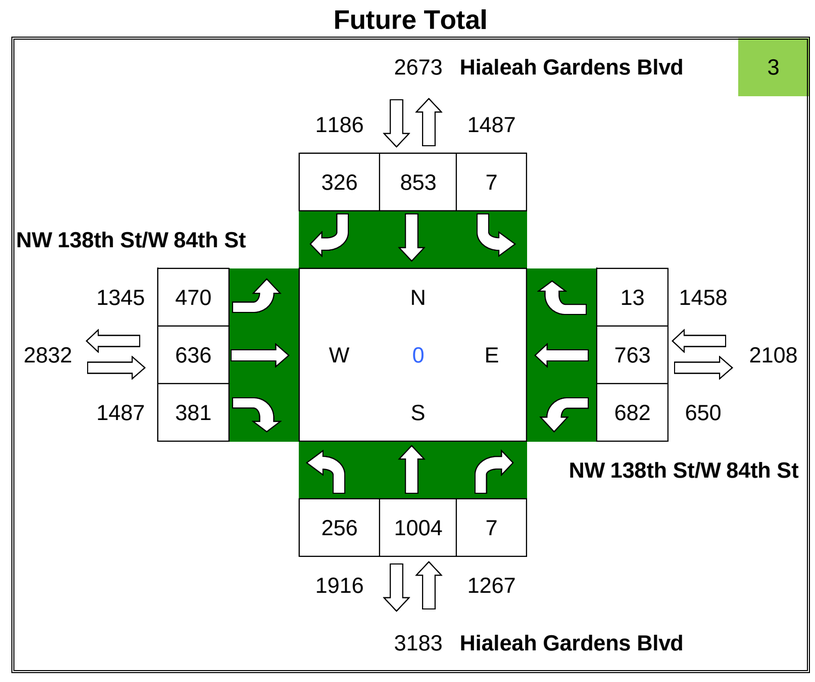
OUT= 2,753

	PD	#
N =	3.80%	203
E =	0.47%	25
S =	3.25%	173
W =	1.47%	78

ADM Project Trips



Future Total



APPENDIX I-K3:
2040 AM Background with Combined

ADM/Graham

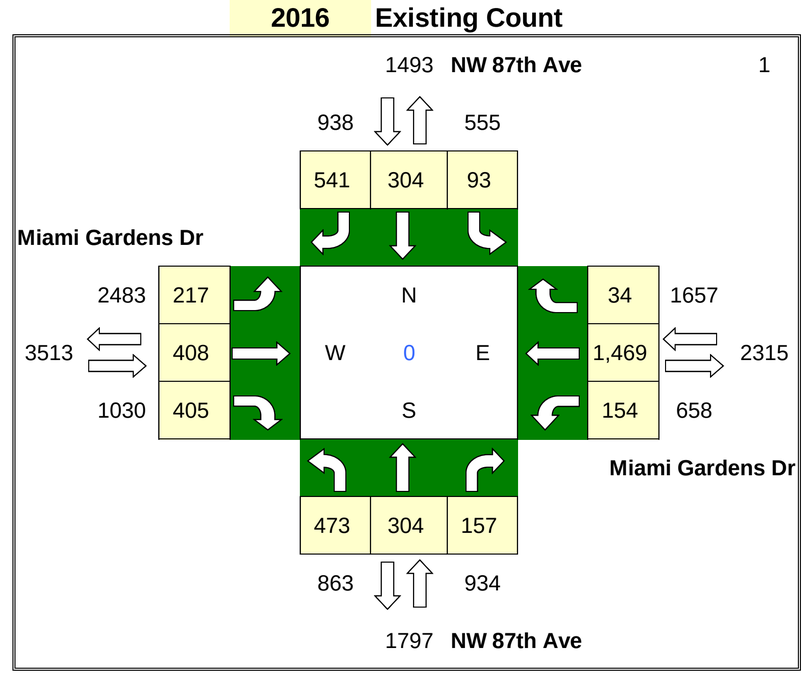
AM Turning Movement Volumes

N/S Roadway: NW 87th Ave

E/W Roadway: Miami Gardens Dr

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1%

Seasonal Factor = 1.00

PHASE 2

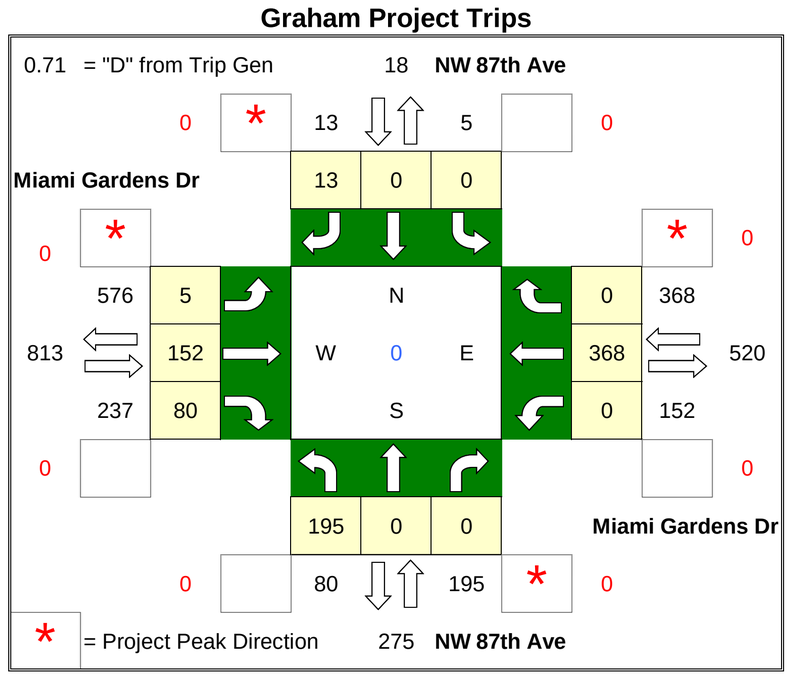
Project Trips

IN= 3,475

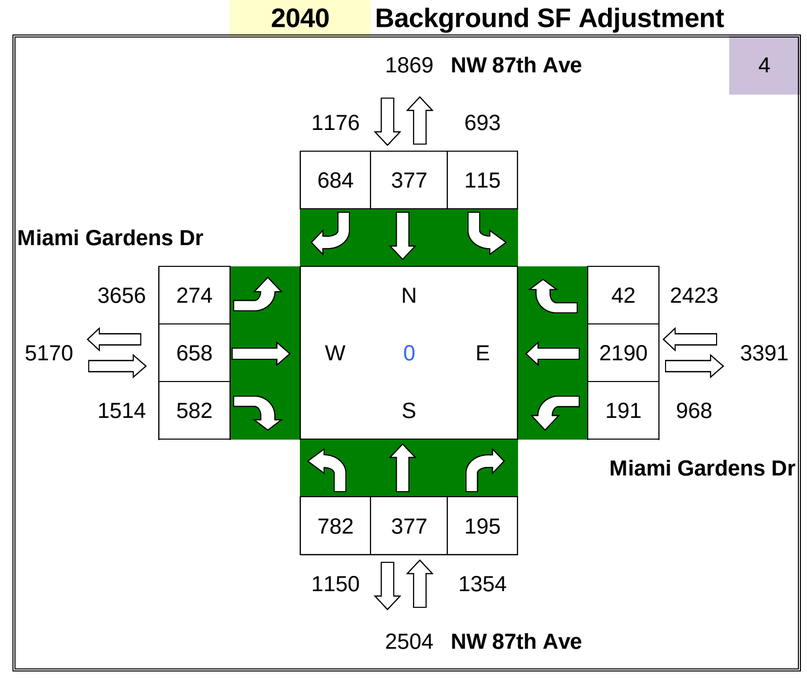
OUT= 1,431

	PD	#
N =	0.37%	18
E =	10.60%	520
S =	5.60%	275
W =	16.57%	813

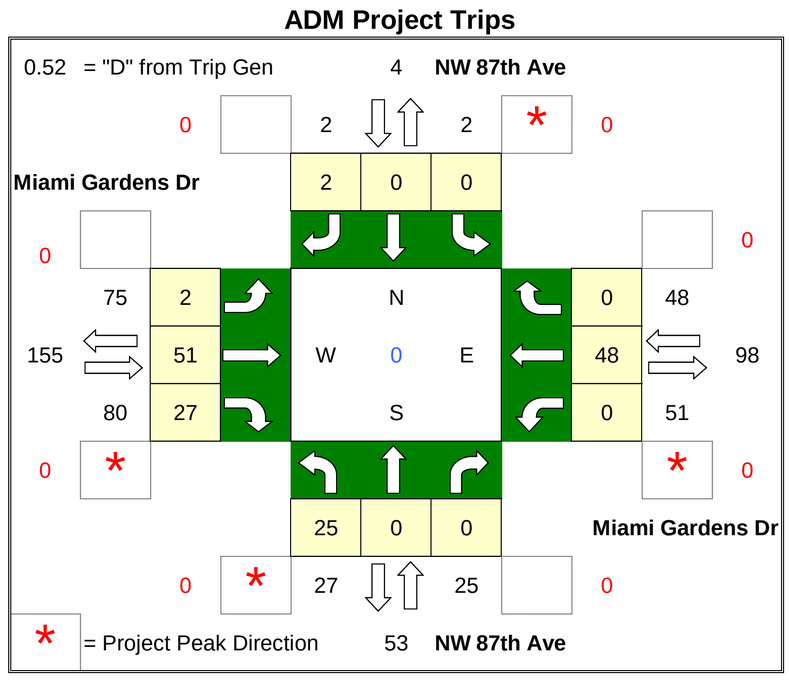
Graham Project Trips



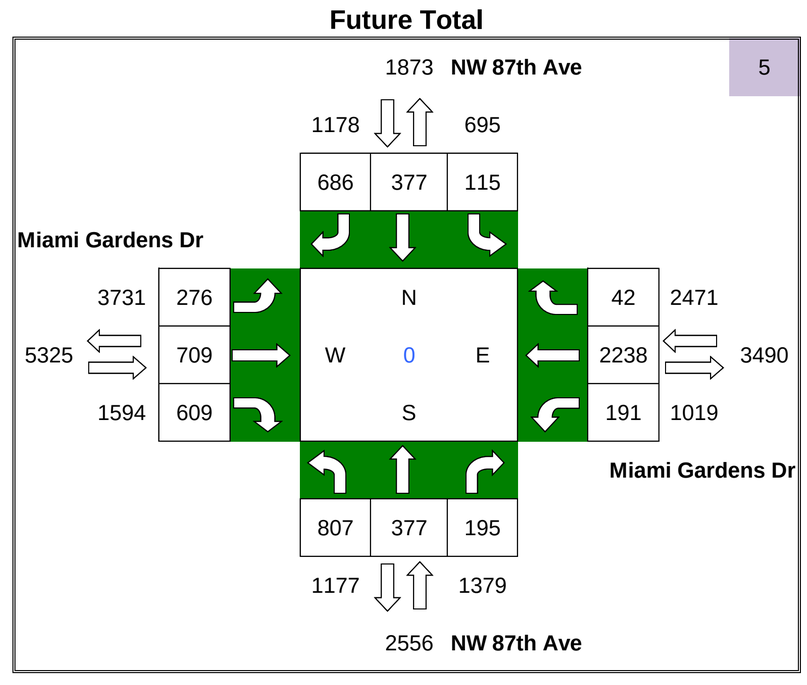
2040 Background SF Adjustment



ADM Project Trips



Future Total



	PD	#
N =	0.37%	4
E =	8.52%	98
S =	4.56%	53
W =	13.44%	155

ADM/Graham

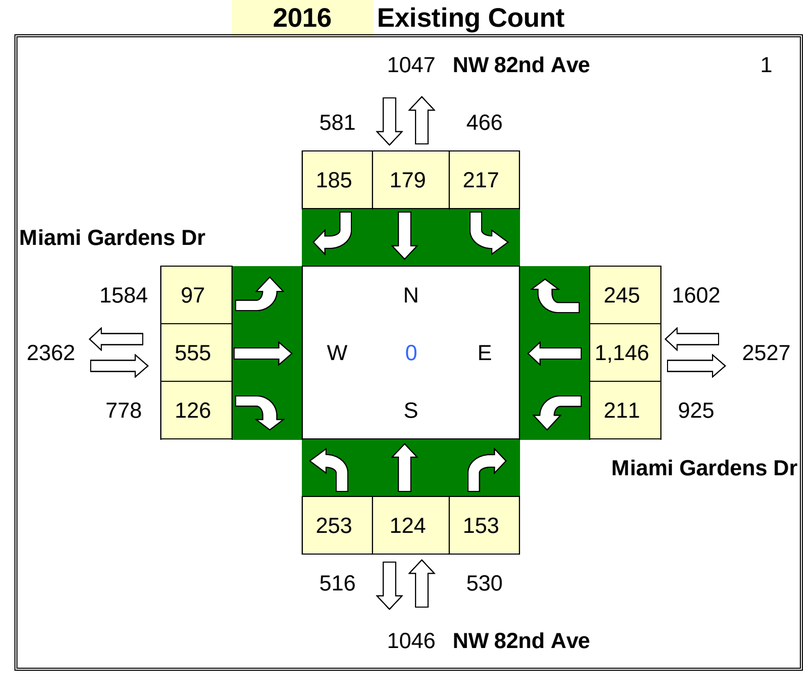
AM Turning Movement Volumes

N/S Roadway: NW 82nd Ave

E/W Roadway: Miami Gardens Dr

Date Taken: 4/20/16

2016 Existing Count

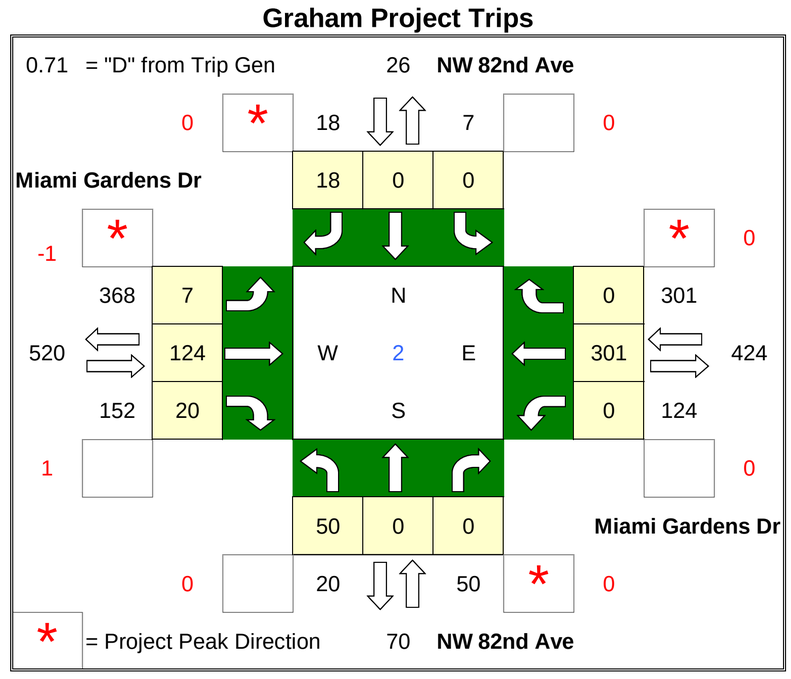


% Annual Growth = 1%

Seasonal Factor = 1.00

PHASE 2

Graham Project Trips



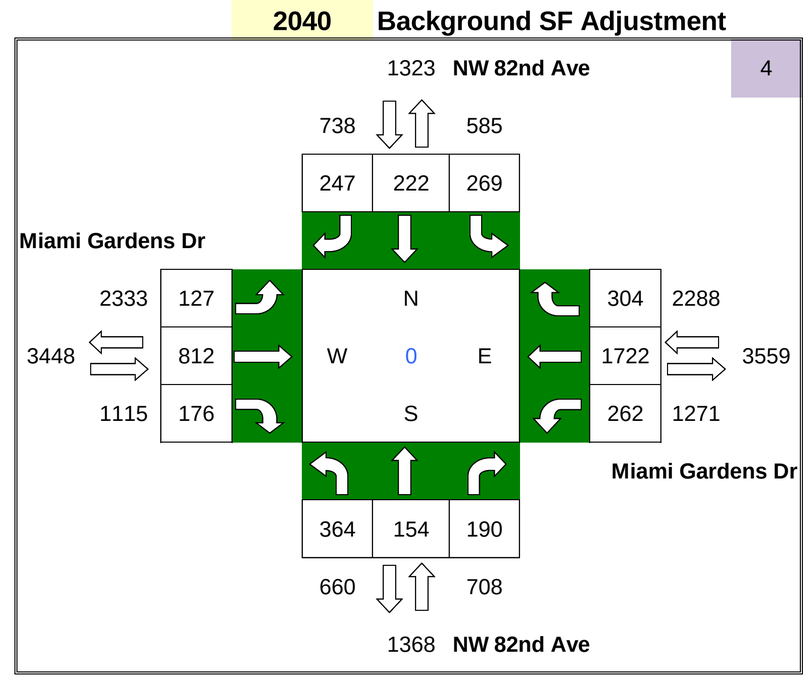
Project Trips

IN= 3,475

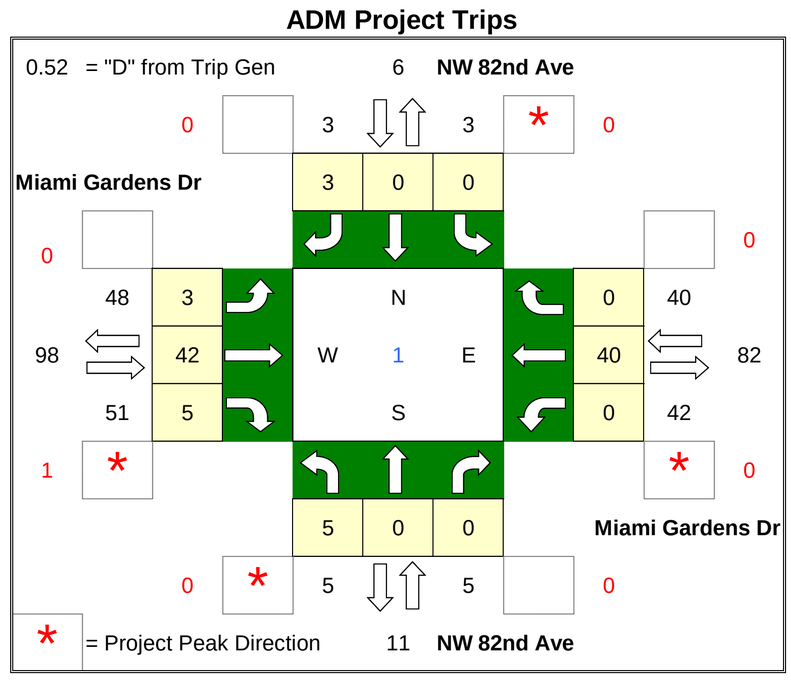
OUT= 1,431

	PD	#
N =	0.52%	26
E =	8.65%	424
S =	1.43%	70
W =	10.60%	520

2040 Background SF Adjustment



ADM Project Trips



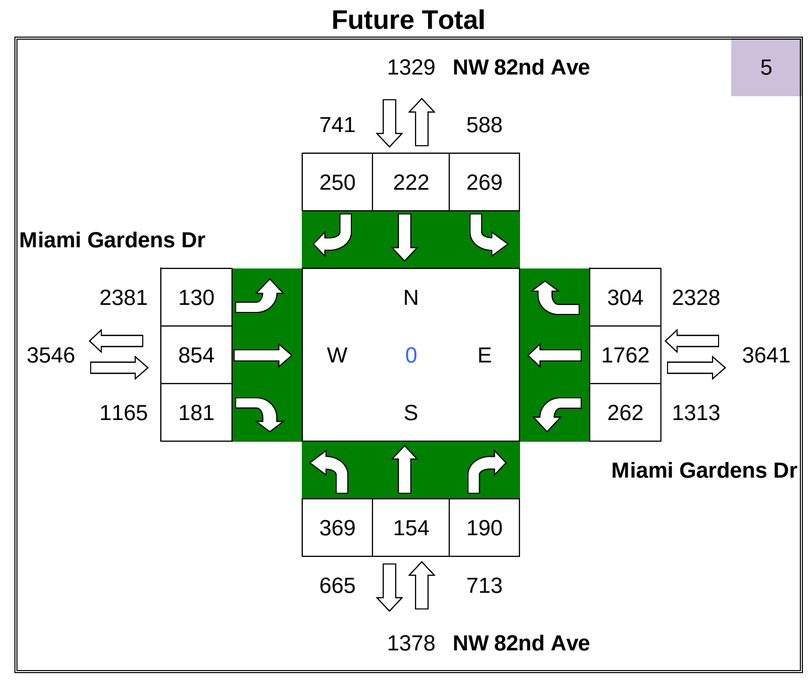
Project Trips

IN= 558

OUT= 596

	PD	#
N =	0.52%	6
E =	7.08%	82
S =	0.91%	11
W =	8.52%	98

Future Total



ADM/Graham

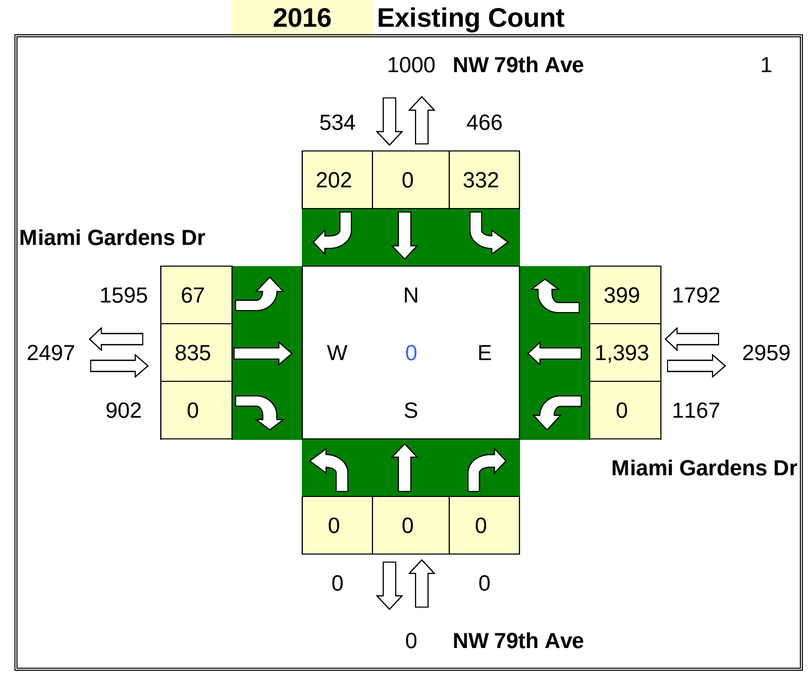
AM Turning Movement Volumes

N/S Roadway: NW 79th Ave

E/W Roadway: Miami Gardens Dr

Date Taken: 4/20/16

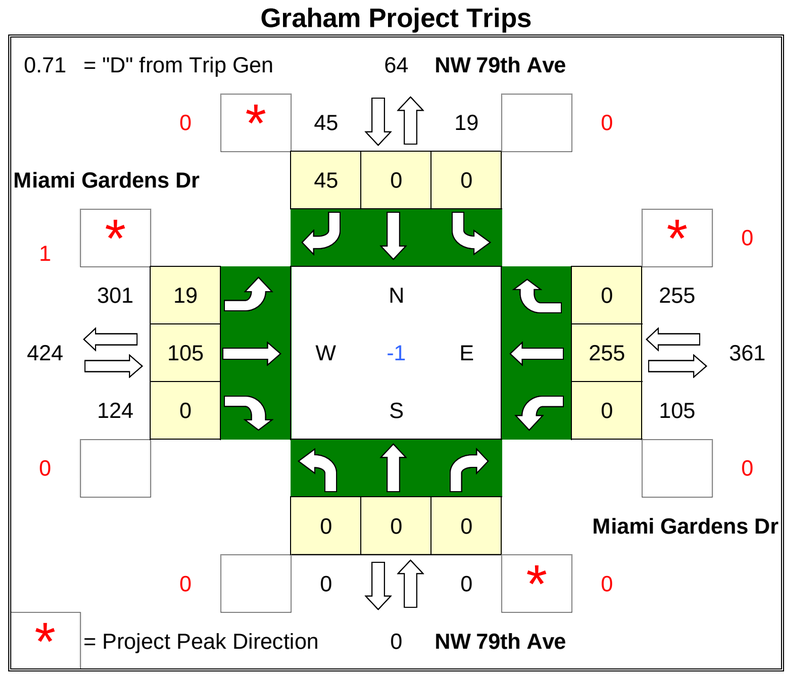
2016 Existing Count



% Annual Growth = 1% **Seasonal Factor =** 1.00

PHASE 2

Graham Project Trips



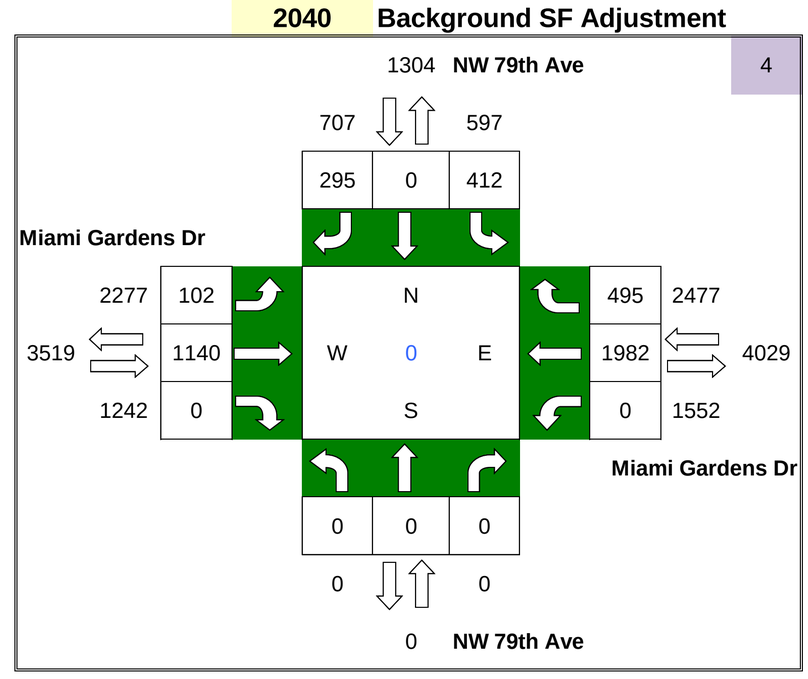
Project Trips

IN= 3,475

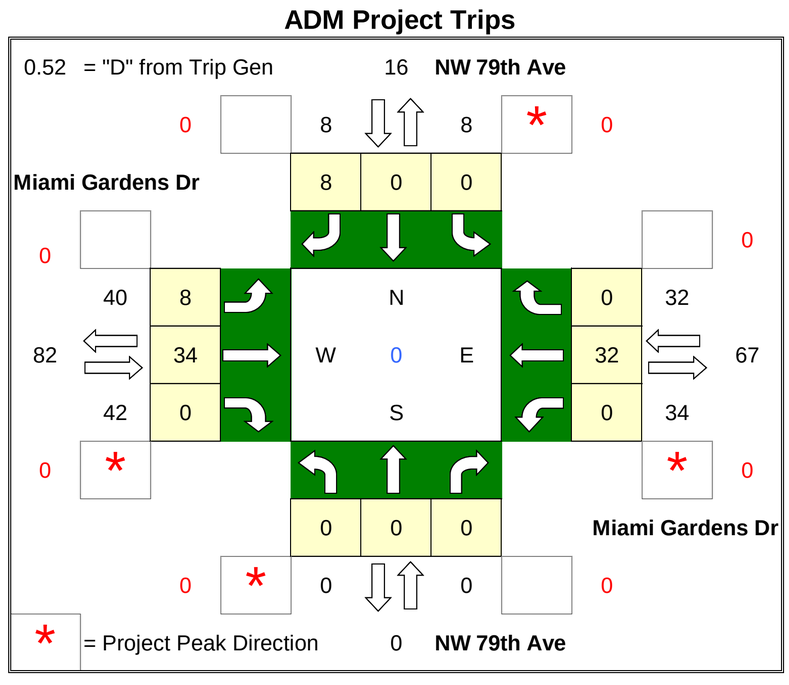
OUT= 1,431

	PD	#
N =	1.30%	64
E =	7.35%	361
S =	0.00%	0
W =	8.65%	424

2040 Background SF Adjustment



ADM Project Trips



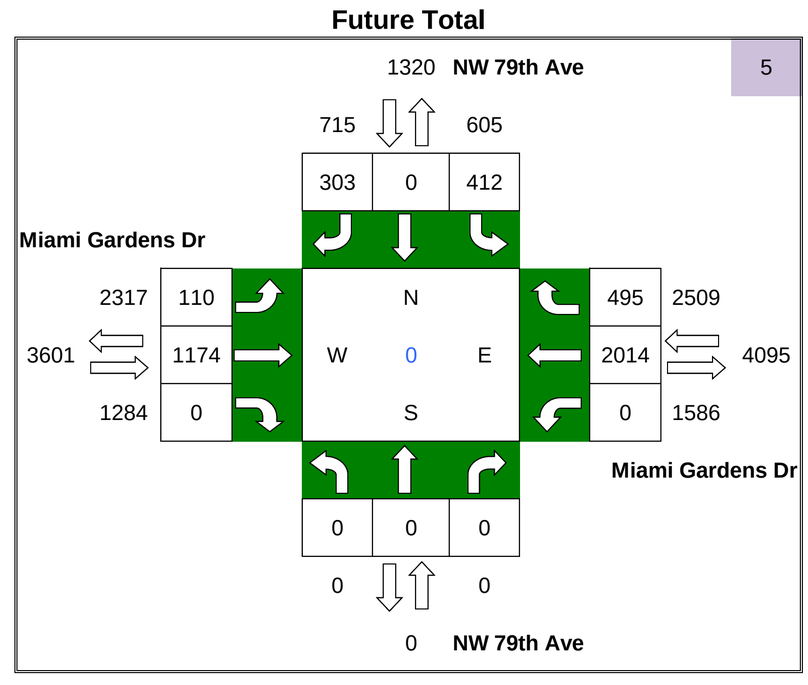
Project Trips

IN= 558

OUT= 596

	PD	#
N =	1.35%	16
E =	5.78%	67
S =	0.00%	0
W =	7.08%	82

Future Total



ADM/Graham

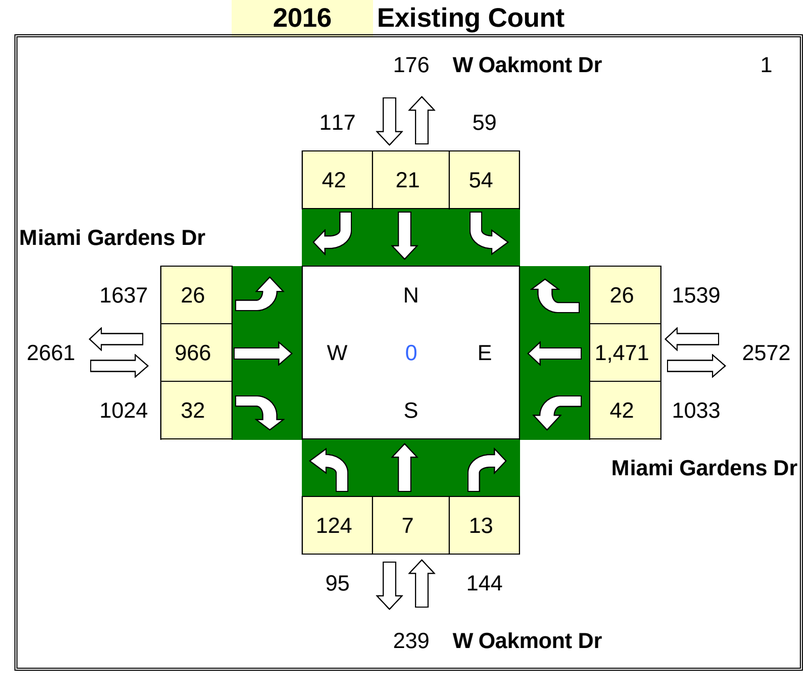
AM Turning Movement Volumes

N/S Roadway: W Oakmont Dr

E/W Roadway: Miami Gardens Dr

Date Taken: 4/20/16

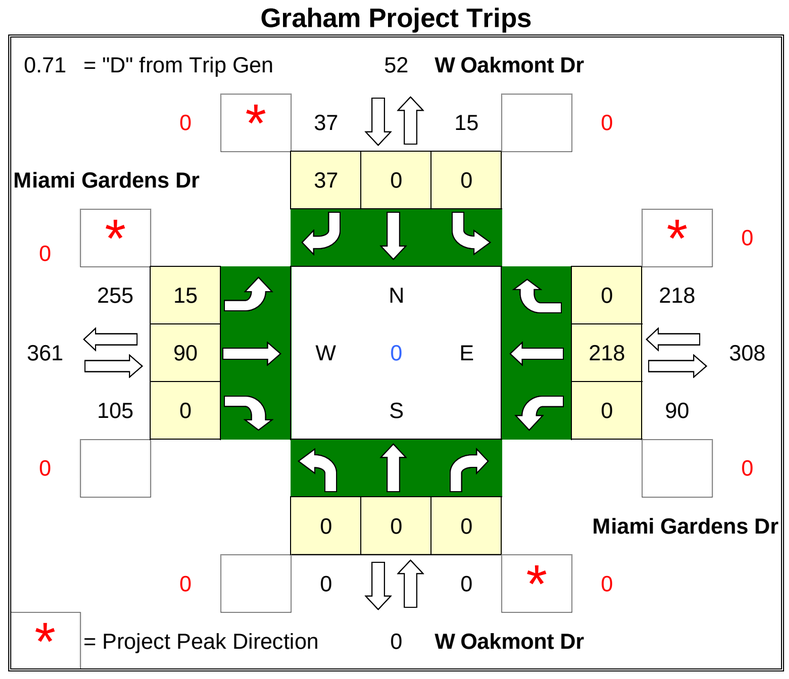
2016 Existing Count



% Annual Growth = 1% **Seasonal Factor =** 1.00

PHASE 2

Graham Project Trips



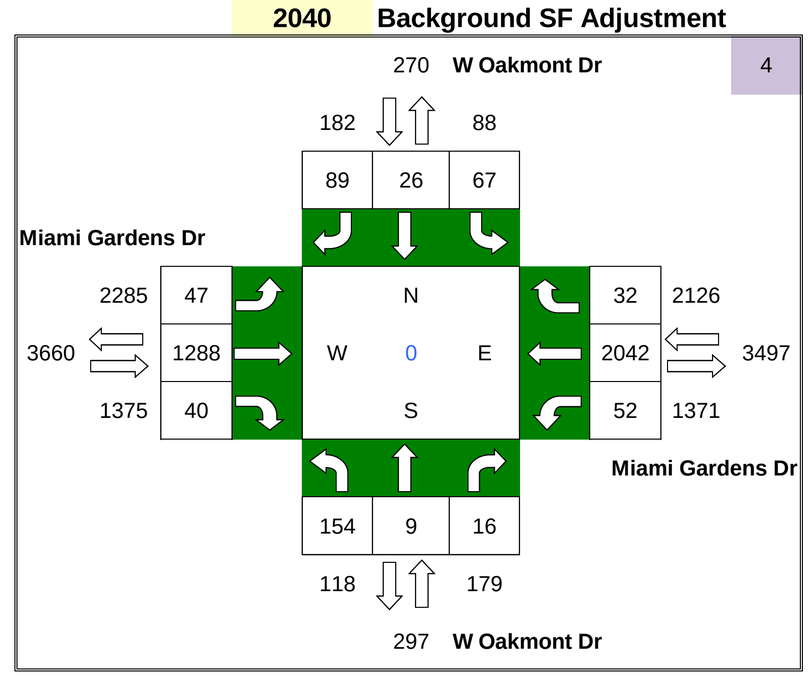
Project Trips

IN= 3,475

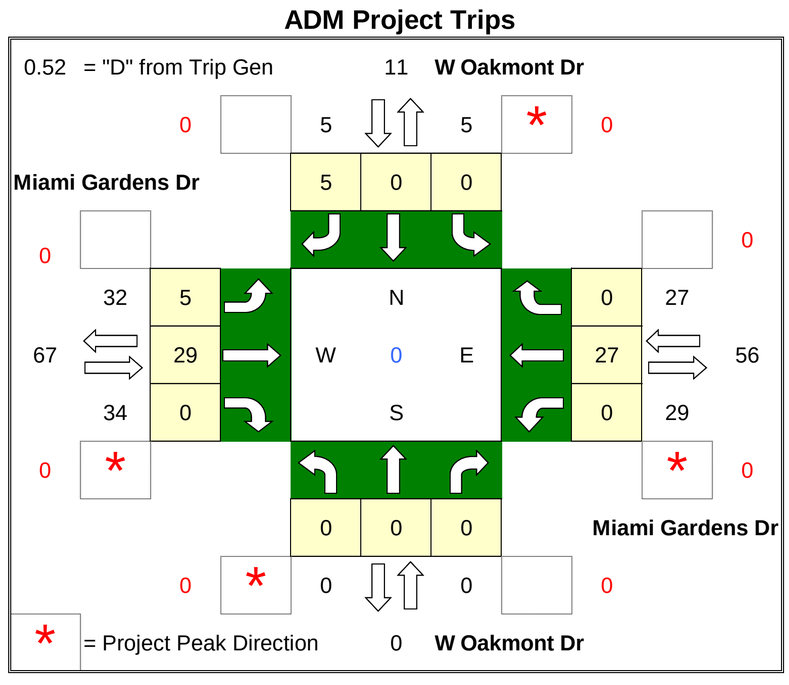
OUT= 1,431

	PD	#
N =	1.07%	52
E =	6.28%	308
S =	0.00%	0
W =	7.35%	361

2040 Background SF Adjustment



ADM Project Trips



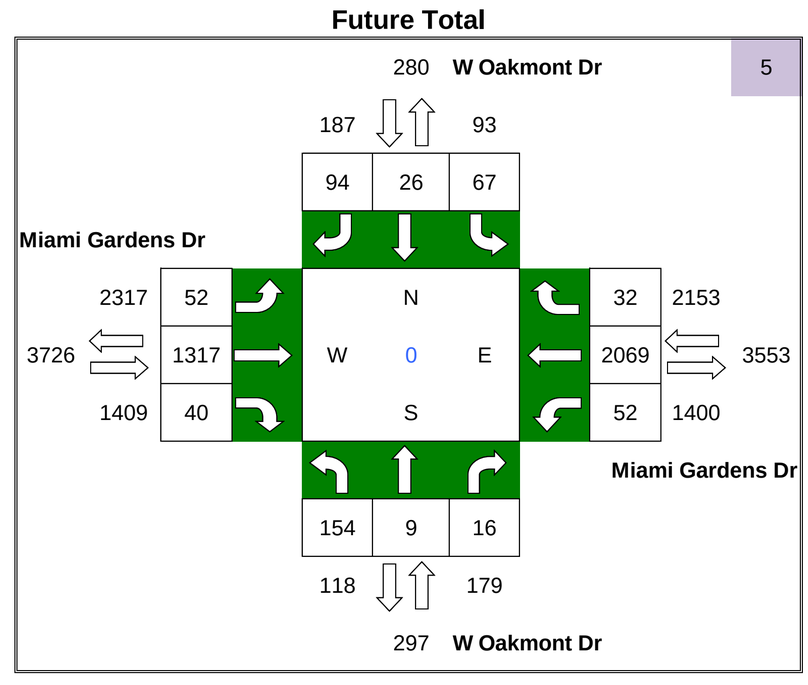
Project Trips

IN= 558

OUT= 596

	PD	#
N =	0.91%	11
E =	4.87%	56
S =	0.00%	0
W =	5.78%	67

Future Total



ADM/Graham

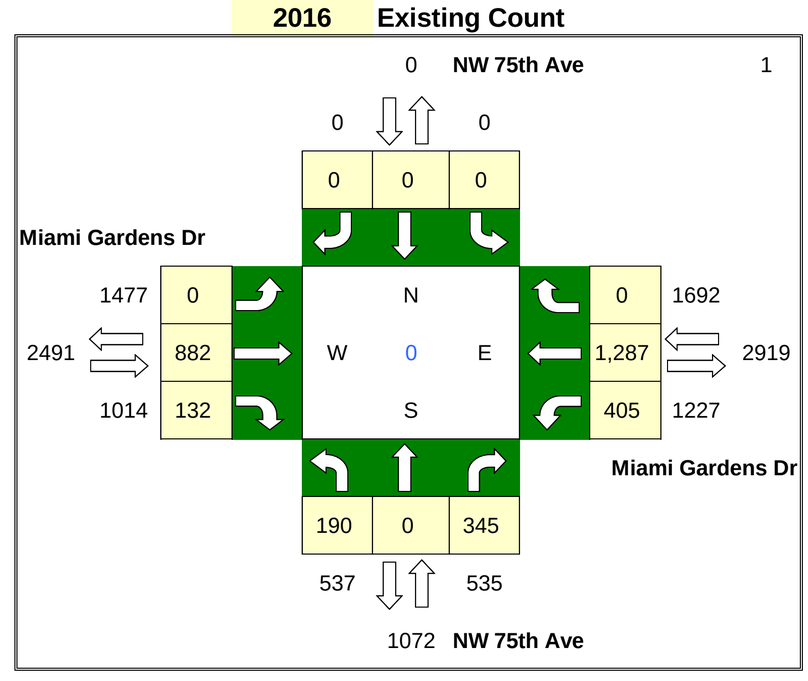
AM Turning Movement Volumes

N/S Roadway: NW 75th Ave

E/W Roadway: Miami Gardens Dr

Date Taken: 4/20/16

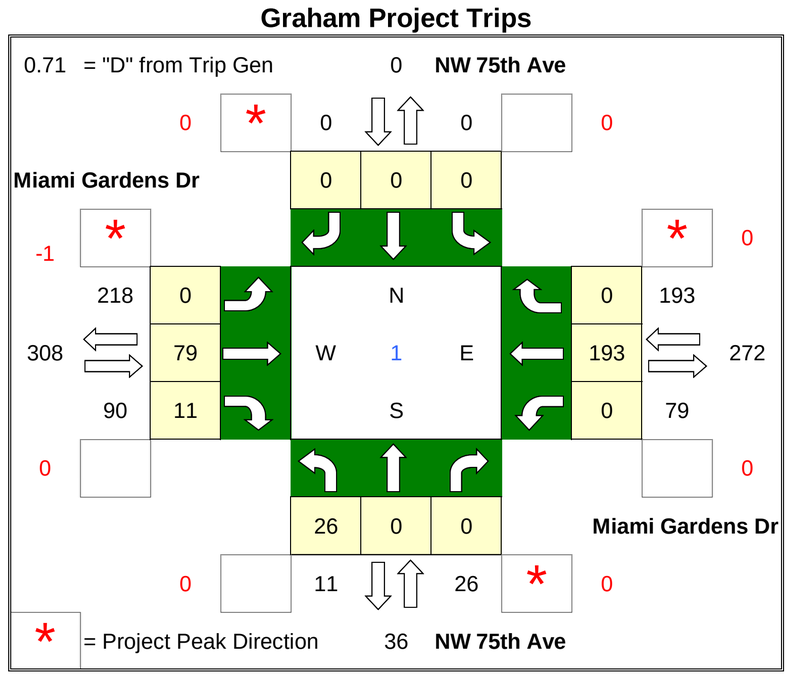
2016 Existing Count



% Annual Growth = 1% **Seasonal Factor =** 1.00

PHASE 2

Graham Project Trips



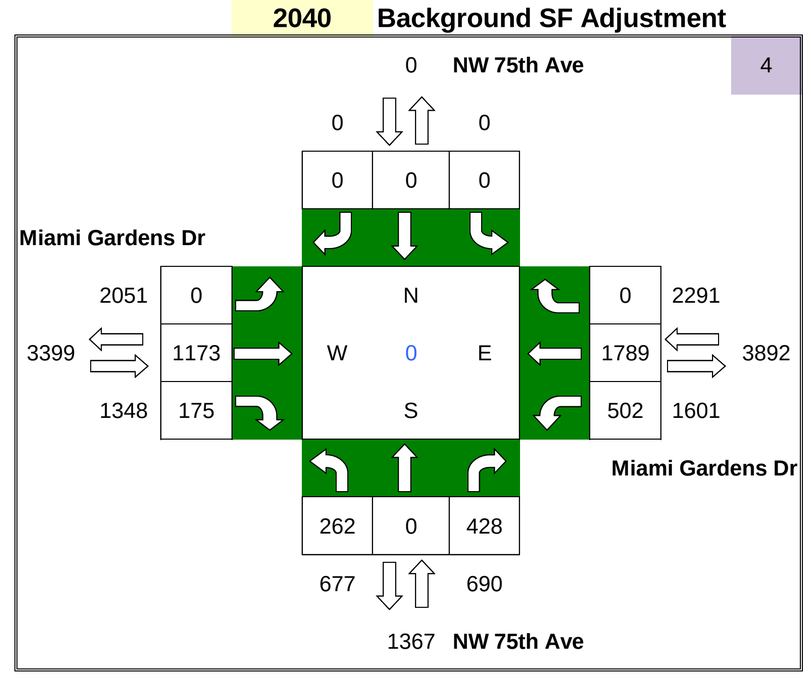
Project Trips

IN= 3,475

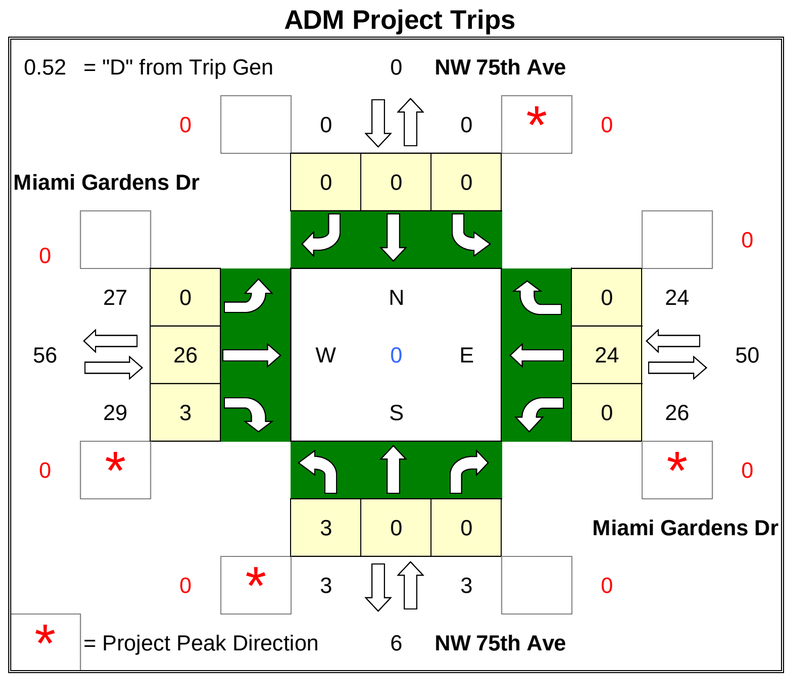
OUT= 1,431

	PD	#
N =	0.00%	0
E =	5.54%	272
S =	0.74%	36
W =	6.28%	308

2040 Background SF Adjustment



ADM Project Trips



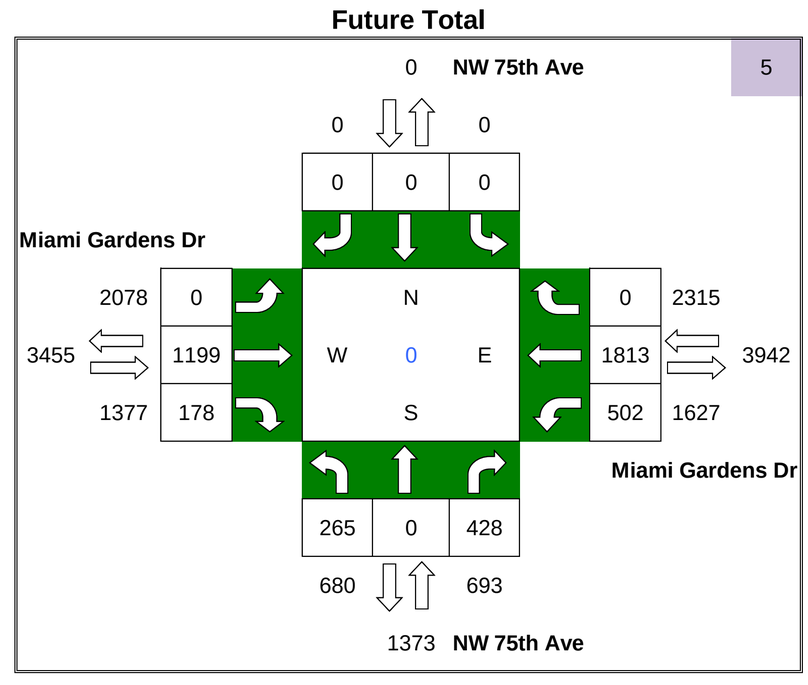
Project Trips

IN= 558

OUT= 596

	PD	#
N =	0.00%	0
E =	4.36%	50
S =	0.52%	6
W =	4.87%	56

Future Total



ADM/Graham

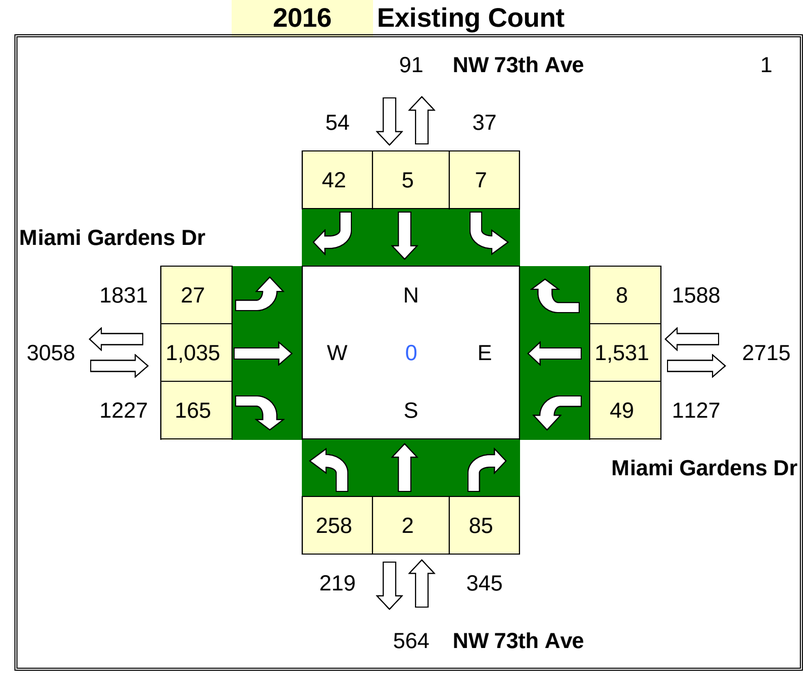
AM Turning Movement Volumes

N/S Roadway: NW 73th Ave

E/W Roadway: Miami Gardens Dr

Date Taken: 4/20/16

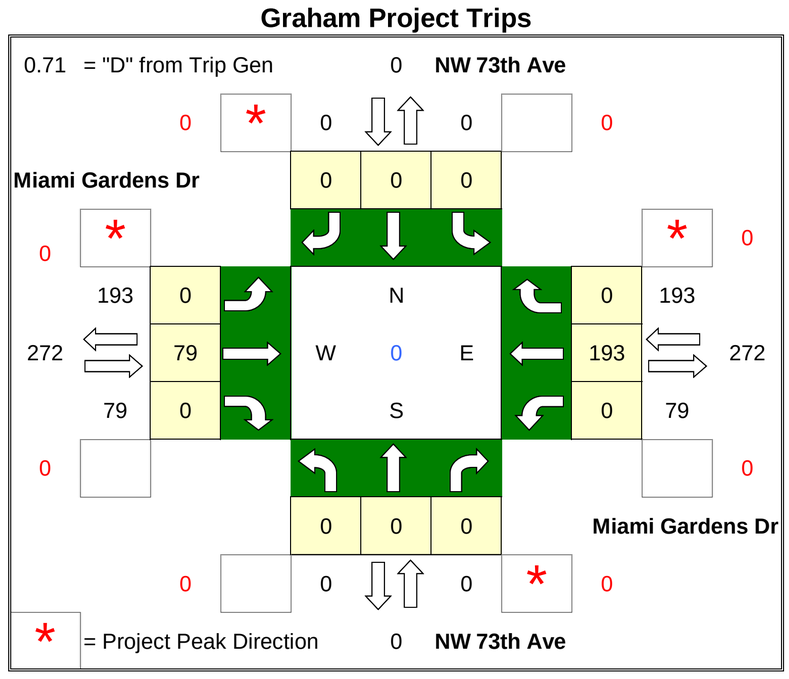
2016 Existing Count



% Annual Growth = 1% **Seasonal Factor =** 1.00

PHASE 2

Graham Project Trips



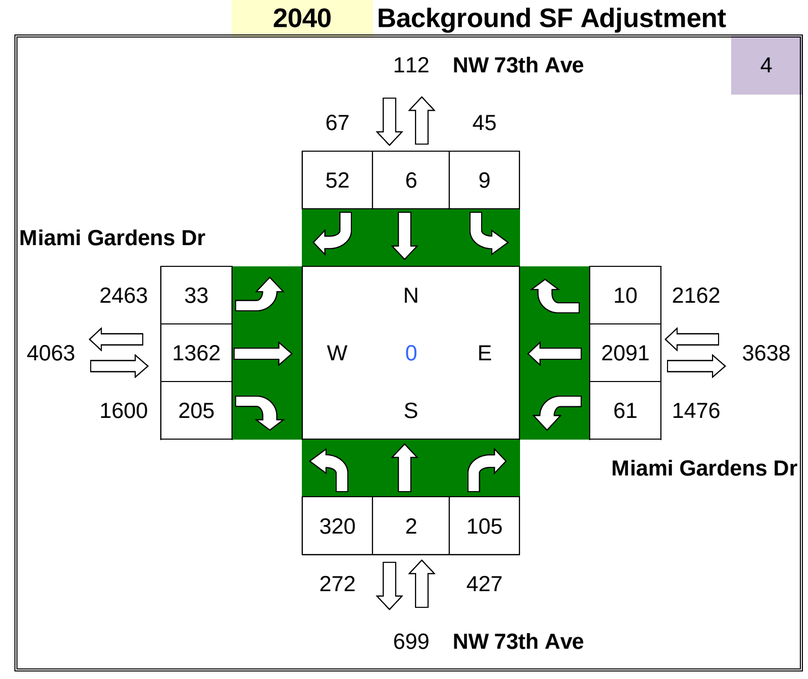
Project Trips

IN= 3,475

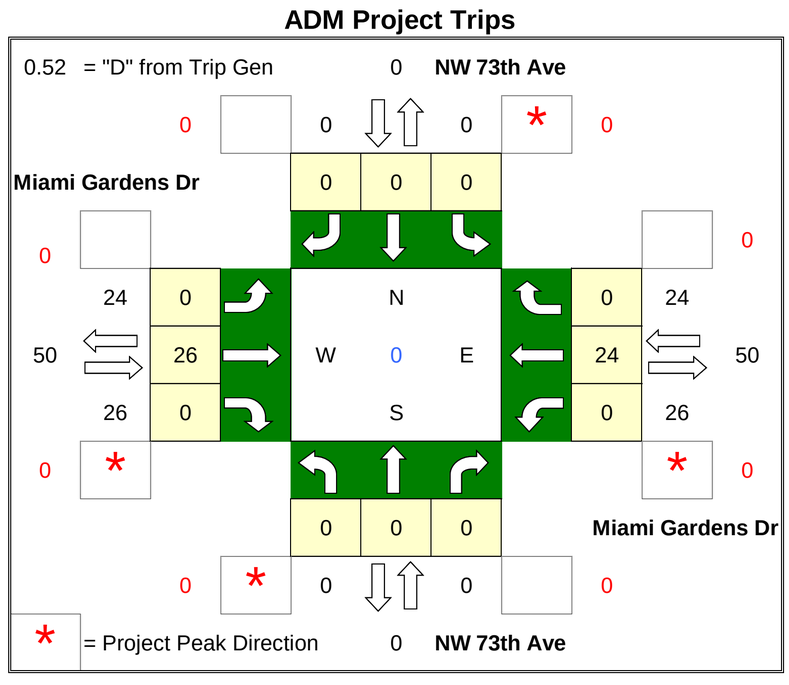
OUT= 1,431

	PD	#
N =	0.00%	0
E =	5.54%	272
S =	0.00%	0
W =	5.54%	272

2040 Background SF Adjustment



ADM Project Trips



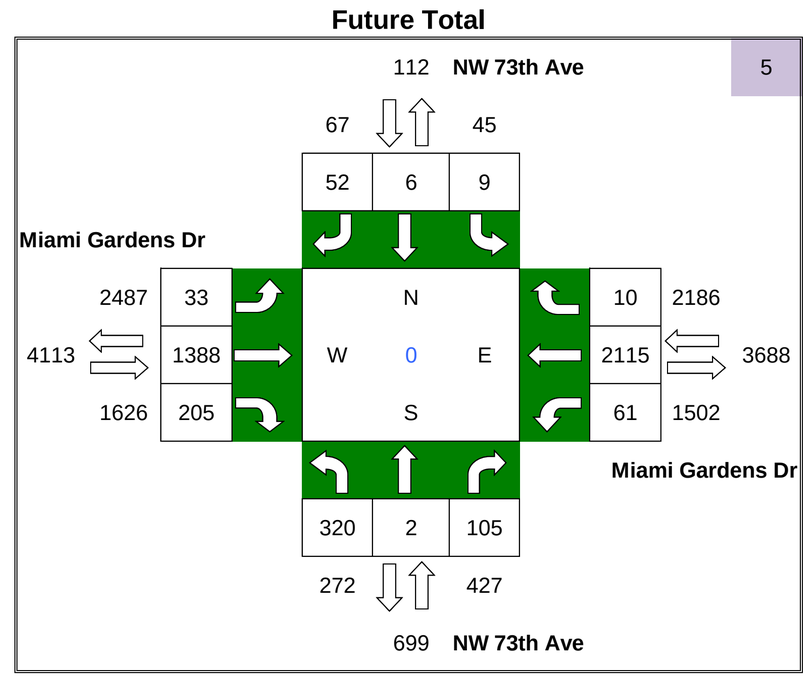
Project Trips

IN= 558

OUT= 596

	PD	#
N =	0.00%	0
E =	4.36%	50
S =	0.00%	0
W =	4.36%	50

Future Total



ADM/Graham

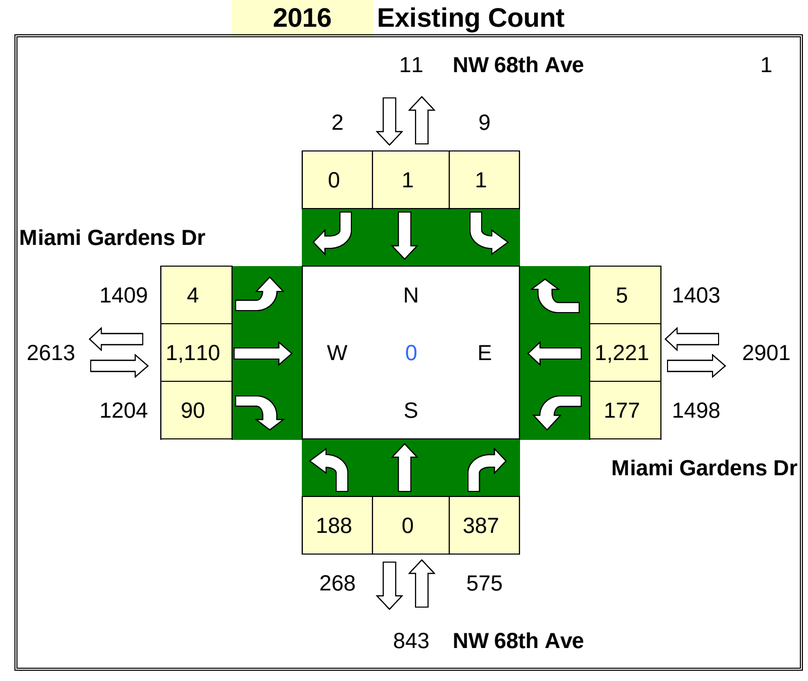
AM Turning Movement Volumes

N/S Roadway: NW 68th Ave

E/W Roadway: Miami Gardens Dr

Date Taken: 4/20/16

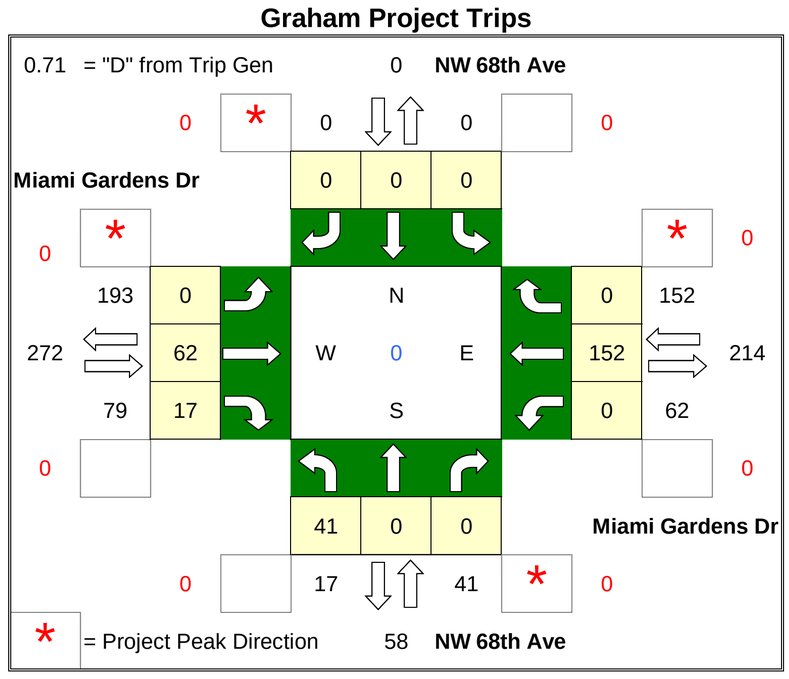
2016 Existing Count



% Annual Growth = 1% **Seasonal Factor =** 1.00

PHASE 2

Graham Project Trips



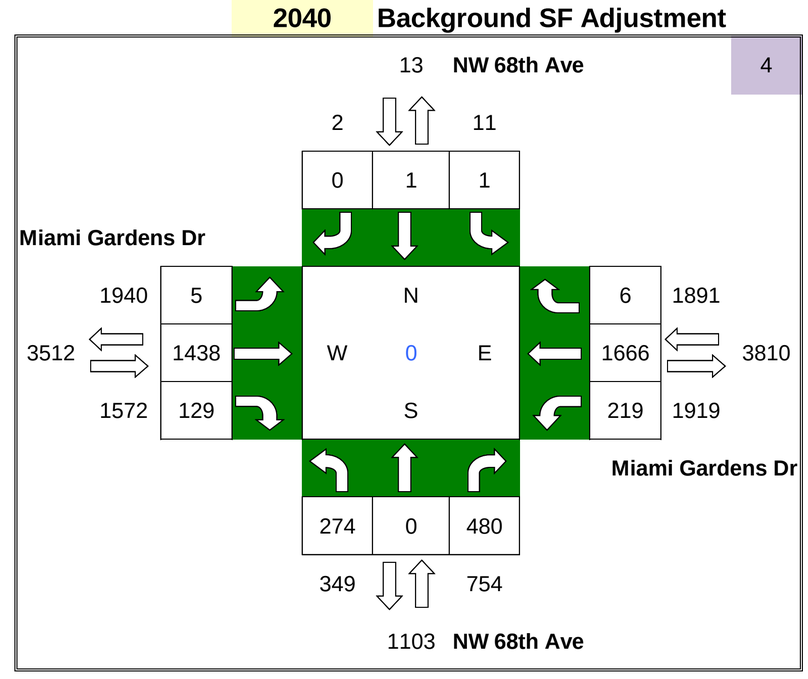
Project Trips

IN= 3,475

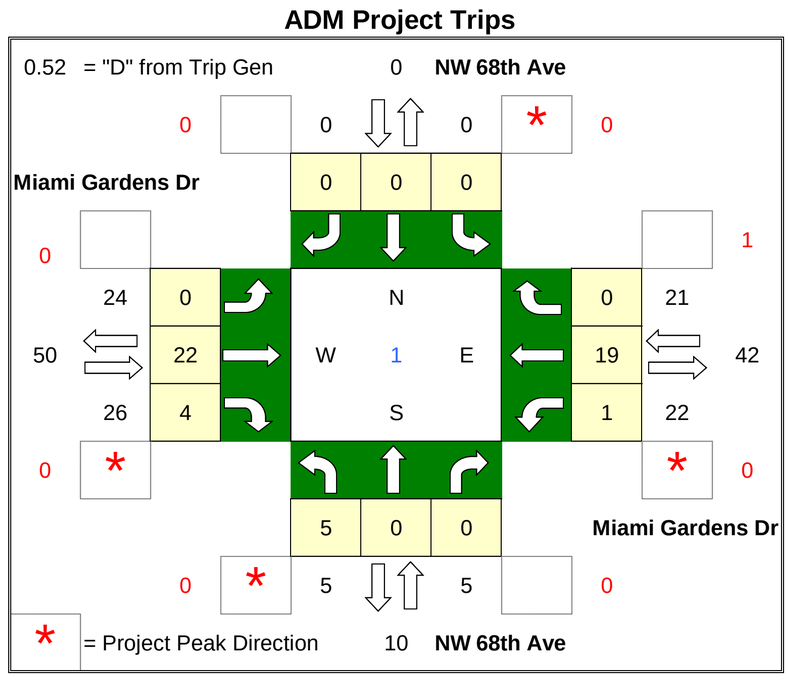
OUT= 1,431

	PD	#
N =	0.00%	0
E =	4.36%	214
S =	1.18%	58
W =	5.54%	272

2040 Background SF Adjustment



ADM Project Trips



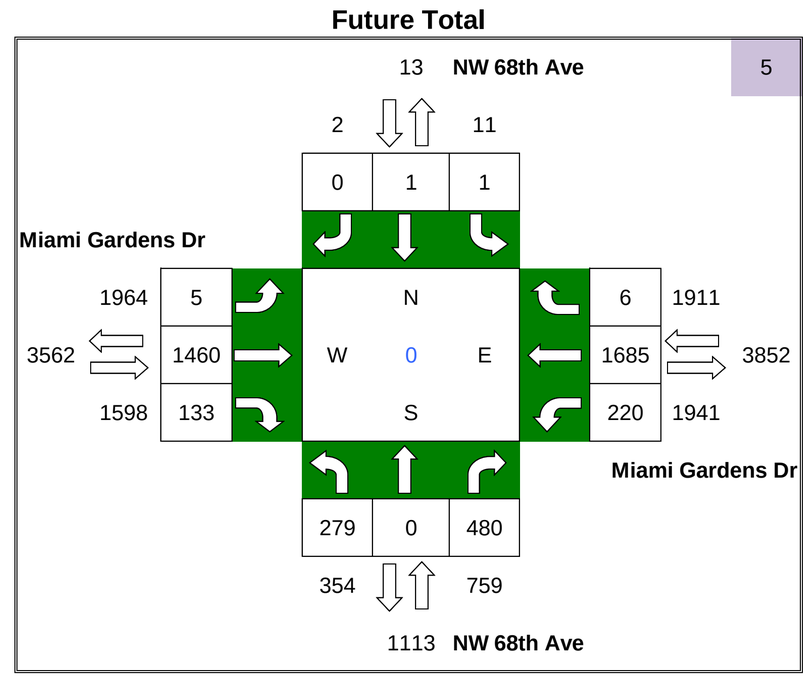
Project Trips

IN= 558

OUT= 596

	PD	#
N =	0.00%	0
E =	3.68%	42
S =	0.89%	10
W =	4.36%	50

Future Total



ADM/Graham

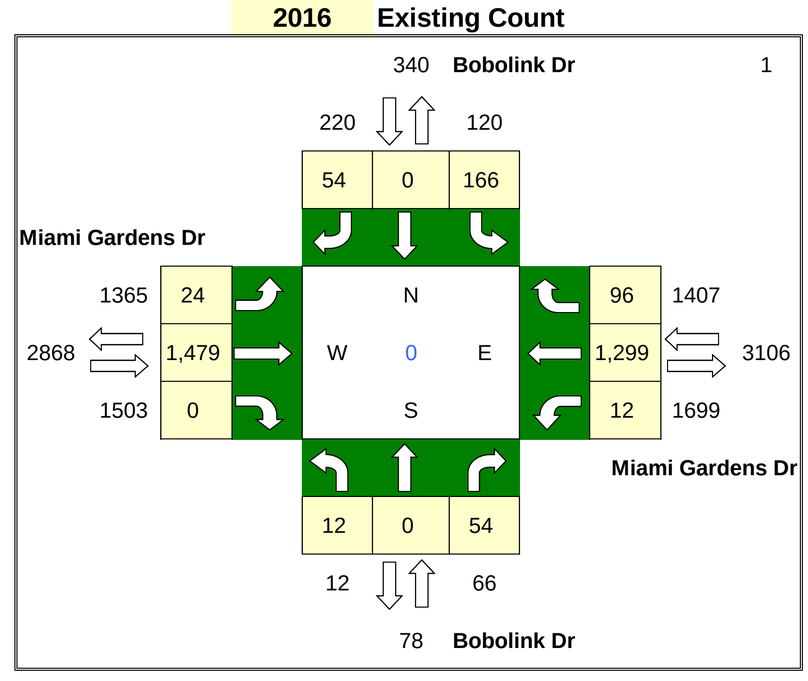
AM Turning Movement Volumes

N/S Roadway: Bobolink Dr

E/W Roadway: Miami Gardens Dr

Date Taken: 4/20/16

2016 Existing Count

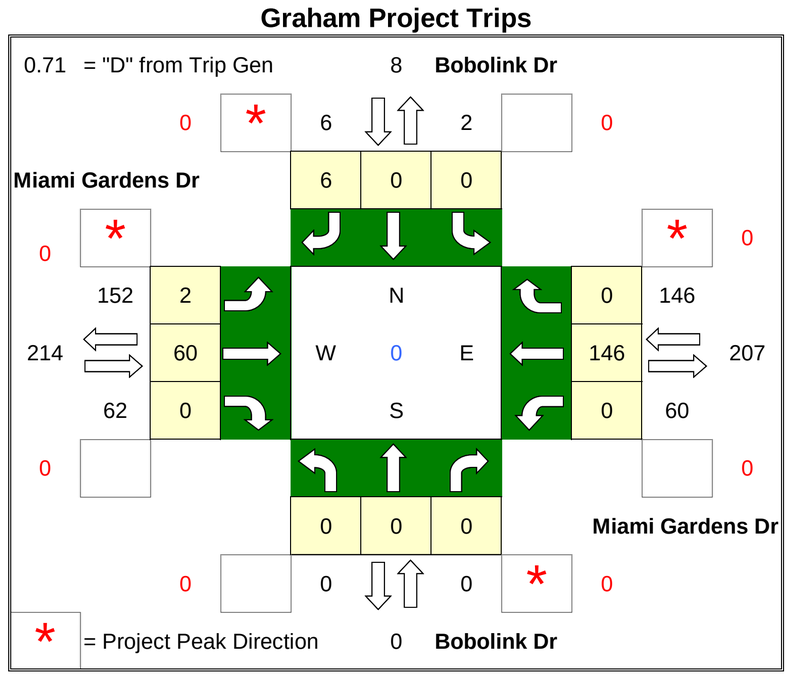


% Annual Growth = 1%

Seasonal Factor = 1.00

PHASE 2

Graham Project Trips



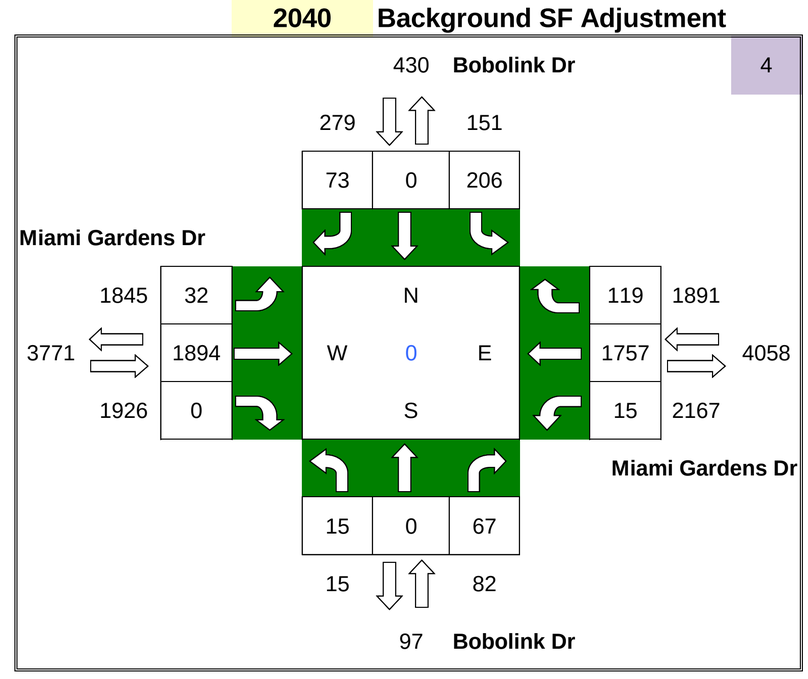
Project Trips

IN= 3,475

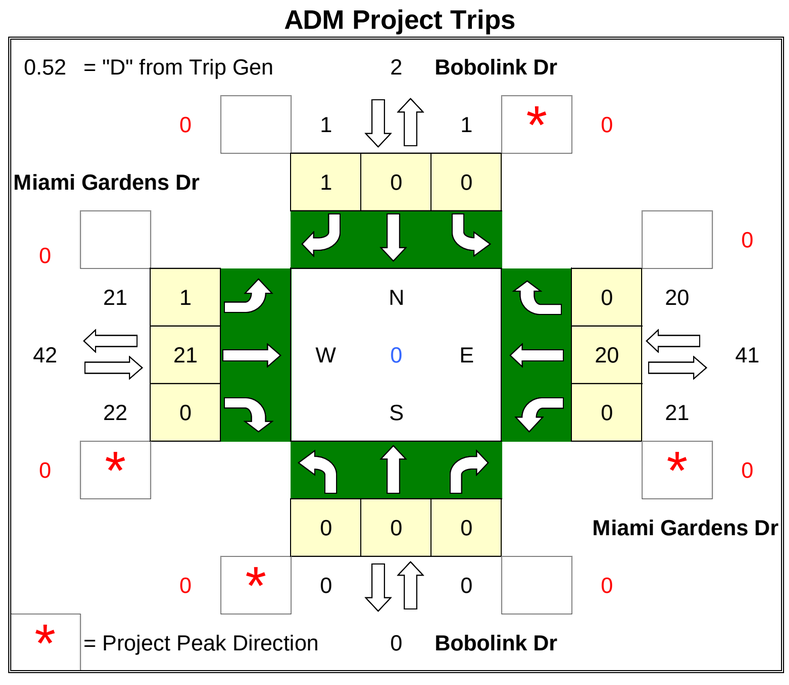
OUT= 1,431

	PD	#
N =	0.16%	8
E =	4.21%	207
S =	0.00%	0
W =	4.36%	214

2040 Background SF Adjustment



ADM Project Trips



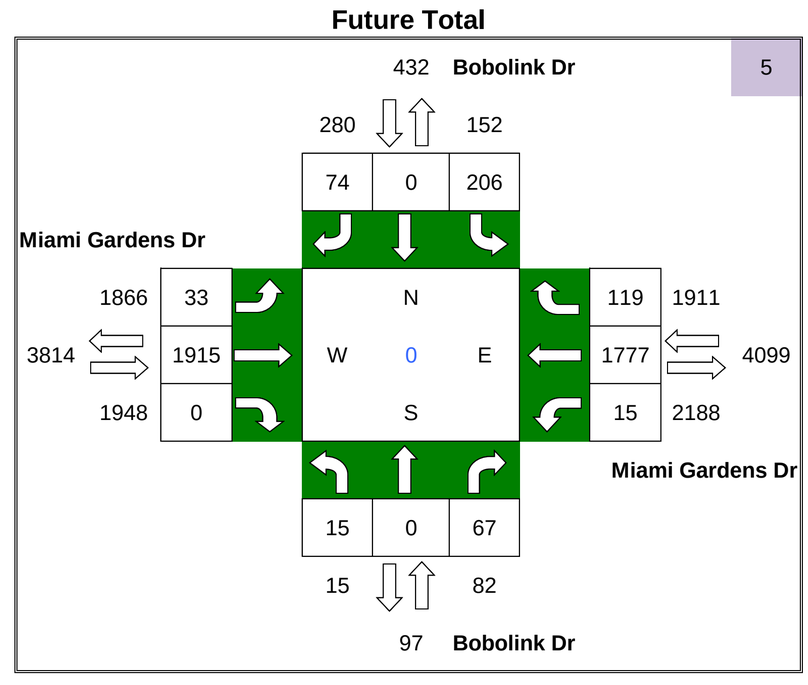
Project Trips

IN= 558

OUT= 596

	PD	#
N =	0.13%	2
E =	3.55%	41
S =	0.00%	0
W =	3.68%	42

Future Total



ADM/Graham

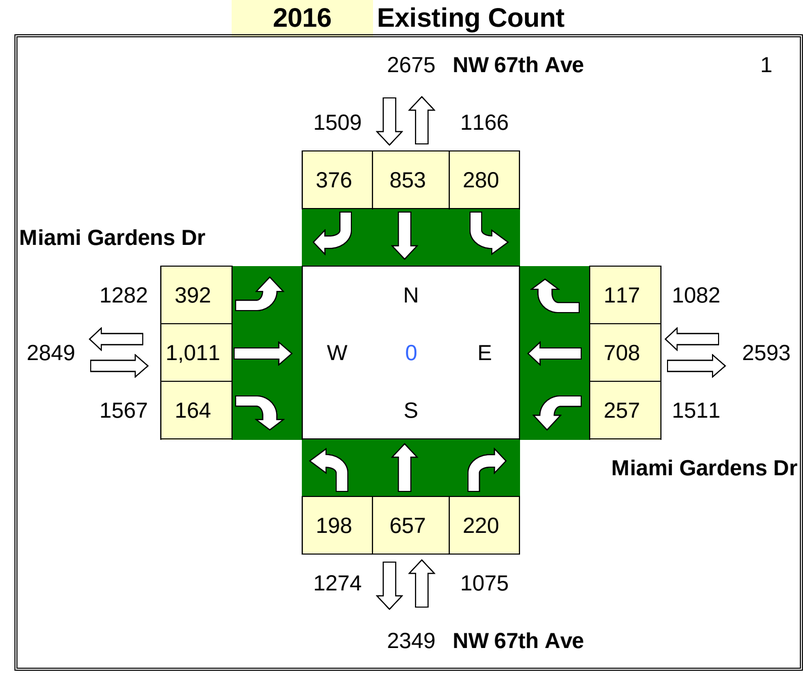
AM Turning Movement Volumes

N/S Roadway: NW 67th Ave

E/W Roadway: Miami Gardens Dr

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1%

Seasonal Factor = 1.00

PHASE 2

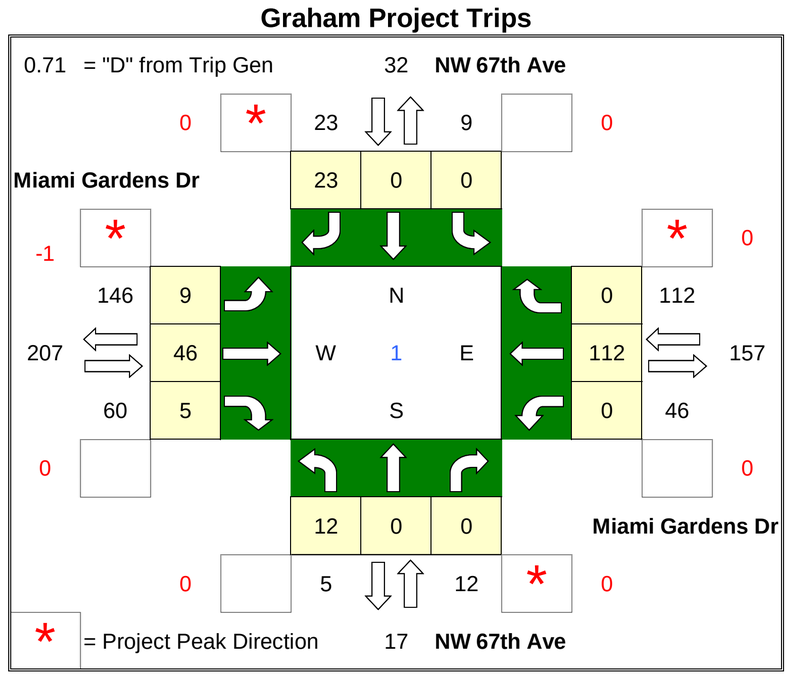
Project Trips

IN= 3,475

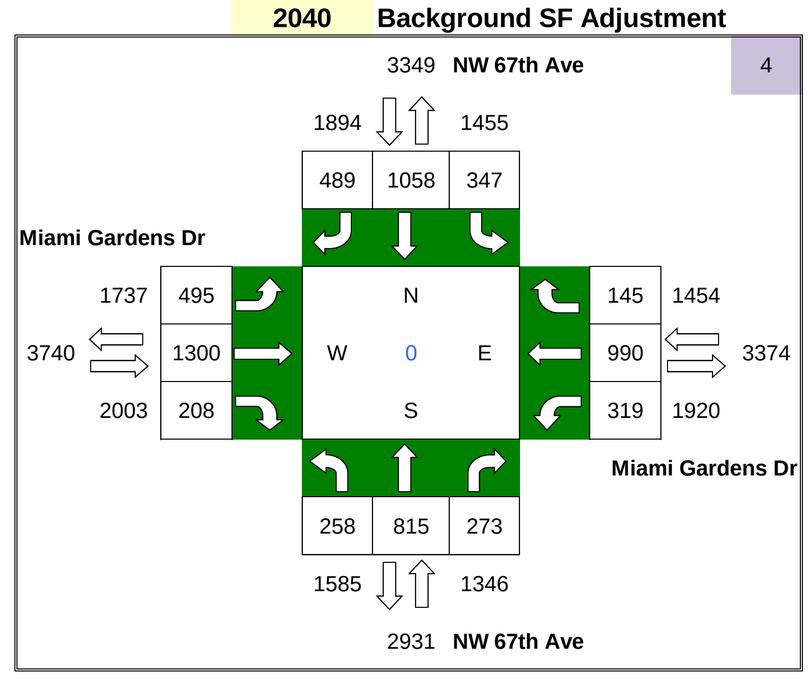
OUT= 1,431

	PD	#
N =	0.66%	32
E =	3.21%	157
S =	0.34%	17
W =	4.21%	207

Graham Project Trips



2040 Background SF Adjustment



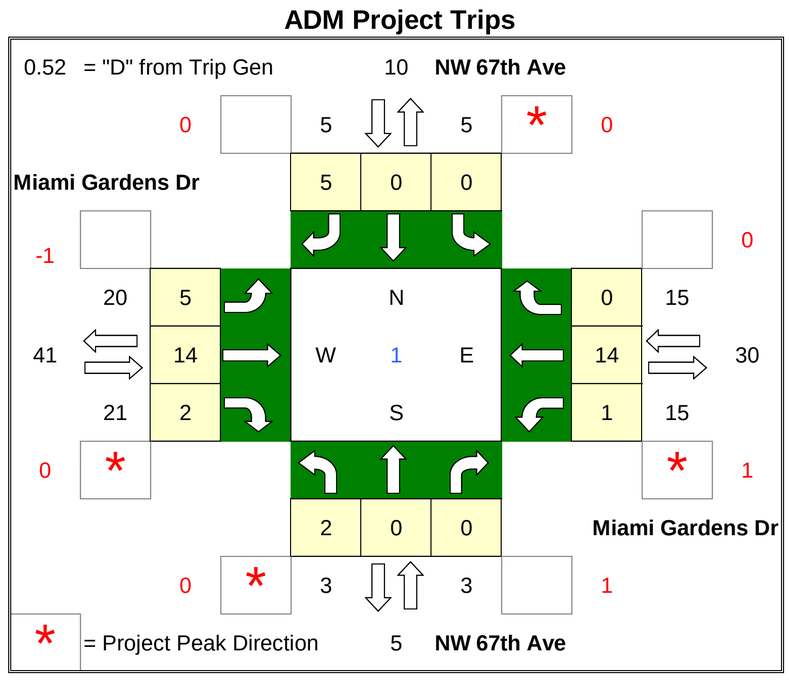
Project Trips

IN= 558

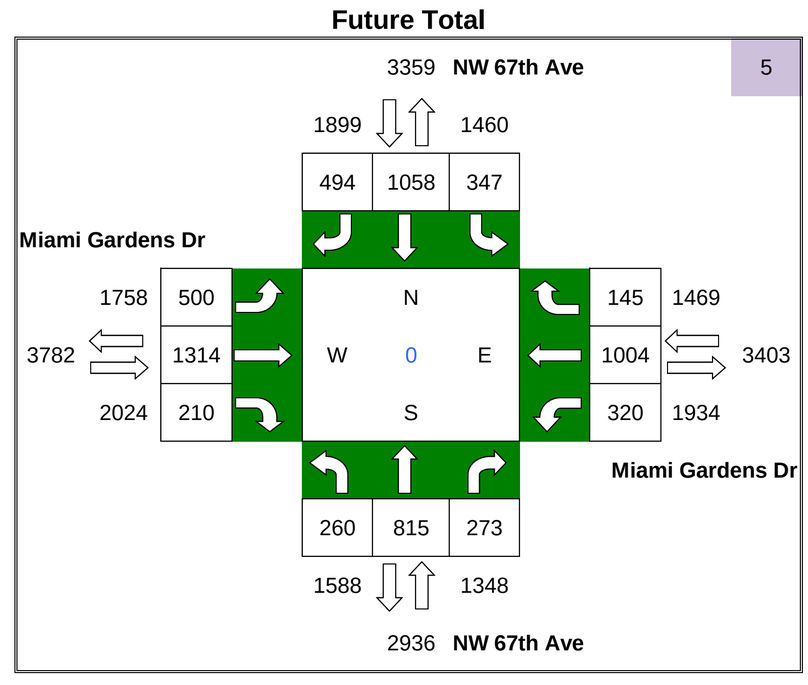
OUT= 596

	PD	#
N =	0.86%	10
E =	2.60%	30
S =	0.45%	5
W =	3.55%	41

ADM Project Trips



Future Total



ADM/Graham

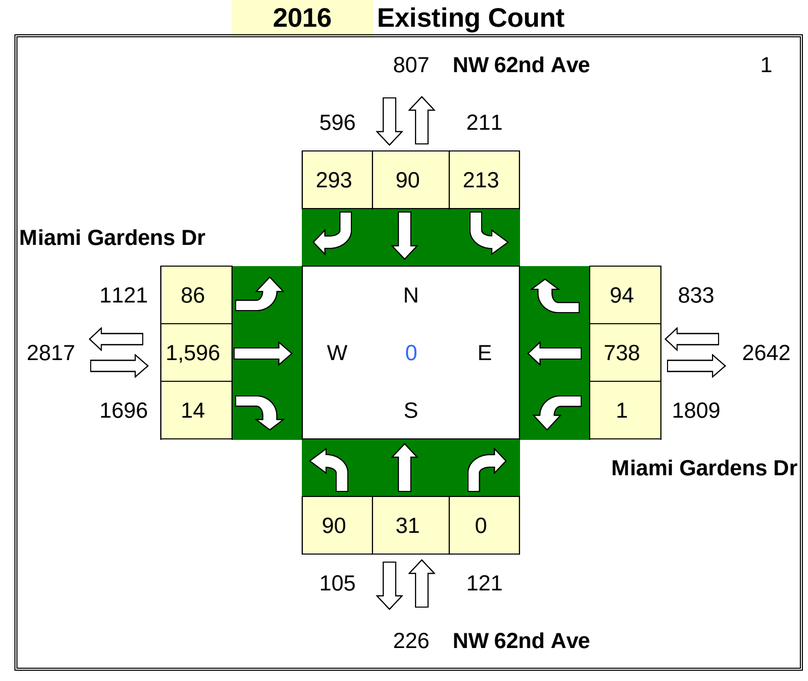
AM Turning Movement Volumes

N/S Roadway: NW 62nd Ave

E/W Roadway: Miami Gardens Dr

Date Taken: 4/20/16

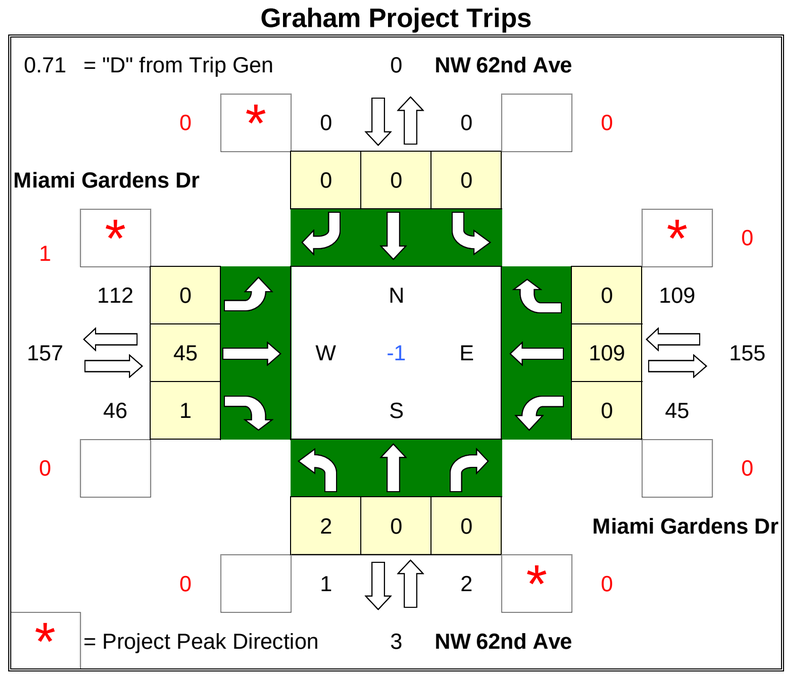
2016 Existing Count



% Annual Growth = 1% **Seasonal Factor =** 1.00

PHASE 2

Graham Project Trips



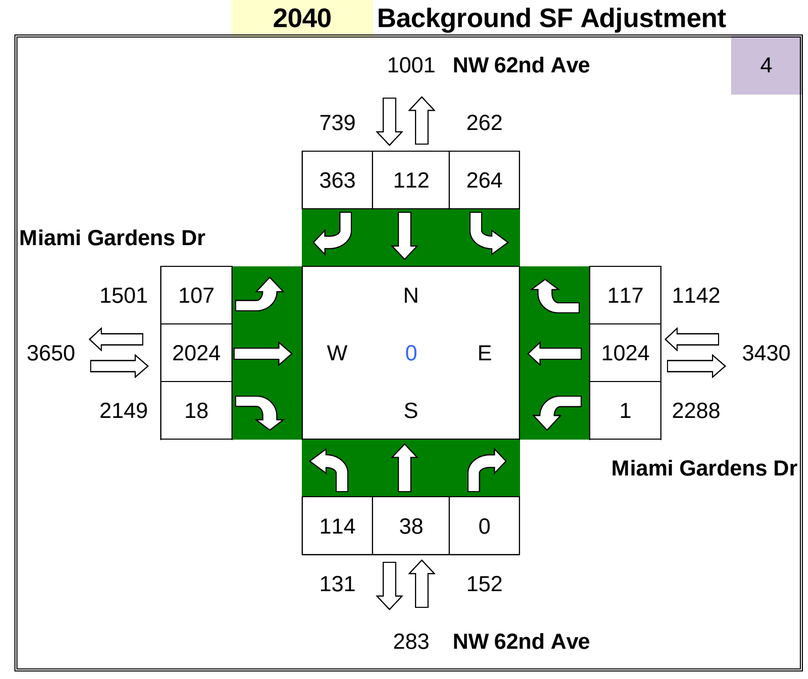
Project Trips

IN= 3,475

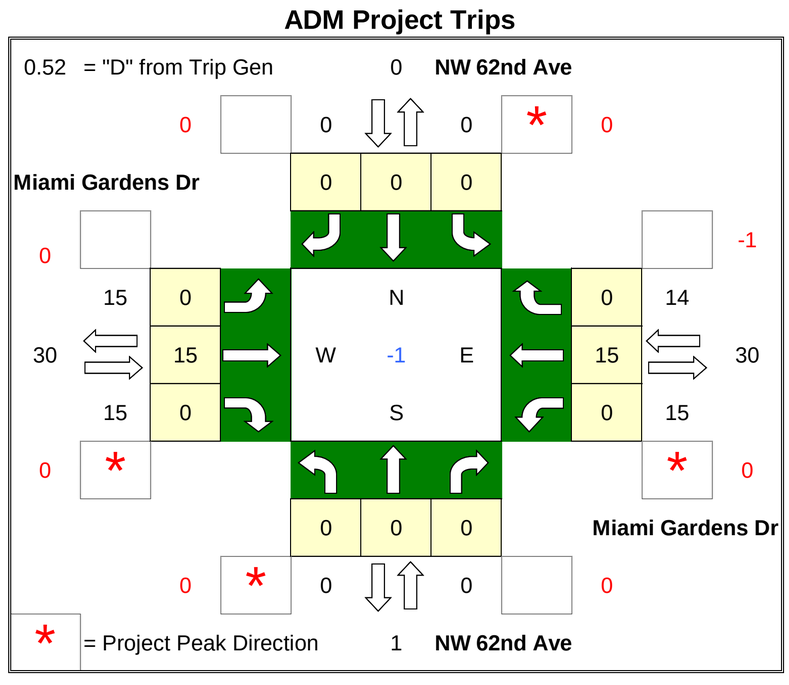
OUT= 1,431

	PD	#
N =	0.00%	0
E =	3.15%	155
S =	0.06%	3
W =	3.21%	157

2040 Background SF Adjustment



ADM Project Trips



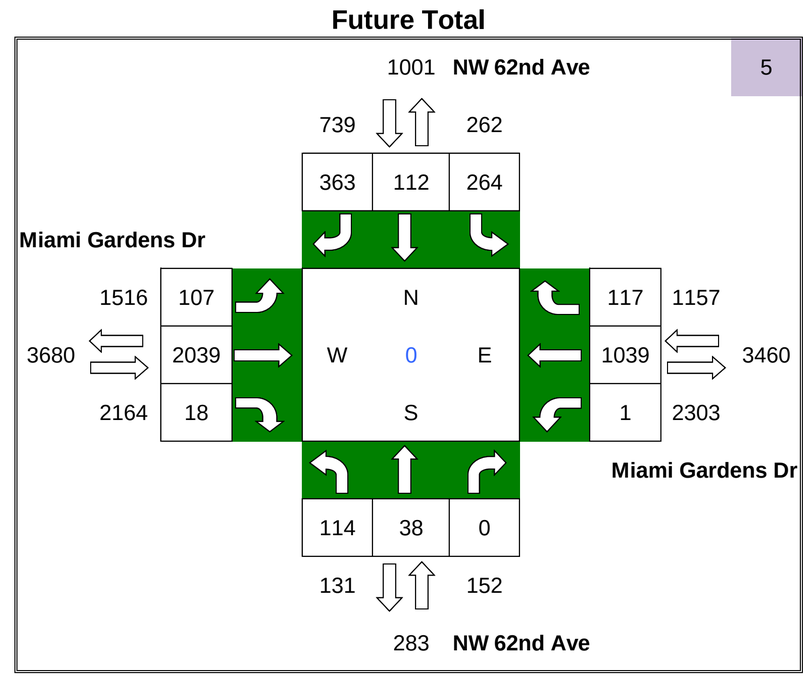
Project Trips

IN= 558

OUT= 596

	PD	#
N =	0.00%	0
E =	2.56%	30
S =	0.05%	1
W =	2.60%	30

Future Total



ADM/Graham

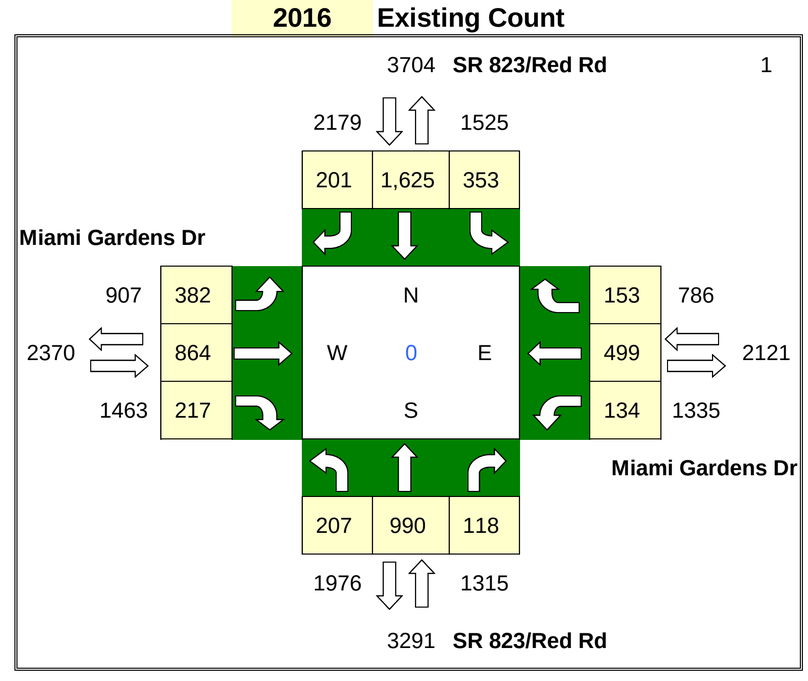
AM Turning Movement Volumes

N/S Roadway: SR 823/Red Rd

E/W Roadway: Miami Gardens Dr

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1% **Seasonal Factor =** 1.00

PHASE 2

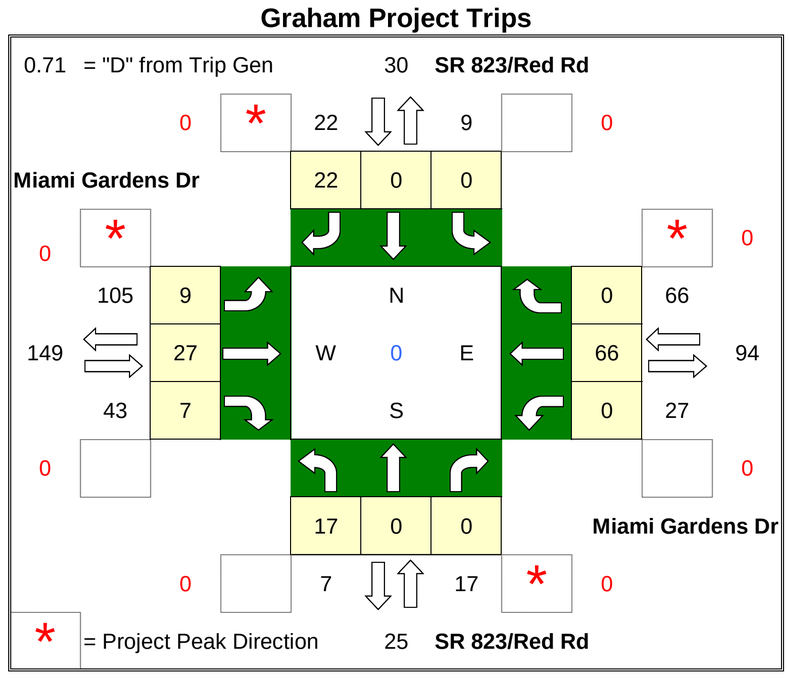
Graham Project Trips

Project Trips

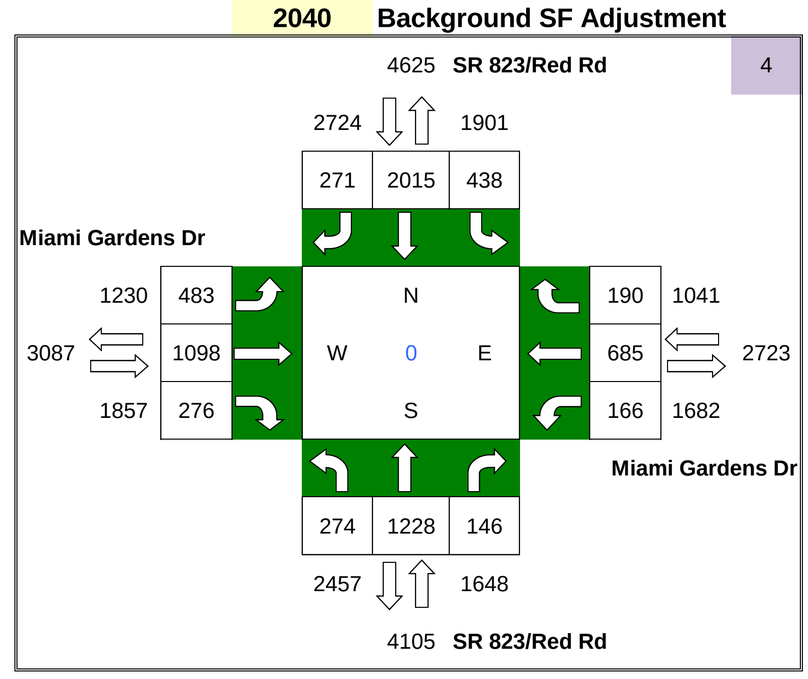
IN= 3,475

OUT= 1,431

	PD	#
N =	0.62%	30
E =	1.91%	94
S =	0.50%	25
W =	3.03%	149



2040 Background SF Adjustment



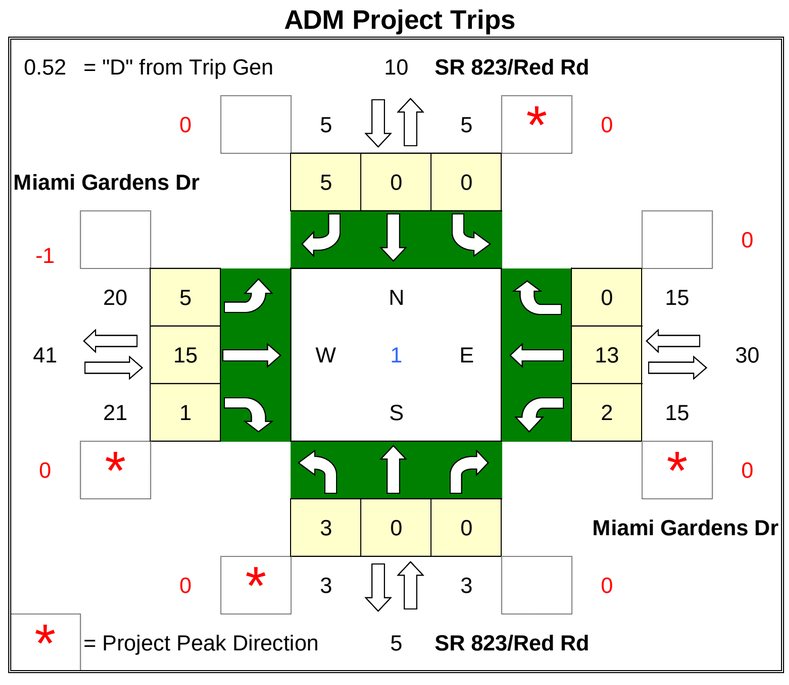
ADM Project Trips

Project Trips

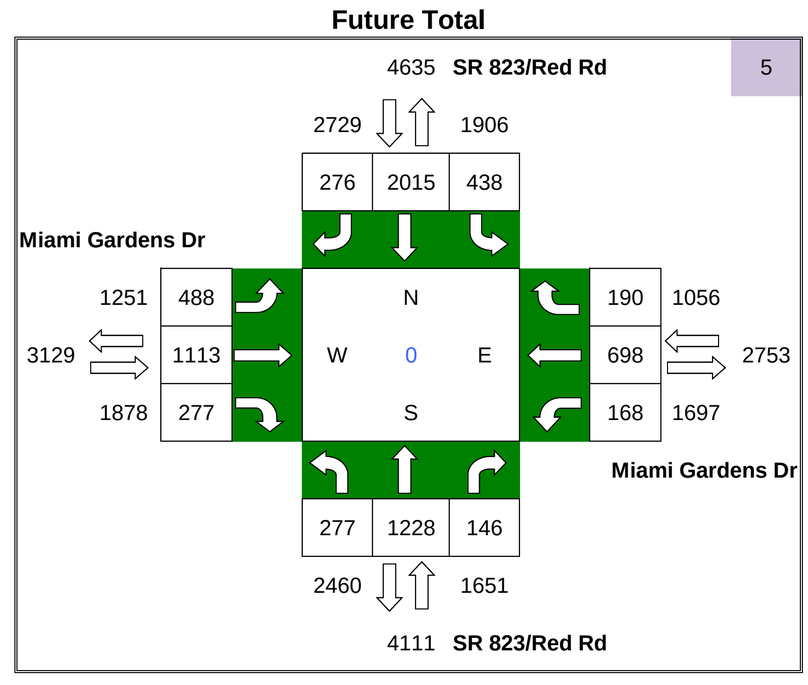
IN= 558

OUT= 596

	PD	#
N =	0.86%	10
E =	2.60%	30
S =	0.45%	5
W =	3.55%	41



Future Total



ADM/Graham

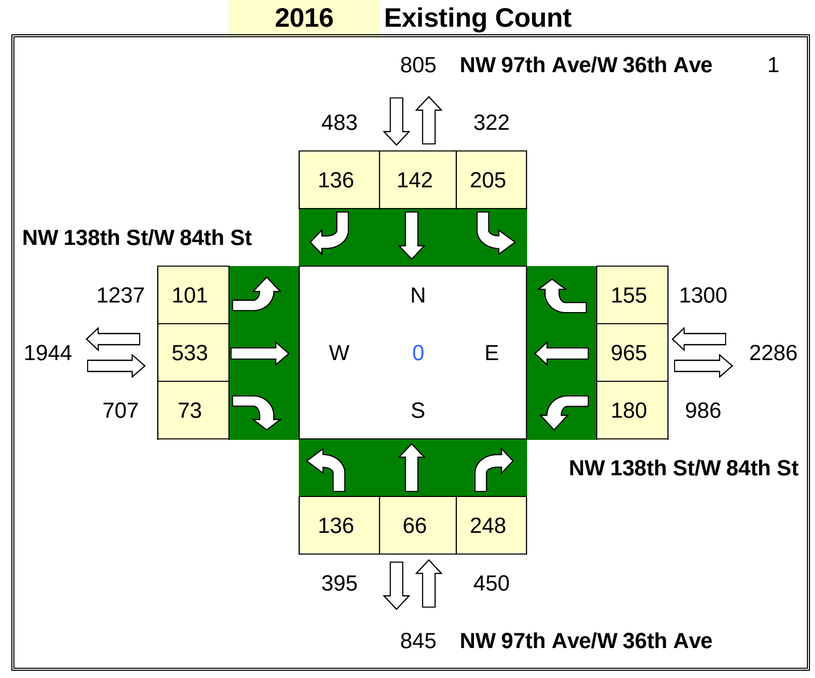
AM Turning Movement Volumes

N/S Roadway: NW 97th Ave/W 36th Ave

E/W Roadway: NW 138th St/W 84th St

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1.4% **Seasonal Factor =** 1.00

PHASE 2

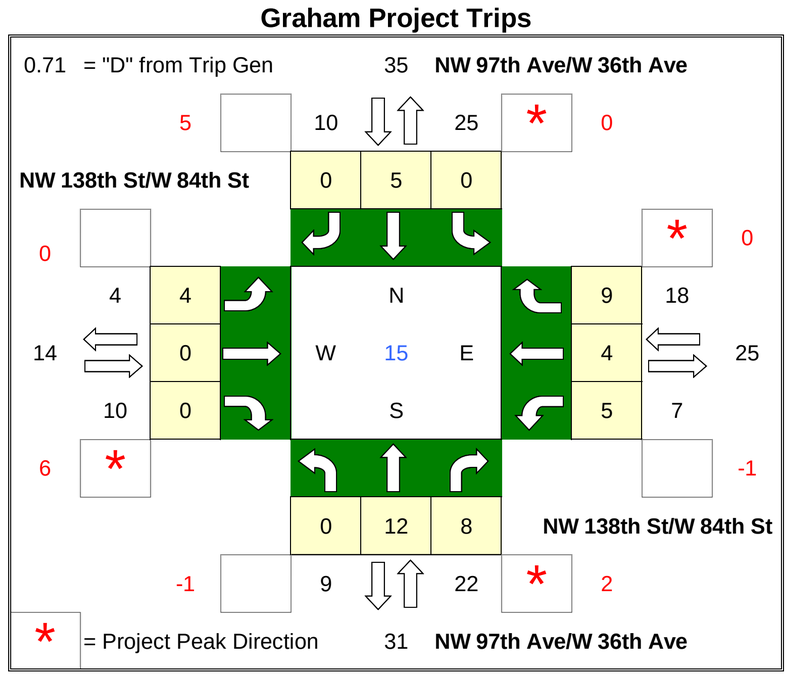
Project Trips

IN= 3,475

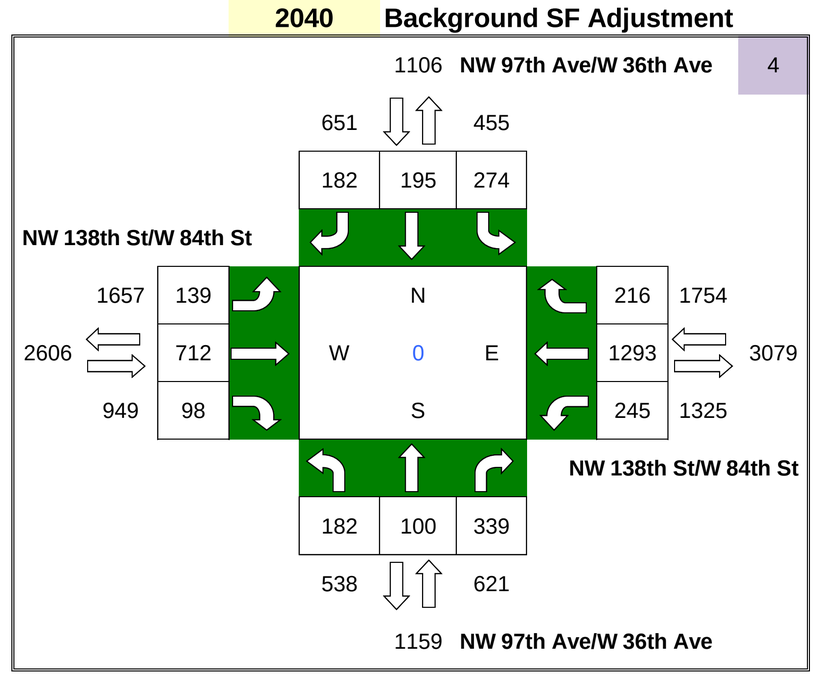
OUT= 1,431

	PD	#
N =	0.72%	35
E =	0.51%	25
S =	0.63%	31
W =	0.28%	14

Graham Project Trips



2040 Background SF Adjustment



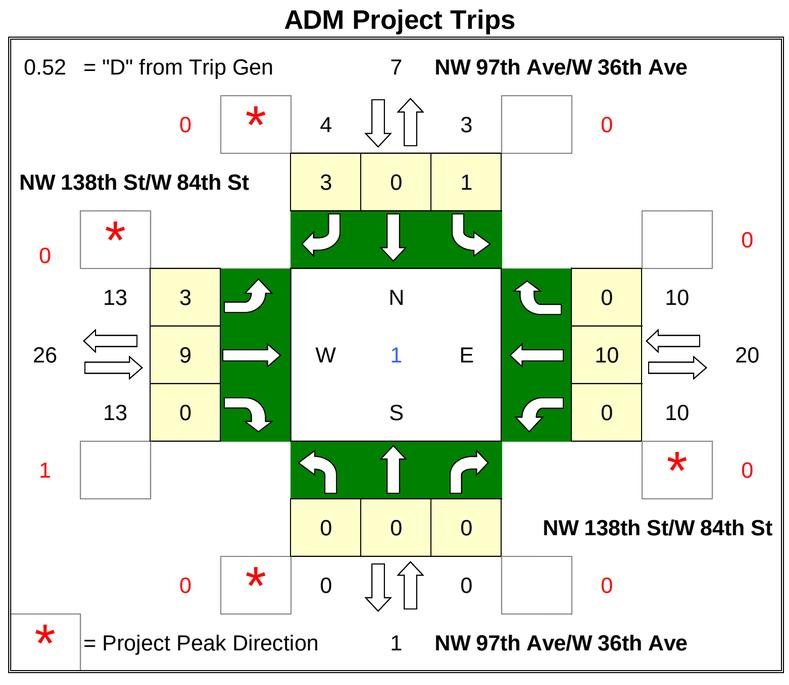
Project Trips

IN= 558

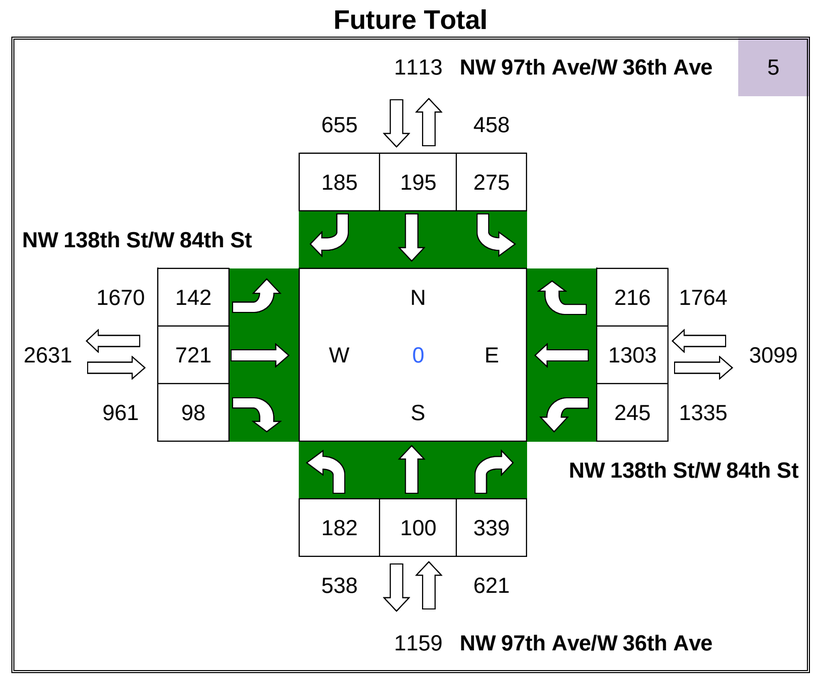
OUT= 596

	PD	#
N =	0.62%	7
E =	1.74%	20
S =	0.06%	1
W =	2.26%	26

ADM Project Trips



Future Total



ADM/Graham

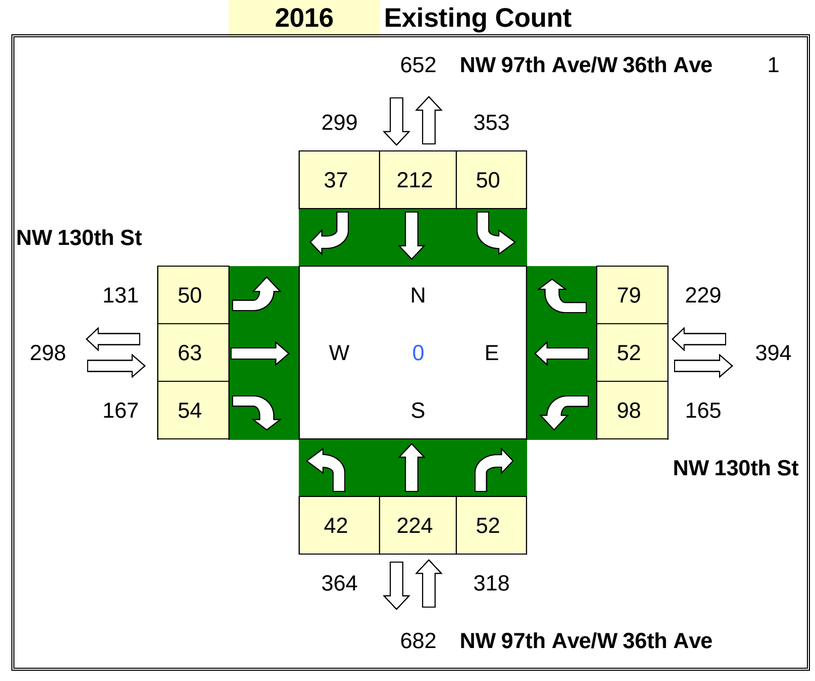
AM Turning Movement Volumes

N/S Roadway: NW 97th Ave/W 36th Ave

E/W Roadway: NW 130th St

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1.4% **Seasonal Factor =** 1.00

PHASE 2

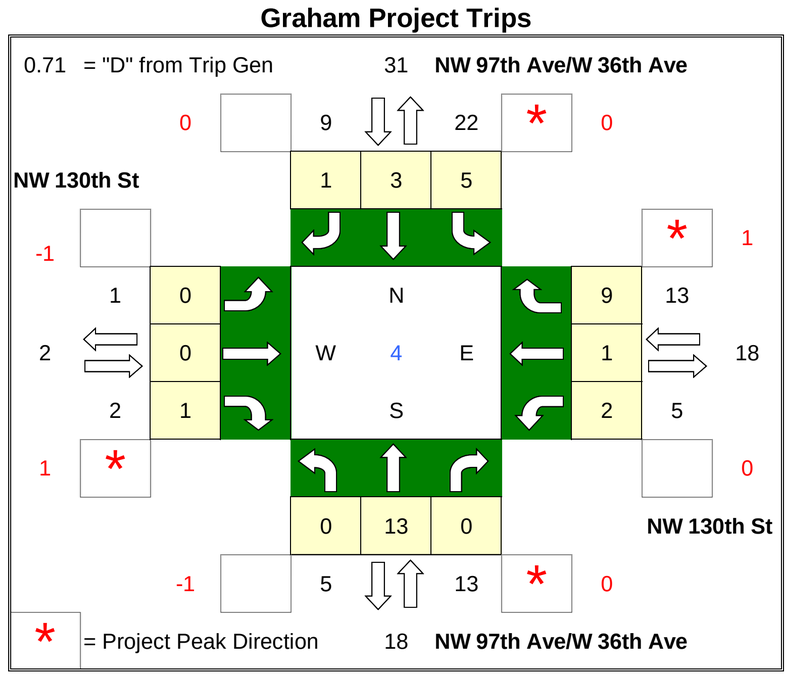
Project Trips

IN= 3,475

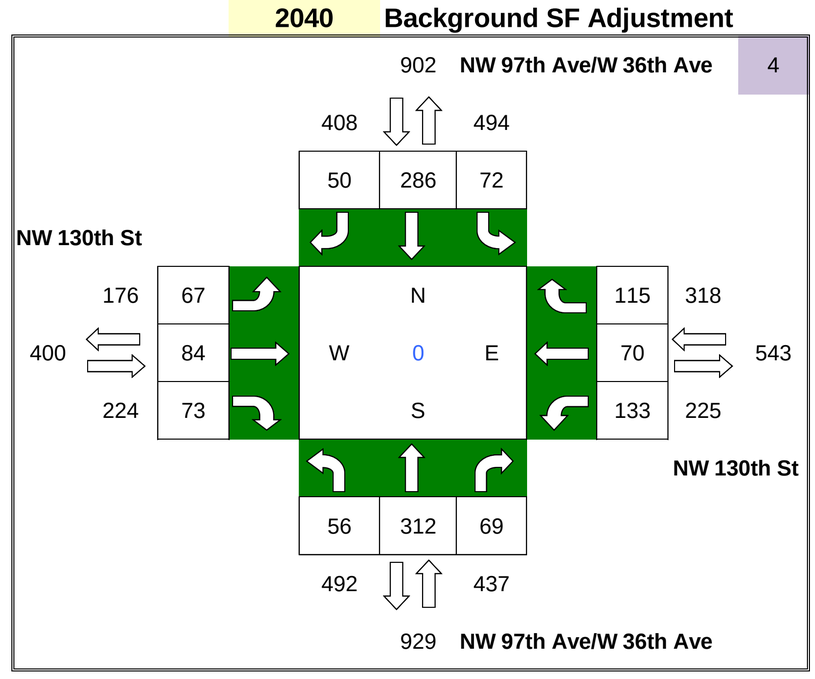
OUT= 1,431

	PD	#
N =	0.63%	31
E =	0.36%	18
S =	0.36%	18
W =	0.05%	2

Graham Project Trips



2040 Background SF Adjustment



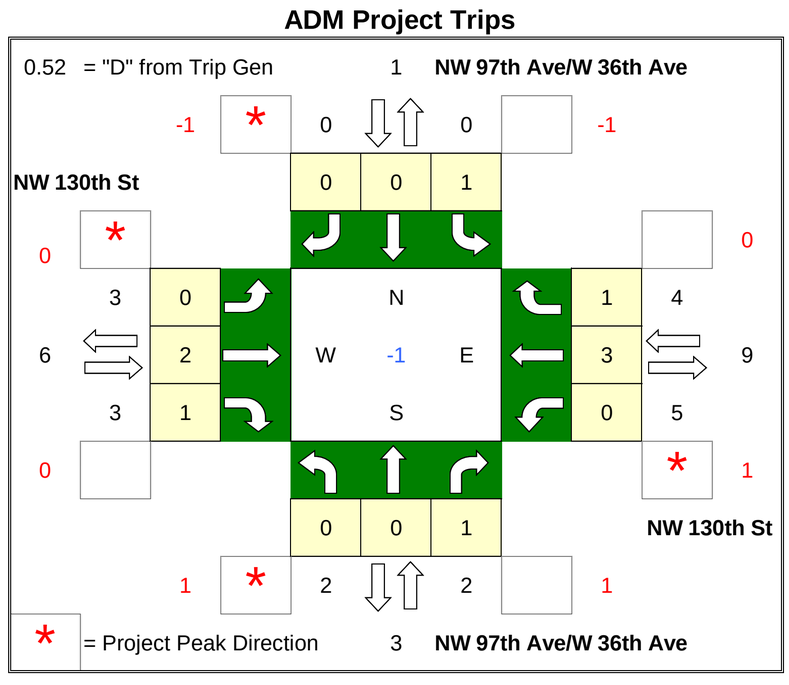
Project Trips

IN= 558

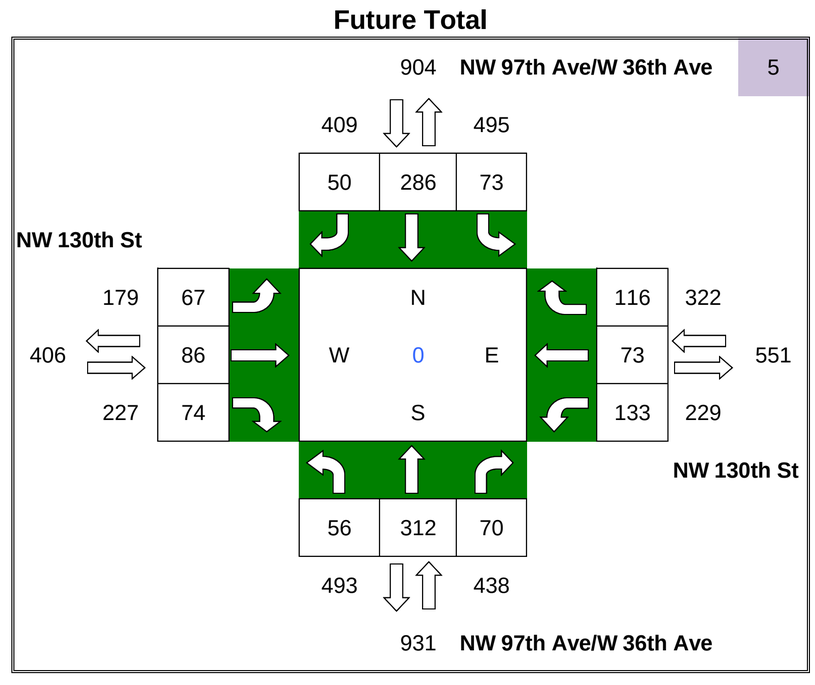
OUT= 596

	PD	#
N =	0.06%	1
E =	0.77%	9
S =	0.27%	3
W =	0.56%	6

ADM Project Trips



Future Total



ADM/Graham

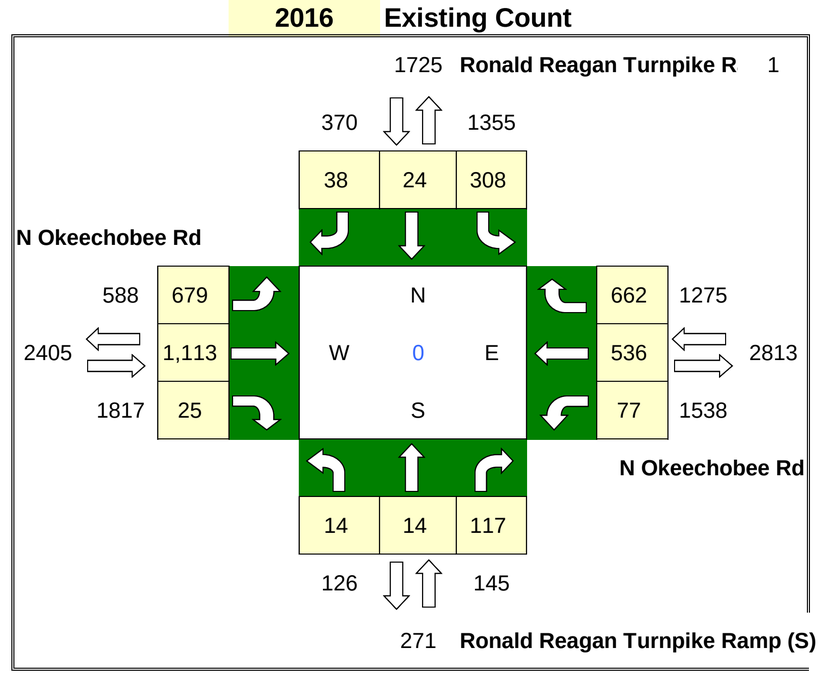
AM Turning Movement Volumes

N/S Roadway: Ronald Reagan Turnpike Ramp (S)

E/W Roadway: N Okeechobee Rd

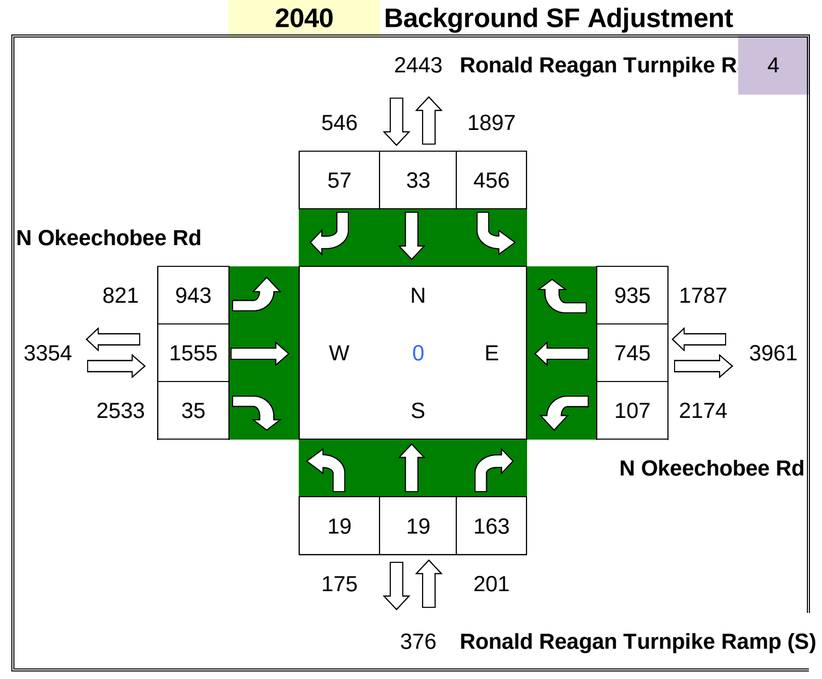
Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1.4% **Seasonal Factor =** 1.04

2040 Background SF Adjustment



PHASE 2

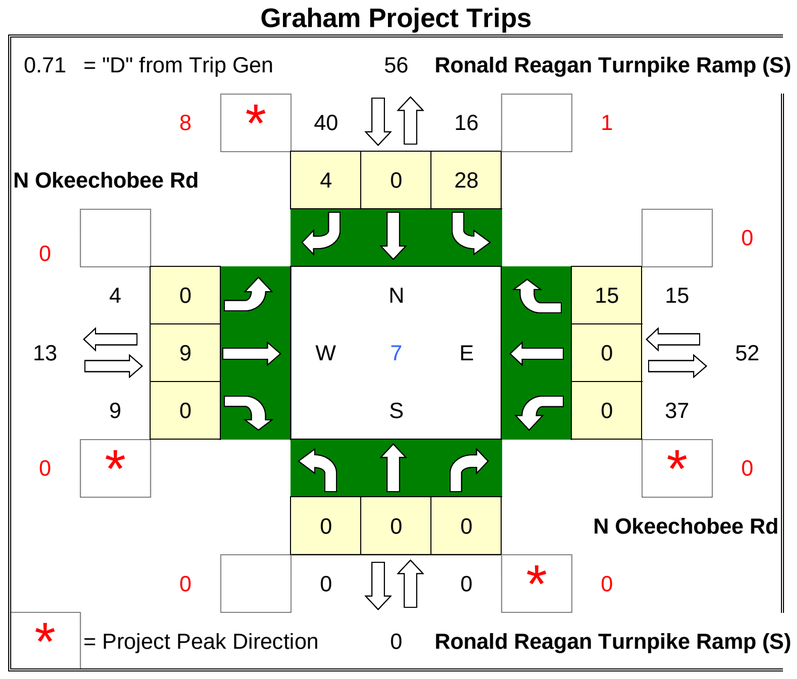
Graham Project Trips

Project Trips

IN= 3,475

OUT= 1,431

	PD	#
N =	1.14%	56
E =	1.07%	52
S =	0.00%	0
W =	0.27%	13



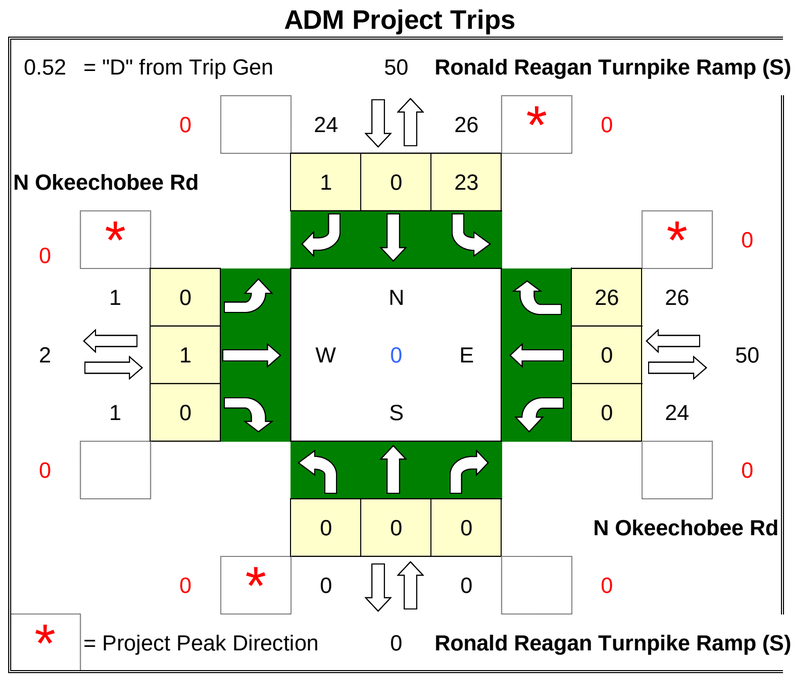
ADM Project Trips

Project Trips

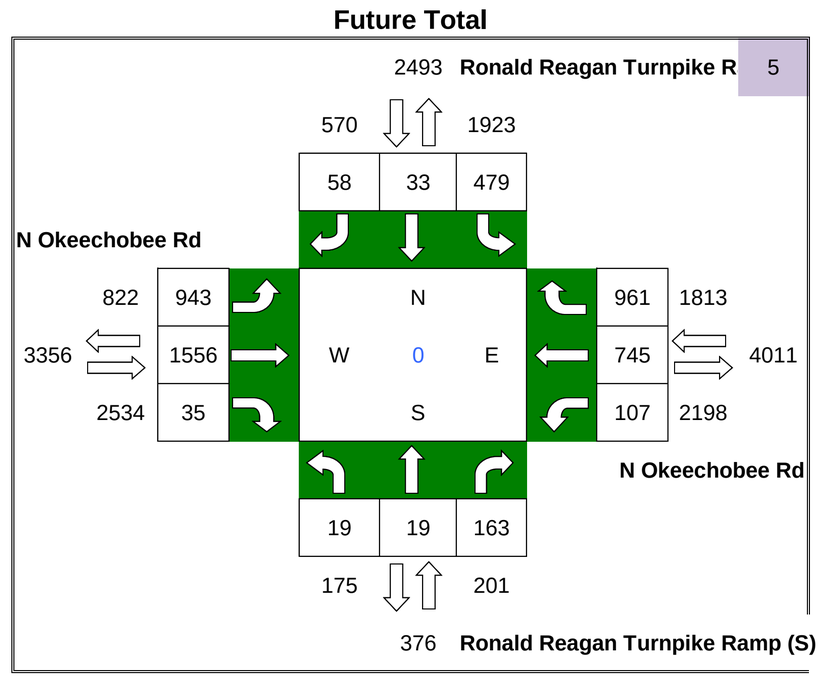
IN= 558

OUT= 596

	PD	#
N =	4.36%	50
E =	4.36%	50
S =	0.00%	0
W =	0.20%	2



Future Total



ADM/Graham

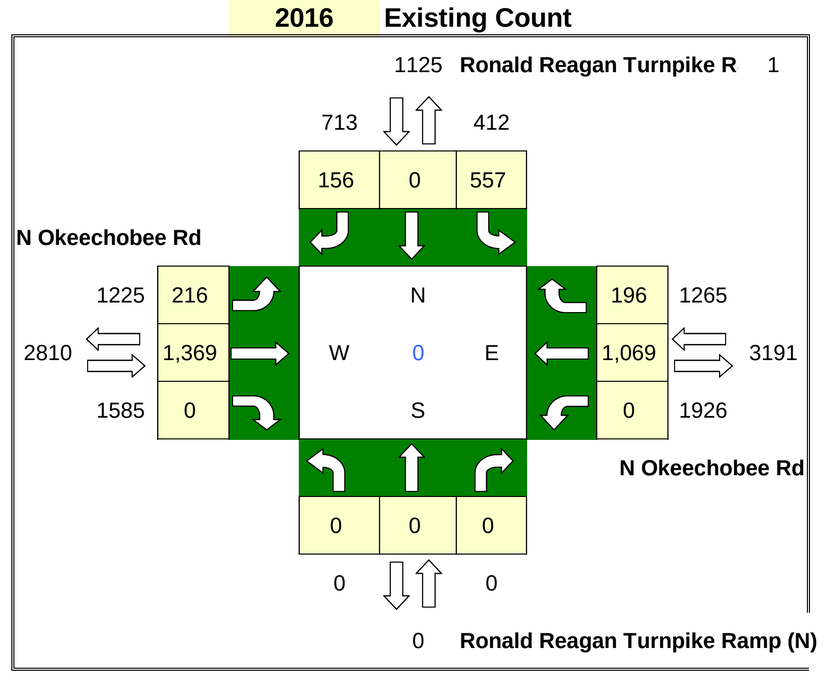
AM Turning Movement Volumes

N/S Roadway: Ronald Reagan Turnpike Ramp (N)

E/W Roadway: N Okeechobee Rd

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1.4% **Seasonal Factor =** 1.04

PHASE 2

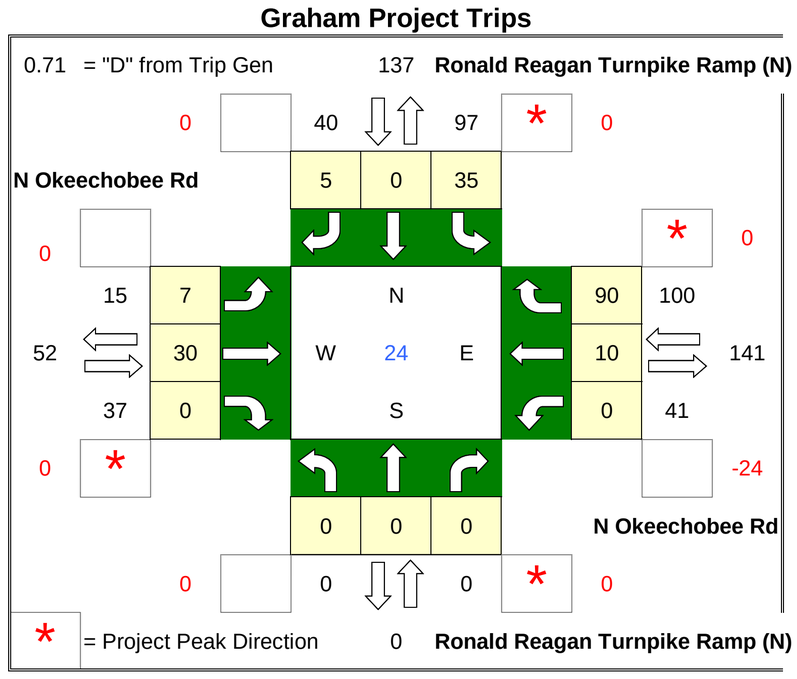
Graham Project Trips

Project Trips

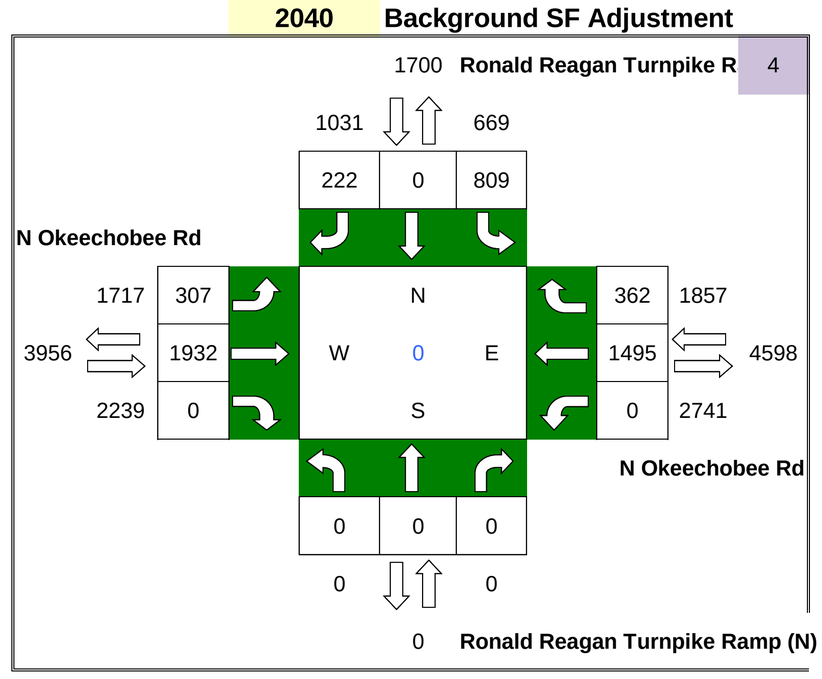
IN= 3,475

OUT= 1,431

	PD	#
N =	2.80%	137
E =	2.88%	141
S =	0.00%	0
W =	1.07%	52



2040 Background SF Adjustment



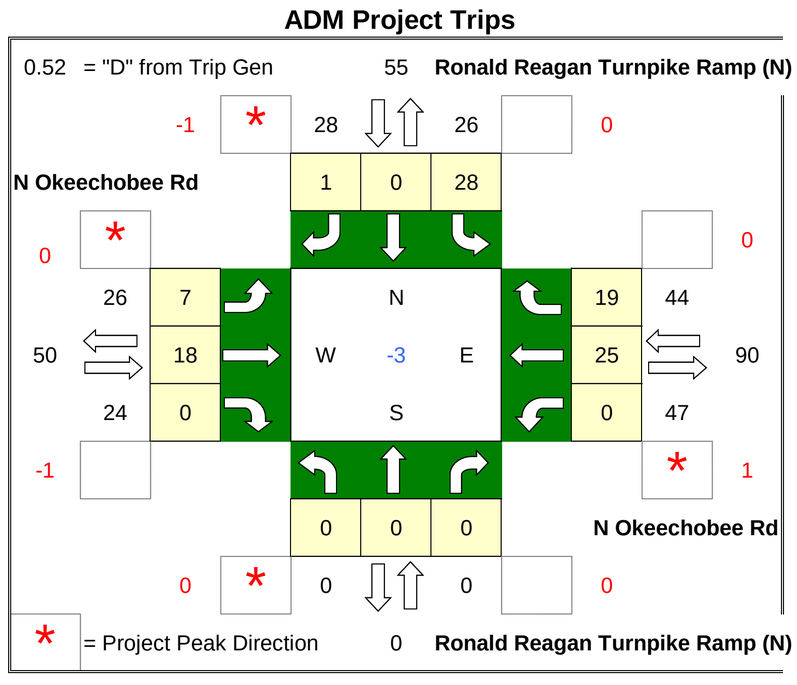
ADM Project Trips

Project Trips

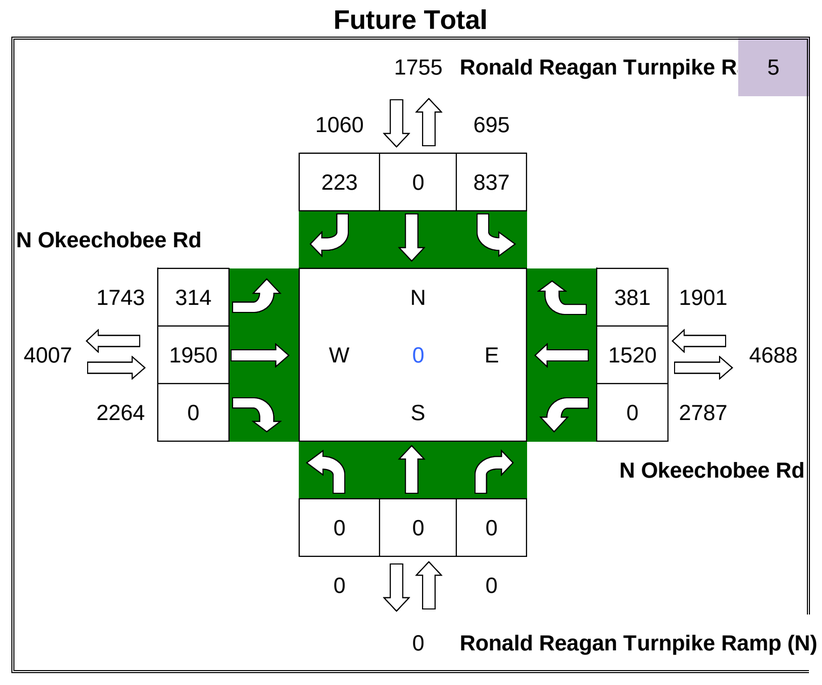
IN= 558

OUT= 596

	PD	#
N =	4.74%	55
E =	7.81%	90
S =	0.00%	0
W =	4.36%	50



Future Total



ADM/Graham

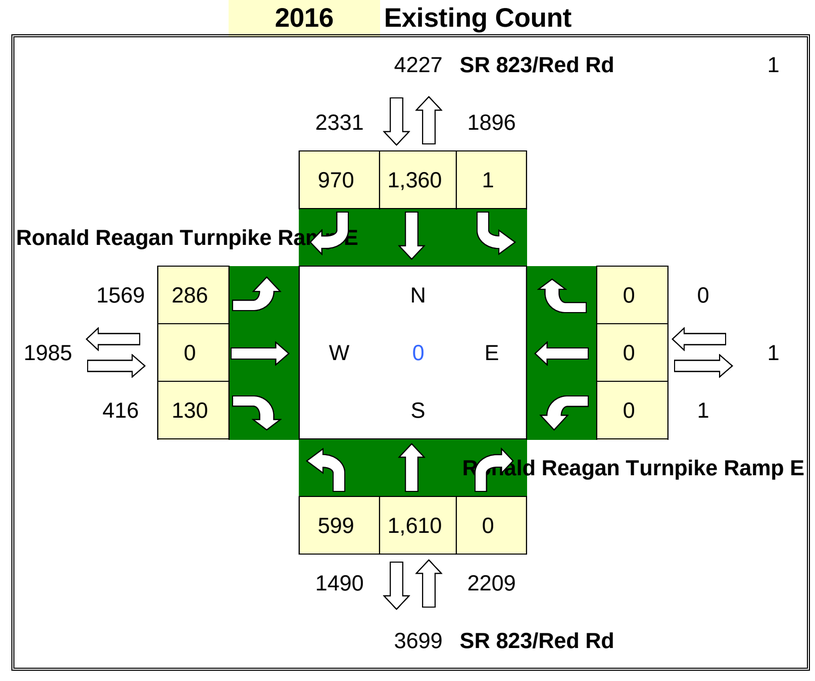
AM Turning Movement Volumes

N/S Roadway: SR 823/Red Rd

E/W Roadway: Ronald Reagan Turnpike Ramp E

Date Taken: 4/20/16

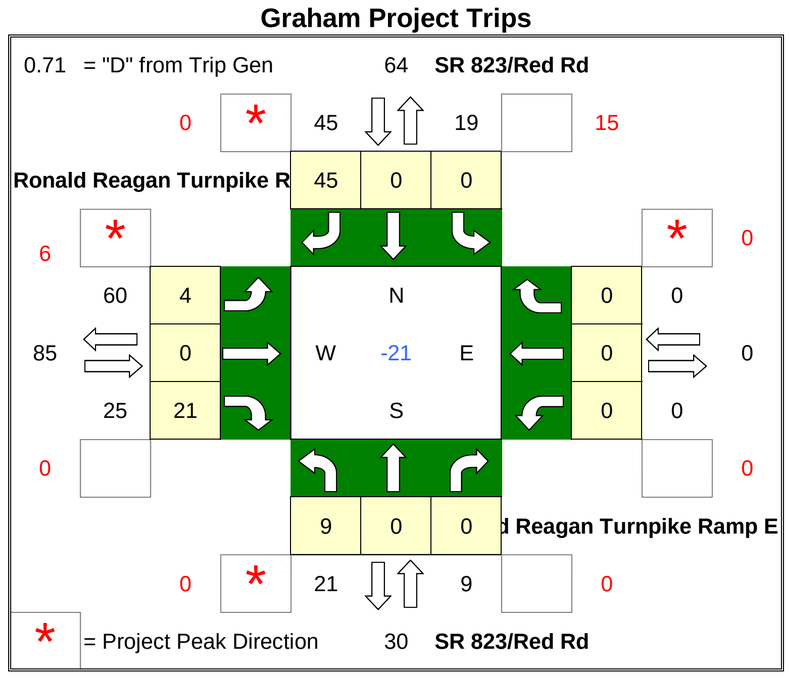
2016 Existing Count



% Annual Growth = 1.9% **Seasonal Factor =** 1.04

PHASE 2

Graham Project Trips



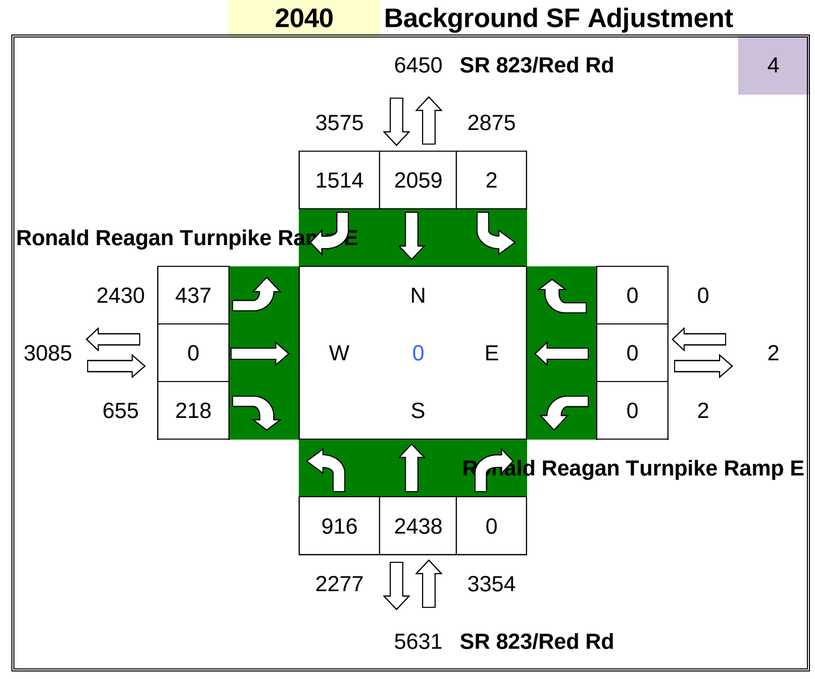
Project Trips

IN= 3,475

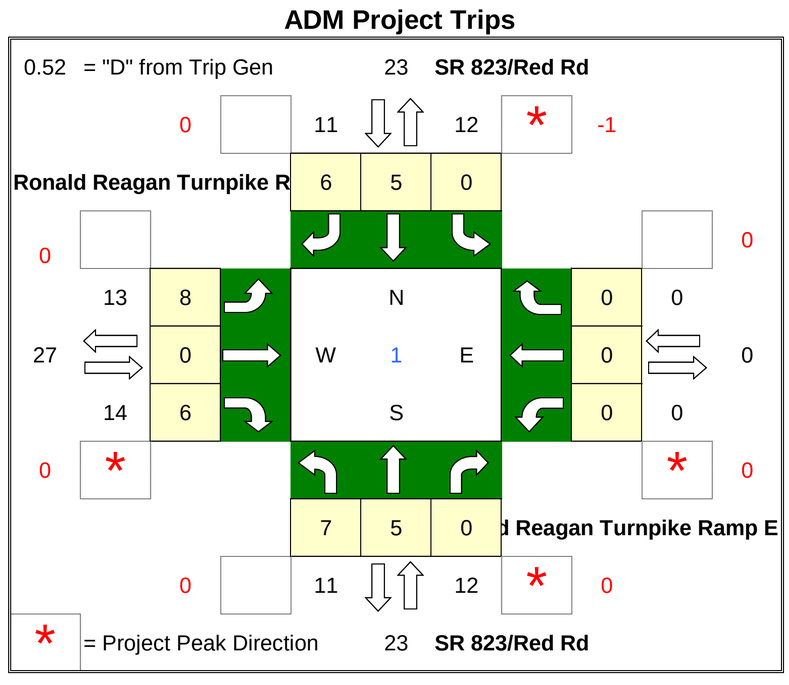
OUT= 1,431

	PD	#
N =	1.30%	64
E =	0.00%	0
S =	0.61%	30
W =	1.74%	85

2040 Background SF Adjustment



ADM Project Trips



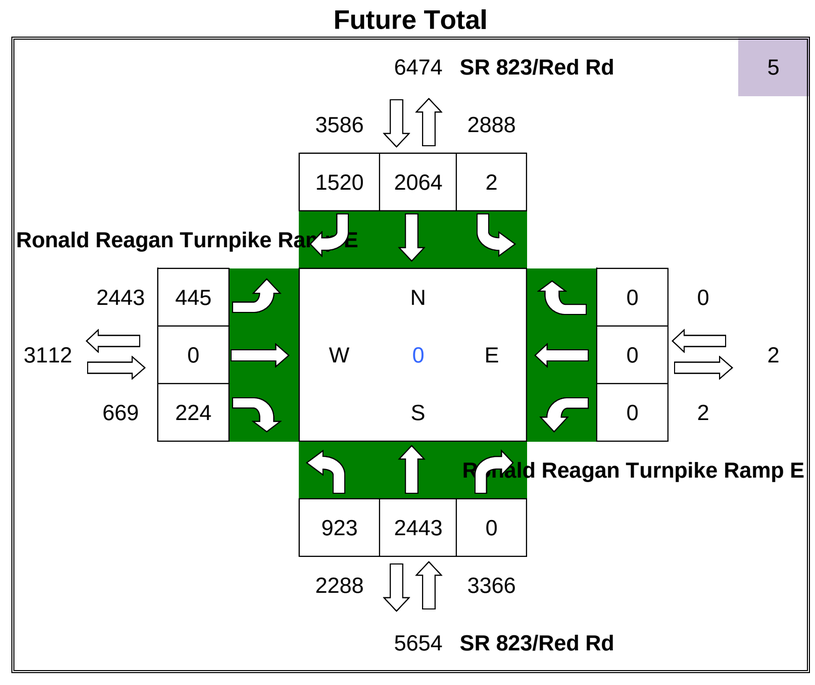
Project Trips

IN= 558

OUT= 596

	PD	#
N =	1.95%	23
E =	0.00%	0
S =	1.97%	23
W =	2.34%	27

Future Total



ADM/Graham

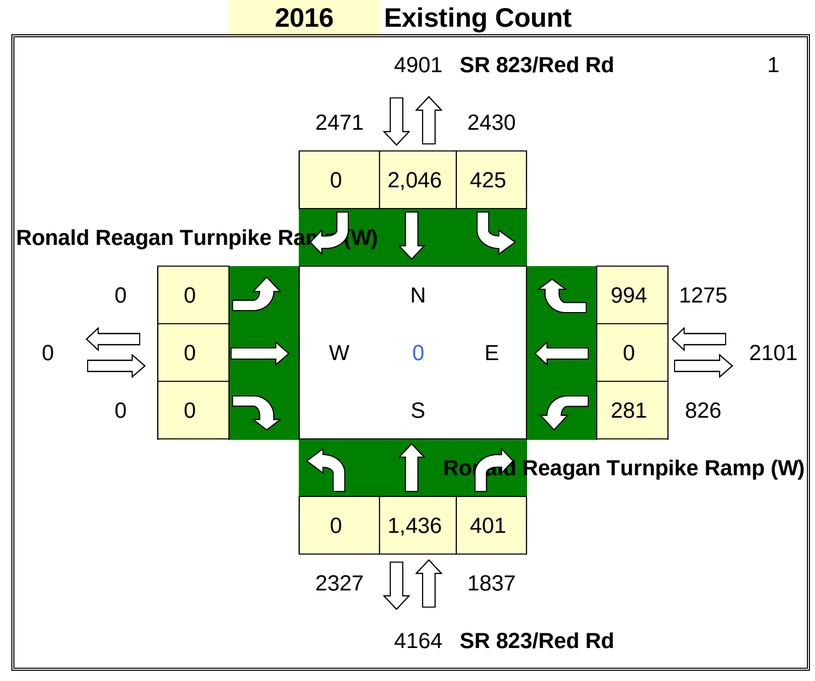
AM Turning Movement Volumes

N/S Roadway: SR 823/Red Rd

E/W Roadway: Ronald Reagan Turnpike Ramp (W)

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1.9% **Seasonal Factor =** 1.04

PHASE 2

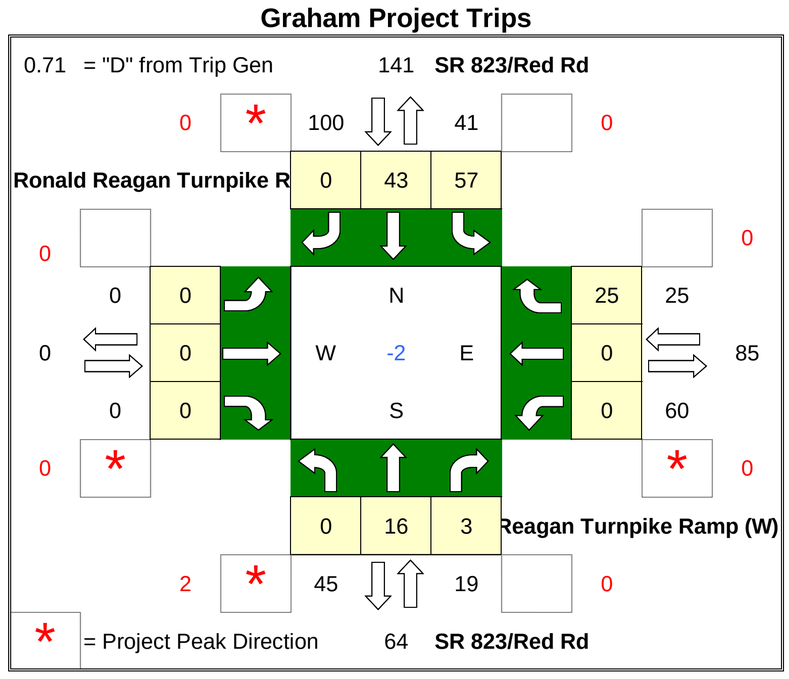
Project Trips

IN= 3,475

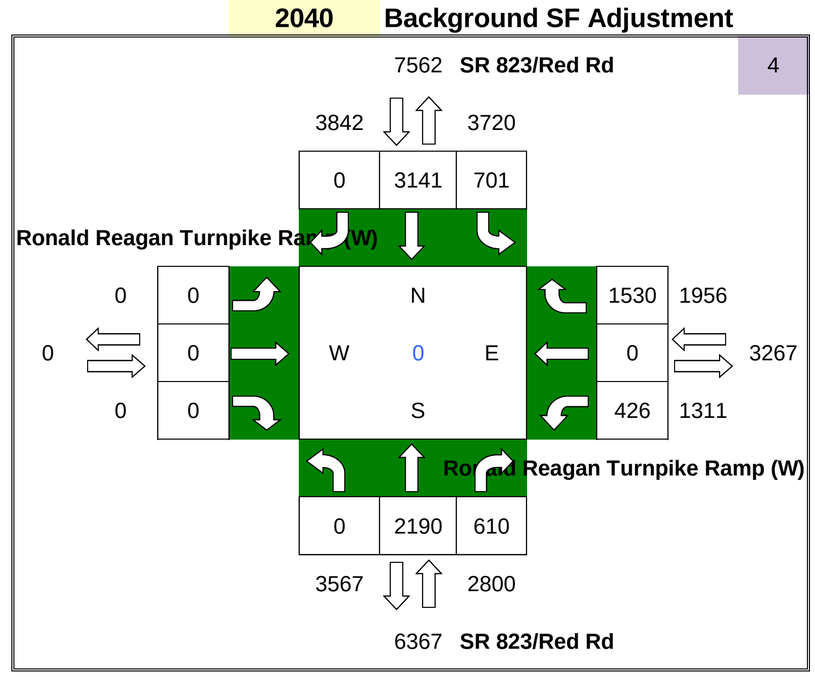
OUT= 1,431

	PD	#
N =	2.87%	141
E =	1.74%	85
S =	1.30%	64
W =	0.00%	0

Graham Project Trips



2040 Background SF Adjustment



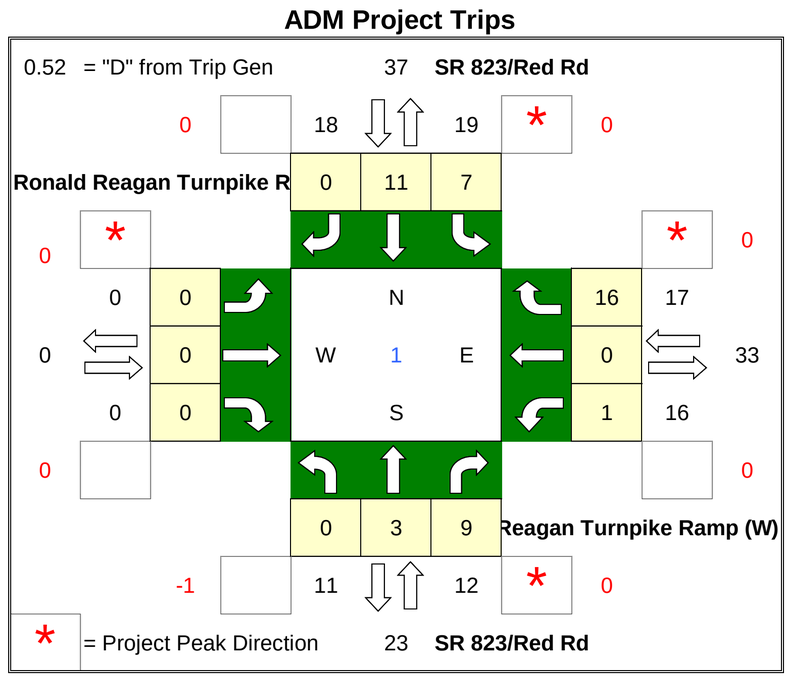
Project Trips

IN= 558

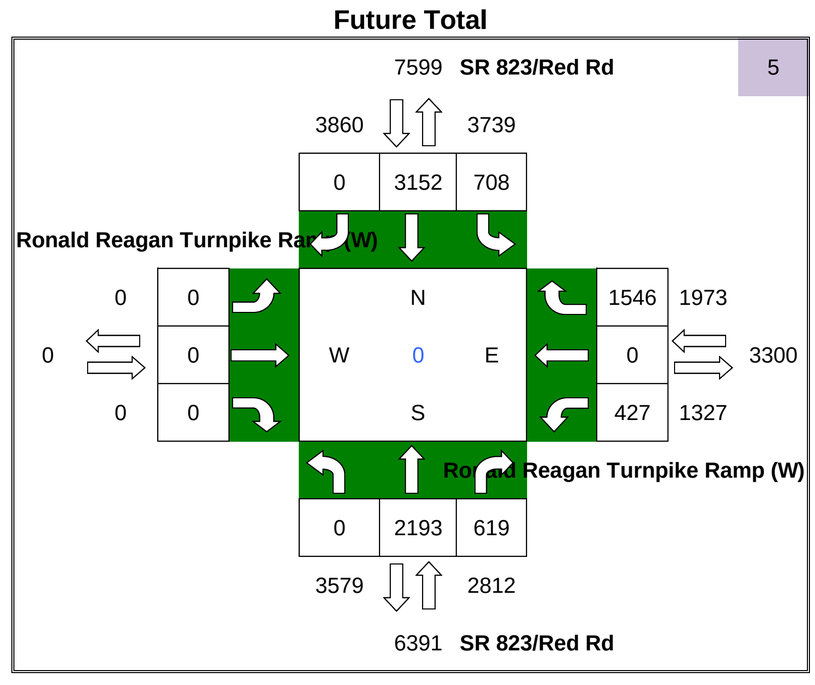
OUT= 596

	PD	#
N =	3.23%	37
E =	2.86%	33
S =	1.95%	23
W =	0.00%	0

ADM Project Trips



Future Total



ADM/Graham

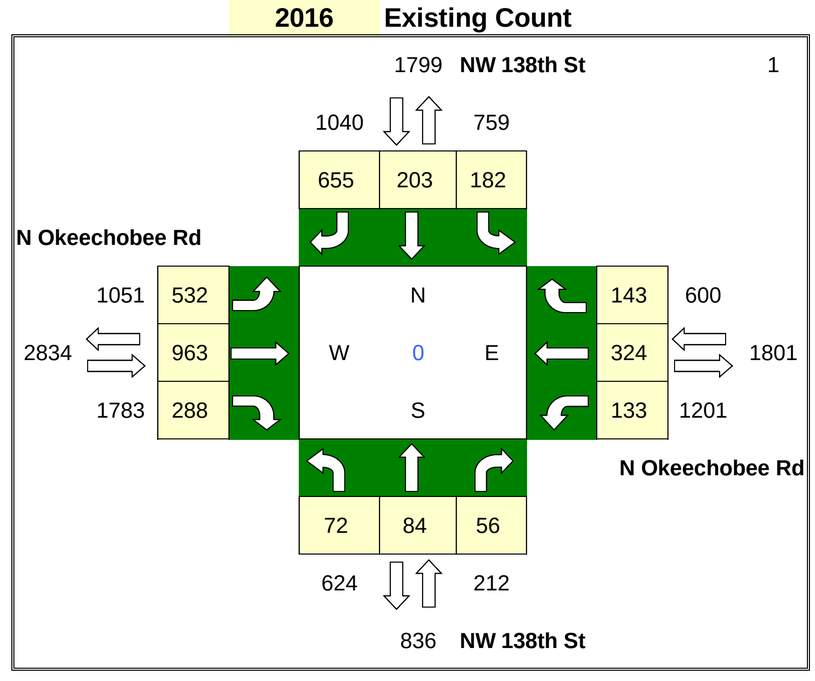
AM Turning Movement Volumes

N/S Roadway: NW 138th St

E/W Roadway: N Okeechobee Rd

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1.4% **Seasonal Factor =** 1.00

PHASE 2

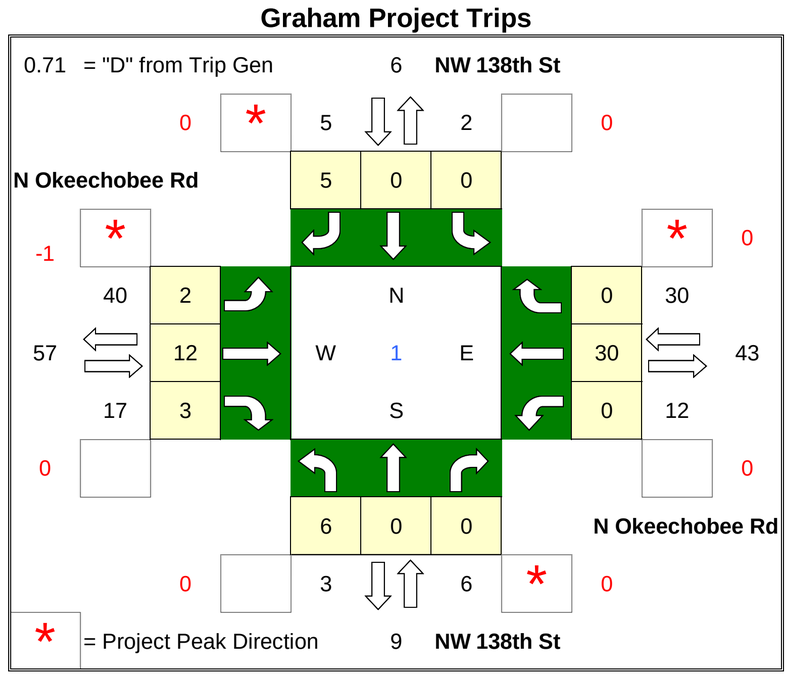
Project Trips

IN= 3,475

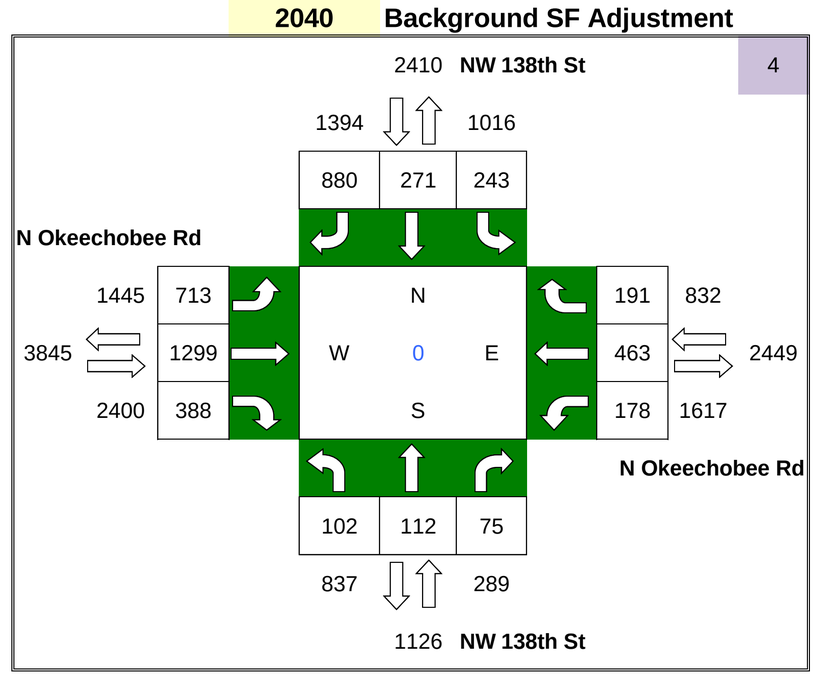
OUT= 1,431

	PD	#
N =	0.13%	6
E =	0.87%	43
S =	0.18%	9
W =	1.16%	57

Graham Project Trips



2040 Background SF Adjustment



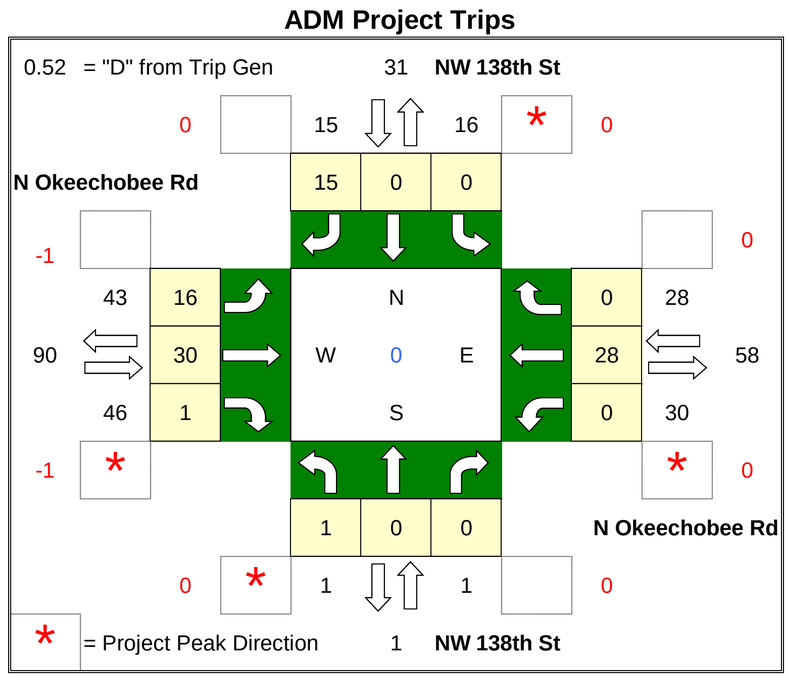
Project Trips

IN= 558

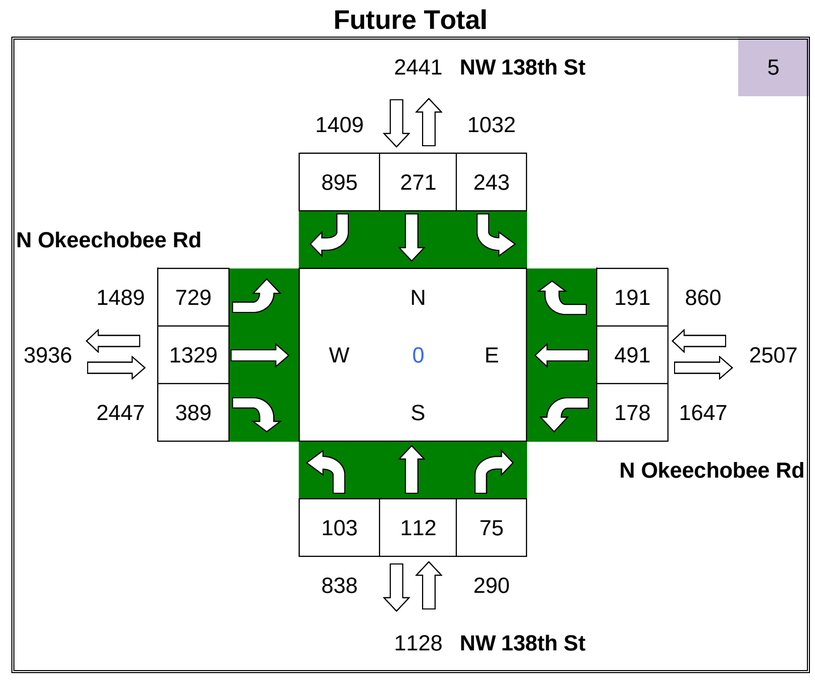
OUT= 596

	PD	#
N =	2.65%	31
E =	5.05%	58
S =	0.12%	1
W =	7.77%	90

ADM Project Trips



Future Total



ADM/Graham

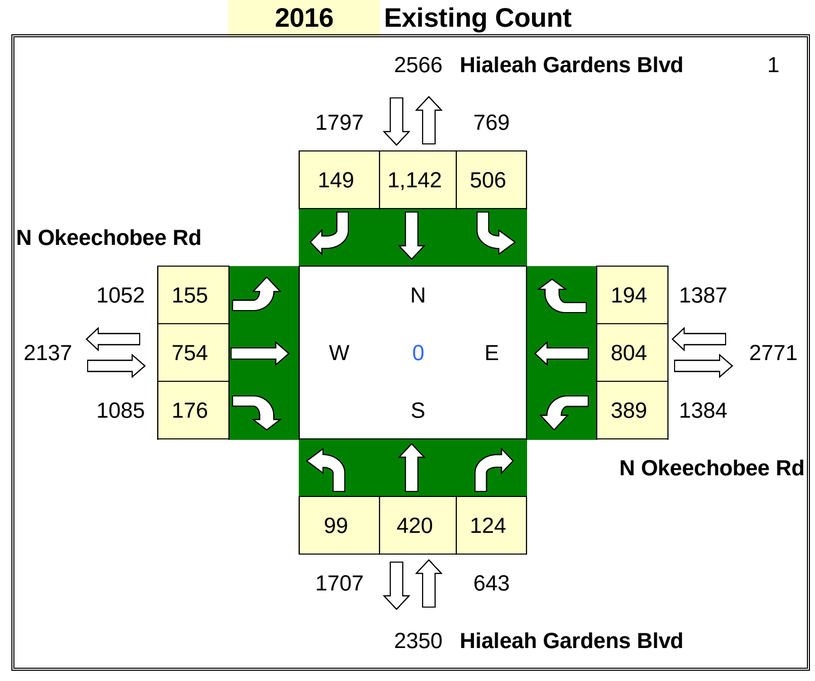
AM Turning Movement Volumes

N/S Roadway: Hialeah Gardens Blvd

E/W Roadway: N Okeechobee Rd

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1.4% **Seasonal Factor =** 1.00

PHASE 2

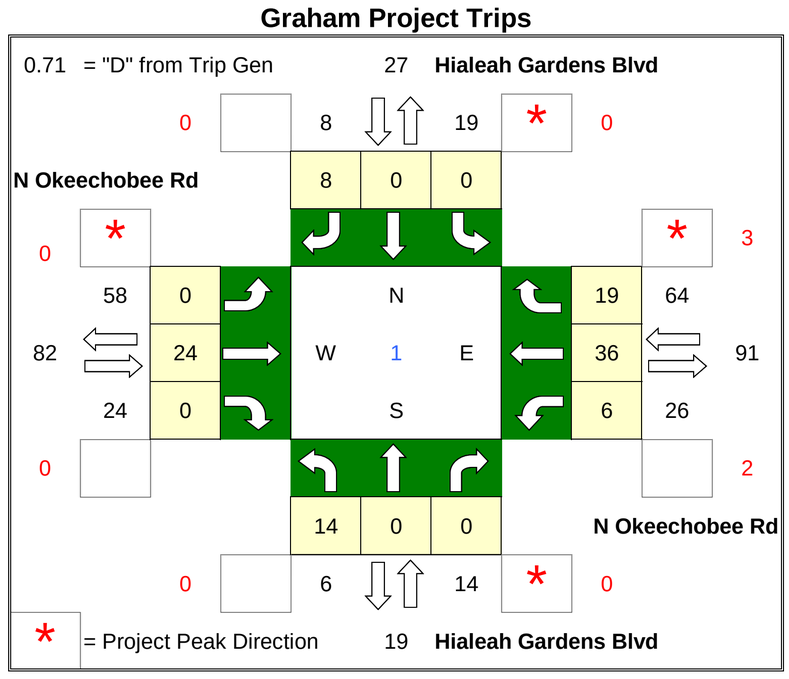
Graham Project Trips

Project Trips

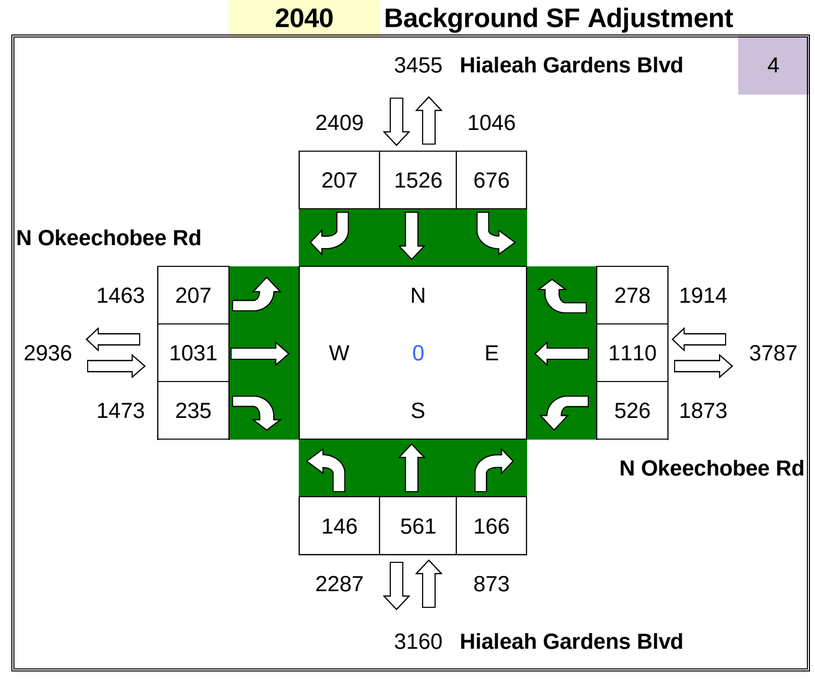
IN= 3,475

OUT= 1,431

	PD	#
N =	0.56%	27
E =	1.85%	91
S =	0.39%	19
W =	1.67%	82



2040 Background SF Adjustment



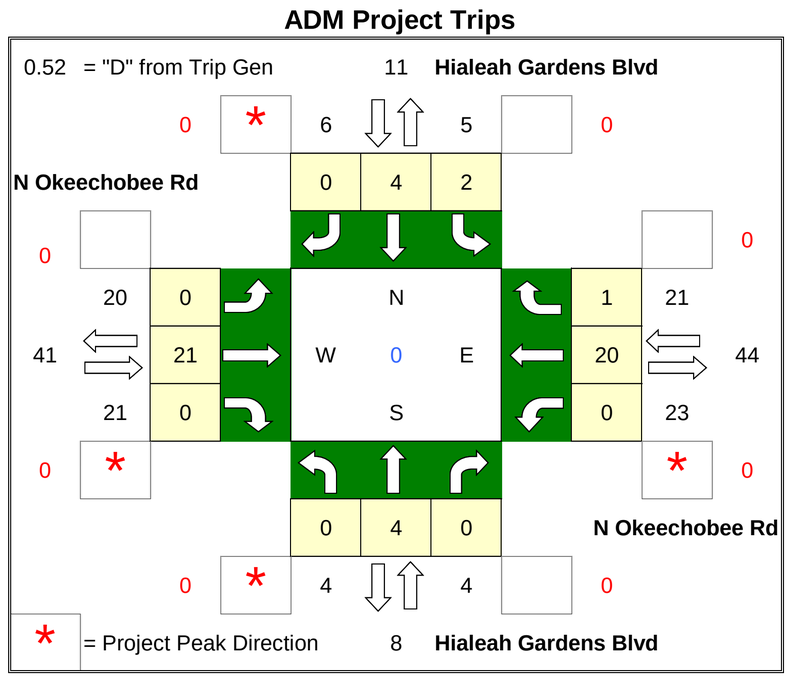
ADM Project Trips

Project Trips

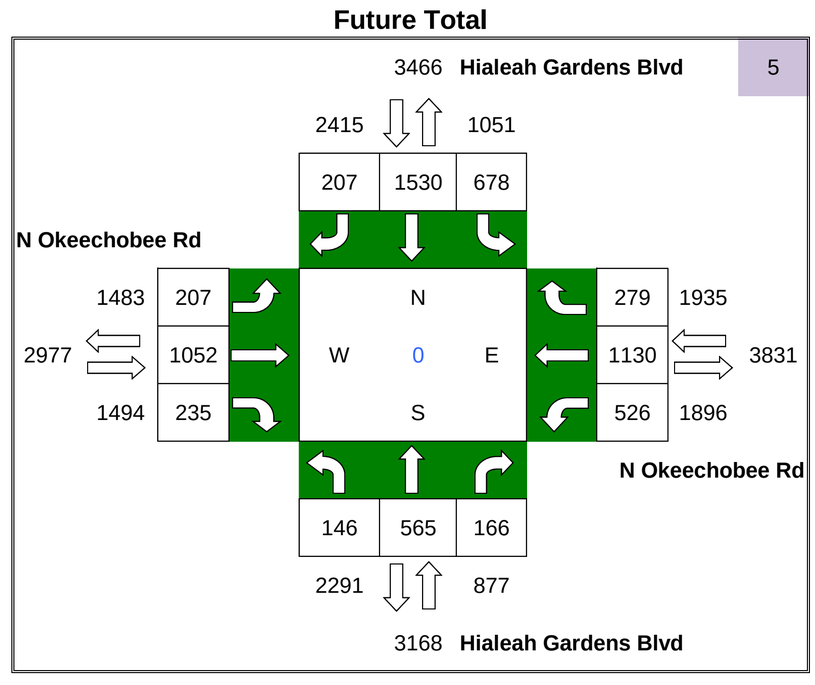
IN= 558

OUT= 596

	PD	#
N =	0.98%	11
E =	3.84%	44
S =	0.69%	8
W =	3.56%	41



Future Total



ADM/Graham

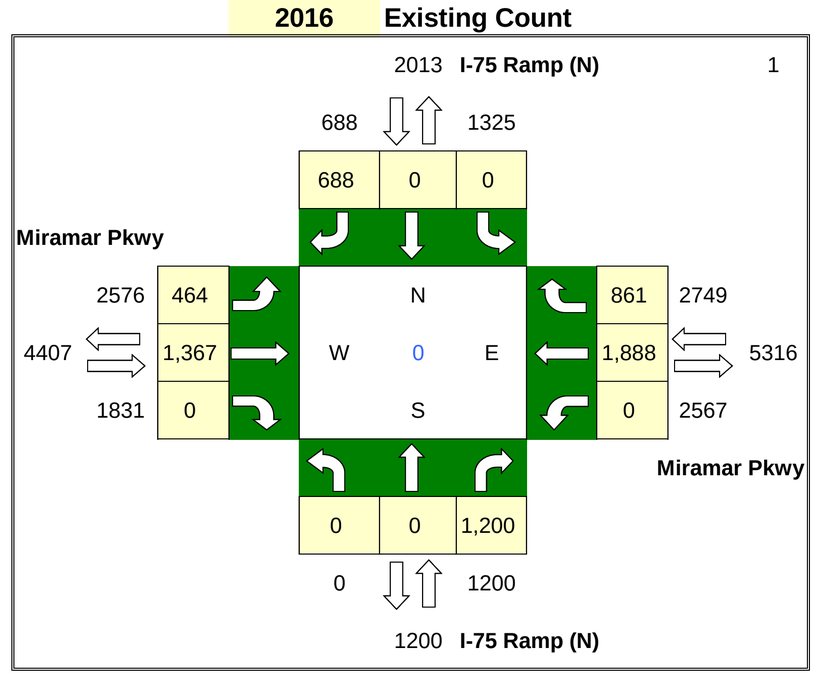
AM Turning Movement Volumes

N/S Roadway: I-75 Ramp (N)

E/W Roadway: Miramar Pkwy

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1.2% **Seasonal Factor =** 1.03

PHASE 2

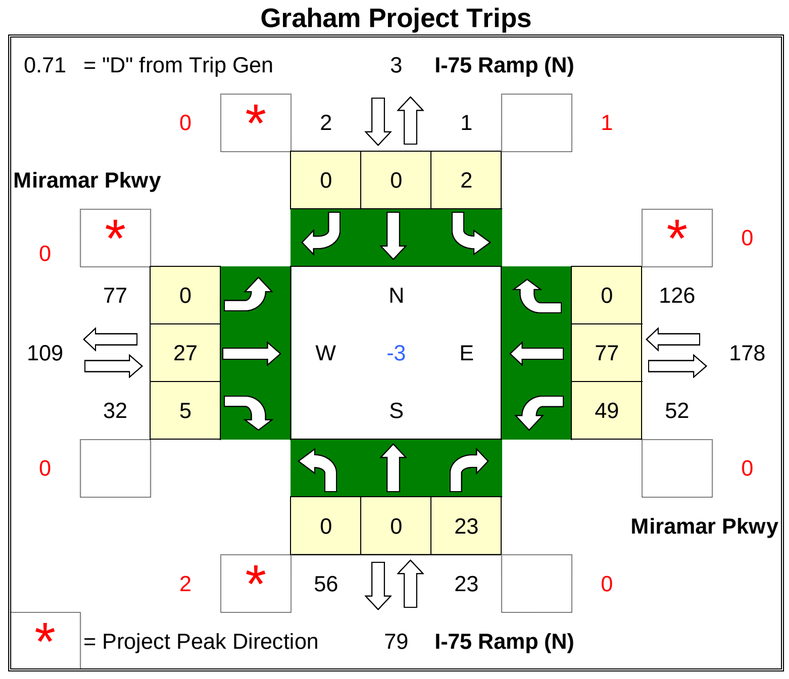
Project Trips

IN= 3,475

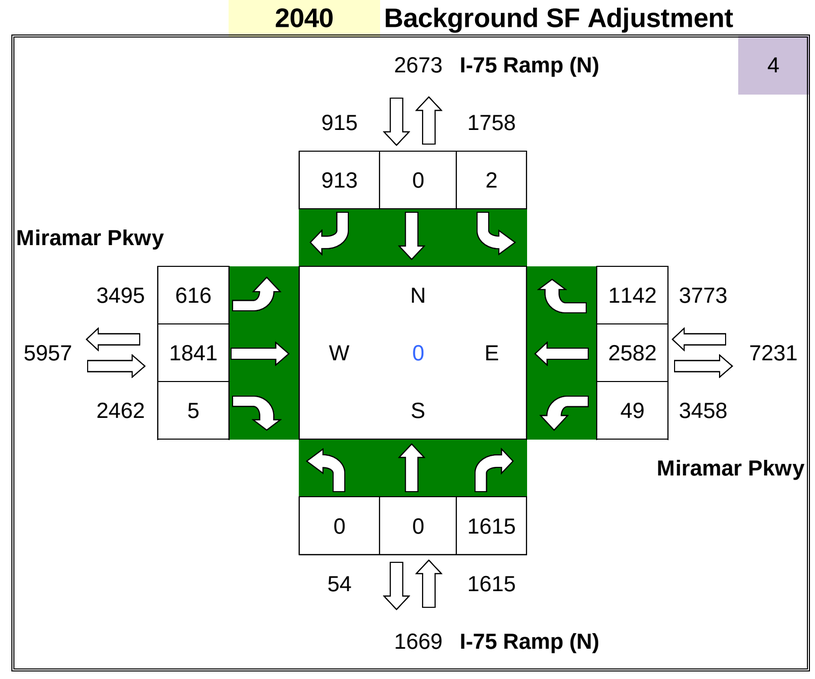
OUT= 1,431

	PD	#
N =	0.06%	3
E =	3.62%	178
S =	1.62%	79
W =	2.23%	109

Graham Project Trips



2040 Background SF Adjustment



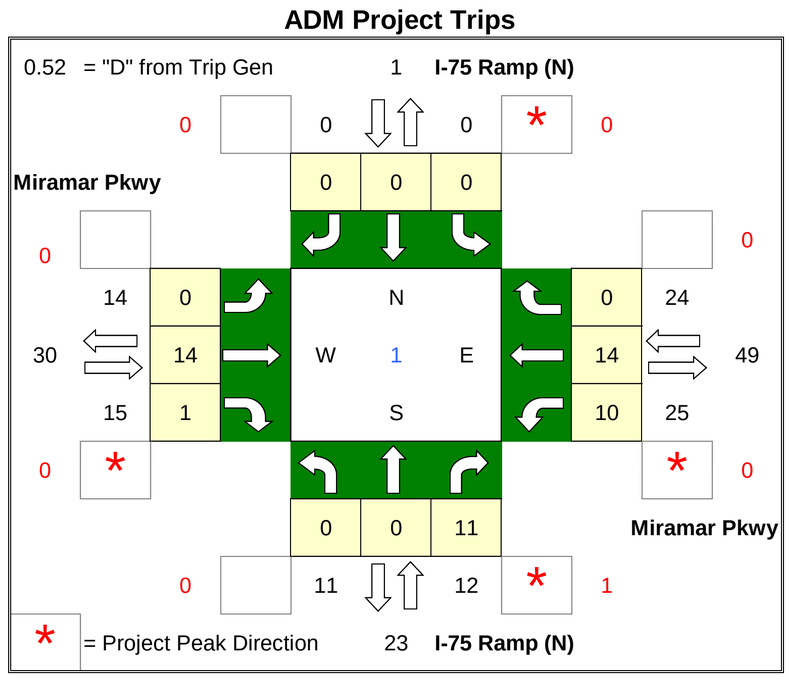
Project Trips

IN= 558

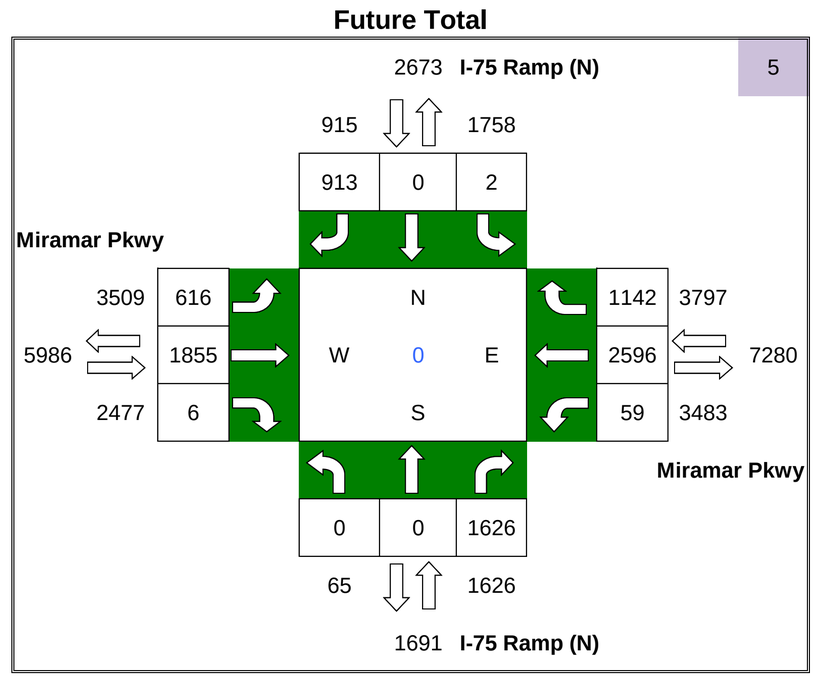
OUT= 596

	PD	#
N =	0.07%	1
E =	4.26%	49
S =	2.01%	23
W =	2.56%	30

ADM Project Trips



Future Total



ADM/Graham

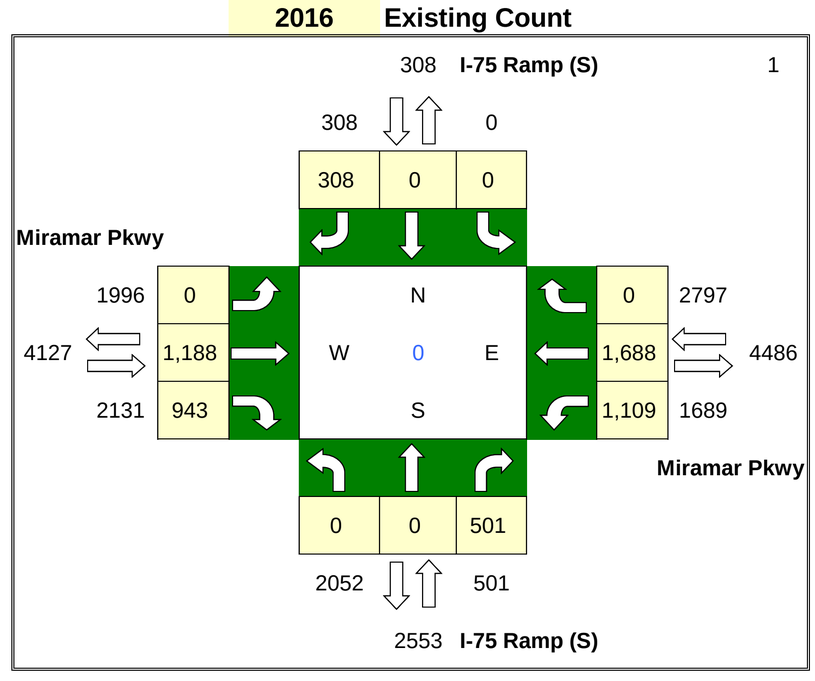
AM Turning Movement Volumes

N/S Roadway: I-75 Ramp (S)

E/W Roadway: Miramar Pkwy

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1.2% **Seasonal Factor =** 1.03

PHASE 2

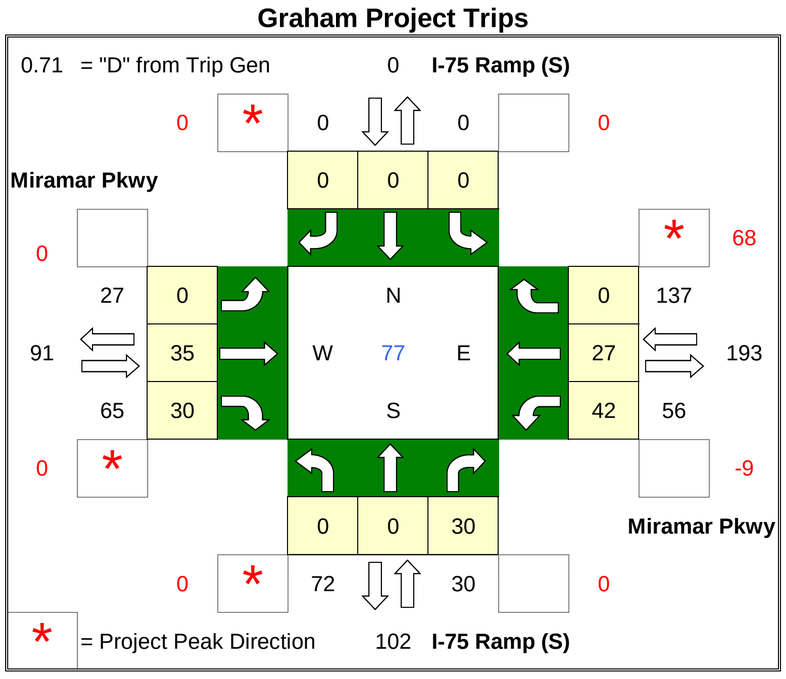
Graham Project Trips

Project Trips

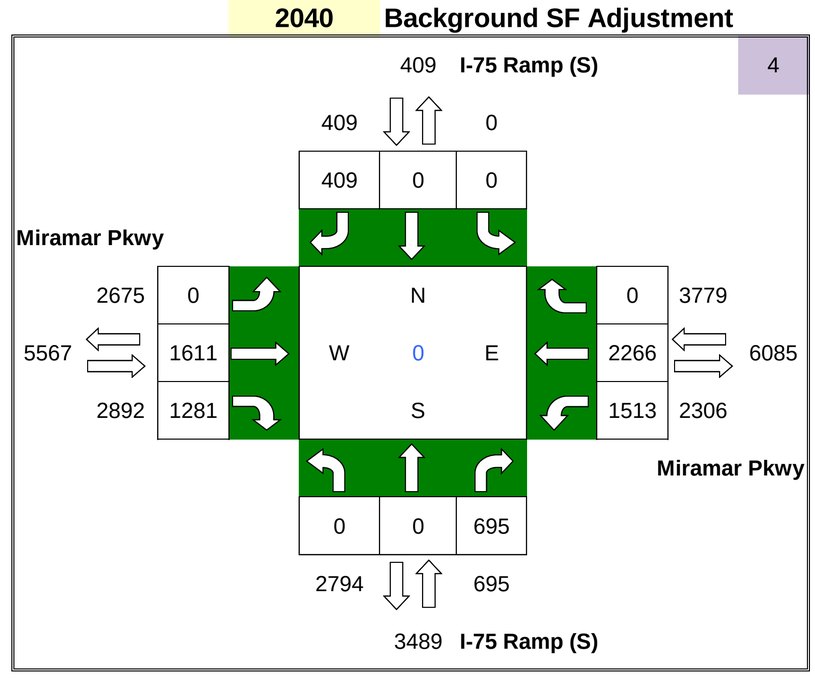
IN= 3,475

OUT= 1,431

	PD	#
N =	0.00%	0
E =	3.94%	193
S =	2.08%	102
W =	1.86%	91



2040 Background SF Adjustment



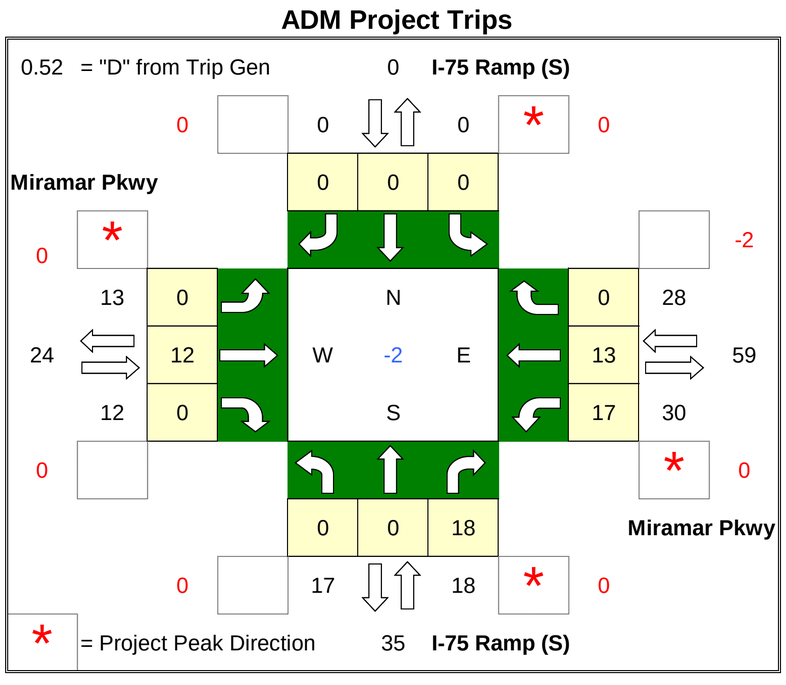
ADM Project Trips

Project Trips

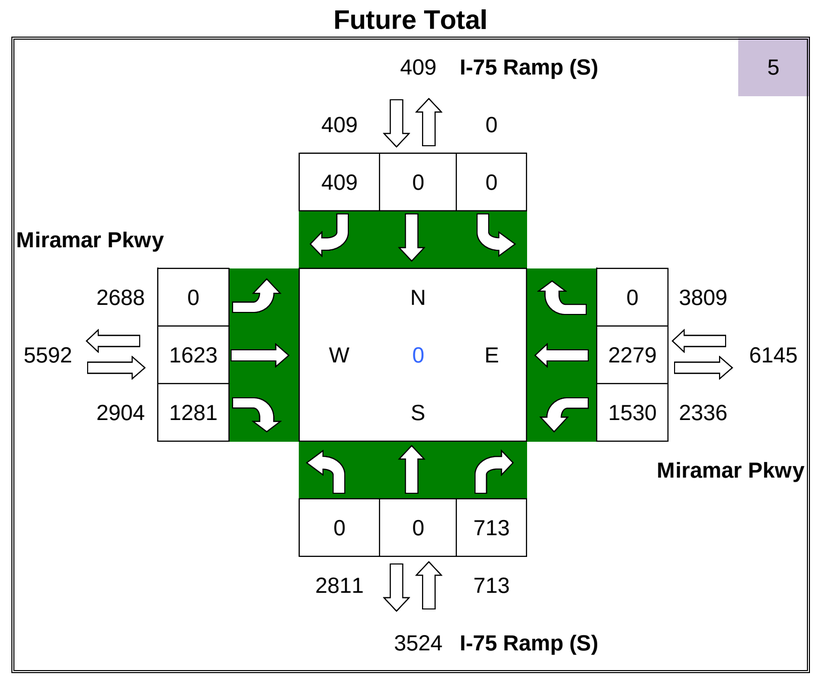
IN= 558

OUT= 596

	PD	#
N =	0.00%	0
E =	5.10%	59
S =	3.00%	35
W =	2.10%	24



Future Total



ADM/Graham

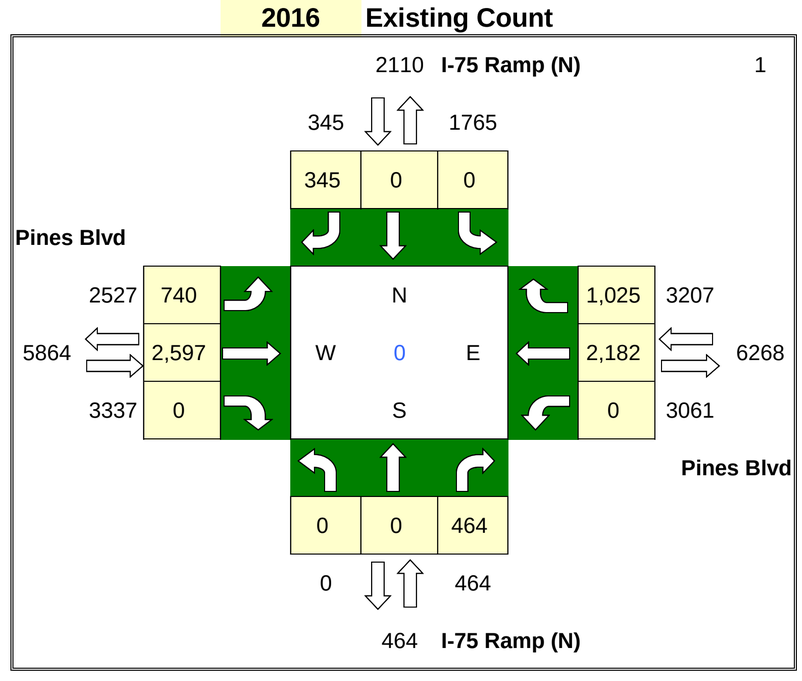
AM Turning Movement Volumes

N/S Roadway: I-75 Ramp (N)

E/W Roadway: Pines Blvd

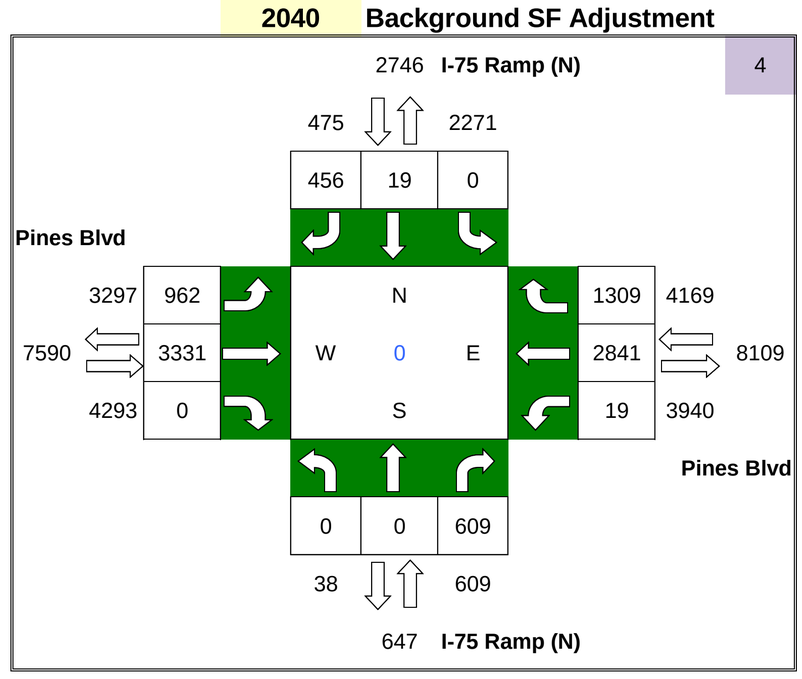
Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1% **Seasonal Factor =** 1.03

2040 Background SF Adjustment



PHASE 2

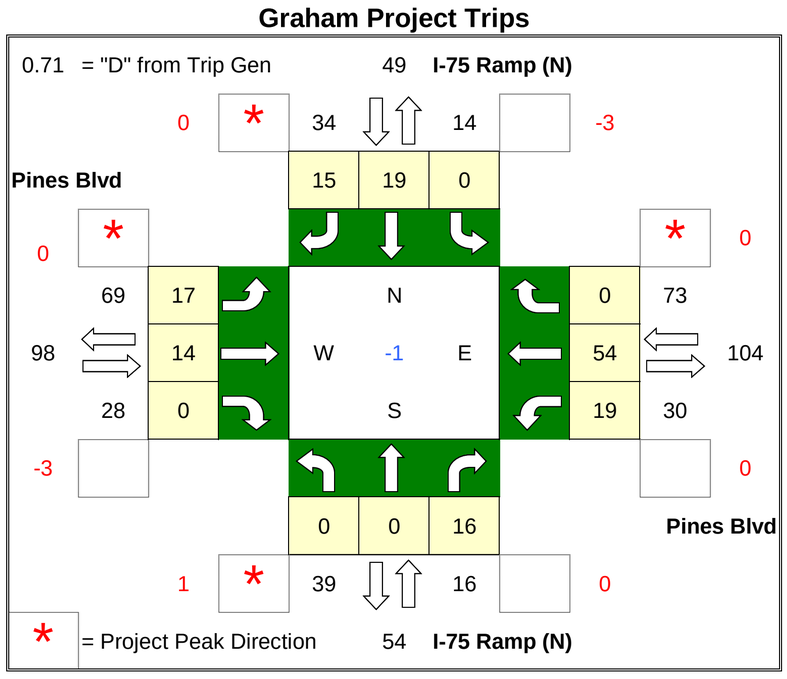
Graham Project Trips

Project Trips

IN= 3,475

OUT= 1,431

	PD	#
N =	0.99%	49
E =	2.11%	104
S =	1.11%	54
W =	1.99%	98



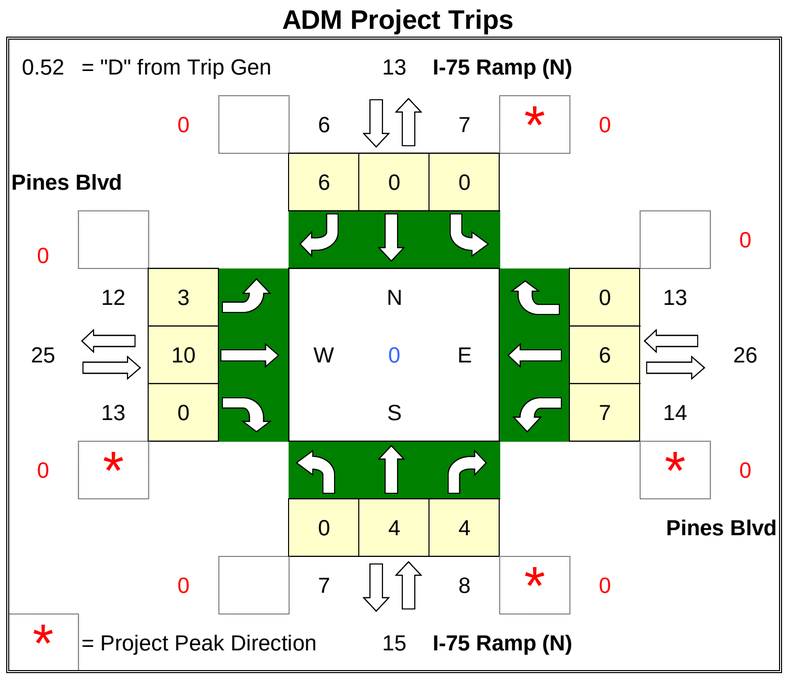
ADM Project Trips

Project Trips

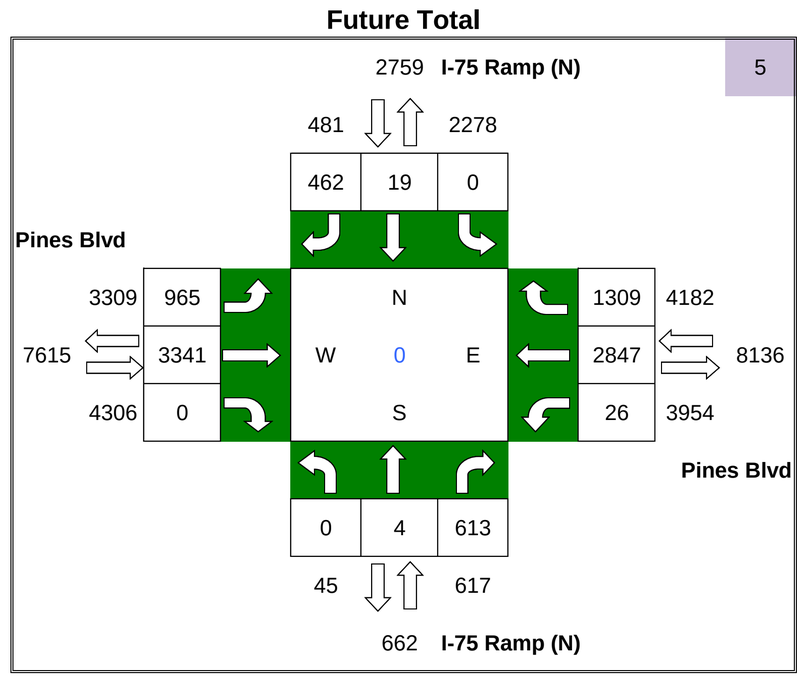
IN= 558

OUT= 596

	PD	#
N =	1.15%	13
E =	2.28%	26
S =	1.30%	15
W =	2.13%	25



Future Total



ADM/Graham

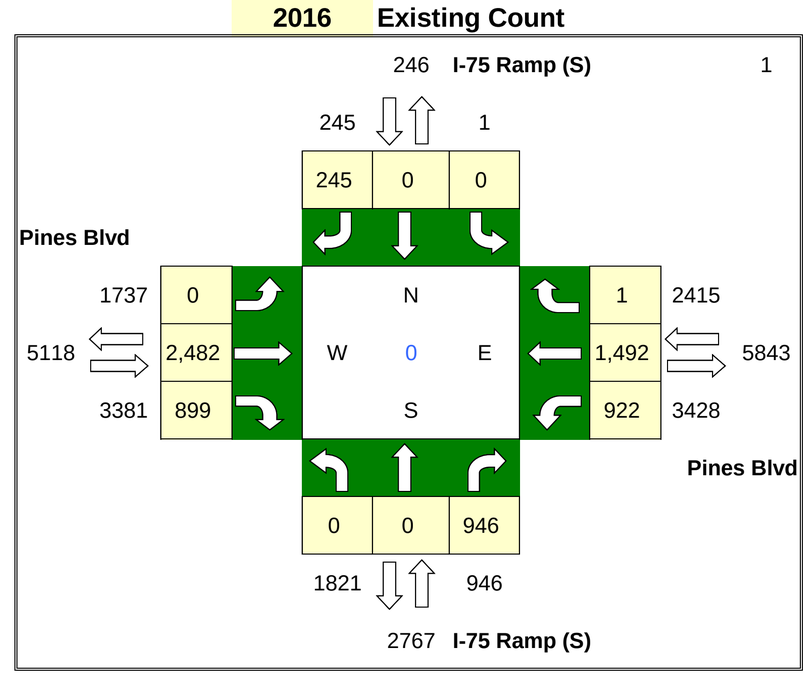
AM Turning Movement Volumes

N/S Roadway: I-75 Ramp (S)

E/W Roadway: Pines Blvd

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1% **Seasonal Factor =** 1.03

PHASE 2

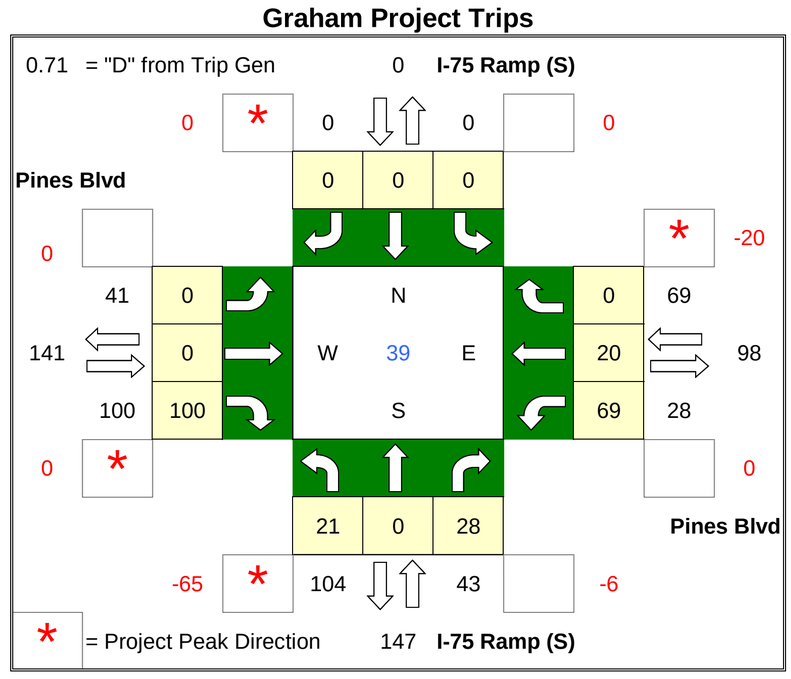
Project Trips

IN= 3,475

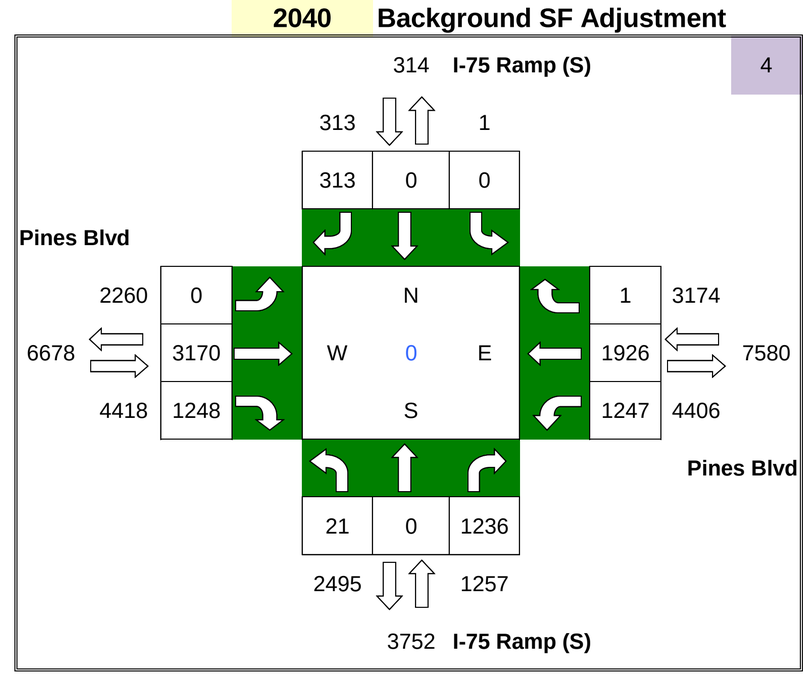
OUT= 1,431

	PD	#
N =	0.00%	0
E =	1.99%	98
S =	2.99%	147
W =	2.87%	141

Graham Project Trips



2040 Background SF Adjustment



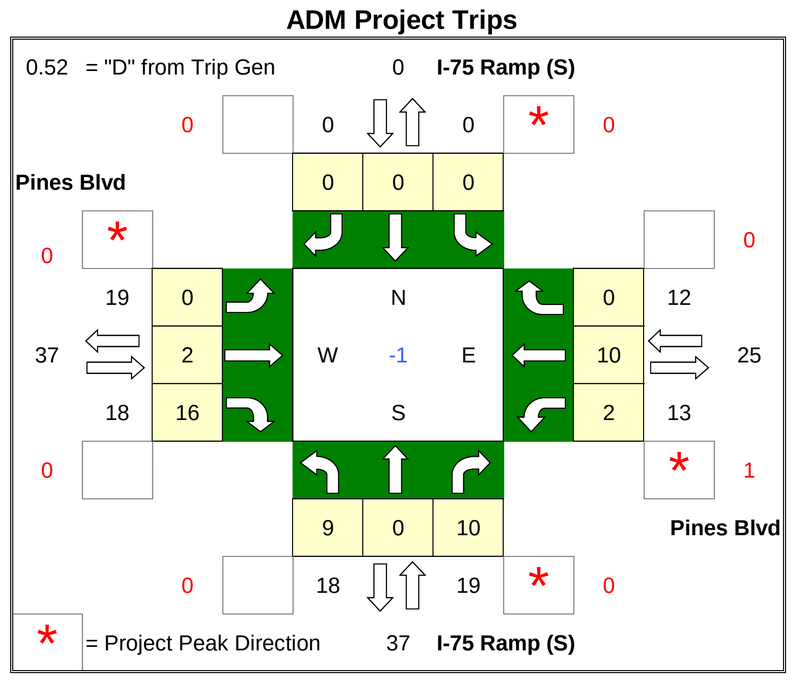
Project Trips

IN= 558

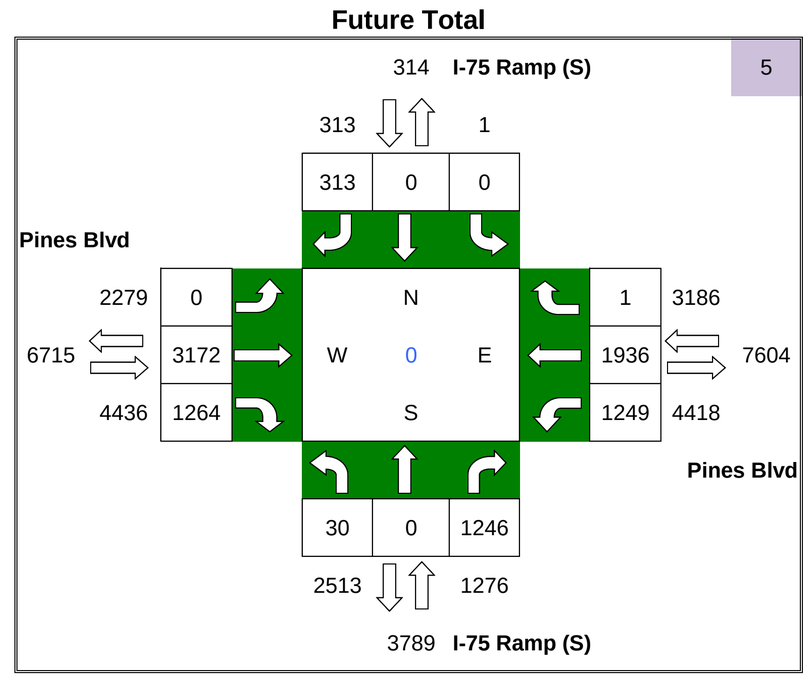
OUT= 596

	PD	#
N =	0.00%	0
E =	2.13%	25
S =	3.18%	37
W =	3.22%	37

ADM Project Trips



Future Total



ADM/Graham

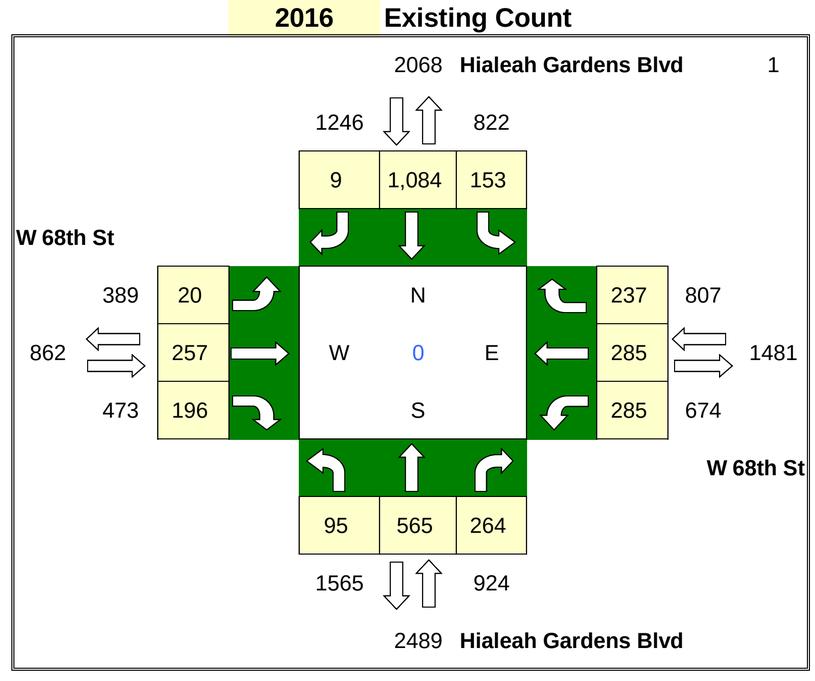
AM Turning Movement Volumes

N/S Roadway: Hialeah Gardens Blvd

E/W Roadway: W 68th St

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1.4% **Seasonal Factor =** 1.00

PHASE 2

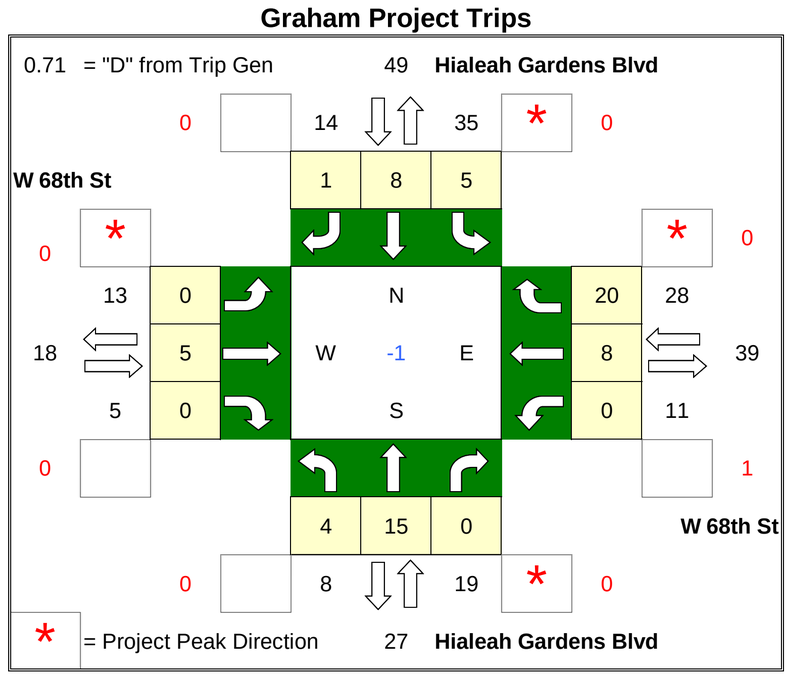
Project Trips

IN= 3,475

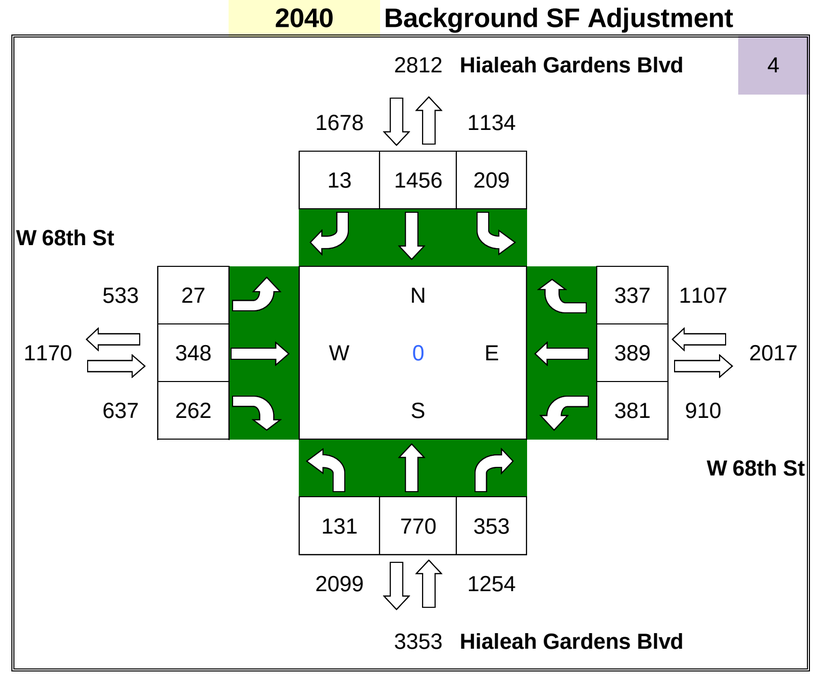
OUT= 1,431

	PD	#
N =	1.00%	49
E =	0.80%	39
S =	0.56%	27
W =	0.36%	18

Graham Project Trips



2040 Background SF Adjustment



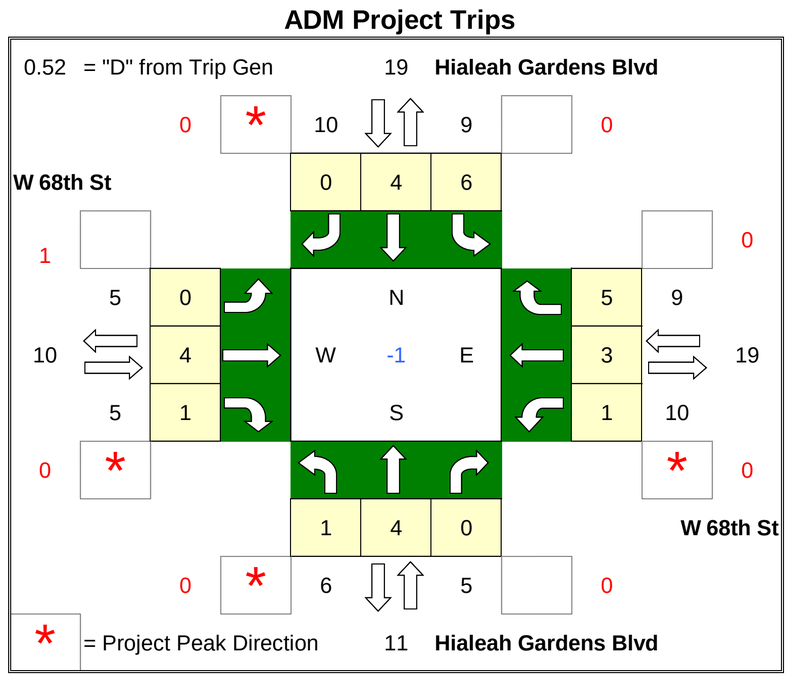
Project Trips

IN= 558

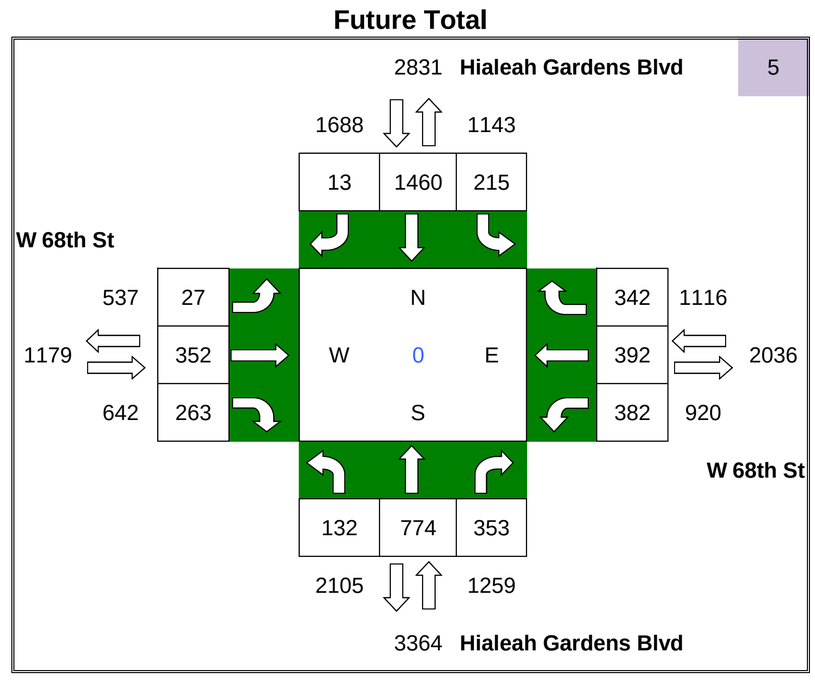
OUT= 596

	PD	#
N =	1.62%	19
E =	1.63%	19
S =	0.98%	11
W =	0.89%	10

ADM Project Trips



Future Total



ADM/Graham

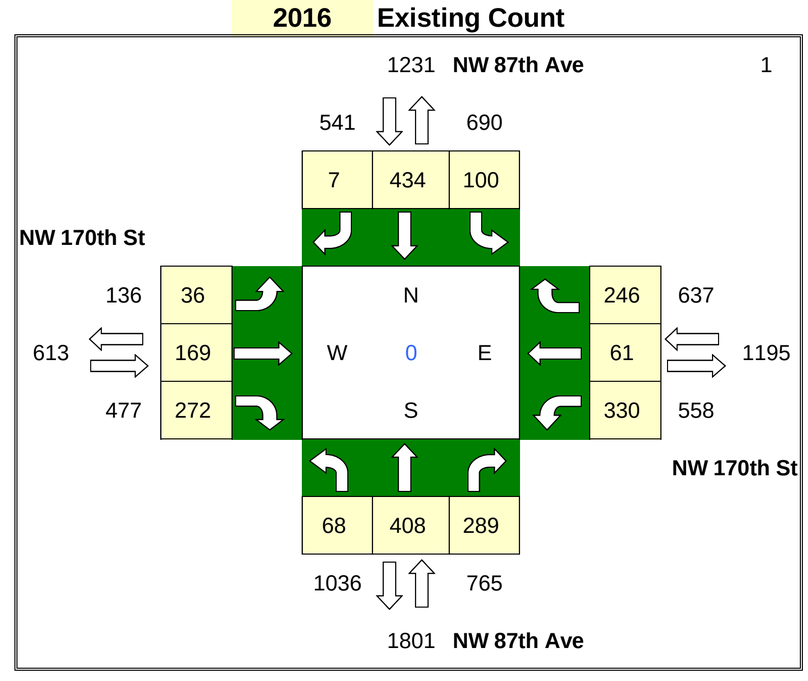
AM Turning Movement Volumes

N/S Roadway: NW 87th Ave

E/W Roadway: NW 170th St

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1% **Seasonal Factor =** 1.00

PHASE 2

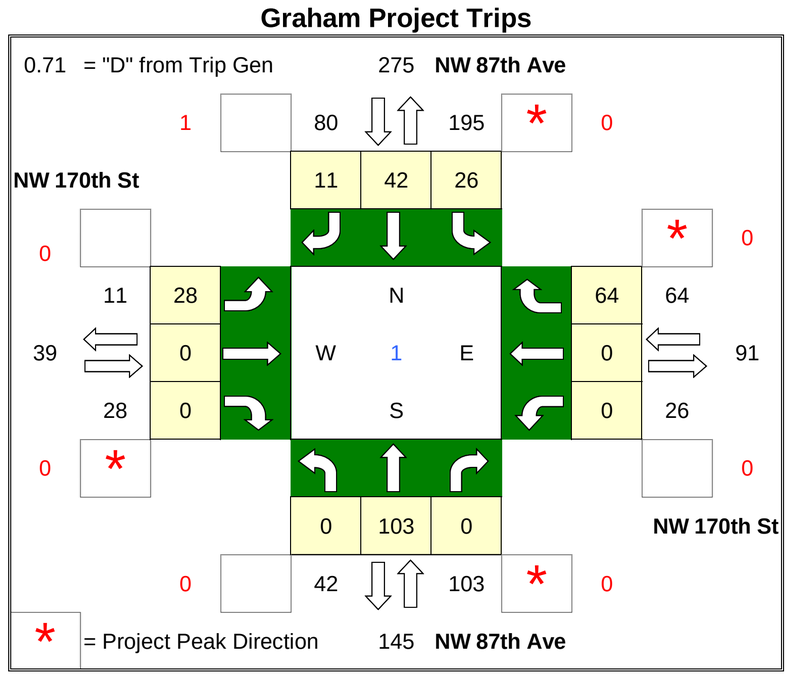
Project Trips

IN= 3,475

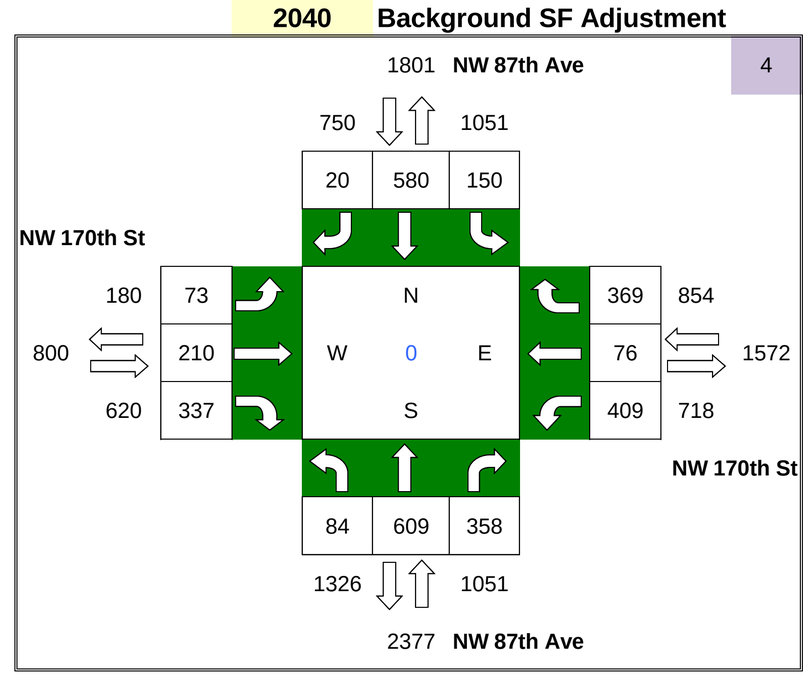
OUT= 1,431

	PD	#
N =	5.60%	275
E =	1.85%	91
S =	2.95%	145
W =	0.80%	39

Graham Project Trips



2040 Background SF Adjustment



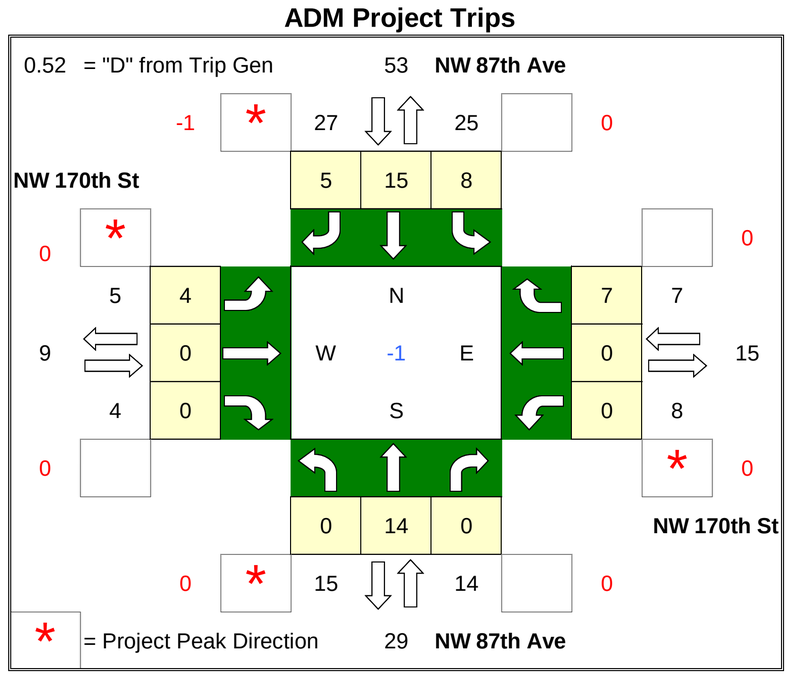
Project Trips

IN= 558

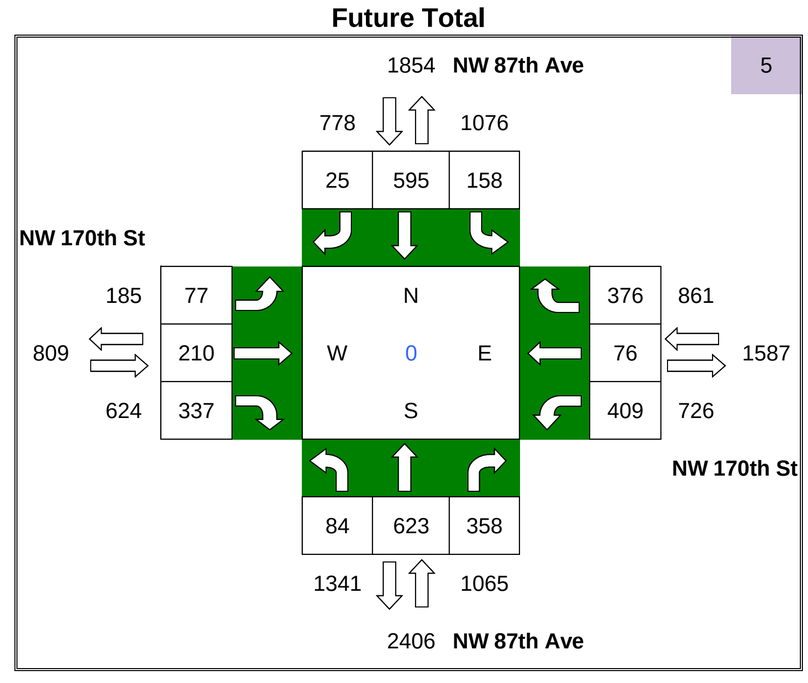
OUT= 596

	PD	#
N =	4.56%	53
E =	1.27%	15
S =	2.52%	29
W =	0.76%	9

ADM Project Trips



Future Total



ADM/Graham

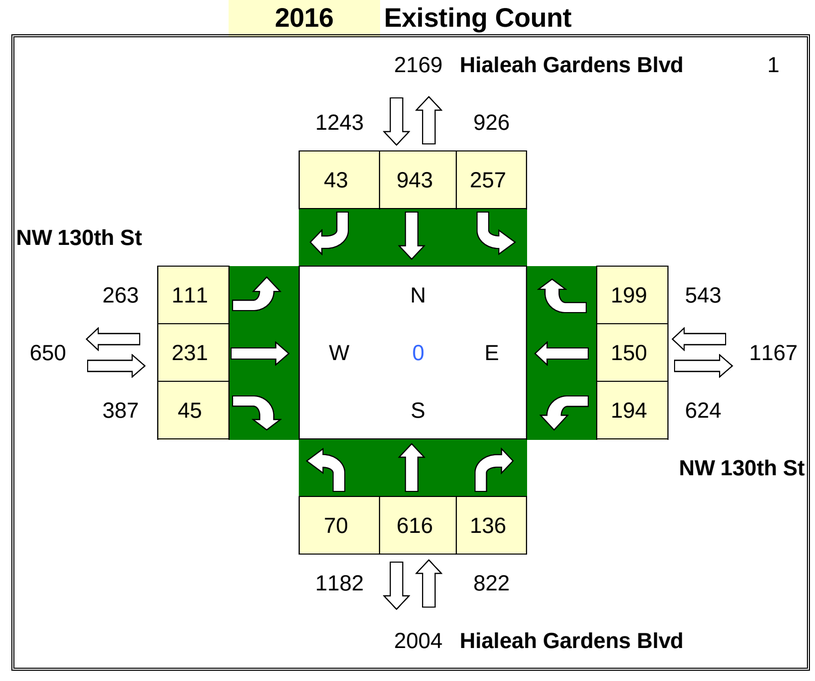
AM Turning Movement Volumes

N/S Roadway: Hialeah Gardens Blvd

E/W Roadway: NW 130th St

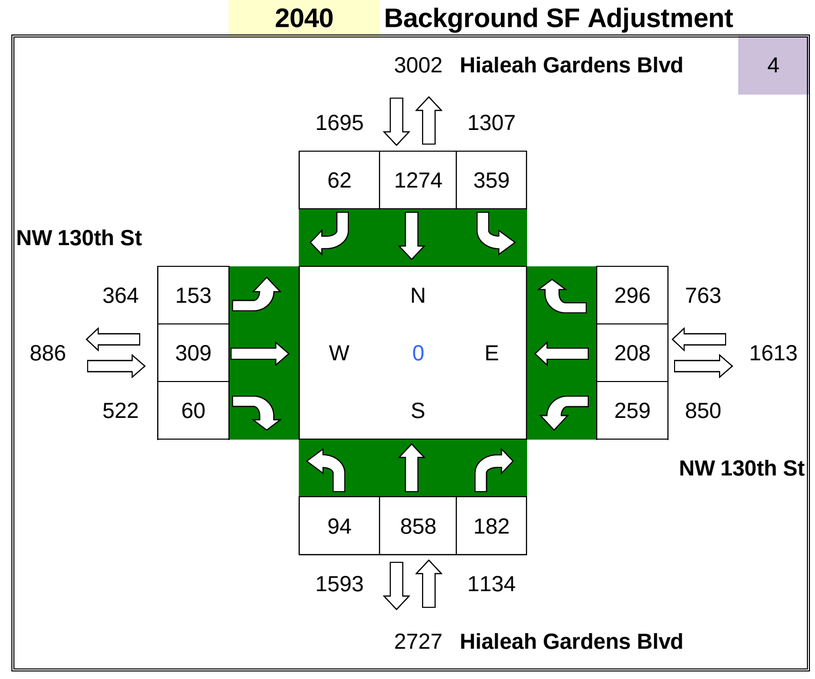
Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1.4% **Seasonal Factor =** 1.00

2040 Background SF Adjustment



PHASE 2

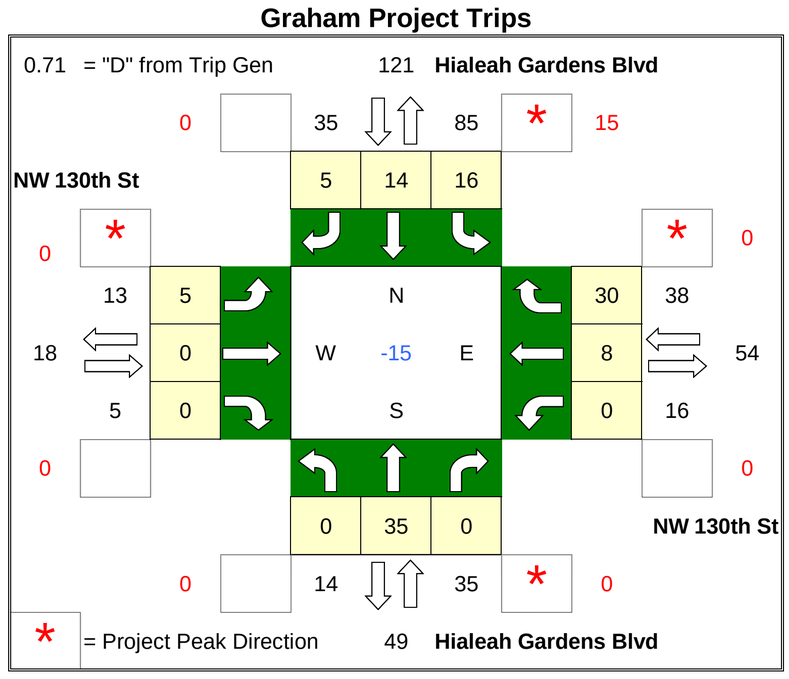
Graham Project Trips

Project Trips

IN= 3,475

OUT= 1,431

	PD	#
N =	2.46%	121
E =	1.10%	54
S =	1.00%	49
W =	0.36%	18



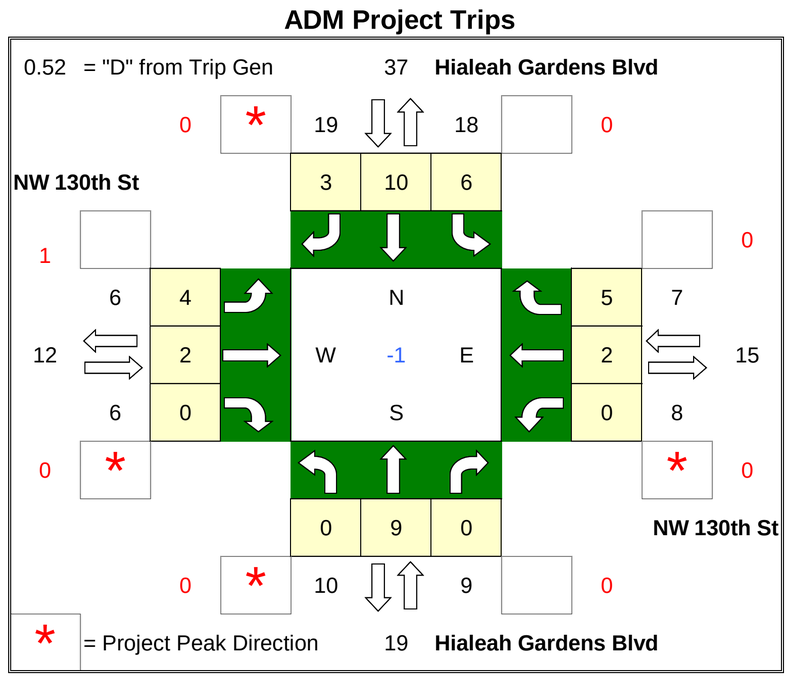
ADM Project Trips

Project Trips

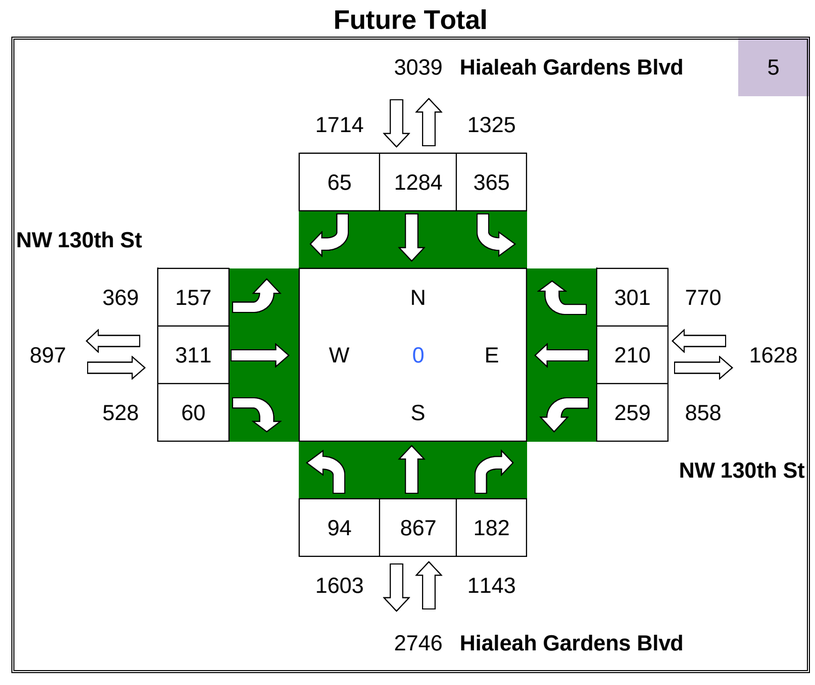
IN= 558

OUT= 596

	PD	#
N =	3.17%	37
E =	1.26%	15
S =	1.62%	19
W =	1.01%	12



Future Total



ADM/Graham

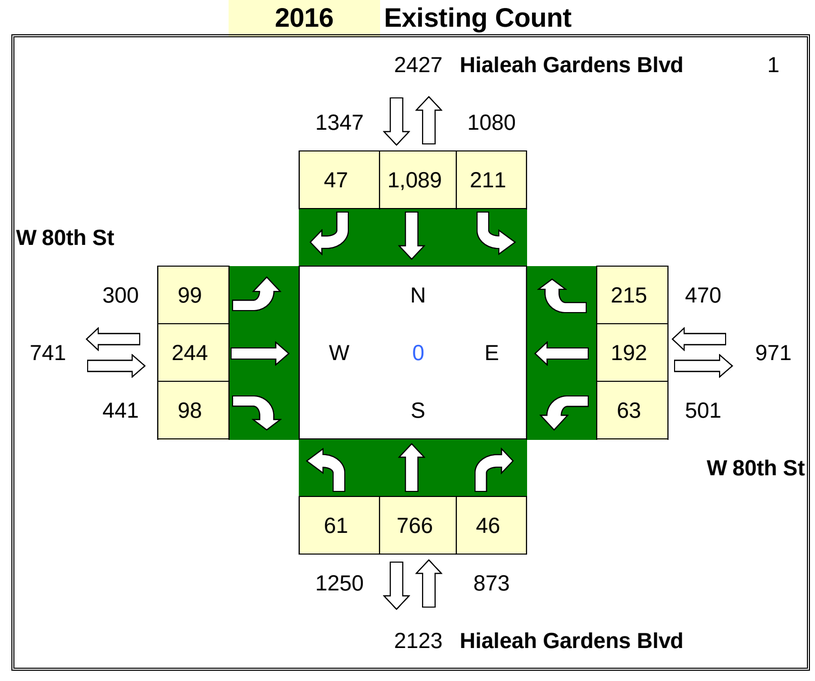
AM Turning Movement Volumes

N/S Roadway: Hialeah Gardens Blvd

E/W Roadway: W 80th St

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1.4% **Seasonal Factor =** 1.00

PHASE 2

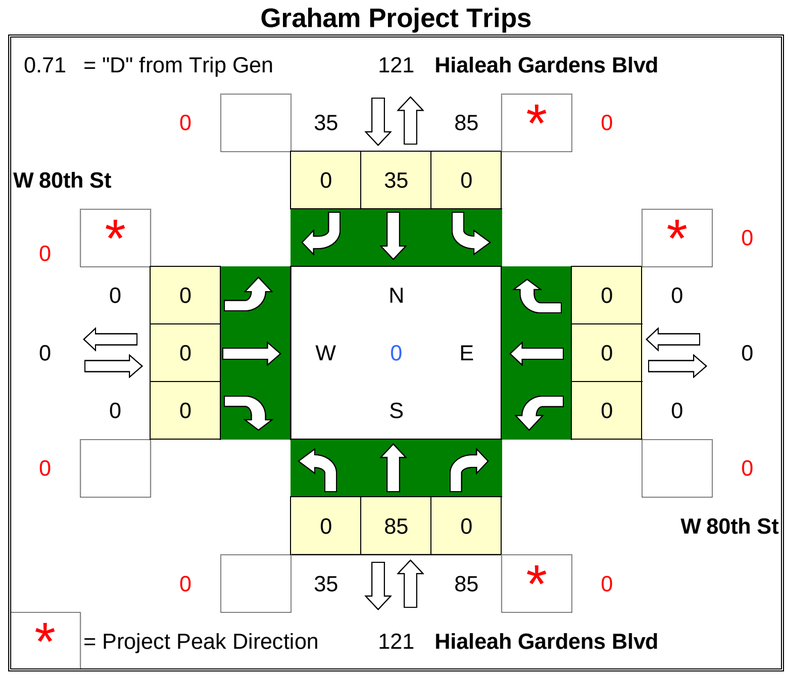
Graham Project Trips

Project Trips

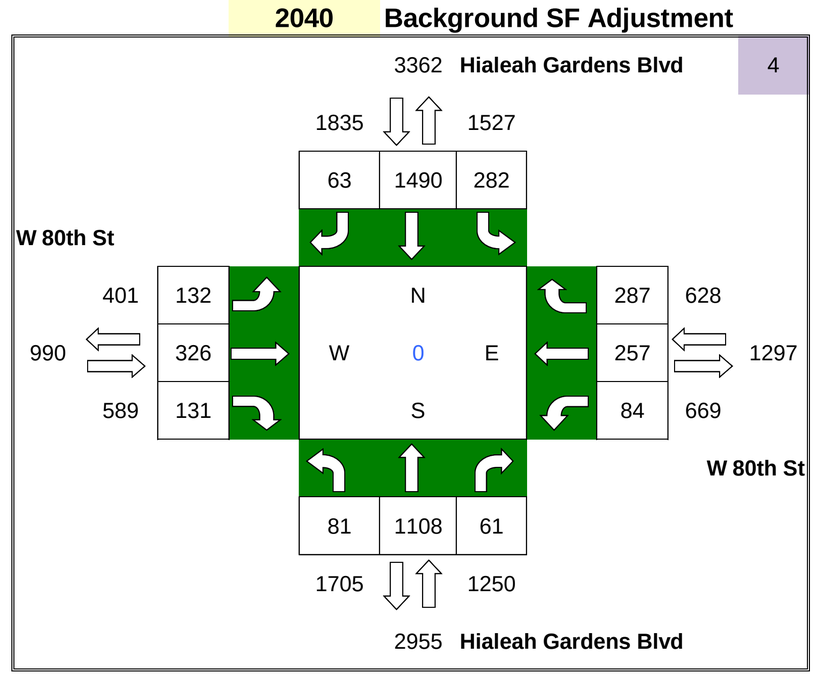
IN= 3,475

OUT= 1,431

	PD	#
N =	2.46%	121
E =	0.00%	0
S =	2.46%	121
W =	0.00%	0



2040 Background SF Adjustment



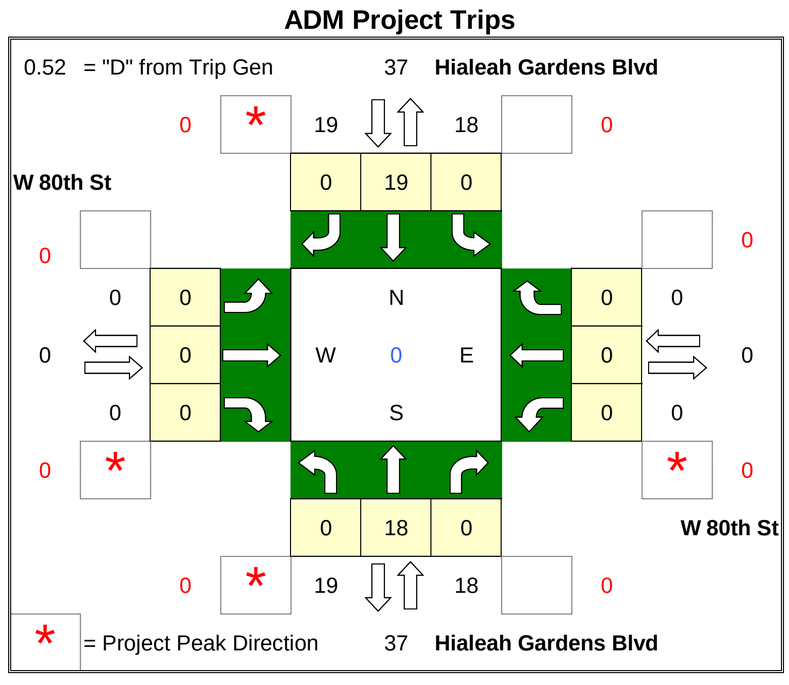
ADM Project Trips

Project Trips

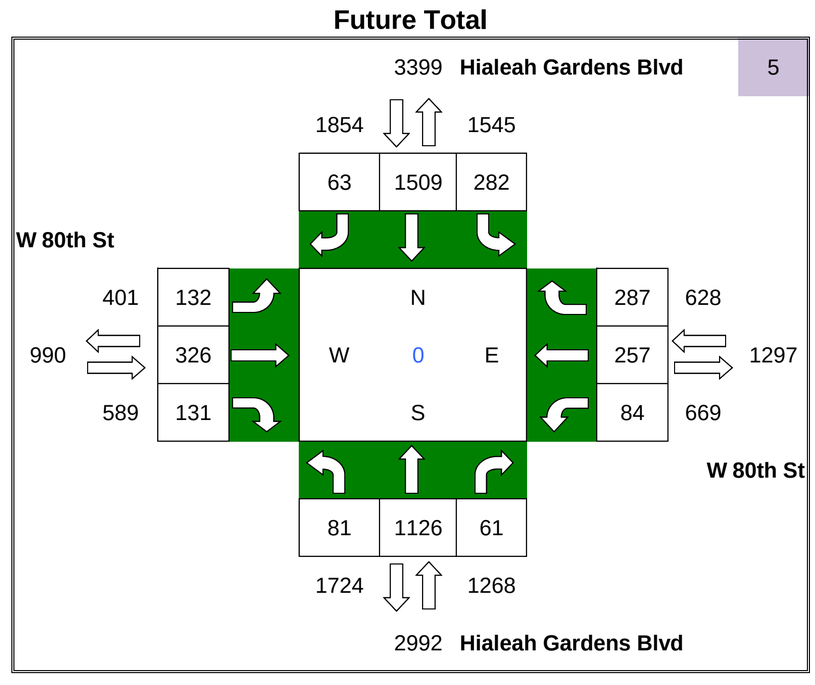
IN= 558

OUT= 596

	PD	#
N =	3.17%	37
E =	0.00%	0
S =	3.17%	37
W =	0.00%	0



Future Total



ADM/Graham

AM Turning Movement Volumes

Hialeah Gardens Blvd & W 84th St (TMC 53)

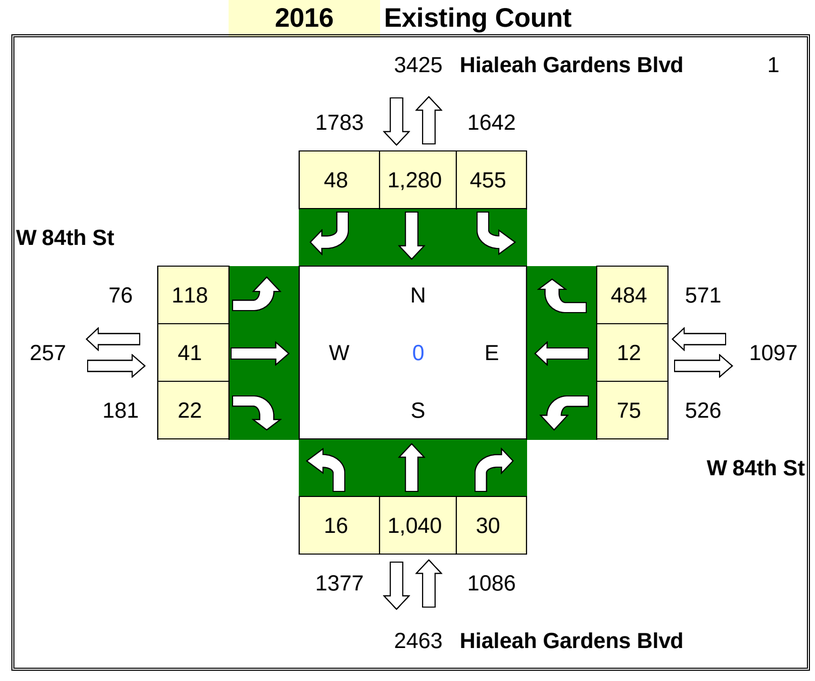
N/S Roadway: Hialeah Gardens Blvd

E/W Roadway: W 84th St

Date Taken: 4/20/16

W 84th St

2016 Existing Count



% Annual Growth = 1.4% **Seasonal Factor =** 1.00

PHASE 2

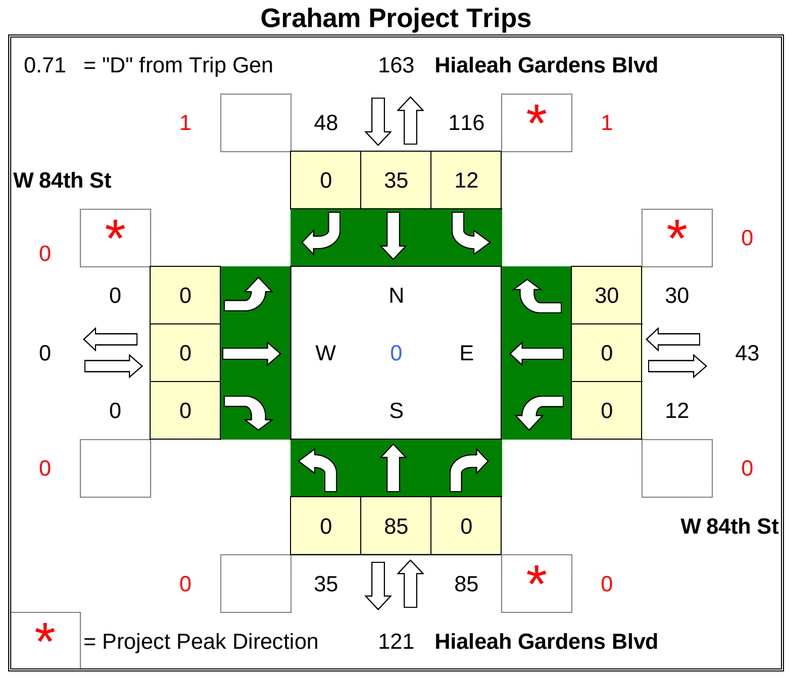
Project Trips

IN= 3,475

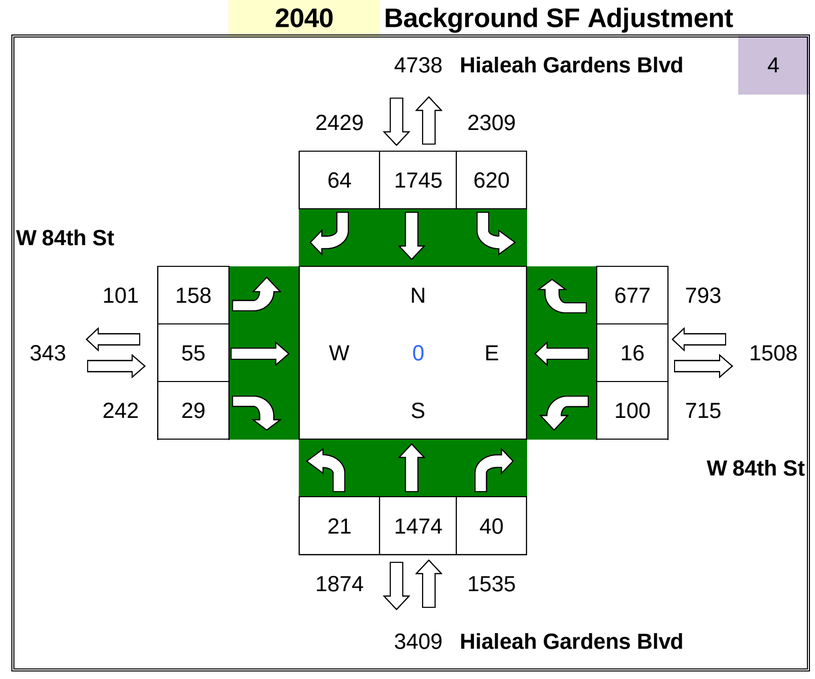
OUT= 1,431

	PD	#
N =	3.33%	163
E =	0.87%	43
S =	2.46%	121
W =	0.00%	0

Graham Project Trips



2040 Background SF Adjustment



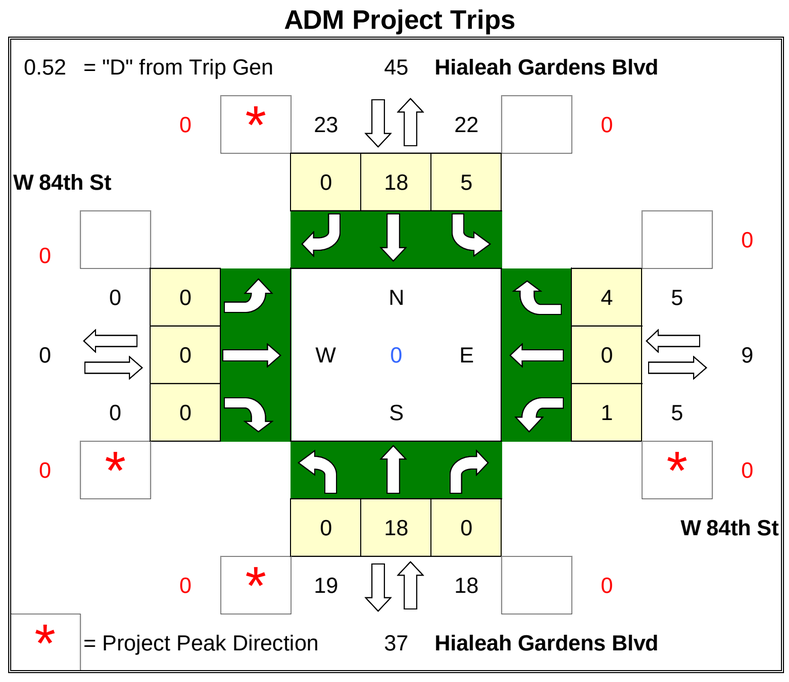
Project Trips

IN= 558

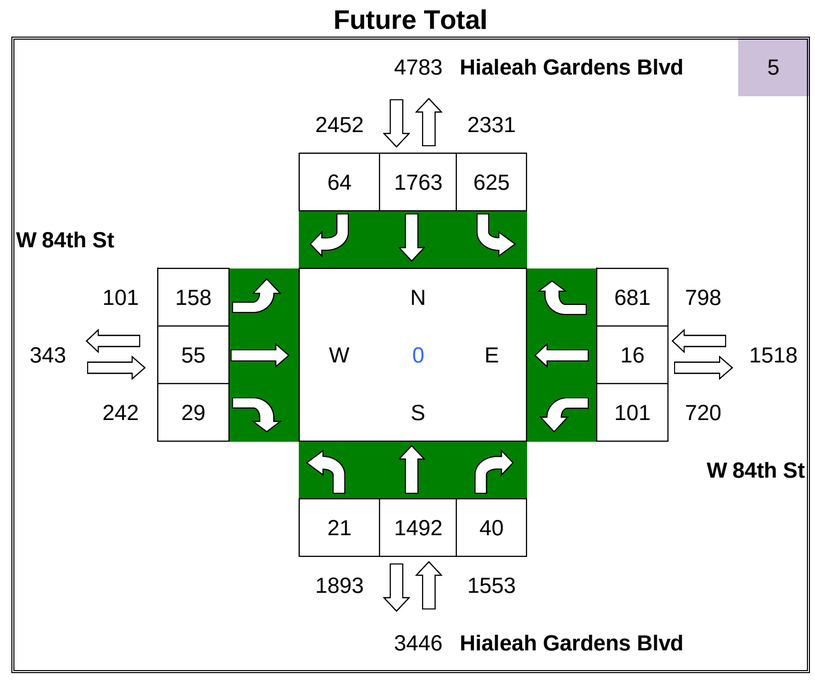
OUT= 596

	PD	#
N =	3.89%	45
E =	0.82%	9
S =	3.17%	37
W =	0.00%	0

ADM Project Trips



Future Total



ADM/Graham

AM Turning Movement Volumes

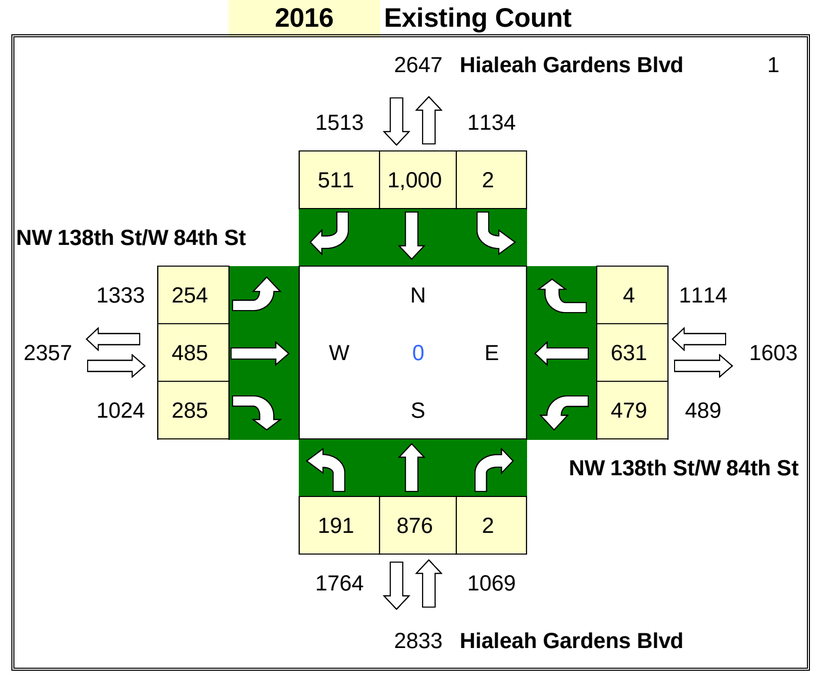
Hialeah Gardens Blvd & W 84th St (TMC 53)

N/S Roadway: Hialeah Gardens Blvd

E/W Roadway: NW 138th St/W 84th St

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1.4% **Seasonal Factor =** 1.00

PHASE 2

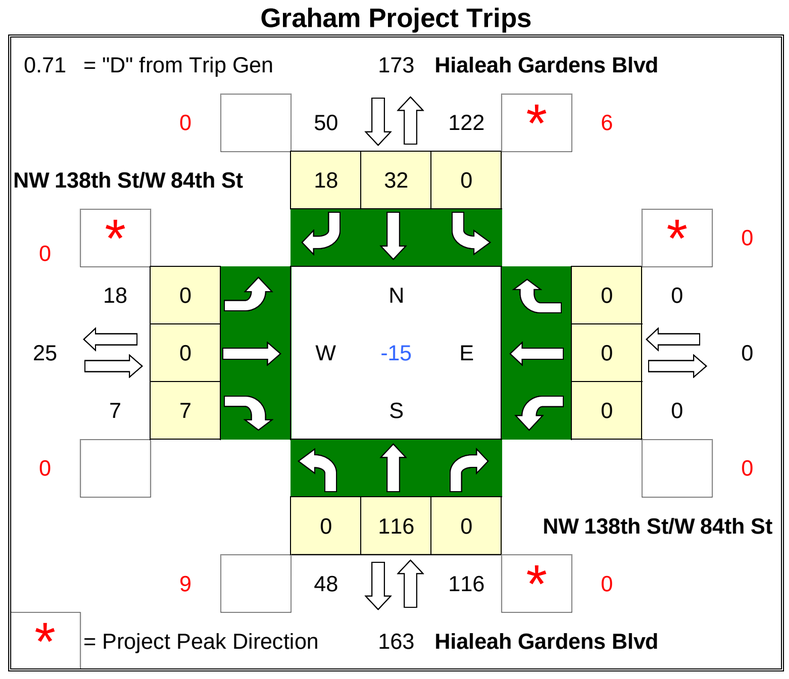
Project Trips

IN= 3,475

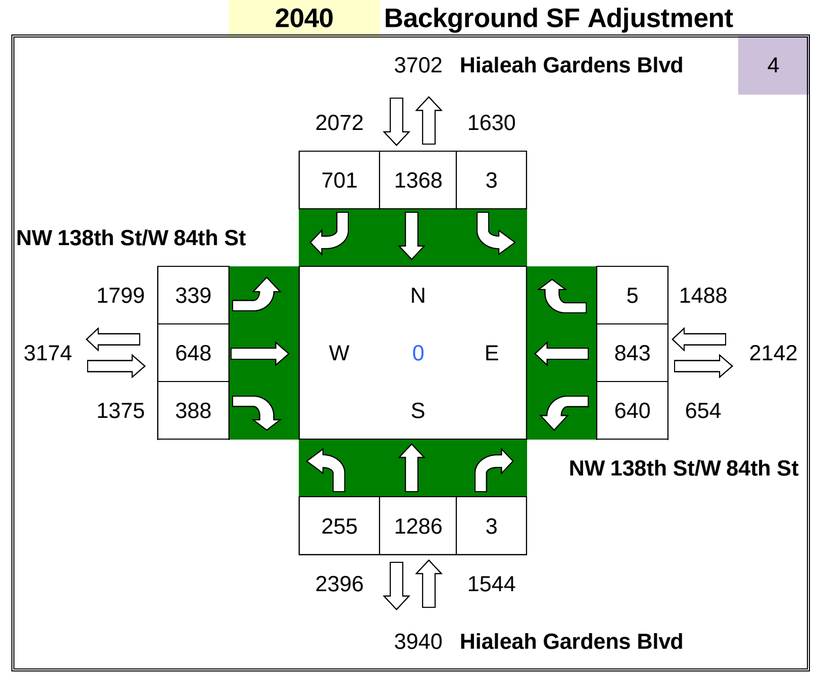
OUT= 1,431

	PD	#
N =	3.52%	173
E =	0.00%	0
S =	3.33%	163
W =	0.51%	25

Graham Project Trips



2040 Background SF Adjustment



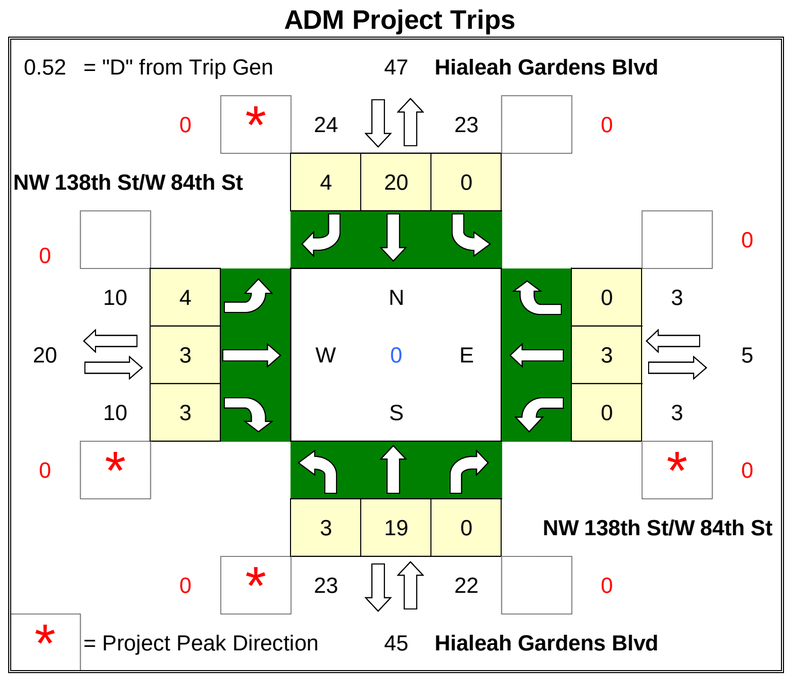
Project Trips

IN= 558

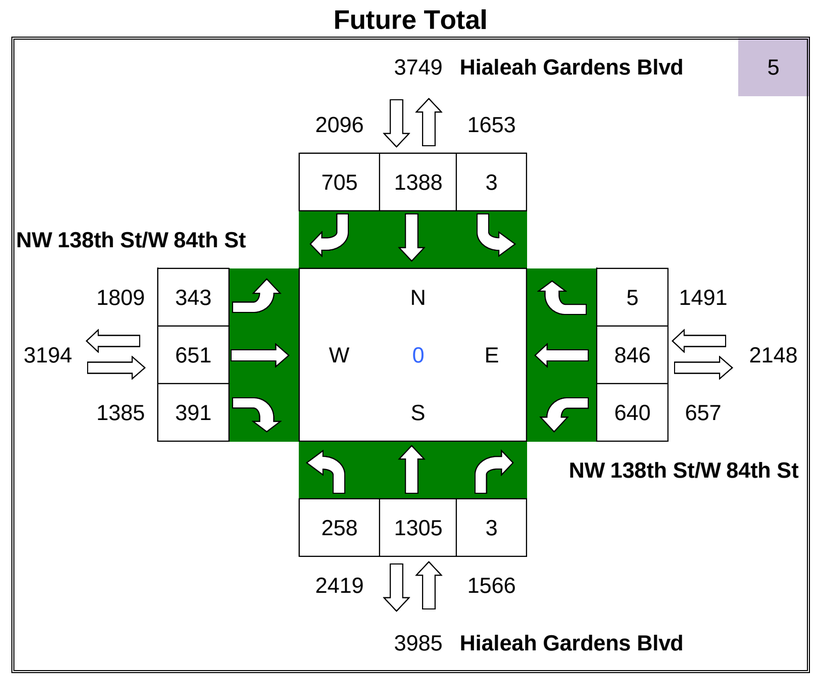
OUT= 596

	PD	#
N =	4.08%	47
E =	0.47%	5
S =	3.89%	45
W =	1.74%	20

ADM Project Trips



Future Total



APPENDIX I-K4:
2040 PM Background with Combined

ADM/Graham

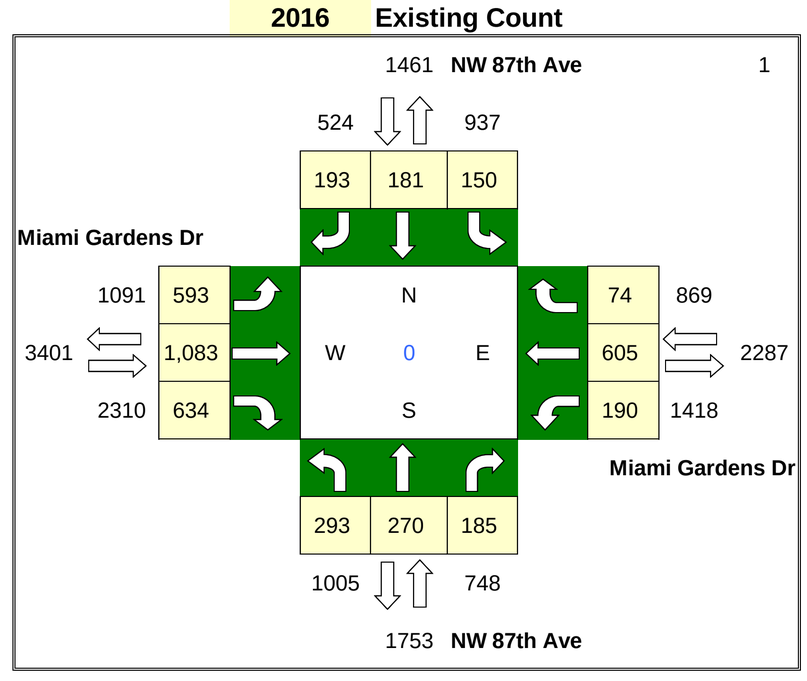
PM Turning Movement Volumes

N/S Roadway: NW 87th Ave

E/W Roadway: Miami Gardens Dr

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1% **Seasonal Factor =** 1.00

PHASE 2

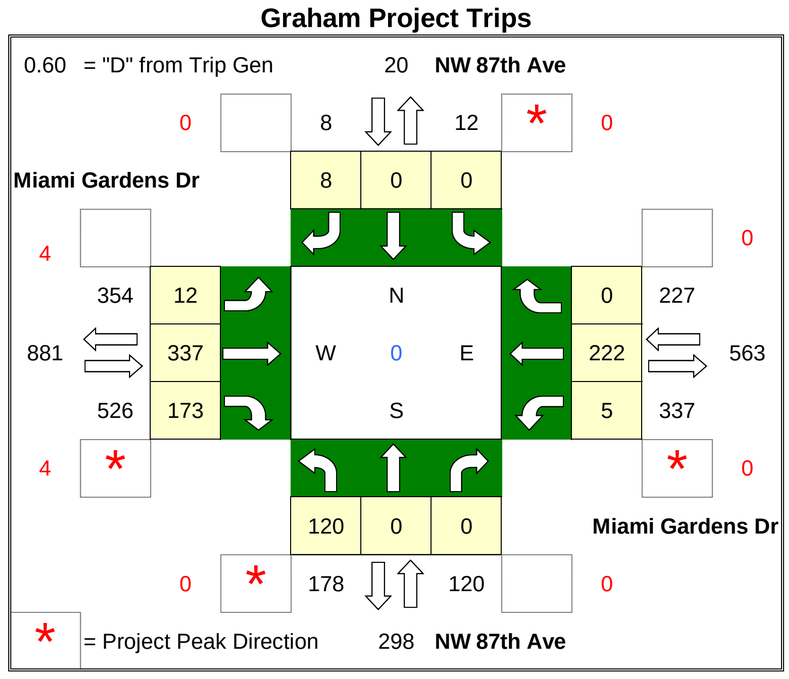
Project Trips

IN= 2,138

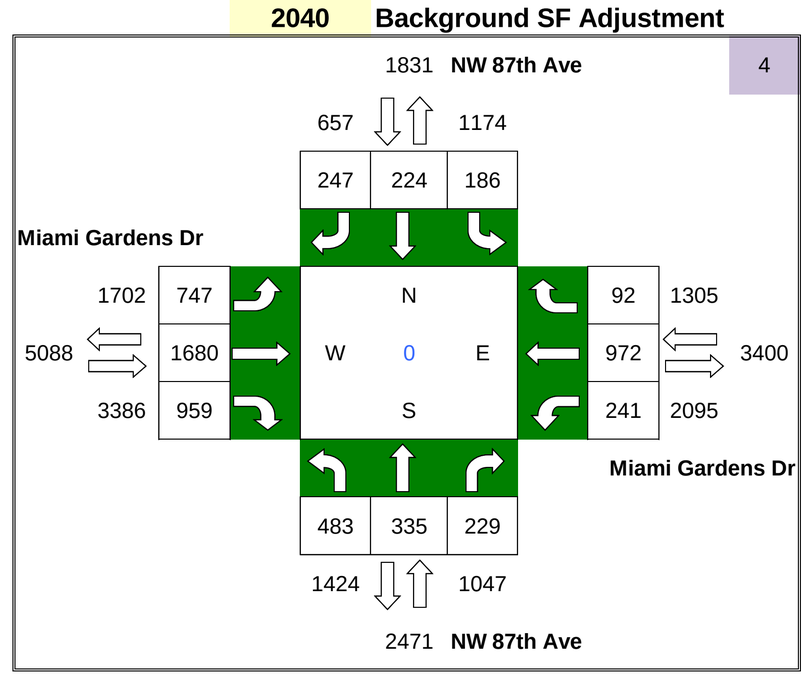
OUT= 3,177

	PD	#
N =	0.37%	20
E =	10.60%	563
S =	5.60%	298
W =	16.57%	881

Graham Project Trips



2040 Background SF Adjustment



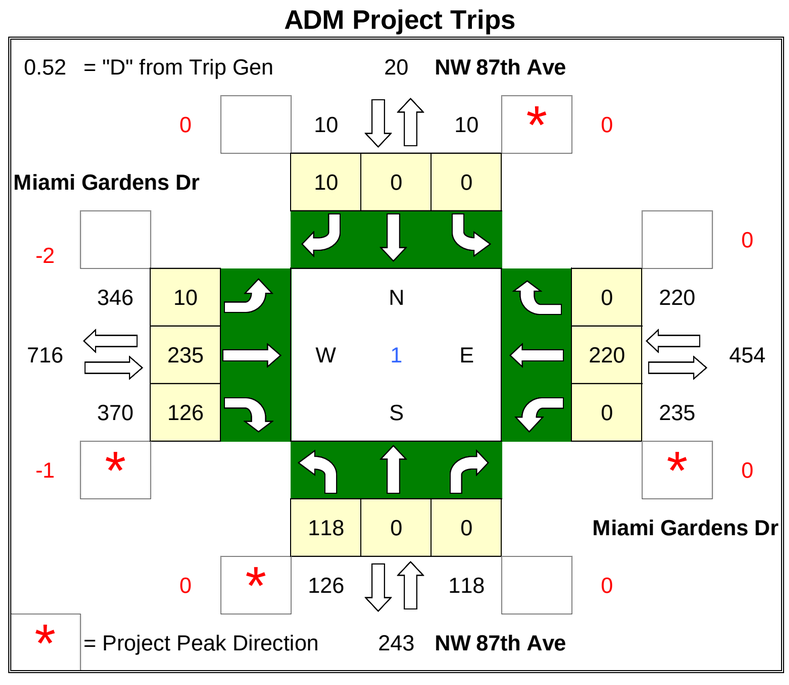
Project Trips

IN= 2,577

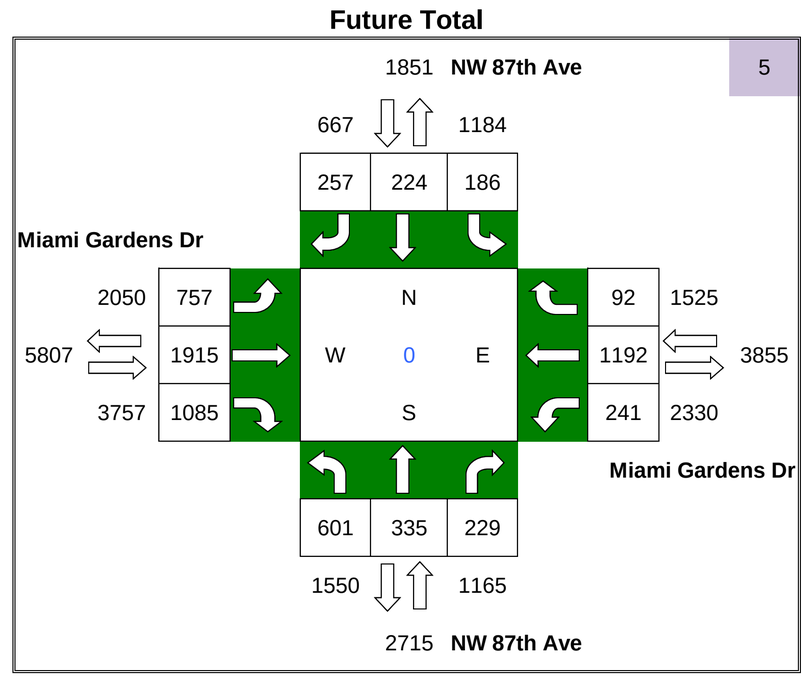
OUT= 2,753

	PD	#
N =	0.37%	20
E =	8.52%	454
S =	4.56%	243
W =	13.44%	716

ADM Project Trips



Future Total



ADM/Graham

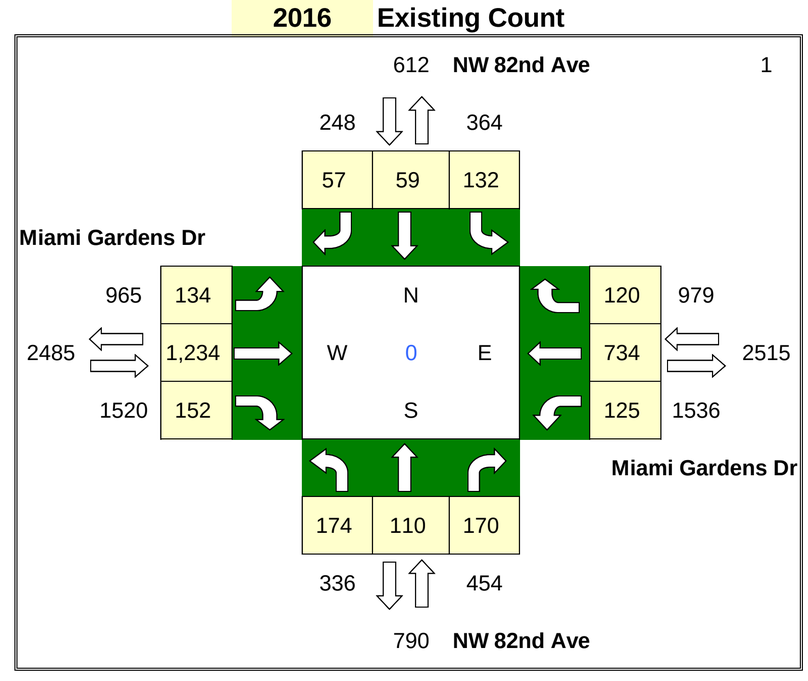
PM Turning Movement Volumes

N/S Roadway: NW 82nd Ave

E/W Roadway: Miami Gardens Dr

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1%

Seasonal Factor = 1.00

PHASE 2

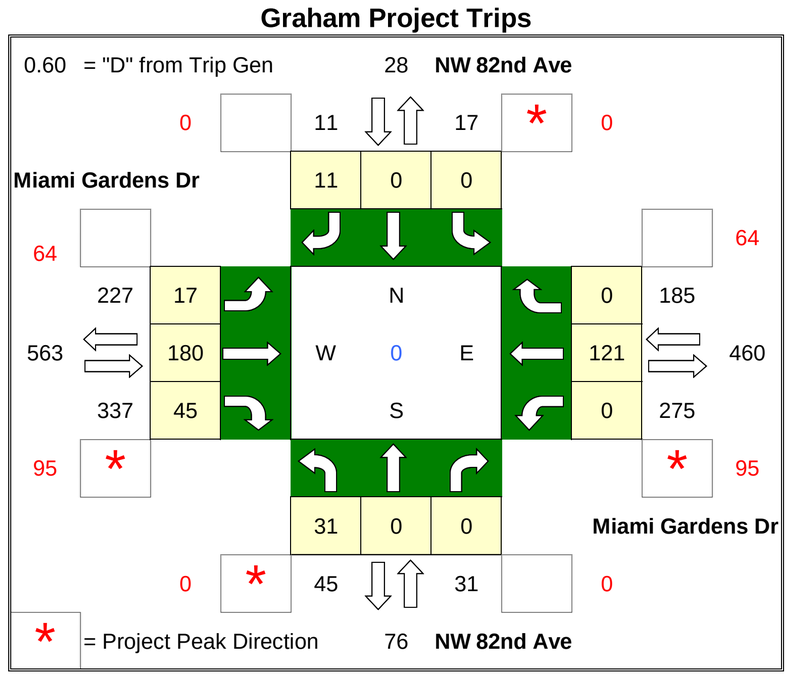
Project Trips

IN= 2,138

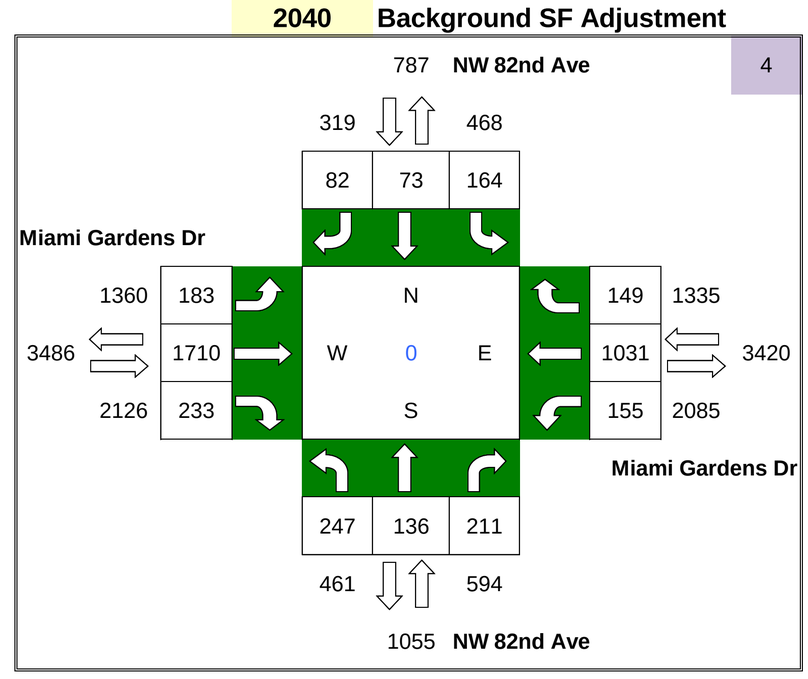
OUT= 3,177

	PD	#
N =	0.52%	28
E =	8.65%	460
S =	1.43%	76
W =	10.60%	563

Graham Project Trips



2040 Background SF Adjustment



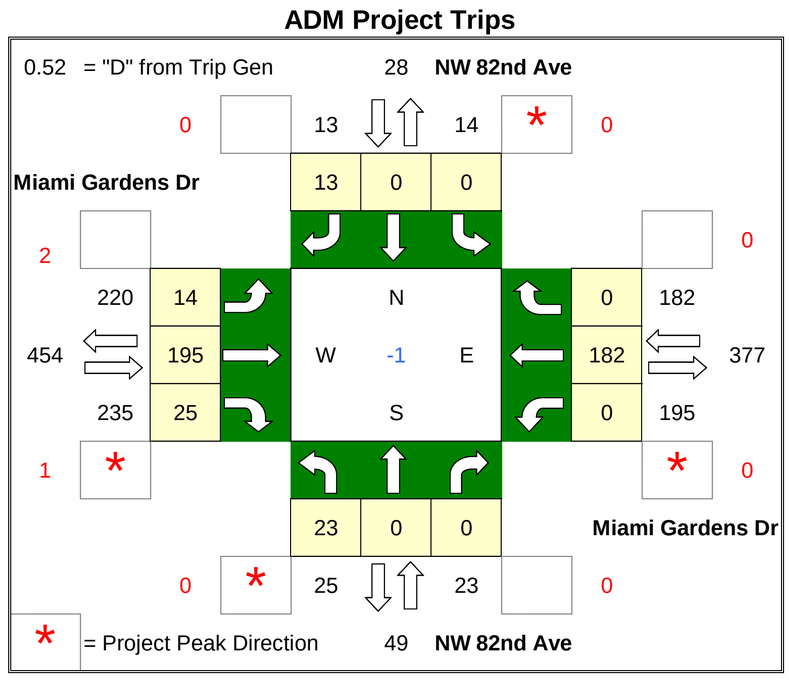
Project Trips

IN= 2,577

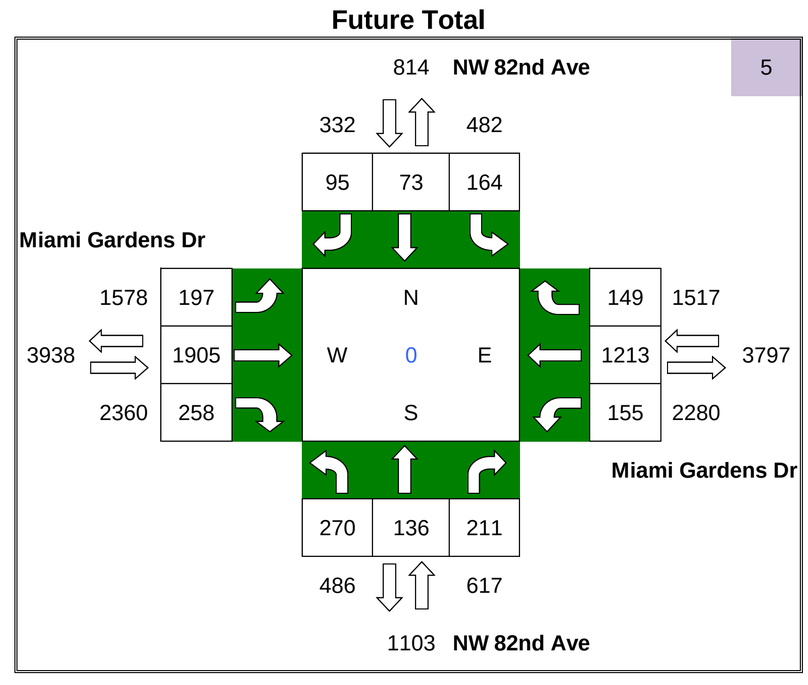
OUT= 2,753

	PD	#
N =	0.52%	28
E =	7.08%	377
S =	0.91%	49
W =	8.52%	454

ADM Project Trips



Future Total



ADM/Graham

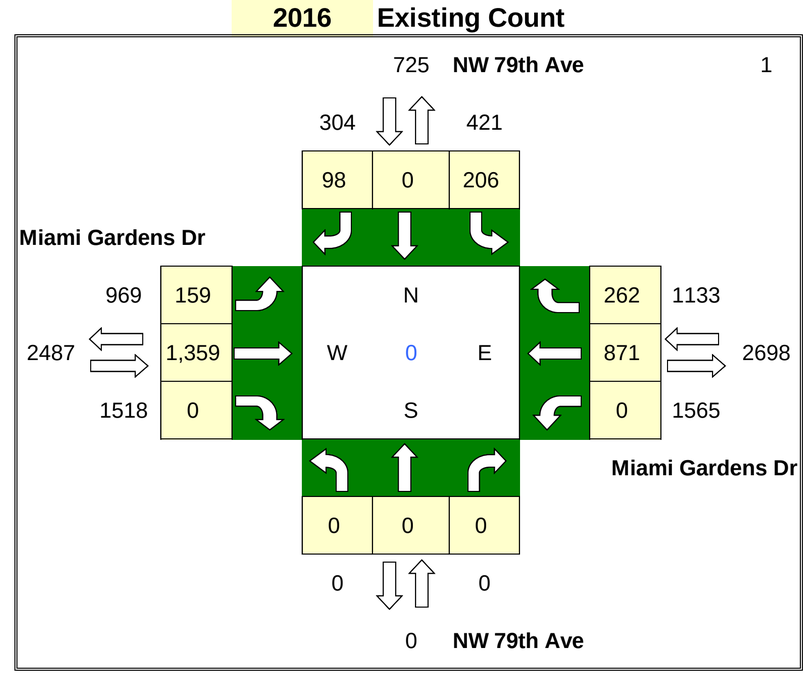
PM Turning Movement Volumes

N/S Roadway: NW 79th Ave

E/W Roadway: Miami Gardens Dr

Date Taken: 4/20/16

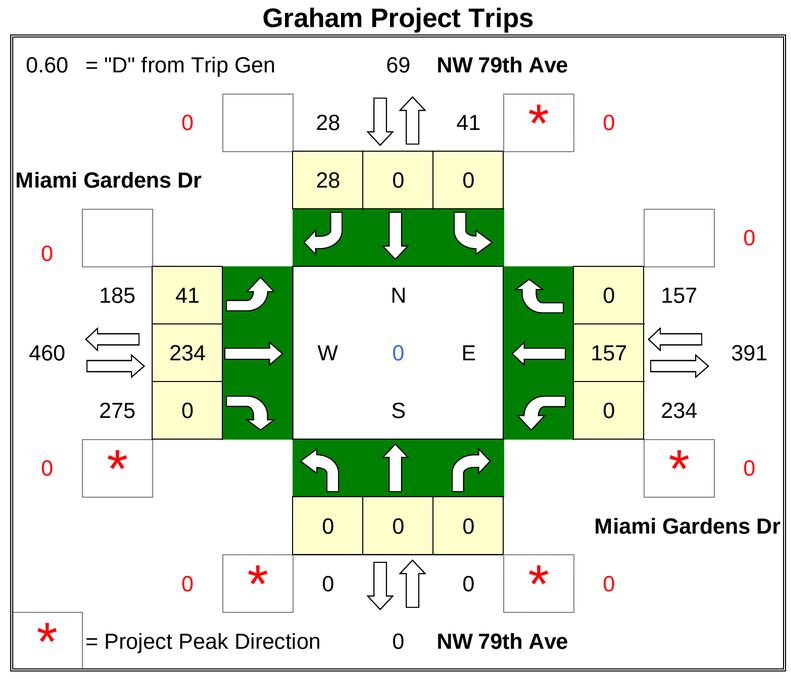
2016 Existing Count



% Annual Growth = 1% **Seasonal Factor =** 1.00

PHASE 2

Graham Project Trips



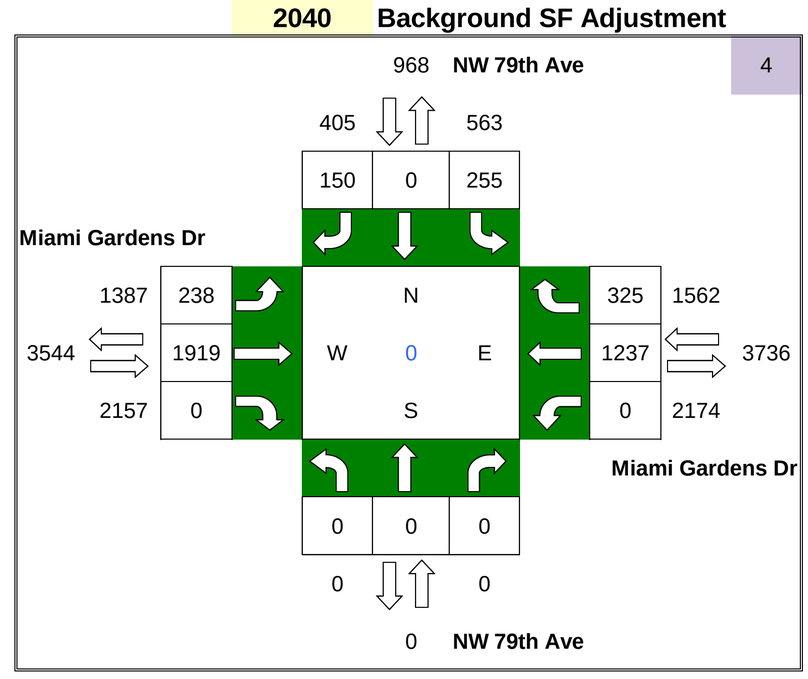
Project Trips

IN= 2,138

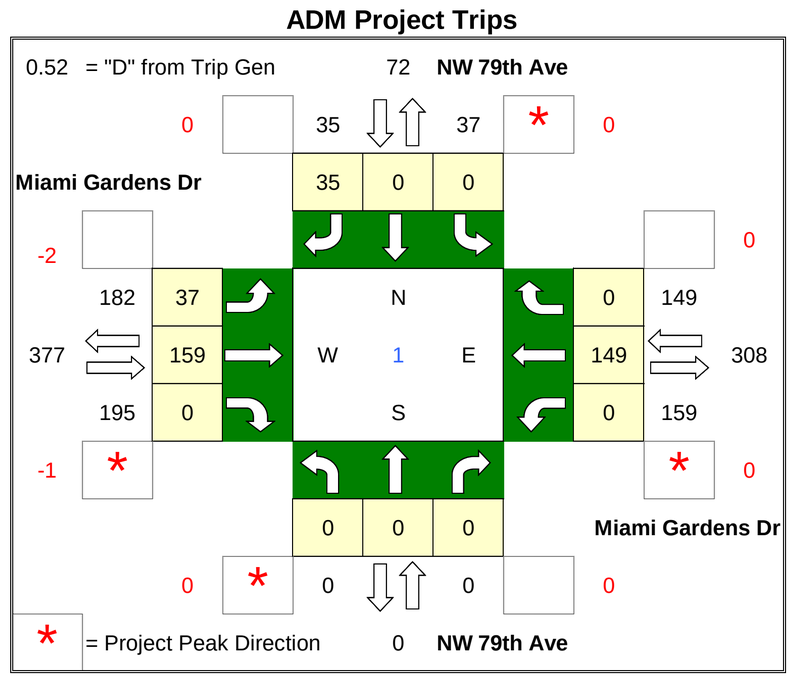
OUT= 3,177

	PD	#
N =	1.30%	69
E =	7.35%	391
S =	0.00%	0
W =	8.65%	460

2040 Background SF Adjustment



ADM Project Trips



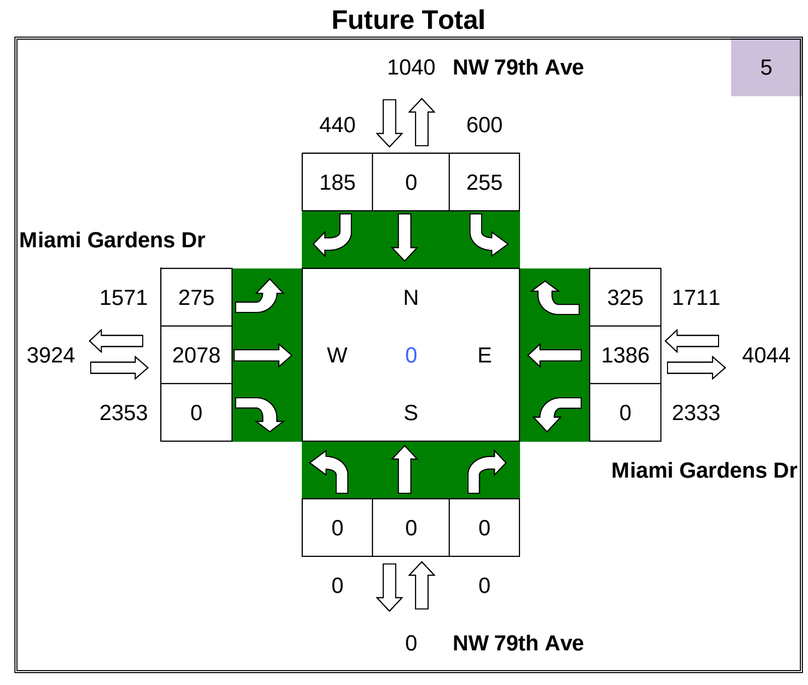
Project Trips

IN= 2,577

OUT= 2,753

	PD	#
N =	1.35%	72
E =	5.78%	308
S =	0.00%	0
W =	7.08%	377

Future Total



ADM/Graham

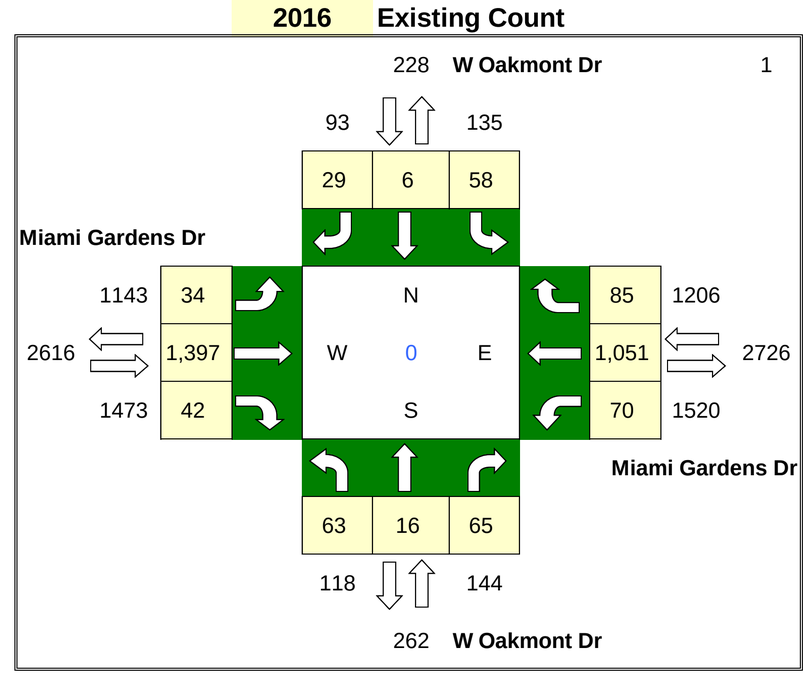
PM Turning Movement Volumes

N/S Roadway: W Oakmont Dr

E/W Roadway: Miami Gardens Dr

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1% **Seasonal Factor =** 1.00

PHASE 2

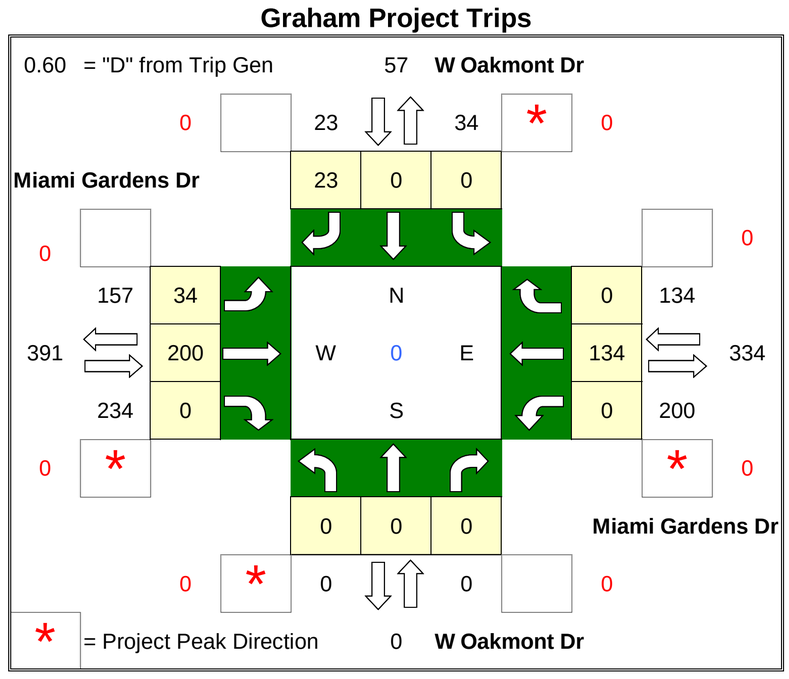
Project Trips

IN= 2,138

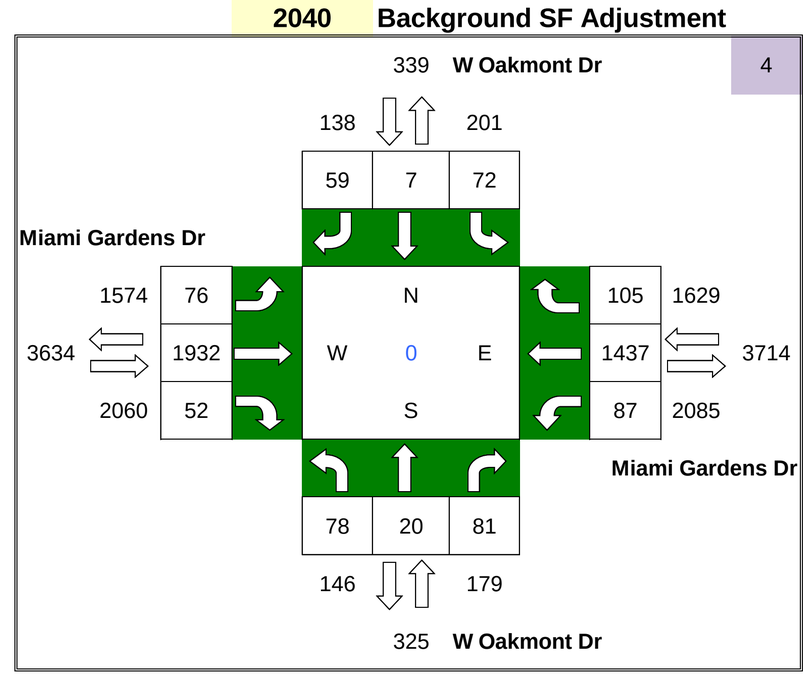
OUT= 3,177

	PD	#
N =	1.07%	57
E =	6.28%	334
S =	0.00%	0
W =	7.35%	391

Graham Project Trips



2040 Background SF Adjustment



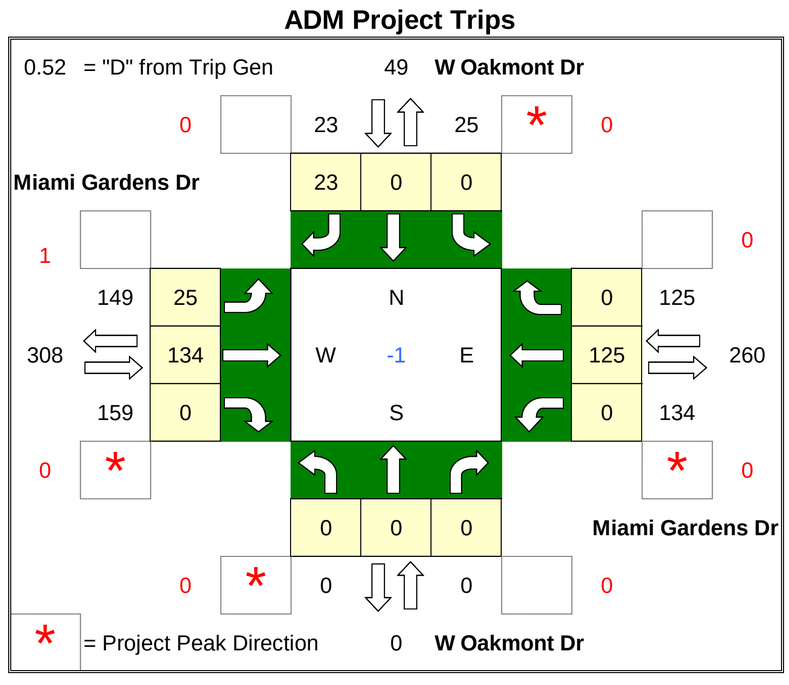
Project Trips

IN= 2,577

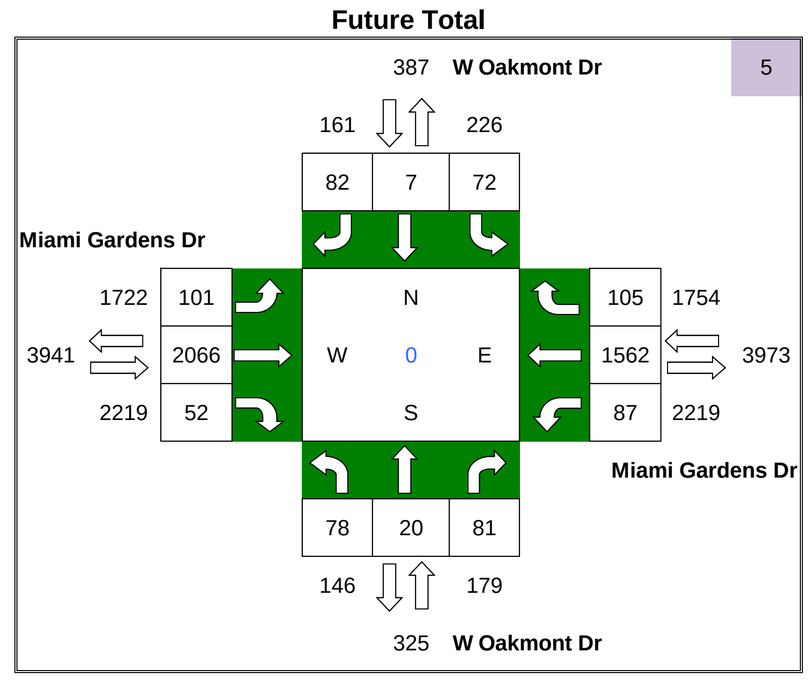
OUT= 2,753

	PD	#
N =	0.91%	49
E =	4.87%	260
S =	0.00%	0
W =	5.78%	308

ADM Project Trips



Future Total



ADM/Graham

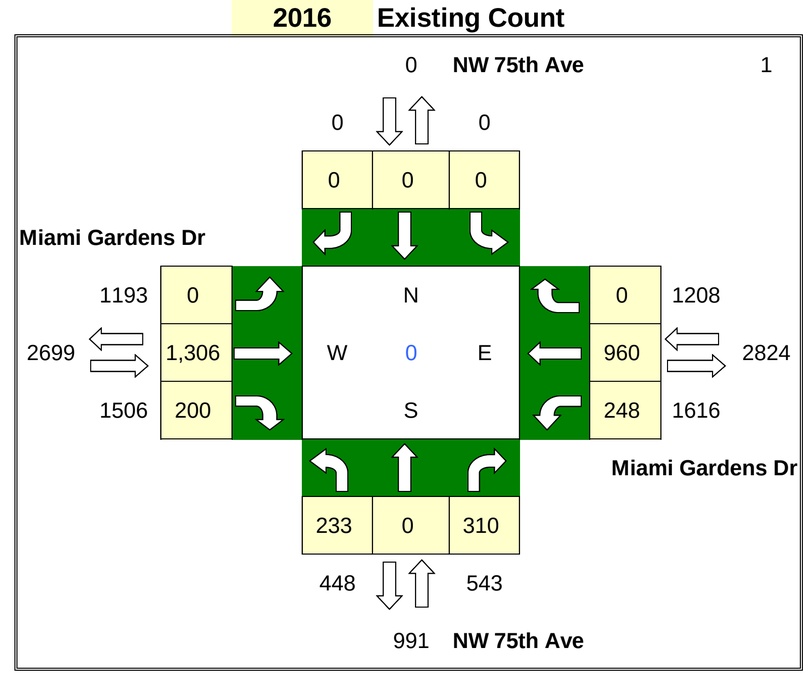
PM Turning Movement Volumes

N/S Roadway: NW 75th Ave

E/W Roadway: Miami Gardens Dr

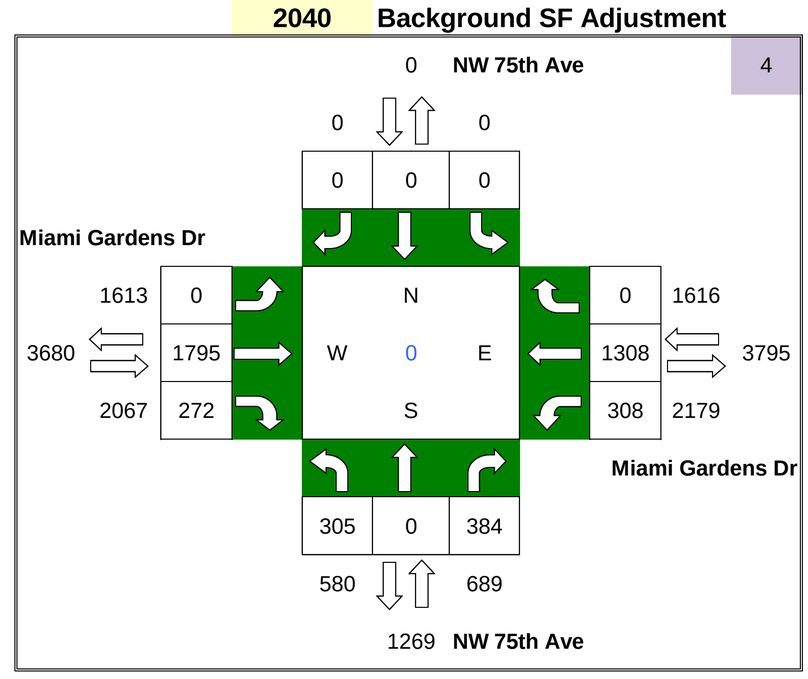
Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1% **Seasonal Factor =** 1.00

2040 Background SF Adjustment



PHASE 2

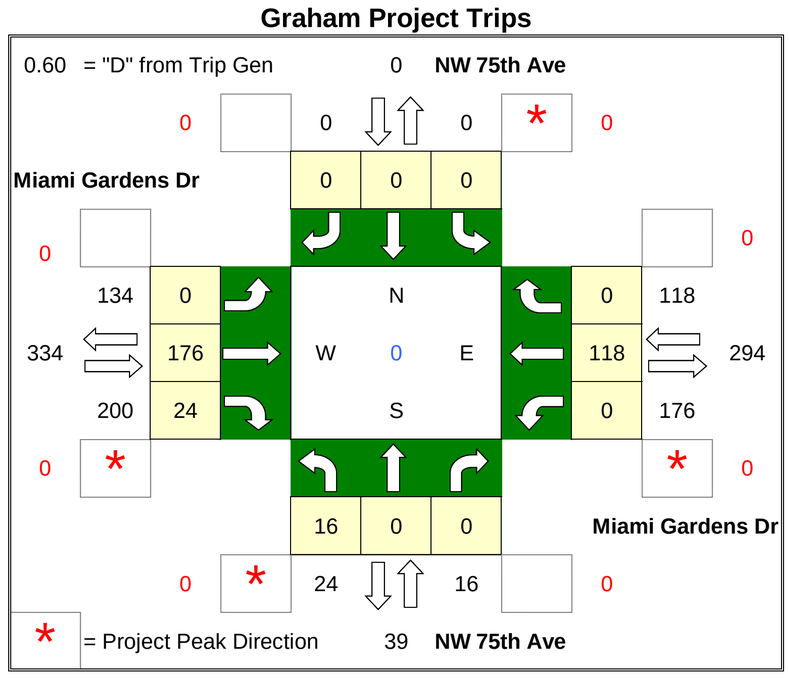
Project Trips

IN= 2,138

OUT= 3,177

	PD	#
N =	0.00%	0
E =	5.54%	294
S =	0.74%	39
W =	6.28%	334

Graham Project Trips



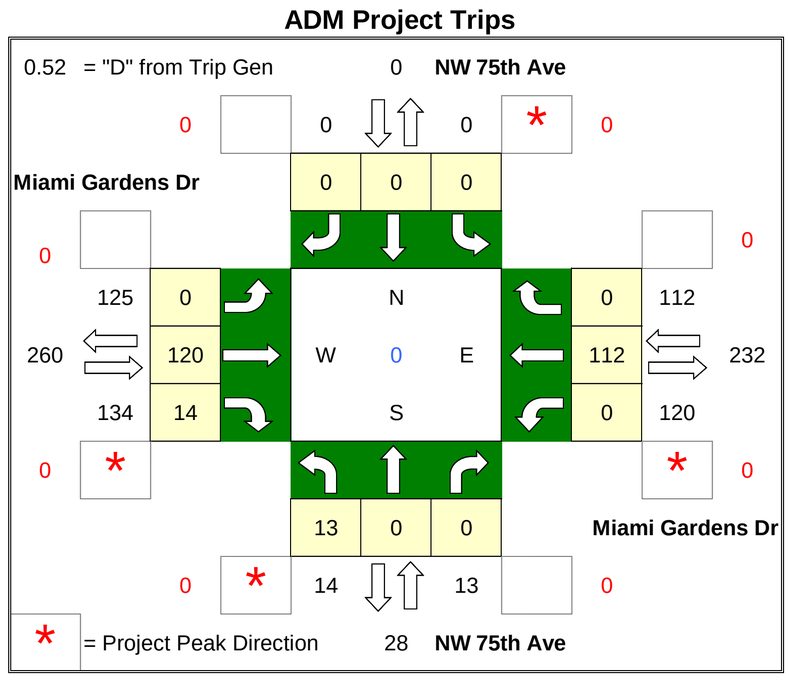
Project Trips

IN= 2,577

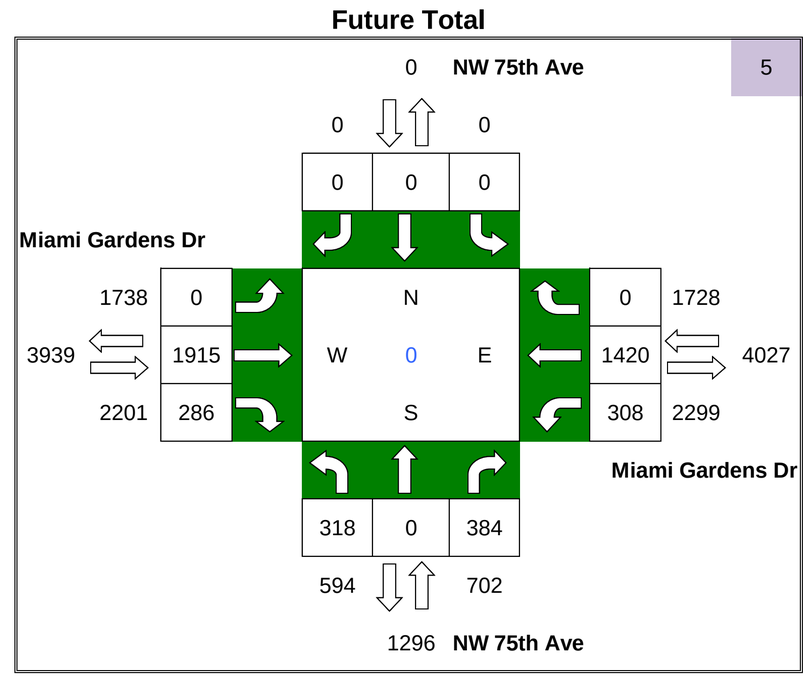
OUT= 2,753

	PD	#
N =	0.00%	0
E =	4.36%	232
S =	0.52%	28
W =	4.87%	260

ADM Project Trips



Future Total



ADM/Graham

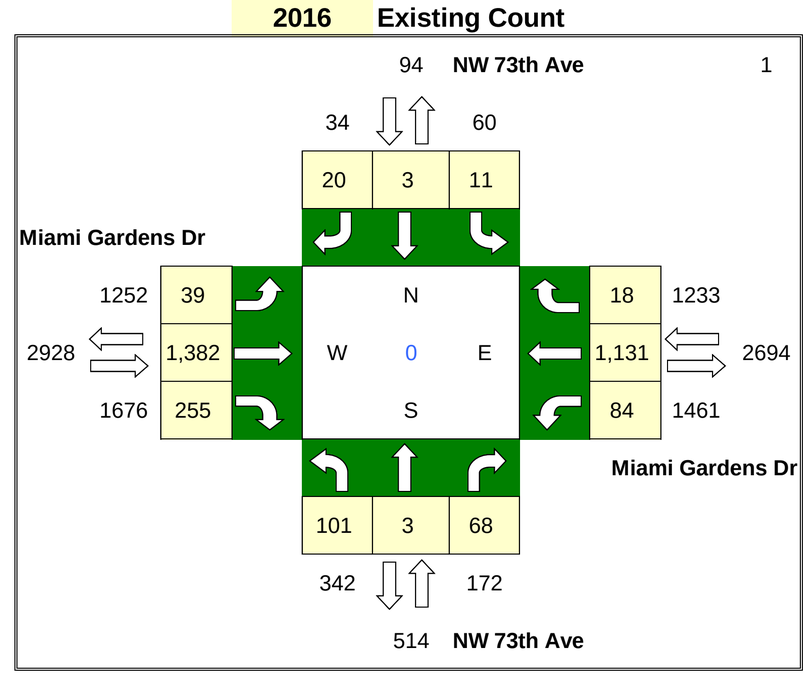
PM Turning Movement Volumes

N/S Roadway: NW 73th Ave

E/W Roadway: Miami Gardens Dr

Date Taken: 4/20/16

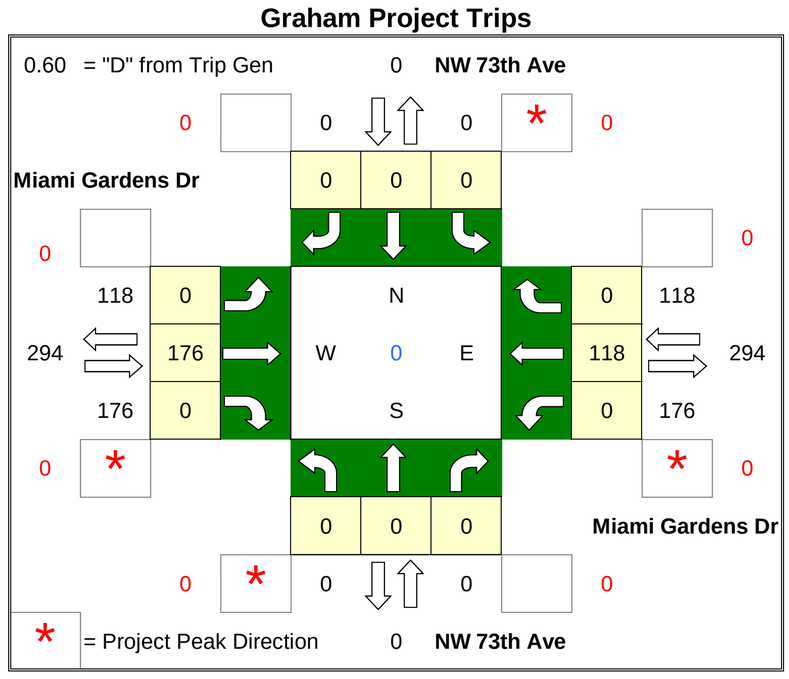
2016 Existing Count



% Annual Growth = 1% **Seasonal Factor =** 1.00

PHASE 2

Graham Project Trips



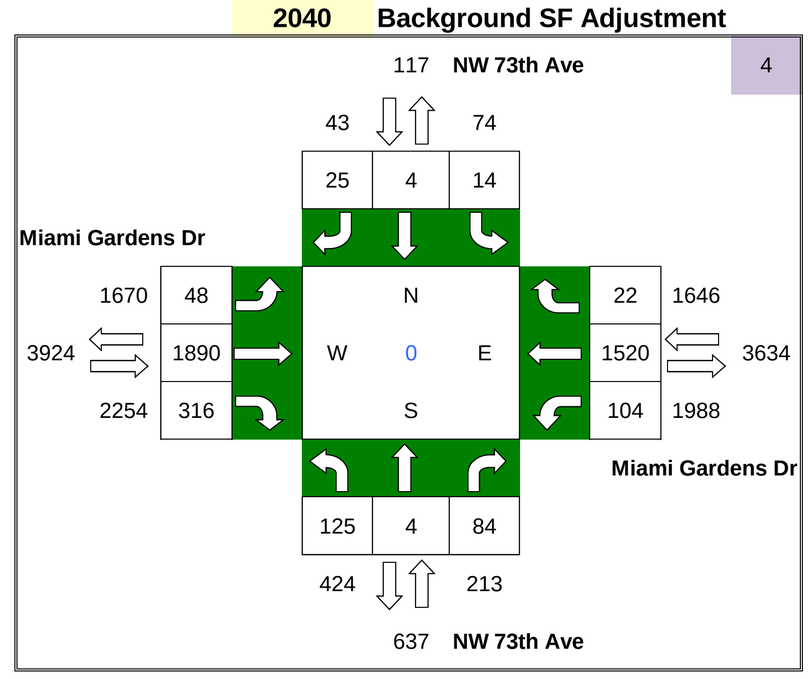
Project Trips

IN= 2,138

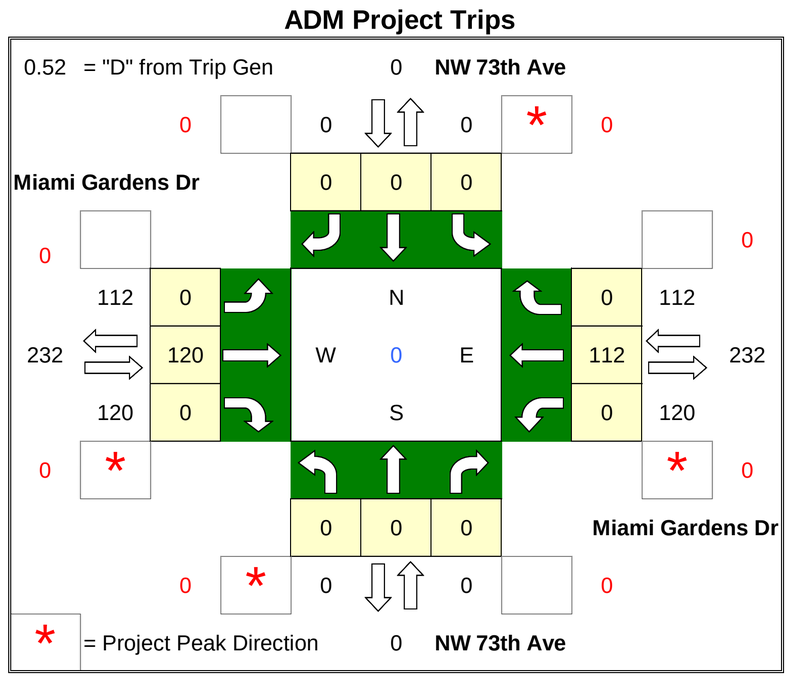
OUT= 3,177

	PD	#
N =	0.00%	0
E =	5.54%	294
S =	0.00%	0
W =	5.54%	294

2040 Background SF Adjustment



ADM Project Trips



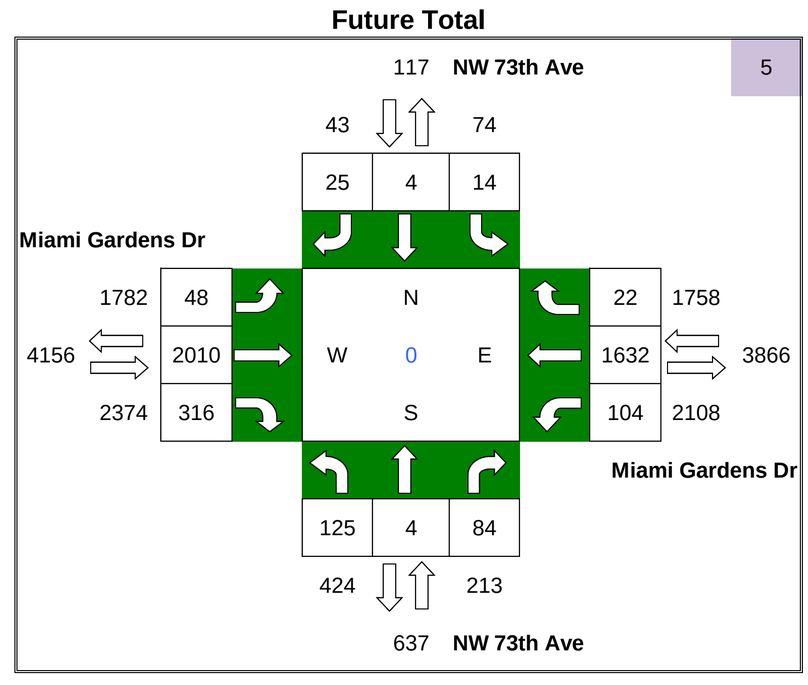
Project Trips

IN= 2,577

OUT= 2,753

	PD	#
N =	0.00%	0
E =	4.36%	232
S =	0.00%	0
W =	4.36%	232

Future Total



ADM/Graham

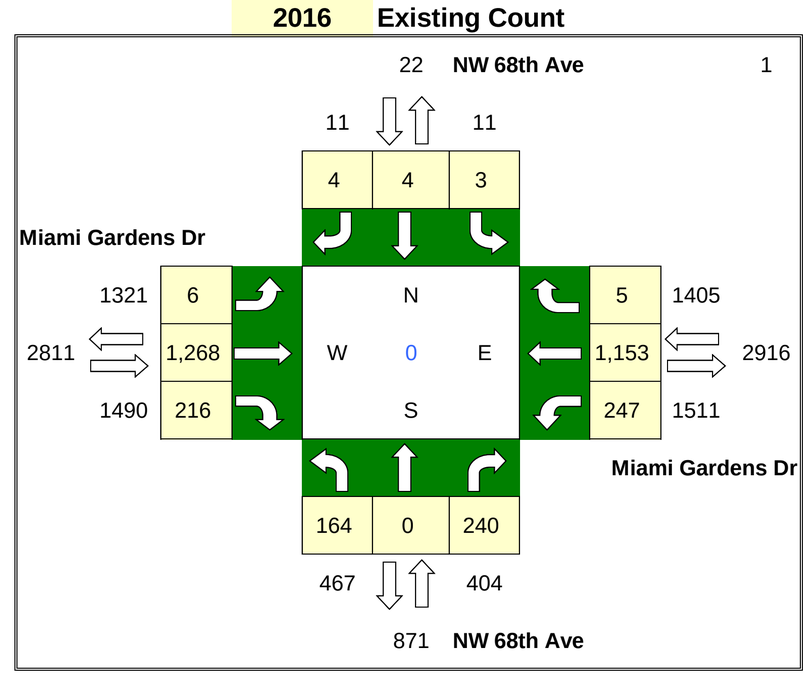
PM Turning Movement Volumes

N/S Roadway: NW 68th Ave

E/W Roadway: Miami Gardens Dr

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1% **Seasonal Factor =** 1.00

PHASE 2

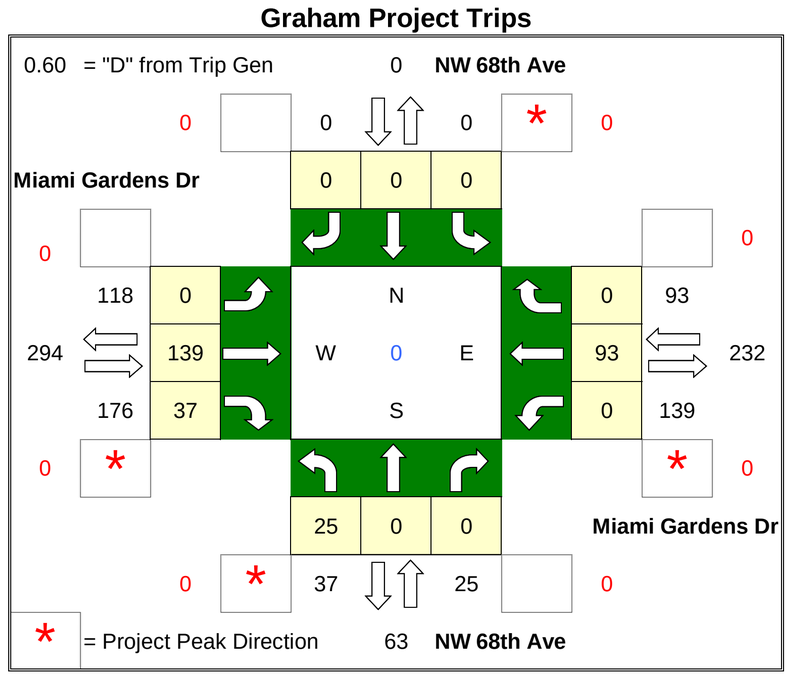
Project Trips

IN= 2,138

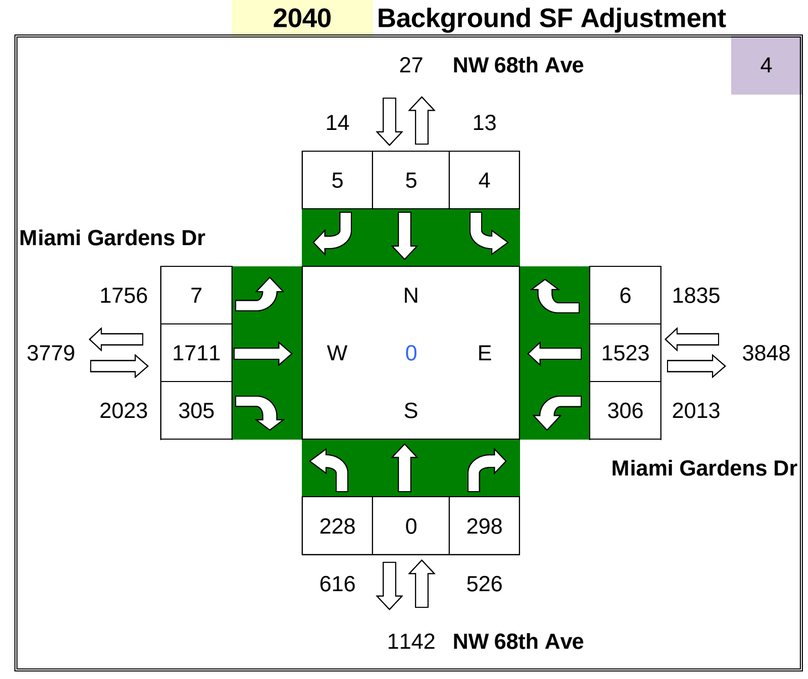
OUT= 3,177

	PD	#
N =	0.00%	0
E =	4.36%	232
S =	1.18%	63
W =	5.54%	294

Graham Project Trips



2040 Background SF Adjustment



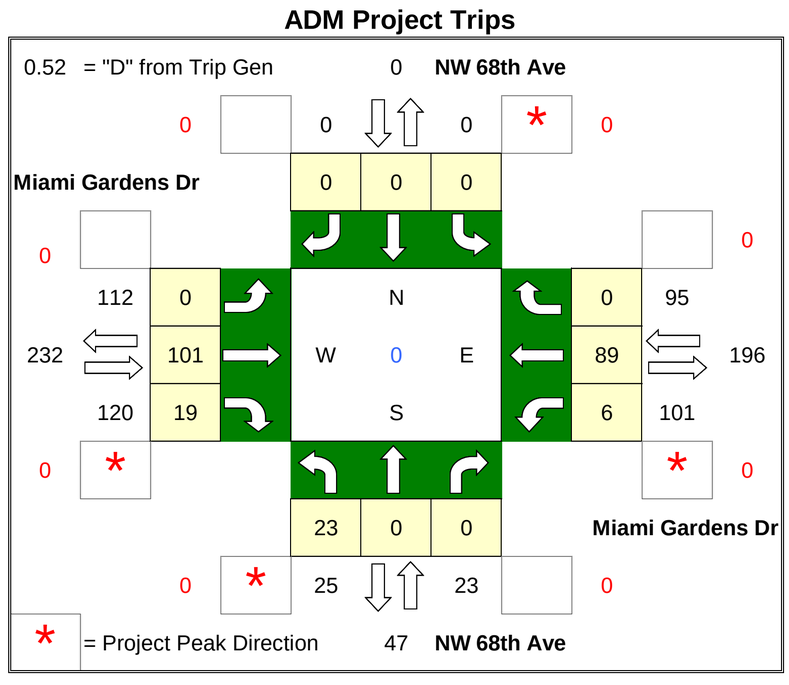
Project Trips

IN= 2,577

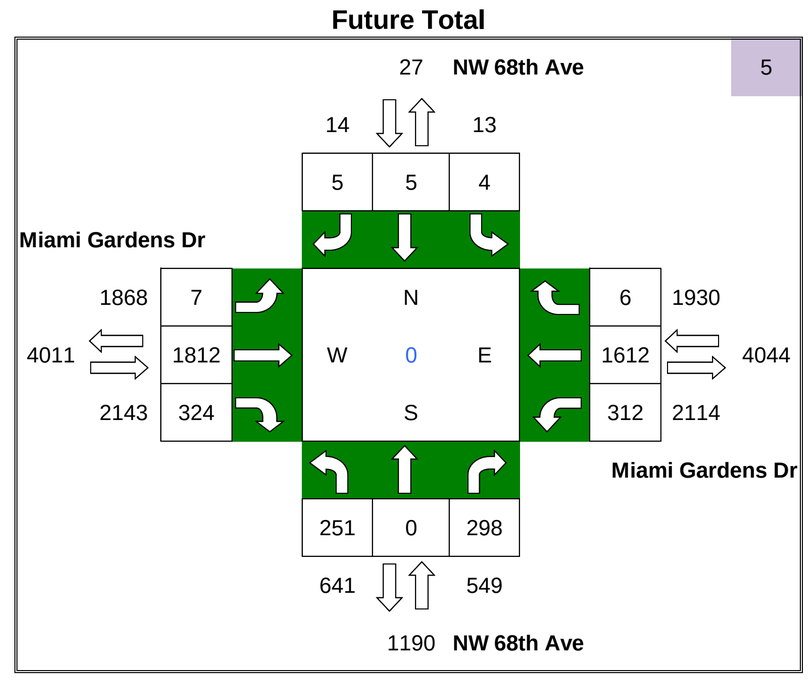
OUT= 2,753

	PD	#
N =	0.00%	0
E =	3.68%	196
S =	0.89%	47
W =	4.36%	232

ADM Project Trips



Future Total



ADM/Graham

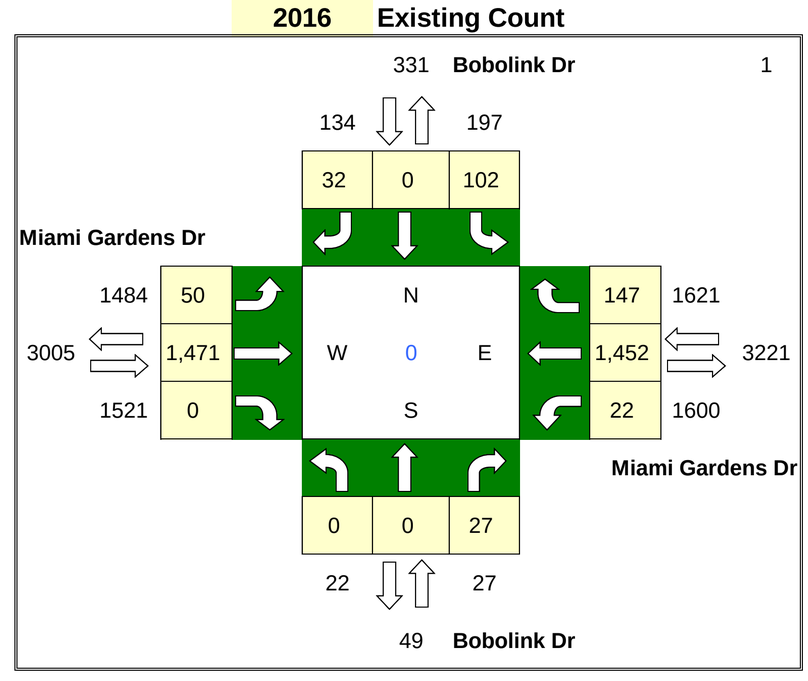
PM Turning Movement Volumes

N/S Roadway: Bobolink Dr

E/W Roadway: Miami Gardens Dr

Date Taken: 4/20/16

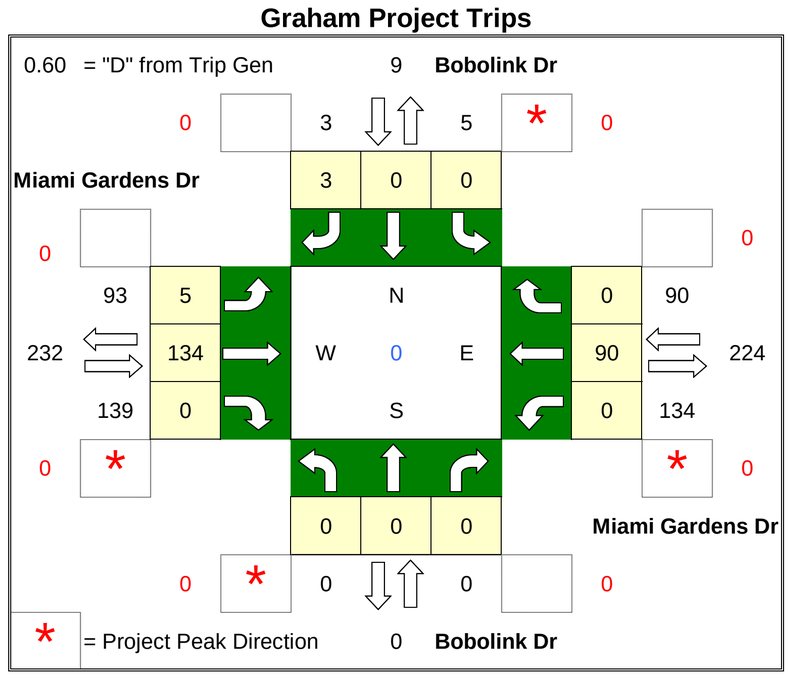
2016 Existing Count



% Annual Growth = 1% **Seasonal Factor =** 1.00

PHASE 2

Graham Project Trips



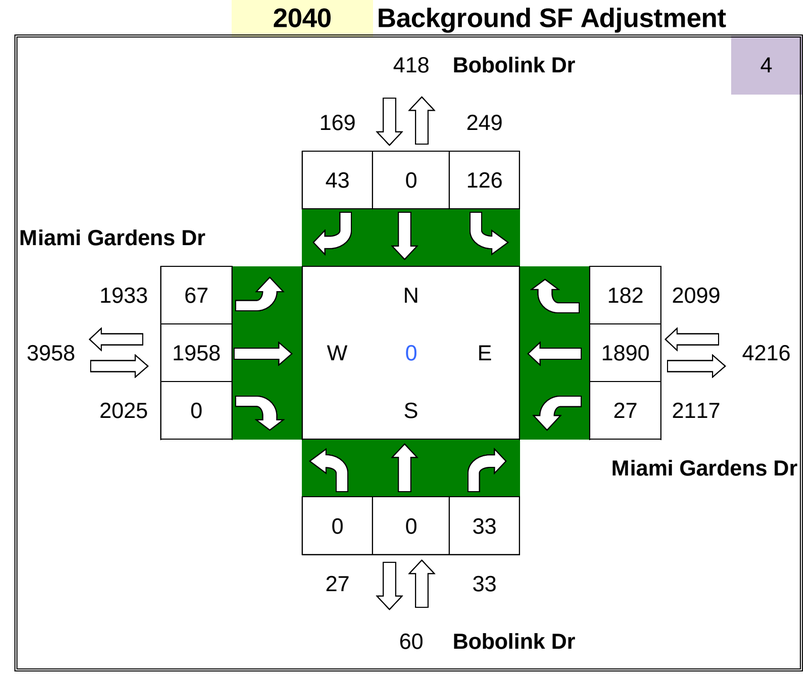
Project Trips

IN= 2,138

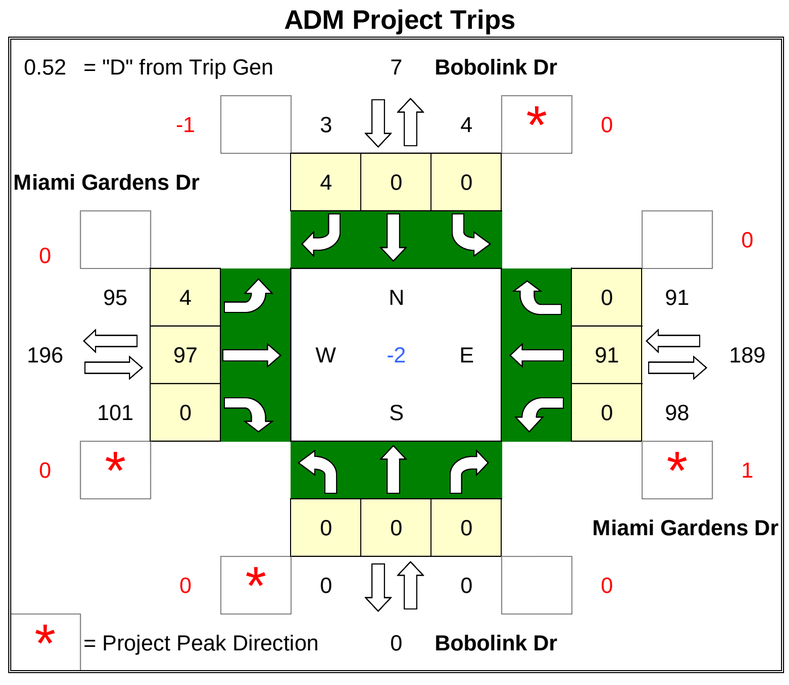
OUT= 3,177

	PD	#
N =	0.16%	9
E =	4.21%	224
S =	0.00%	0
W =	4.36%	232

2040 Background SF Adjustment



ADM Project Trips



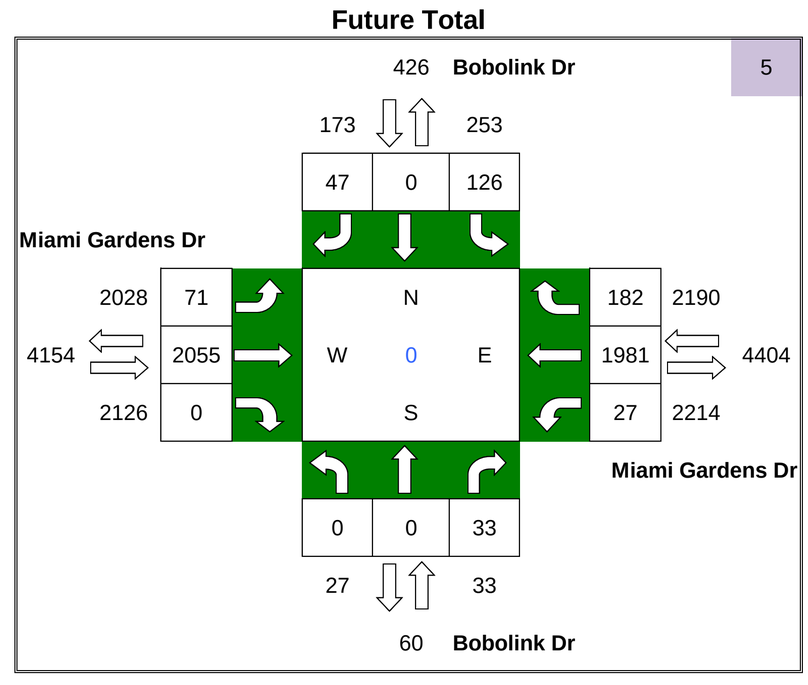
Project Trips

IN= 2,577

OUT= 2,753

	PD	#
N =	0.13%	7
E =	3.55%	189
S =	0.00%	0
W =	3.68%	196

Future Total



ADM/Graham

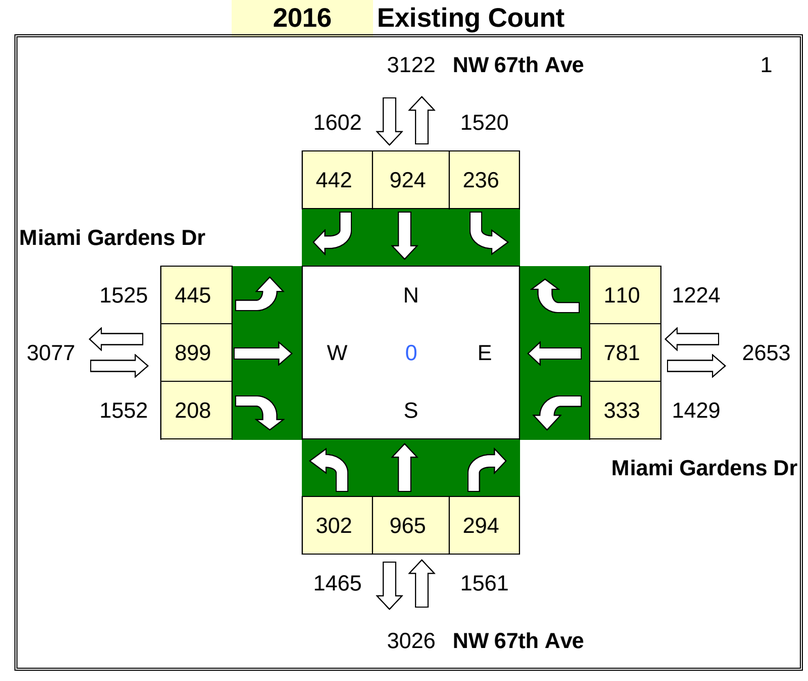
PM Turning Movement Volumes

N/S Roadway: NW 67th Ave

E/W Roadway: Miami Gardens Dr

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1%

Seasonal Factor = 1.00

PHASE 2

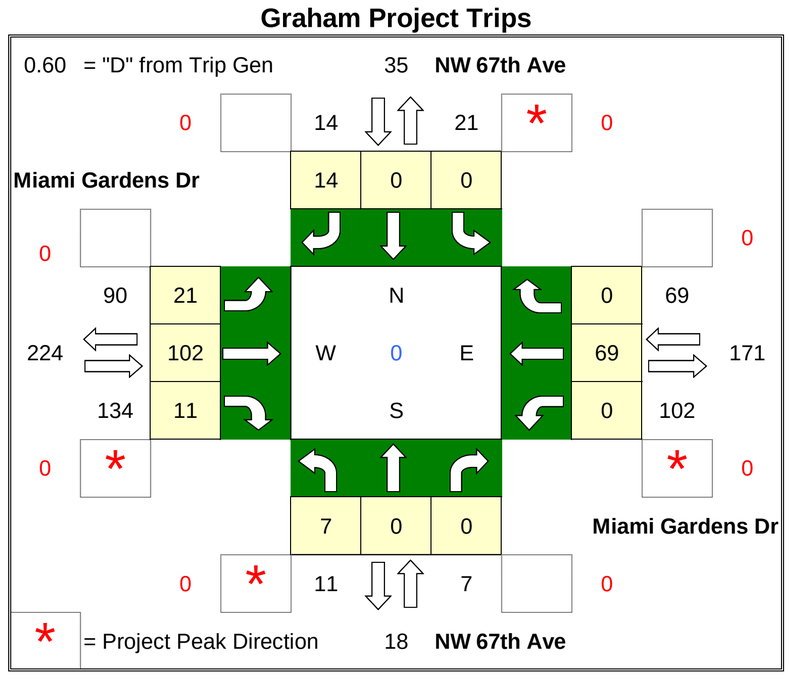
Graham Project Trips

Project Trips

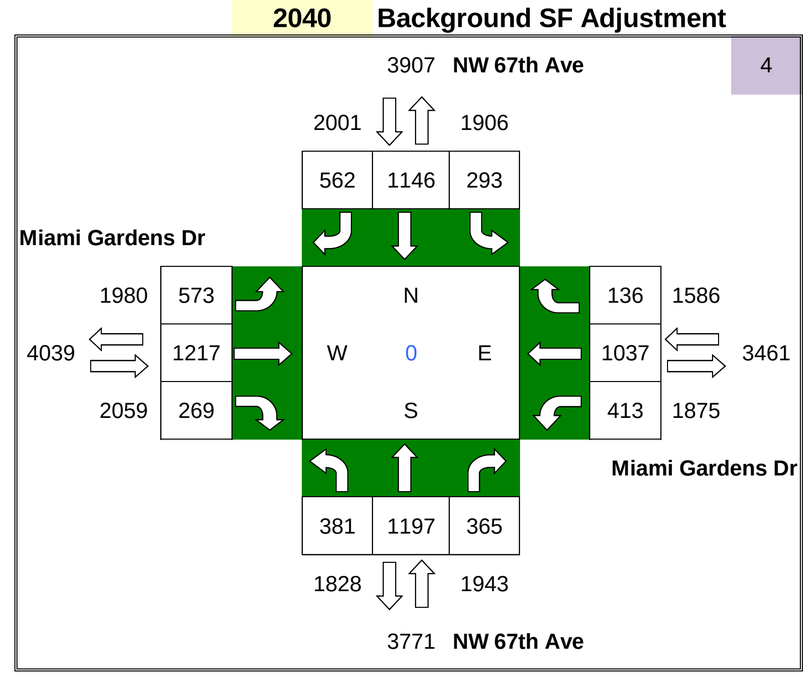
IN= 2,138

OUT= 3,177

	PD	#
N =	0.66%	35
E =	3.21%	171
S =	0.34%	18
W =	4.21%	224



2040 Background SF Adjustment



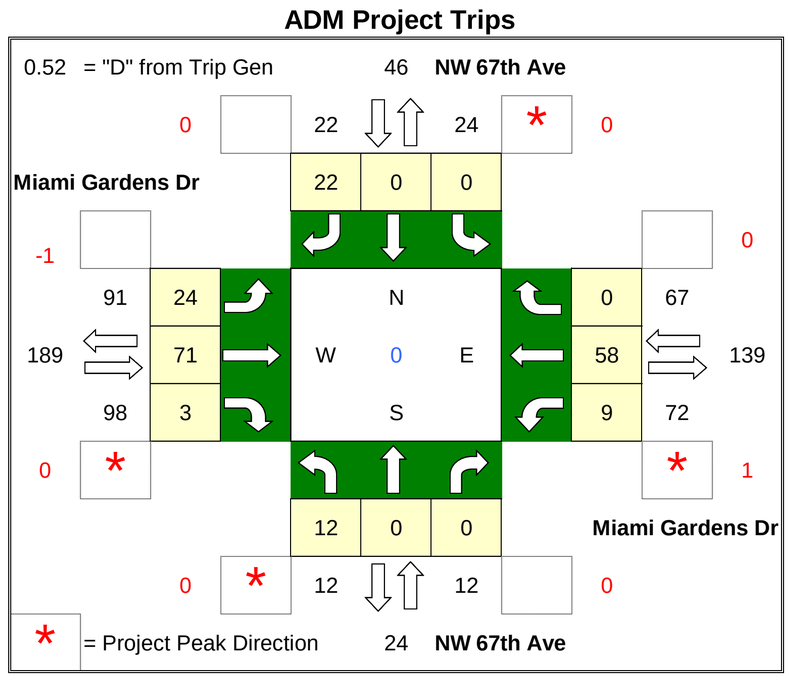
ADM Project Trips

Project Trips

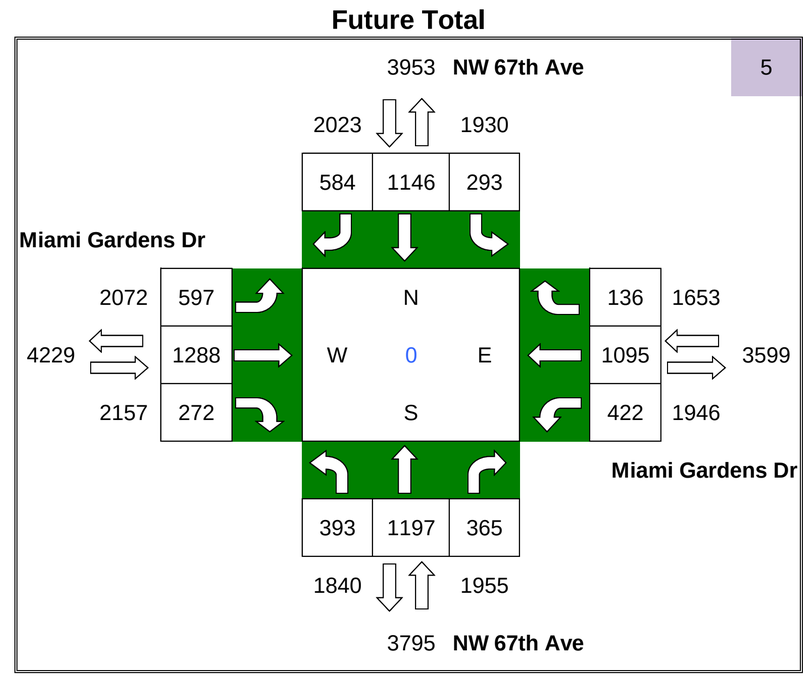
IN= 2,577

OUT= 2,753

	PD	#
N =	0.86%	46
E =	2.60%	139
S =	0.45%	24
W =	3.55%	189



Future Total



ADM/Graham

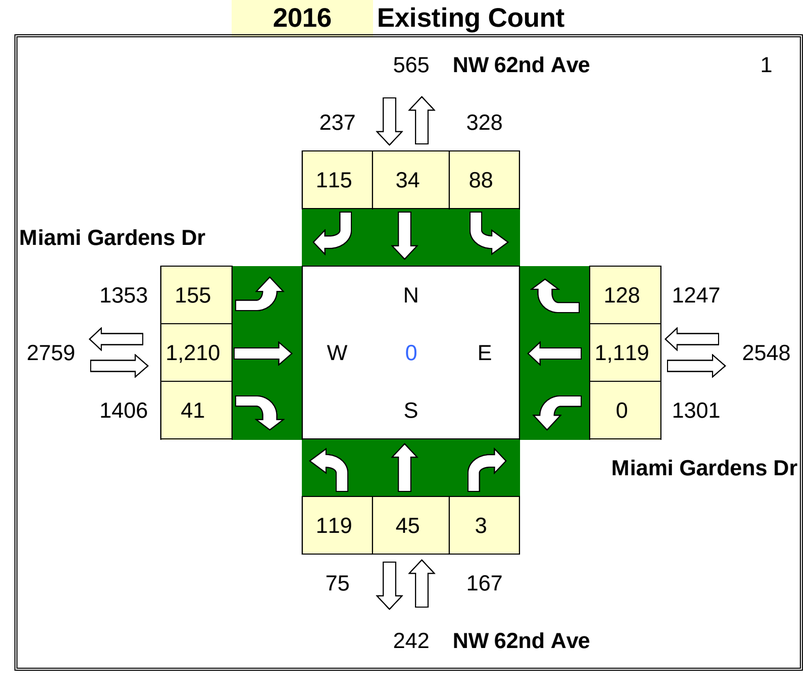
PM Turning Movement Volumes

N/S Roadway: NW 62nd Ave

E/W Roadway: Miami Gardens Dr

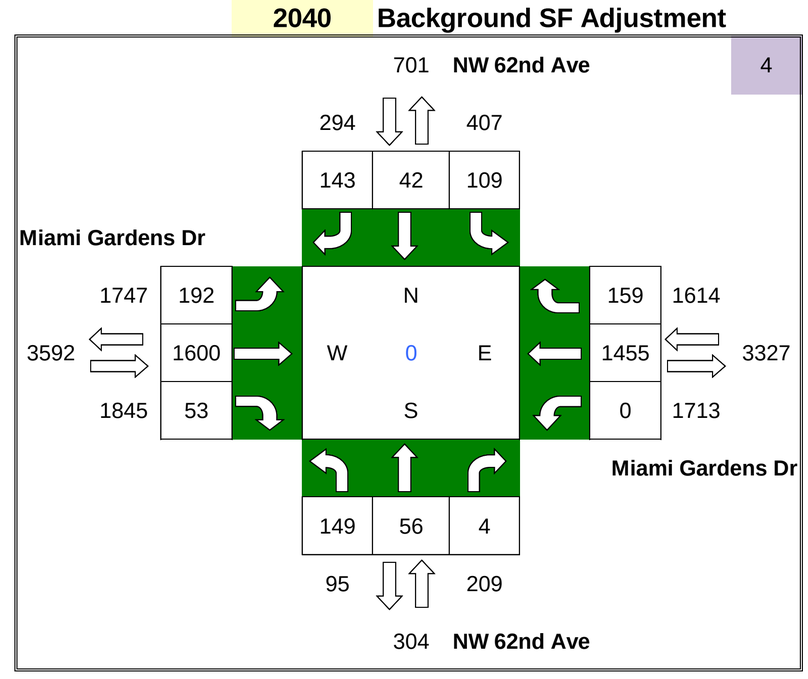
Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1% **Seasonal Factor =** 1.00

2040 Background SF Adjustment



PHASE 2

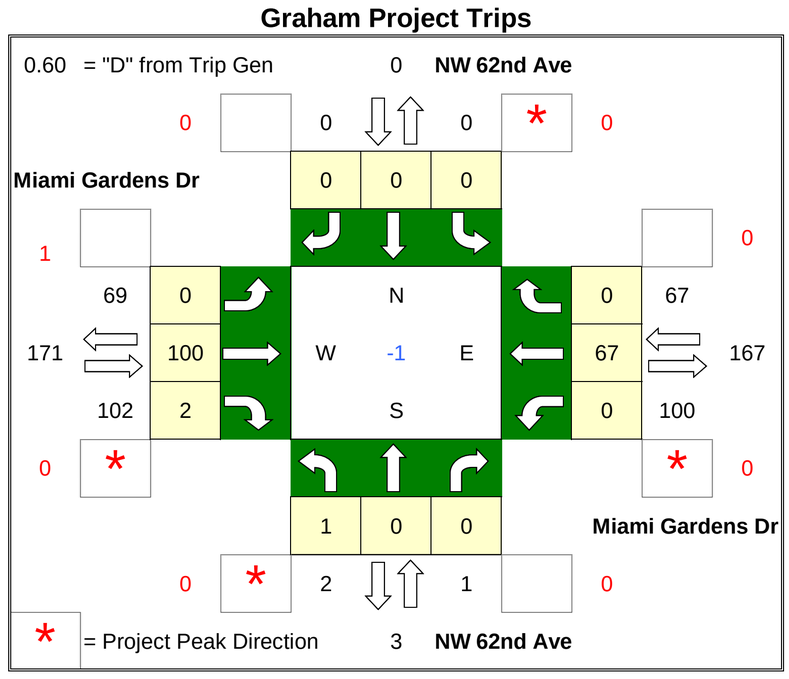
Project Trips

IN= 2,138

OUT= 3,177

	PD	#
N =	0.00%	0
E =	3.15%	167
S =	0.06%	3
W =	3.21%	171

Graham Project Trips



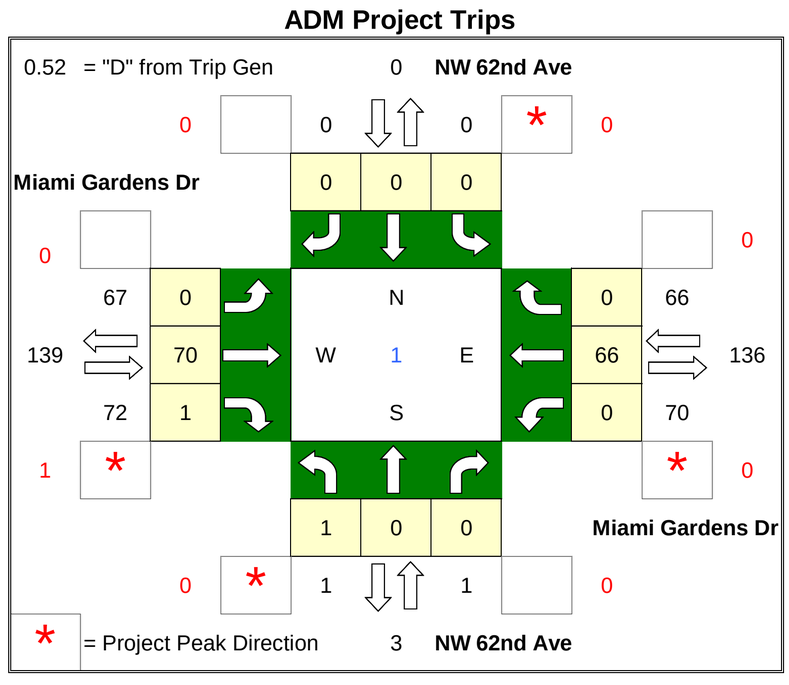
Project Trips

IN= 2,577

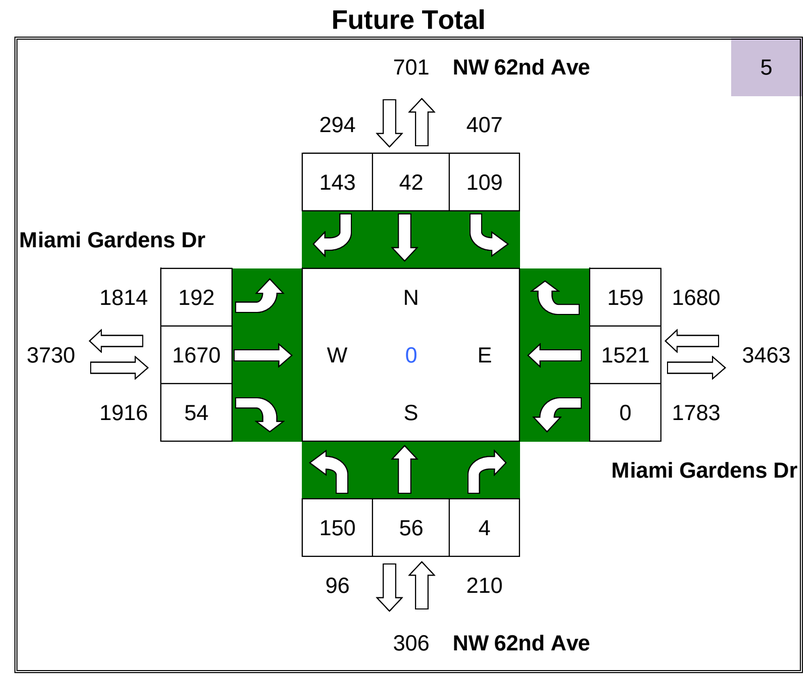
OUT= 2,753

	PD	#
N =	0.00%	0
E =	2.56%	136
S =	0.05%	3
W =	2.60%	139

ADM Project Trips



Future Total



ADM/Graham

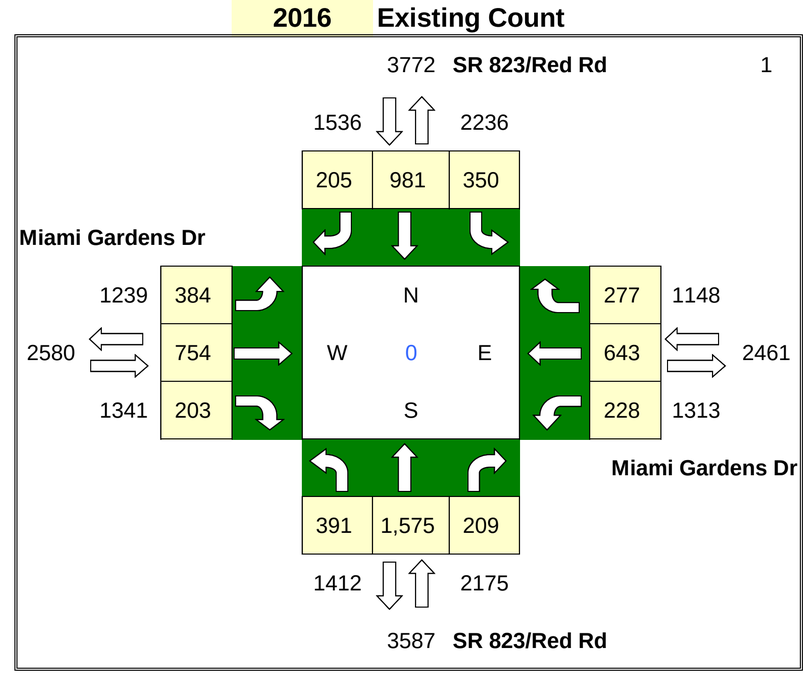
PM Turning Movement Volumes

N/S Roadway: SR 823/Red Rd

E/W Roadway: Miami Gardens Dr

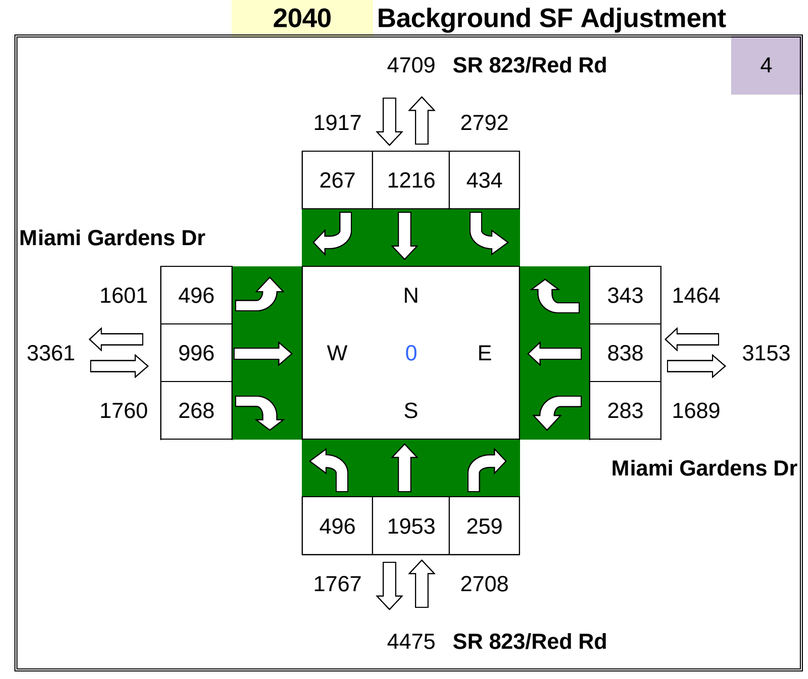
Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1% **Seasonal Factor =** 1.00

2040 Background SF Adjustment



PHASE 2

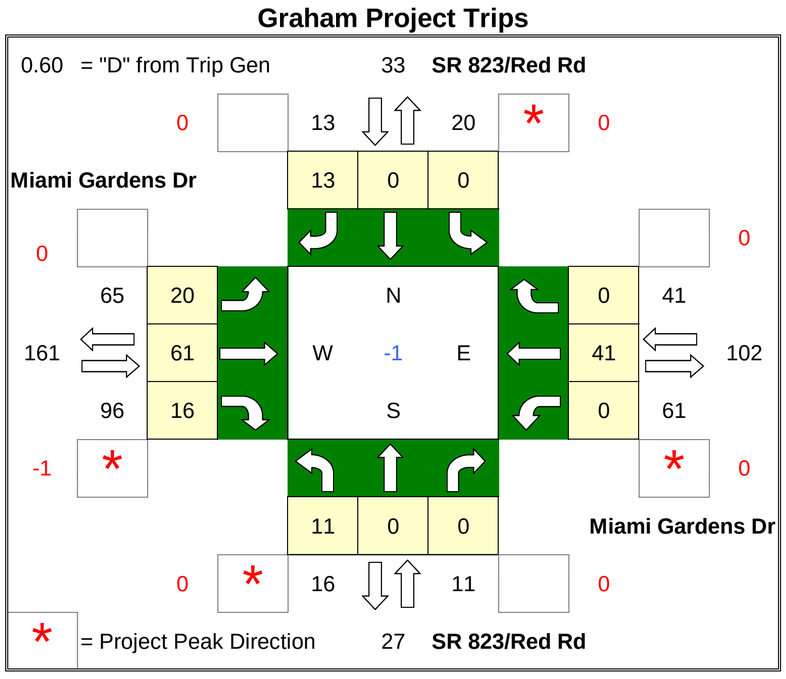
Graham Project Trips

Project Trips

IN= 2,138

OUT= 3,177

	PD	#
N =	0.62%	33
E =	1.91%	102
S =	0.50%	27
W =	3.03%	161



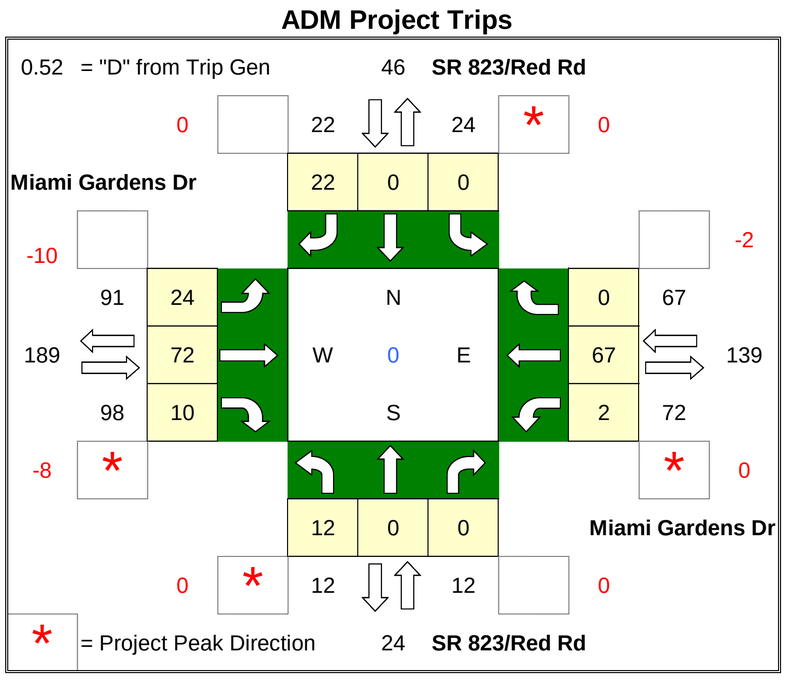
ADM Project Trips

Project Trips

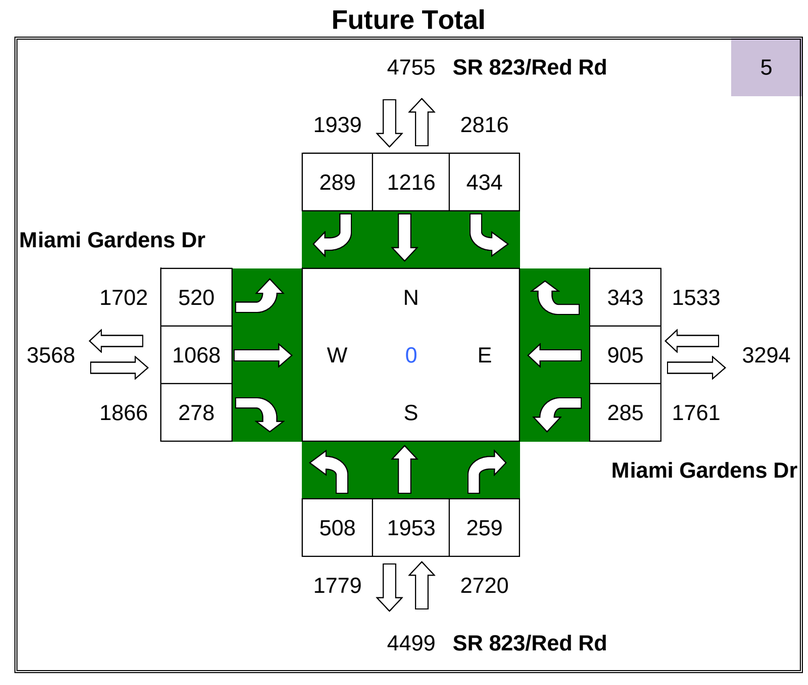
IN= 2,577

OUT= 2,753

	PD	#
N =	0.86%	46
E =	2.60%	139
S =	0.45%	24
W =	3.55%	189



Future Total



ADM/Graham

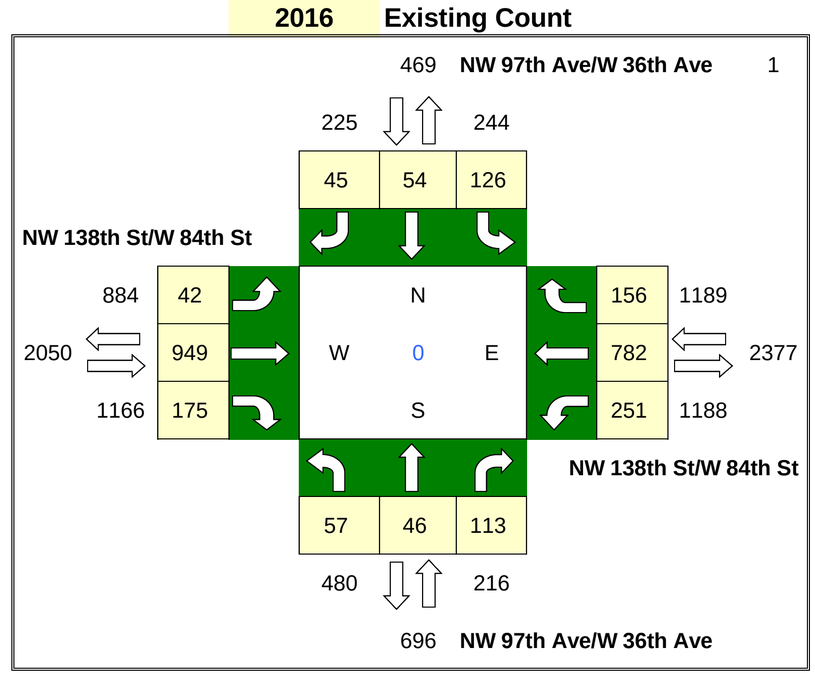
PM Turning Movement Volumes

N/S Roadway: NW 97th Ave/W 36th Ave

E/W Roadway: NW 138th St/W 84th St

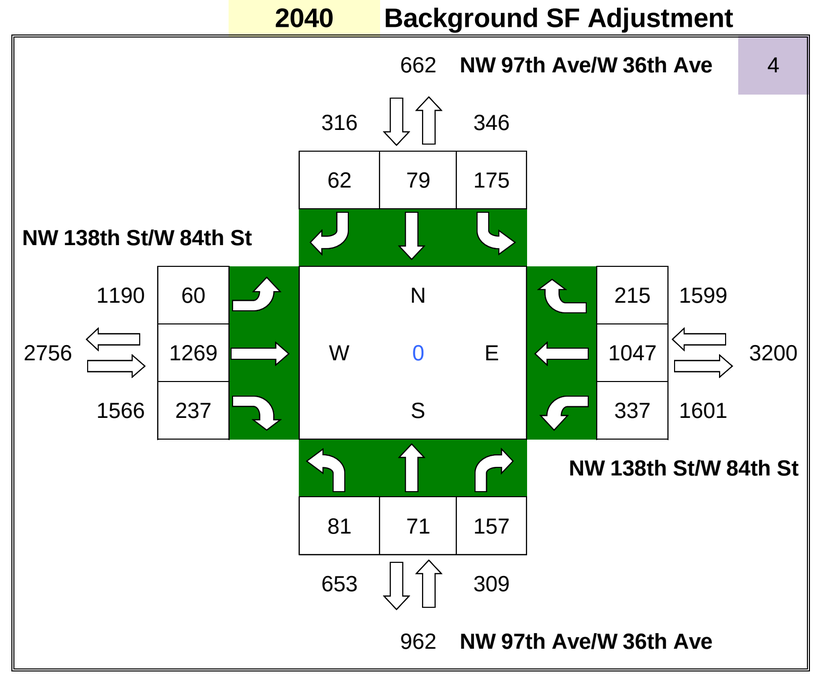
Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1.4% **Seasonal Factor =** 1.00

2040 Background SF Adjustment



PHASE 2

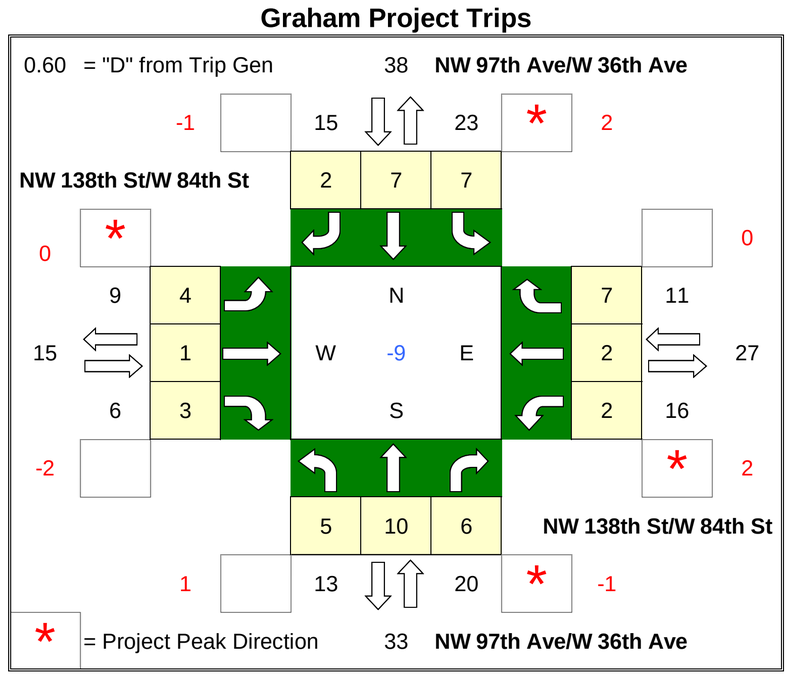
Project Trips

IN= 2,138

OUT= 3,177

	PD	#
N =	0.72%	38
E =	0.51%	27
S =	0.63%	33
W =	0.28%	15

Graham Project Trips



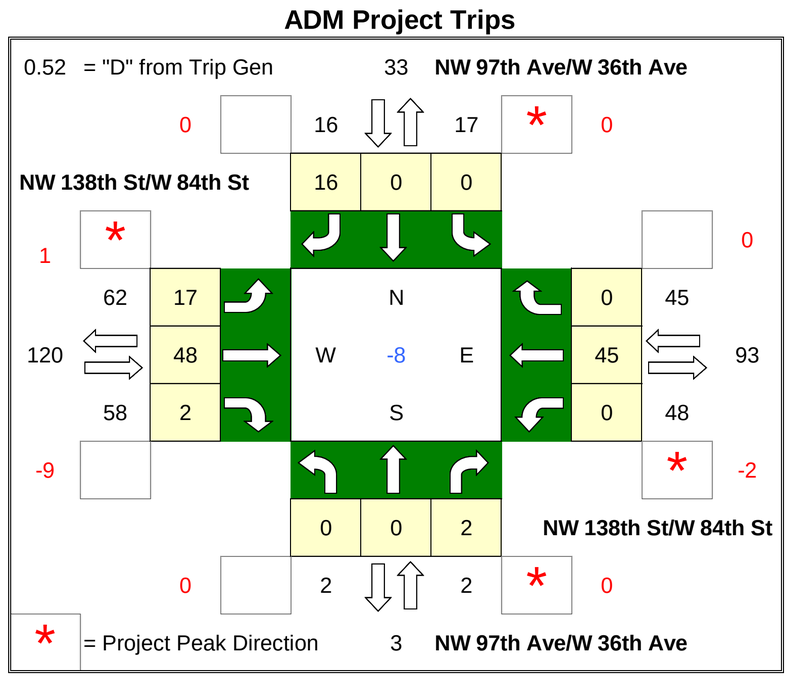
Project Trips

IN= 2,577

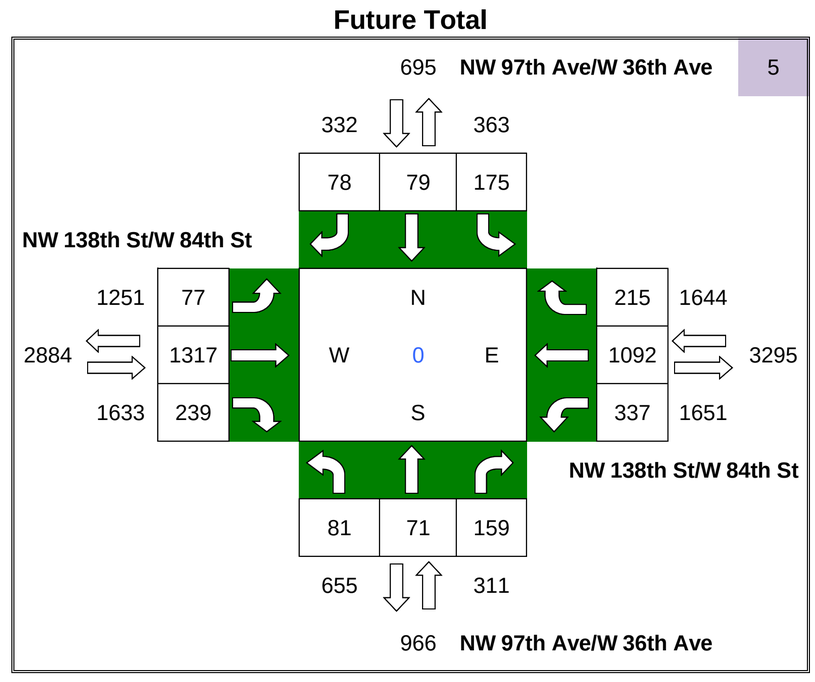
OUT= 2,753

	PD	#
N =	0.62%	33
E =	1.74%	93
S =	0.06%	3
W =	2.26%	120

ADM Project Trips



Future Total



ADM/Graham

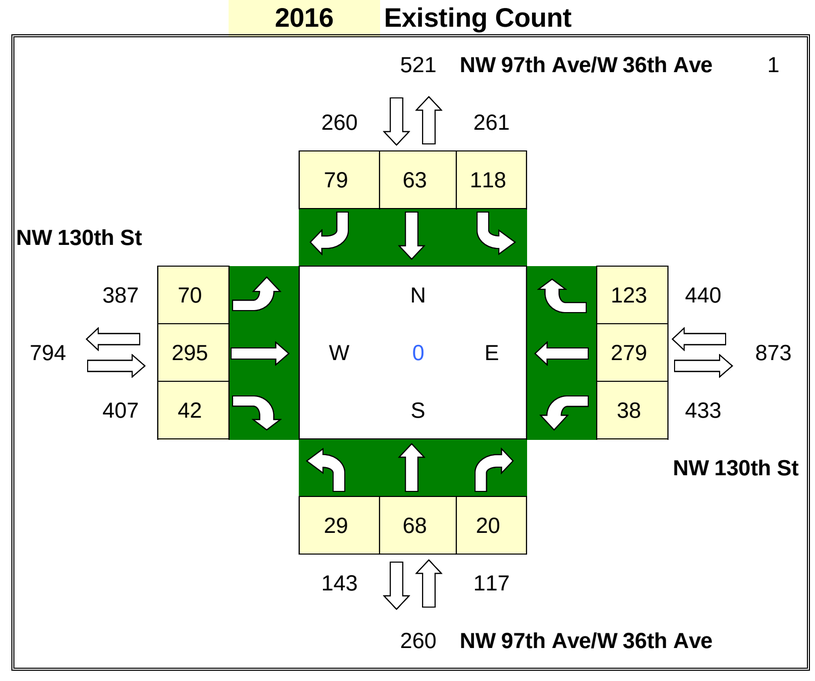
PM Turning Movement Volumes

N/S Roadway: NW 97th Ave/W 36th Ave

E/W Roadway: NW 130th St

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1.4% **Seasonal Factor =** 1.00

PHASE 2

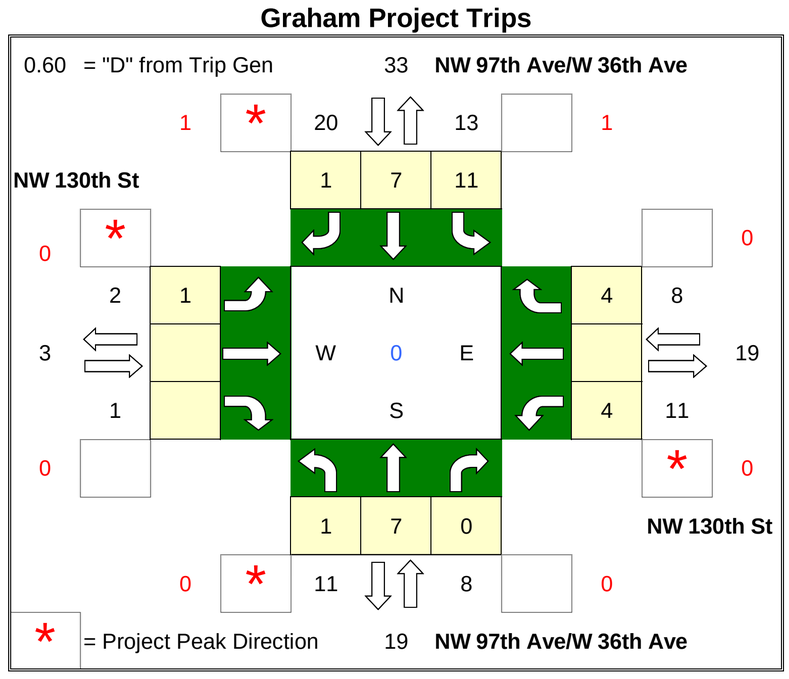
Graham Project Trips

Project Trips

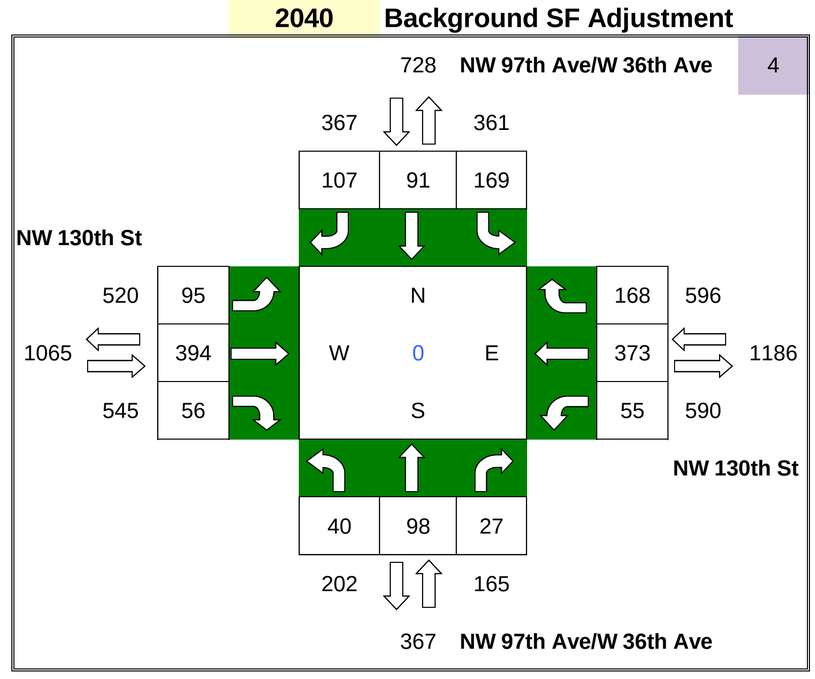
IN= 2,138

OUT= 3,177

	PD	#
N =	0.63%	33
E =	0.36%	19
S =	0.36%	19
W =	0.05%	3



2040 Background SF Adjustment



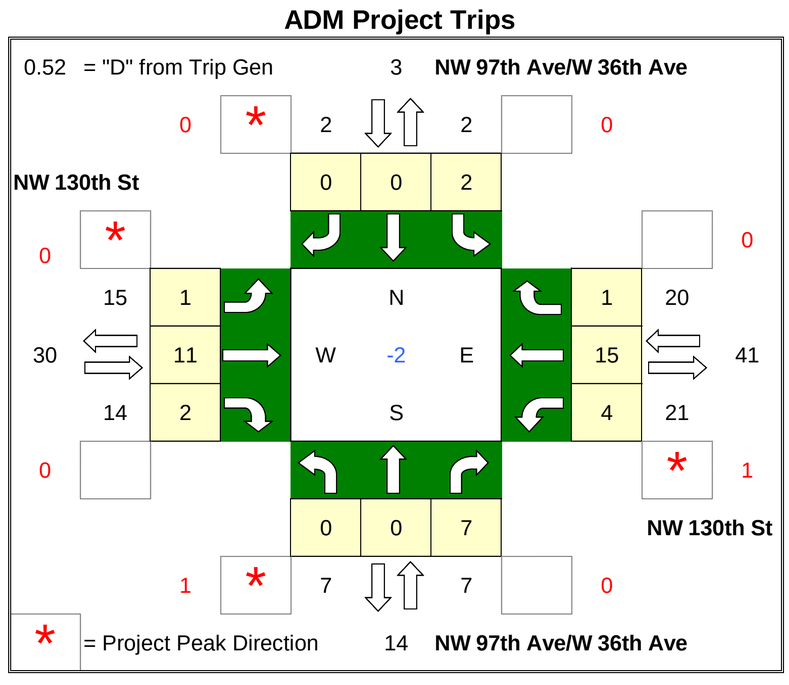
ADM Project Trips

Project Trips

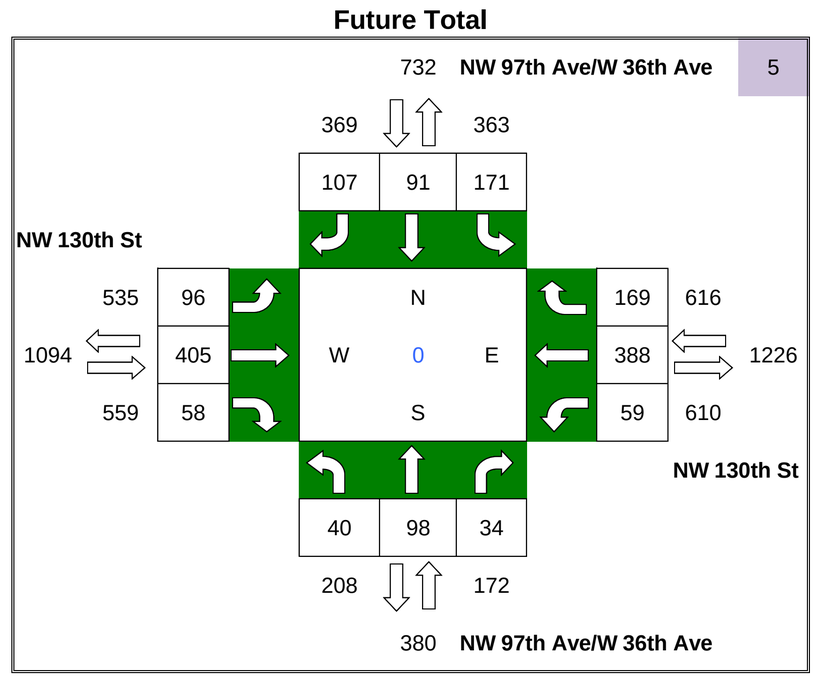
IN= 2,577

OUT= 2,753

	PD	#
N =	0.06%	3
E =	0.77%	41
S =	0.27%	14
W =	0.56%	30



Future Total



ADM/Graham

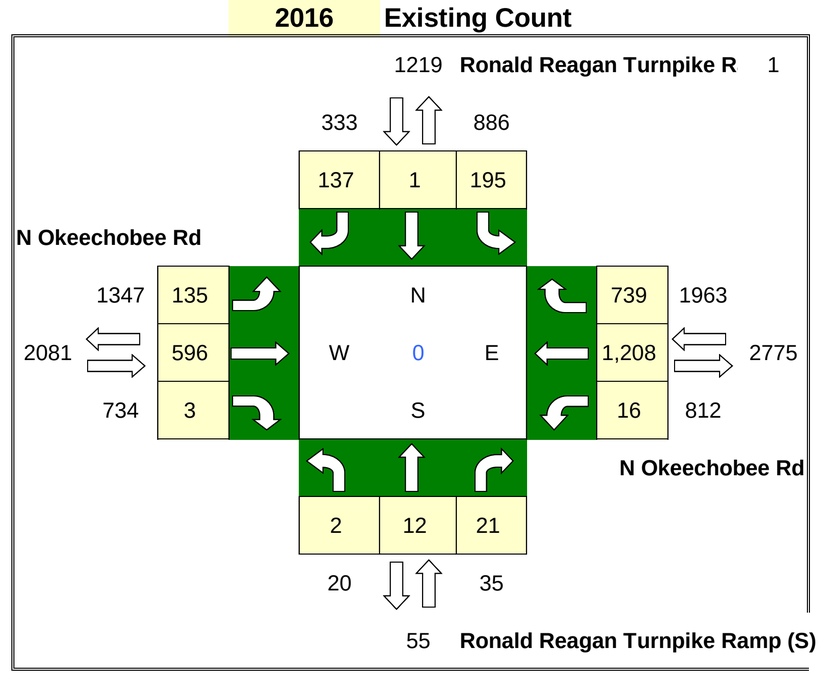
PM Turning Movement Volumes

N/S Roadway: Ronald Reagan Turnpike Ramp (S)

E/W Roadway: N Okeechobee Rd

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1.4% **Seasonal Factor =** 1.04

PHASE 2

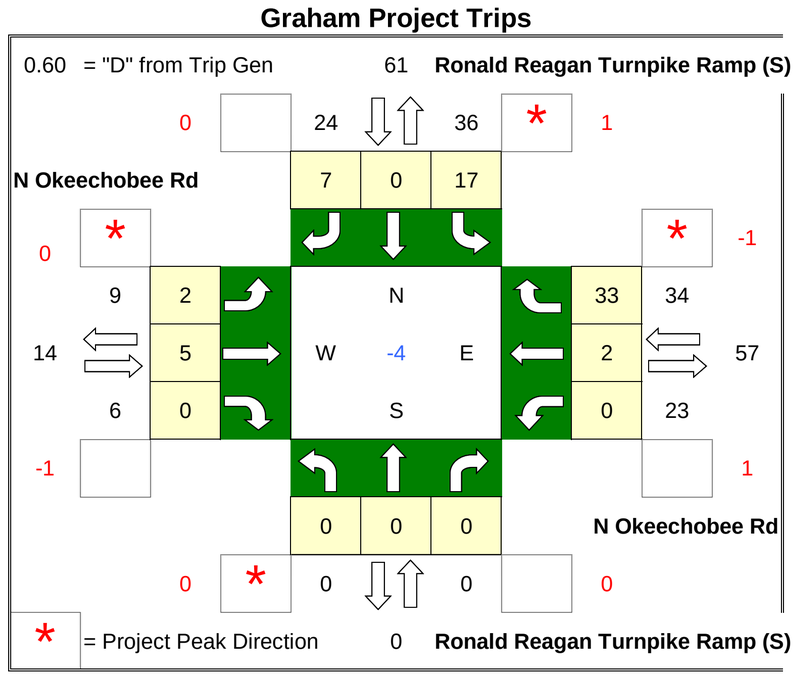
Graham Project Trips

Project Trips

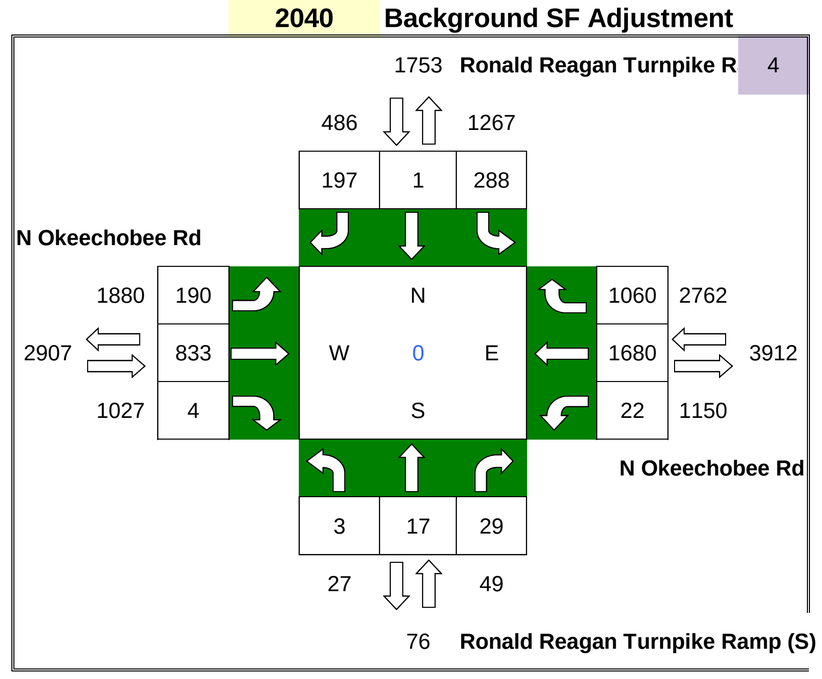
IN= 2,138

OUT= 3,177

	PD	#
N =	1.14%	61
E =	1.07%	57
S =	0.00%	0
W =	0.27%	14



2040 Background SF Adjustment



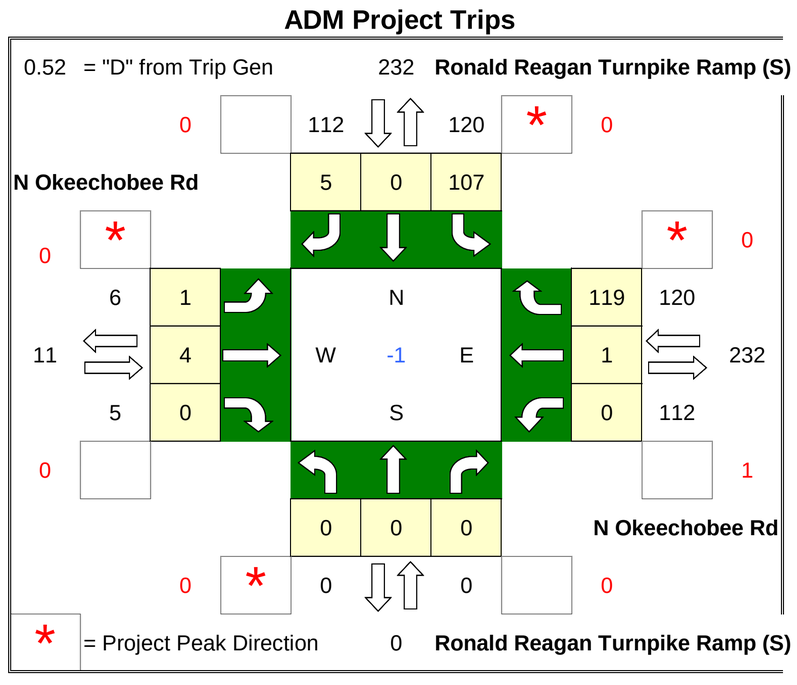
ADM Project Trips

Project Trips

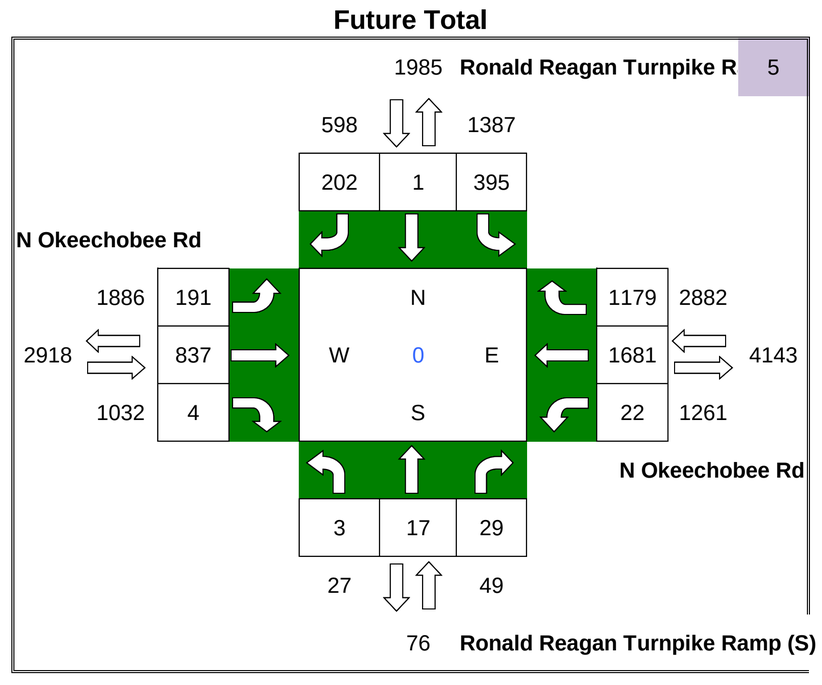
IN= 2,577

OUT= 2,753

	PD	#
N =	4.36%	232
E =	4.36%	232
S =	0.00%	0
W =	0.20%	11



Future Total



ADM/Graham

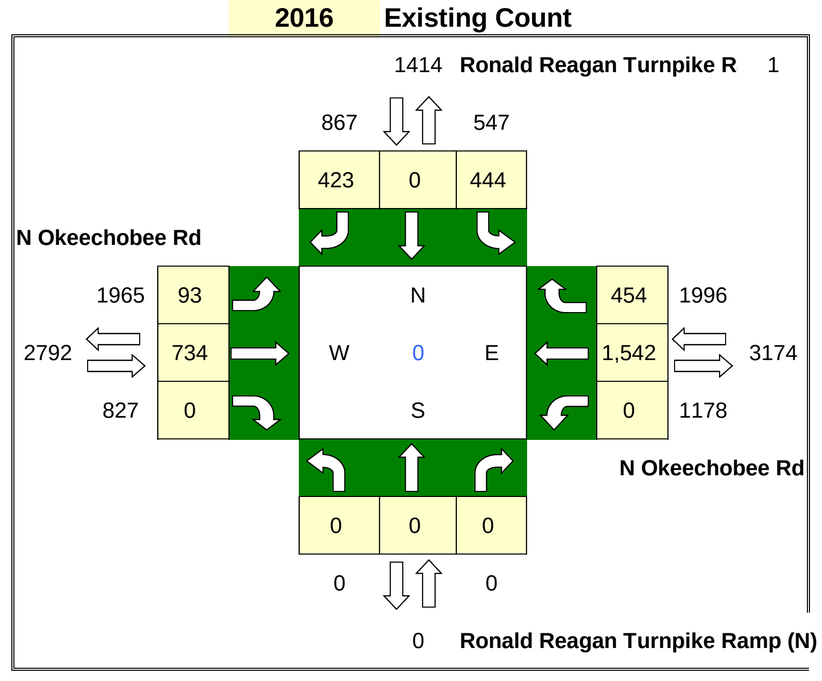
PM Turning Movement Volumes

N/S Roadway: Ronald Reagan Turnpike Ramp (N)

E/W Roadway: N Okeechobee Rd

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1.4% **Seasonal Factor =** 1.04

PHASE 2

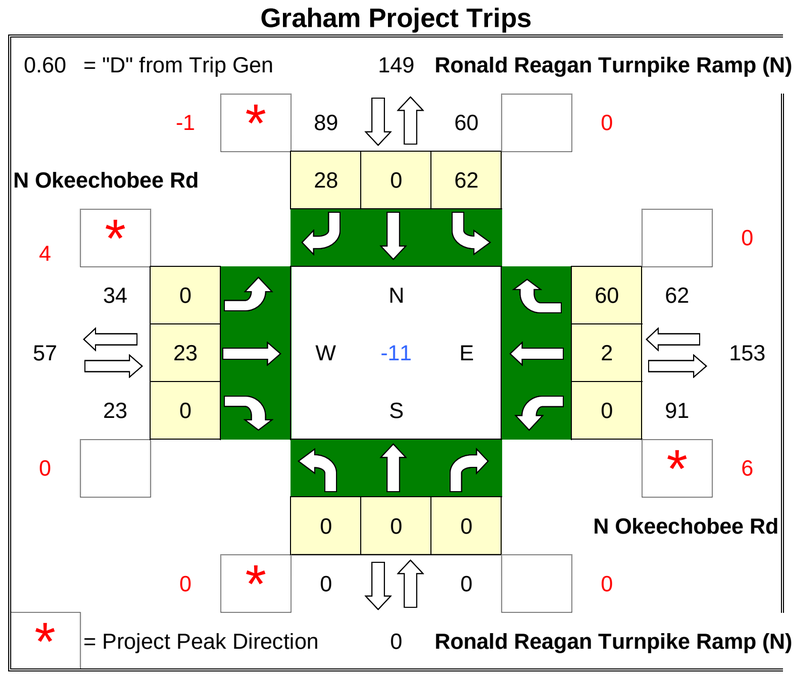
Project Trips

IN= 2,138

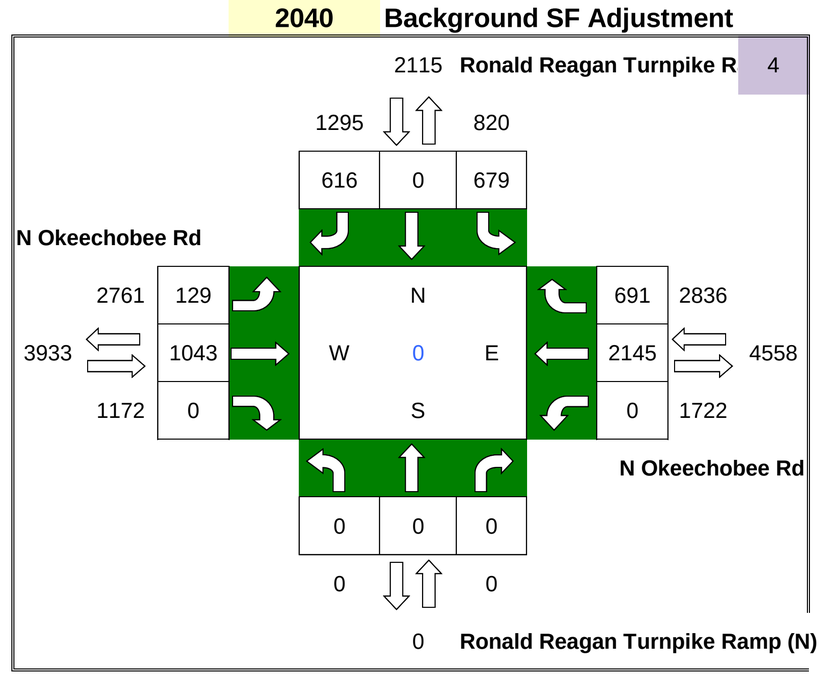
OUT= 3,177

	PD	#
N =	2.80%	149
E =	2.88%	153
S =	0.00%	0
W =	1.07%	57

Graham Project Trips



2040 Background SF Adjustment



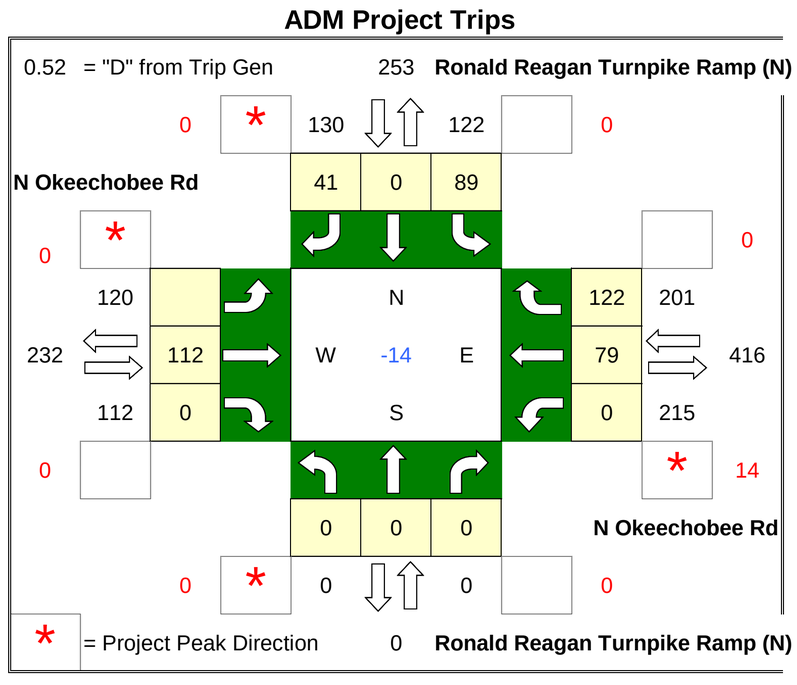
Project Trips

IN= 2,577

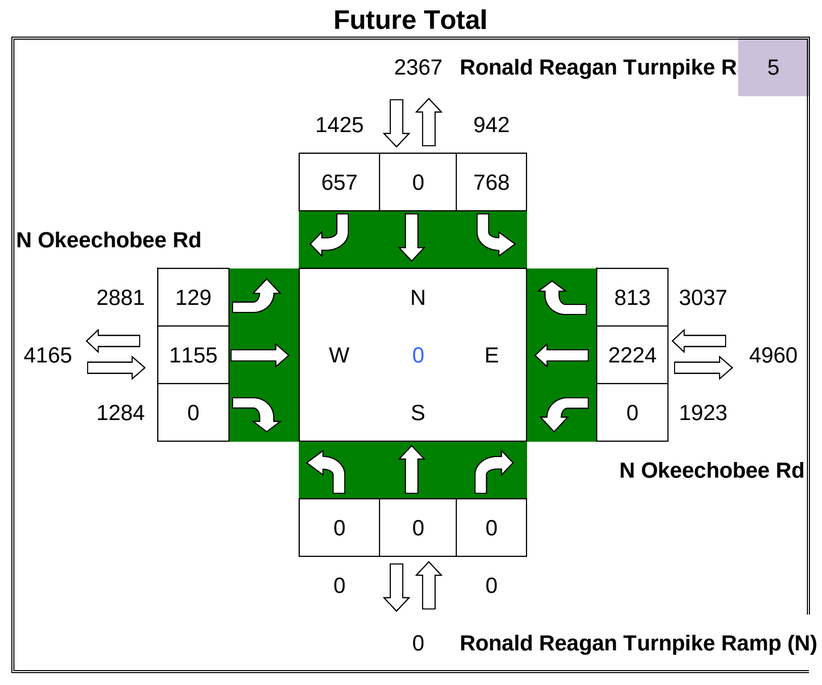
OUT= 2,753

	PD	#
N =	4.74%	253
E =	7.81%	416
S =	0.00%	0
W =	4.36%	232

ADM Project Trips



Future Total



ADM/Graham

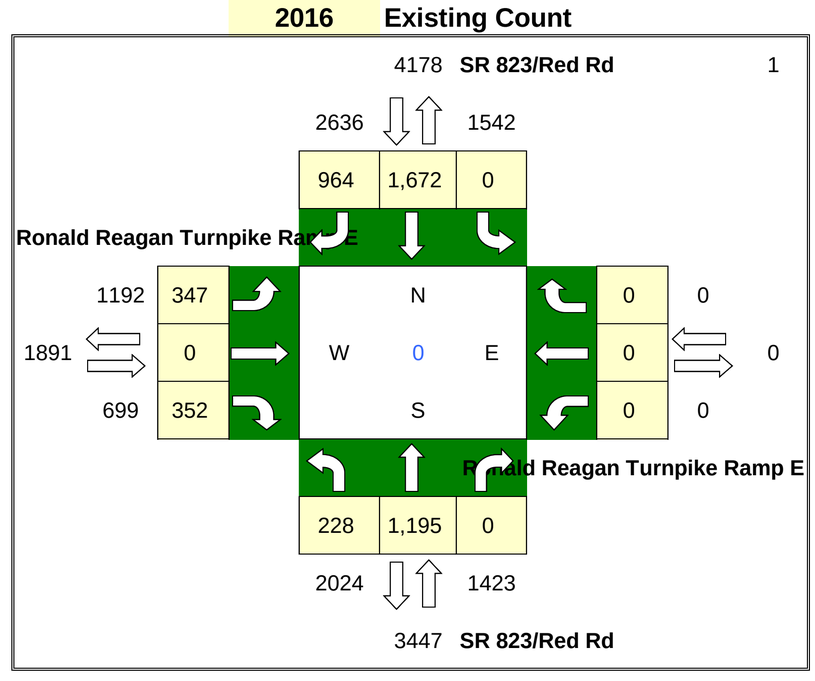
PM Turning Movement Volumes

N/S Roadway: SR 823/Red Rd

E/W Roadway: Ronald Reagan Turnpike Ramp E

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1.9% **Seasonal Factor =** 1.04

PHASE 2

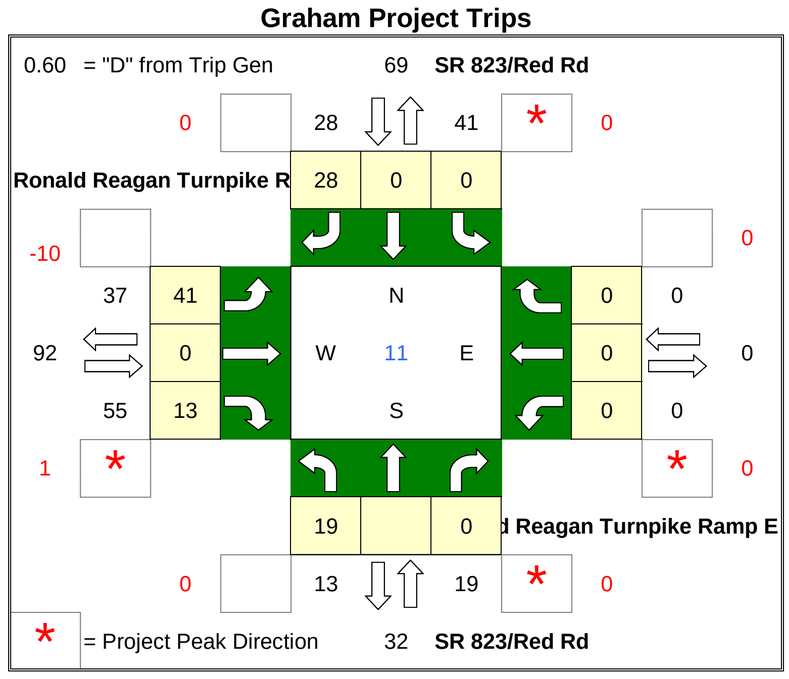
Project Trips

IN= 2,138

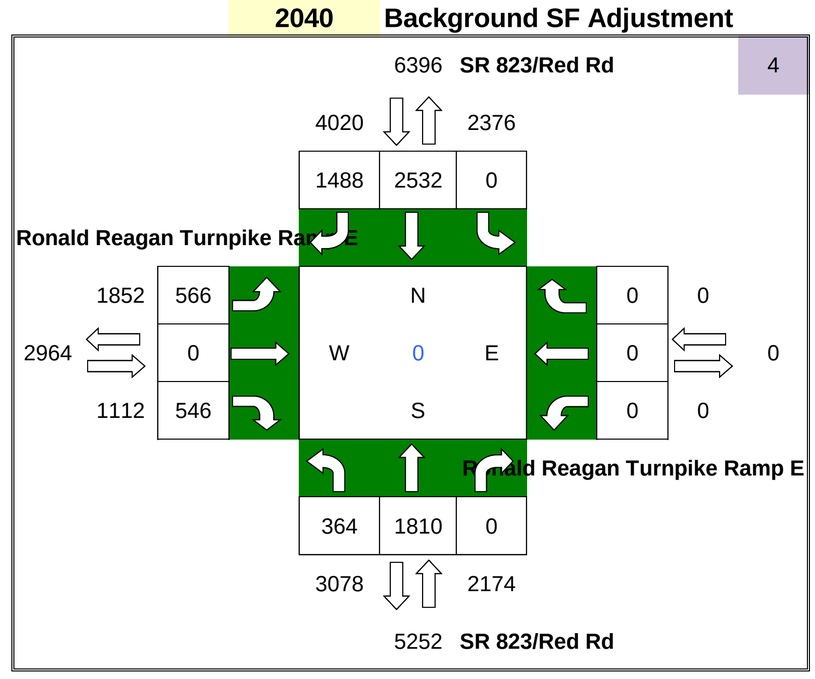
OUT= 3,177

	PD	#
N =	1.30%	69
E =	0.00%	0
S =	0.61%	32
W =	1.74%	92

Graham Project Trips



2040 Background SF Adjustment



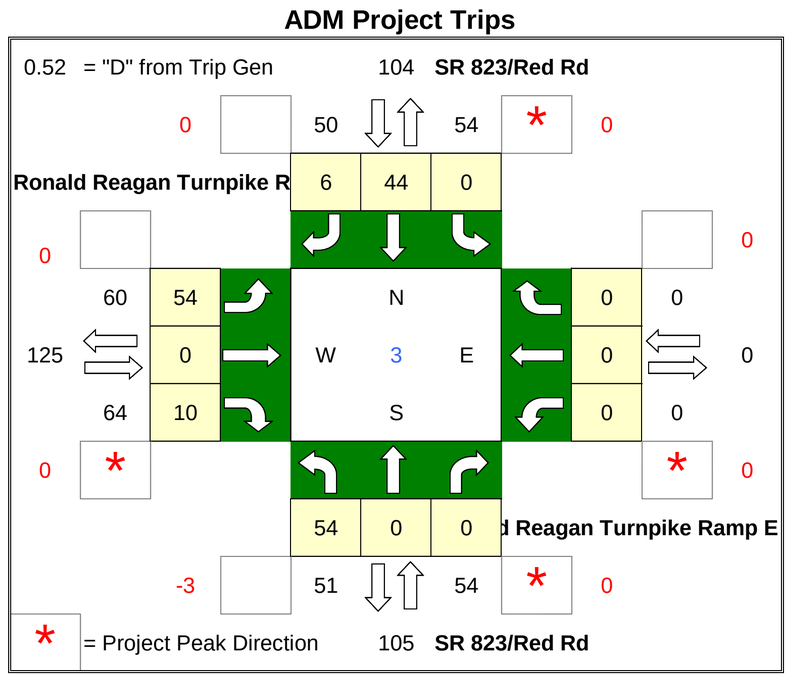
Project Trips

IN= 2,577

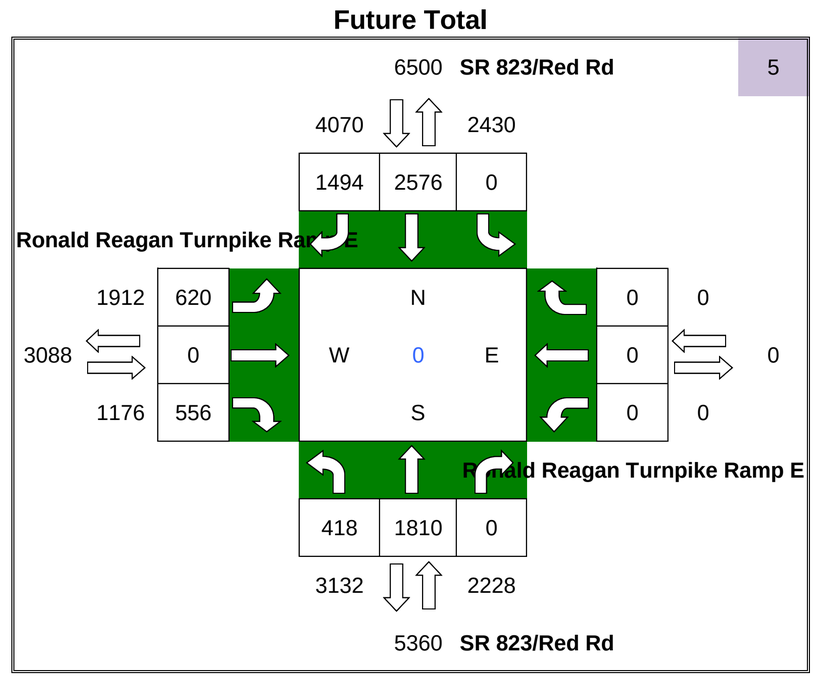
OUT= 2,753

	PD	#
N =	1.95%	104
E =	0.00%	0
S =	1.97%	105
W =	2.34%	125

ADM Project Trips



Future Total



ADM/Graham

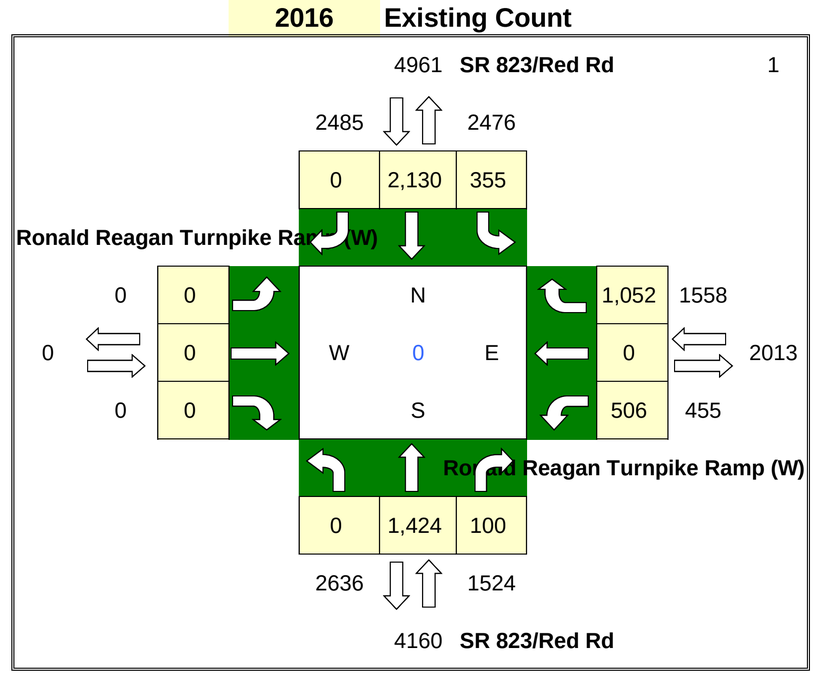
PM Turning Movement Volumes

N/S Roadway: SR 823/Red Rd

E/W Roadway: Ronald Reagan Turnpike Ramp (W)

Date Taken: 4/20/16

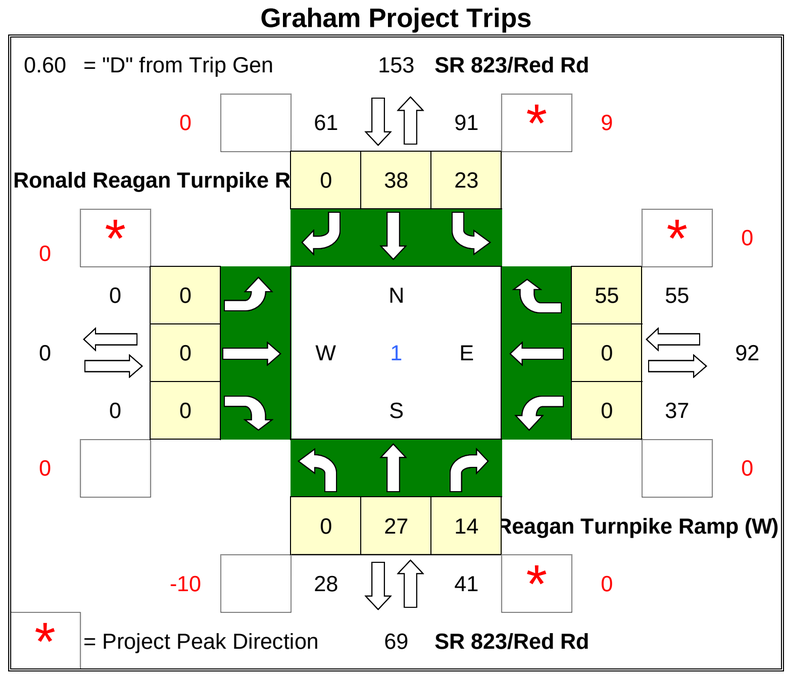
2016 Existing Count



% Annual Growth = 1.9% **Seasonal Factor =** 1.04

PHASE 2

Graham Project Trips



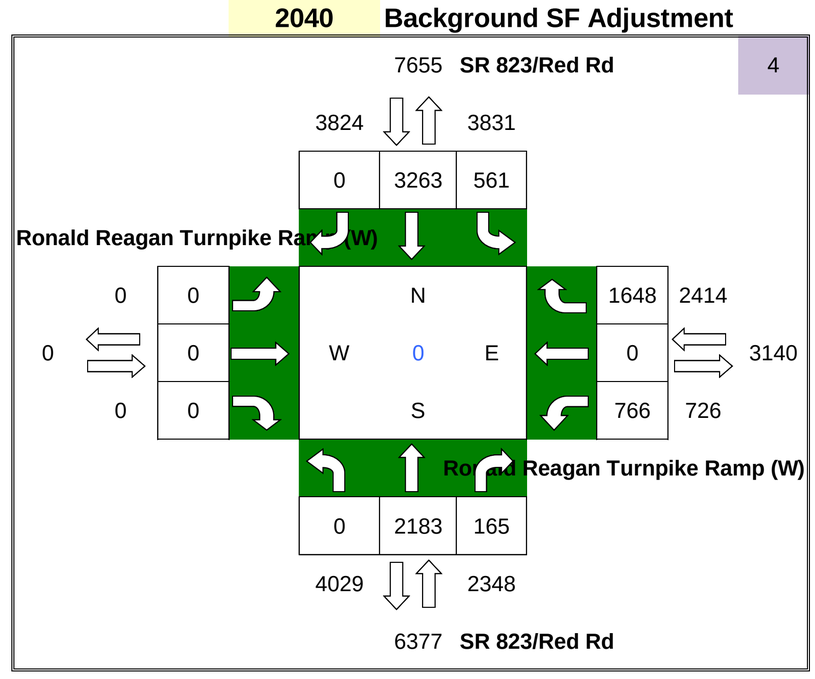
Project Trips

IN= 2,138

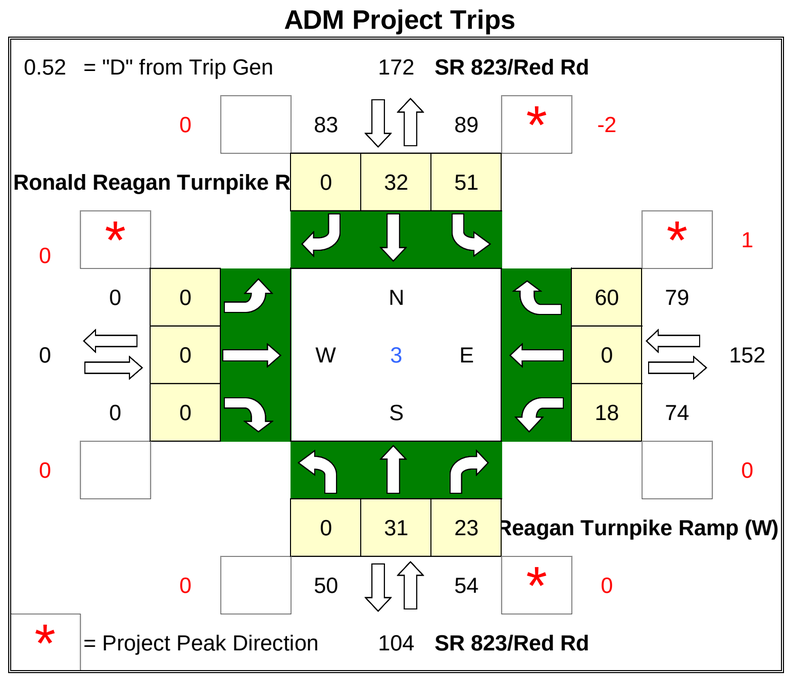
OUT= 3,177

	PD	#
N =	2.87%	153
E =	1.74%	92
S =	1.30%	69
W =	0.00%	0

2040 Background SF Adjustment



ADM Project Trips



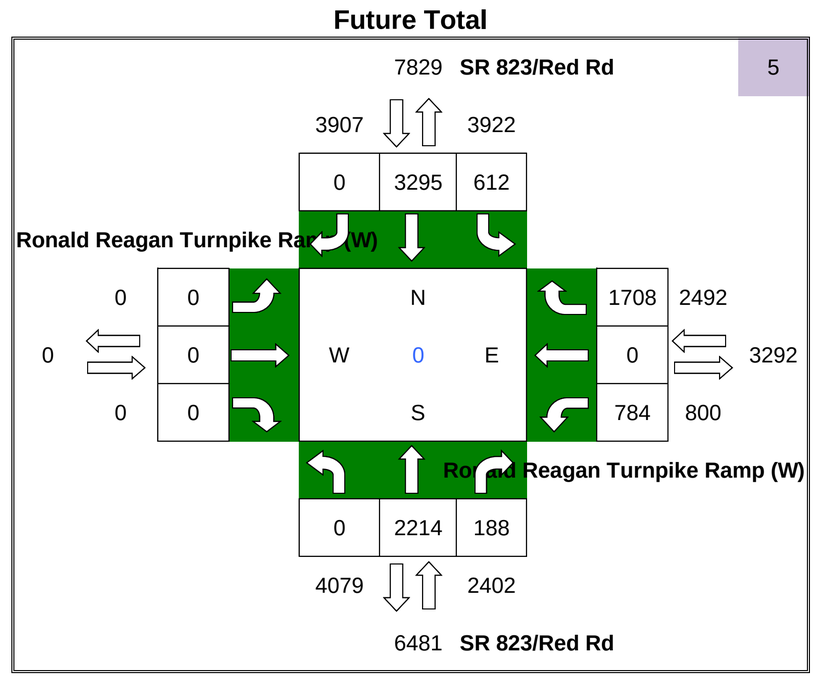
Project Trips

IN= 2,577

OUT= 2,753

	PD	#
N =	3.23%	172
E =	2.86%	152
S =	1.95%	104
W =	0.00%	0

Future Total



ADM/Graham

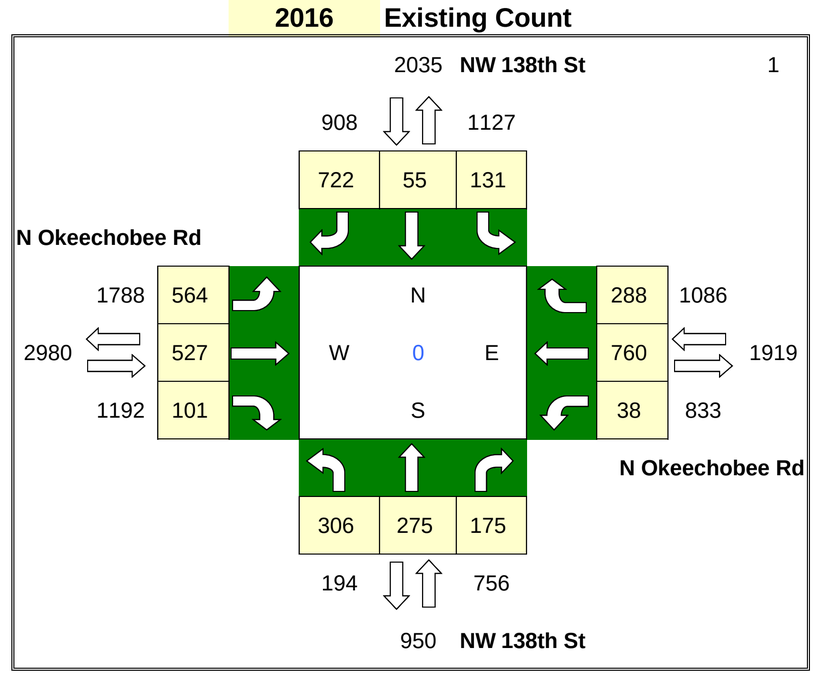
PM Turning Movement Volumes

N/S Roadway: NW 138th St

E/W Roadway: N Okeechobee Rd

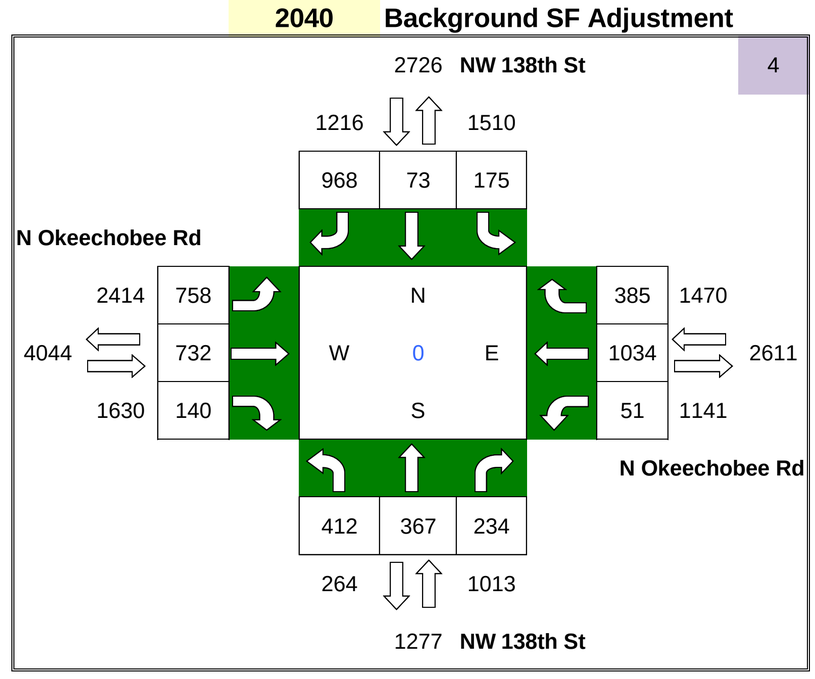
Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1.4% **Seasonal Factor =** 1.00

2040 Background SF Adjustment



PHASE 2

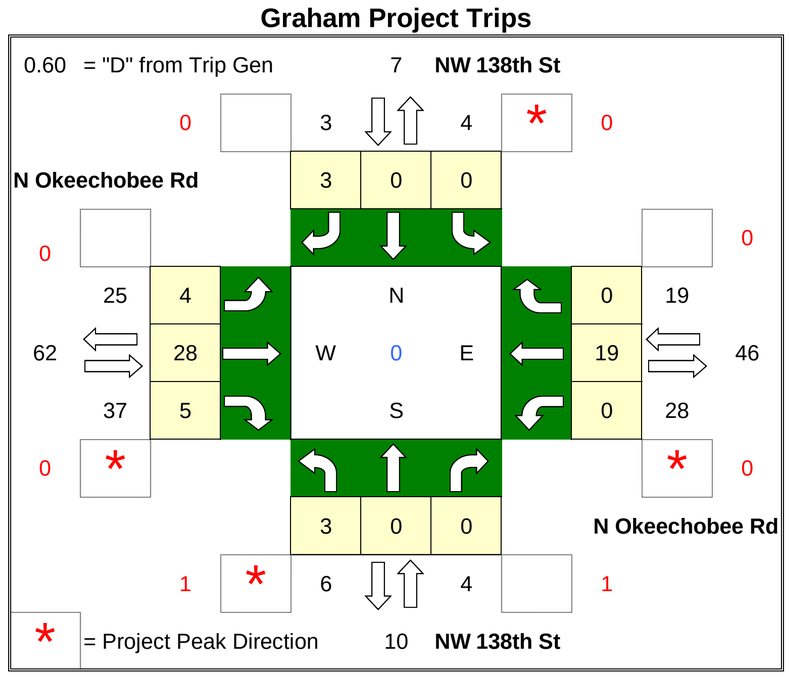
Graham Project Trips

Project Trips

IN= 2,138

OUT= 3,177

	PD	#
N =	0.13%	7
E =	0.87%	46
S =	0.18%	10
W =	1.16%	62



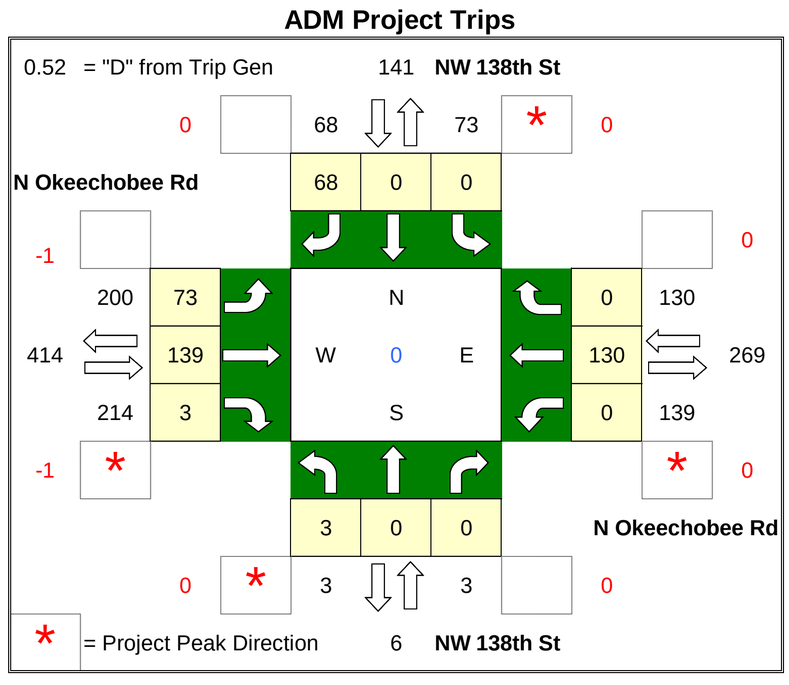
ADM Project Trips

Project Trips

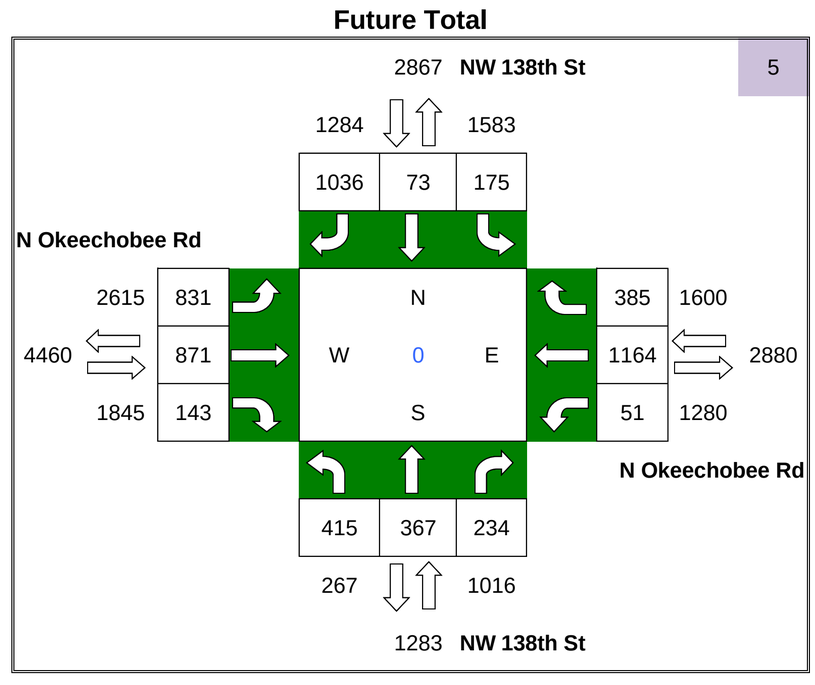
IN= 2,577

OUT= 2,753

	PD	#
N =	2.65%	141
E =	5.05%	269
S =	0.12%	6
W =	7.77%	414



Future Total



ADM/Graham

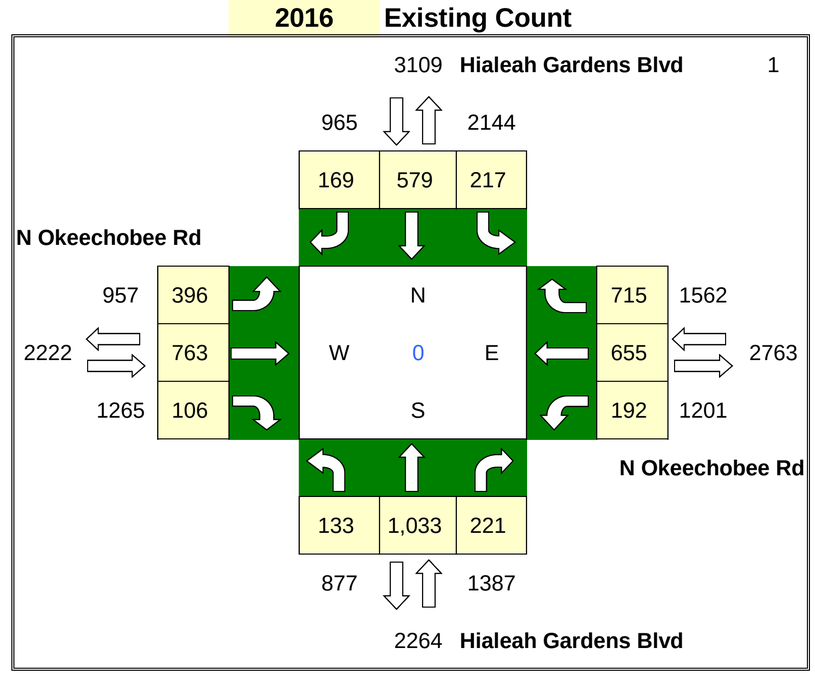
PM Turning Movement Volumes

N/S Roadway: Hialeah Gardens Blvd

E/W Roadway: N Okeechobee Rd

Date Taken: 4/20/16

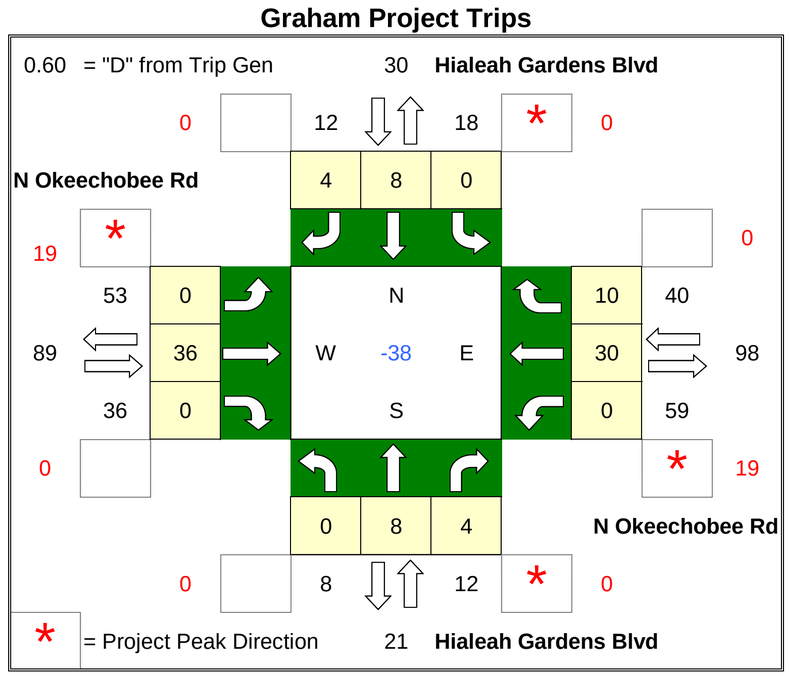
2016 Existing Count



% Annual Growth = 1.4% **Seasonal Factor =** 1.00

PHASE 2

Graham Project Trips



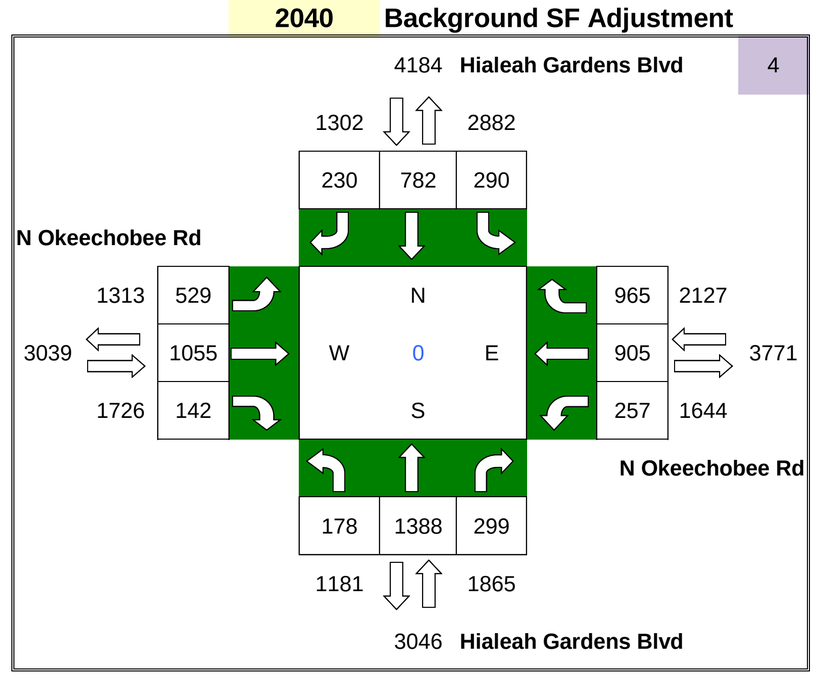
Project Trips

IN= 2,138

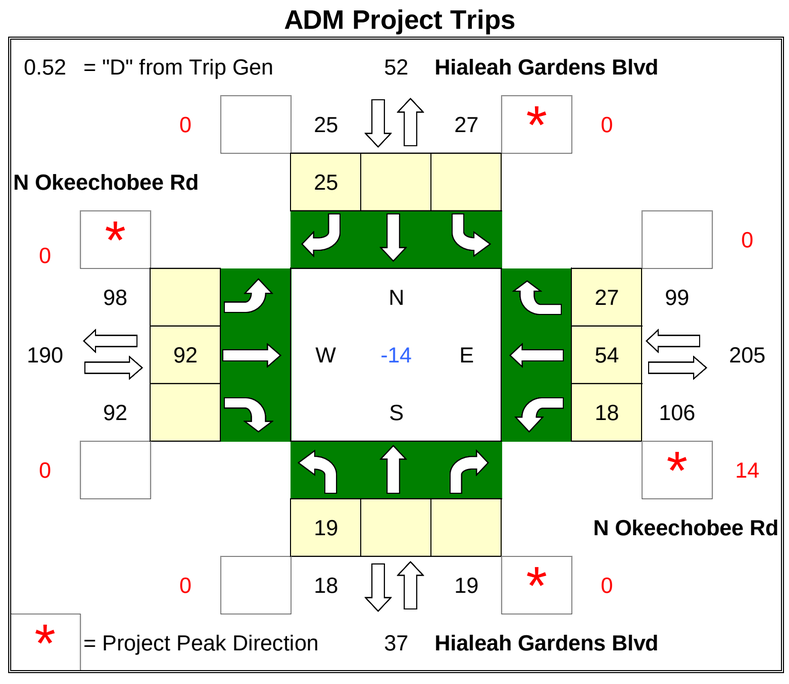
OUT= 3,177

	PD	#
N =	0.56%	30
E =	1.85%	98
S =	0.39%	21
W =	1.67%	89

2040 Background SF Adjustment



ADM Project Trips



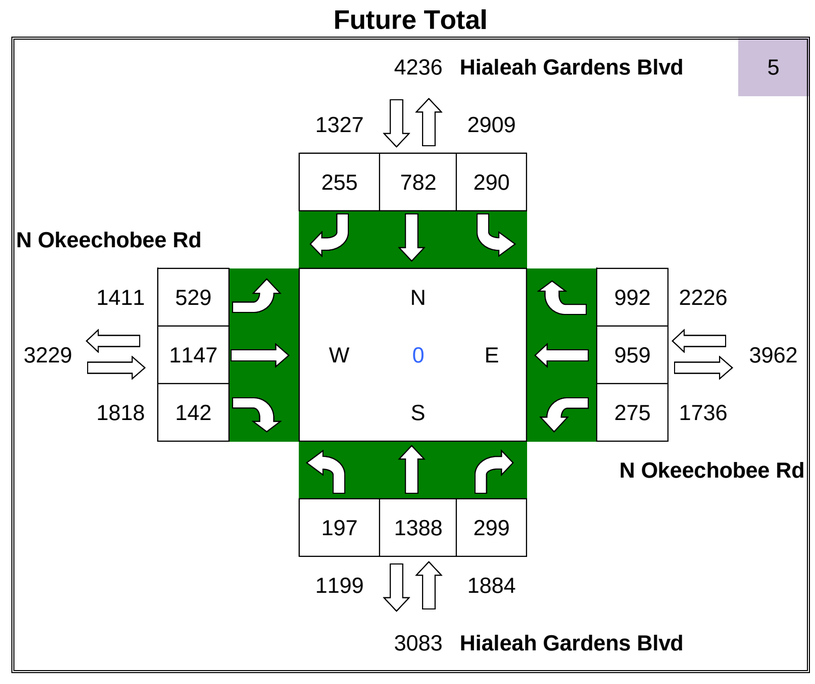
Project Trips

IN= 2,577

OUT= 2,753

	PD	#
N =	0.98%	52
E =	3.84%	205
S =	0.69%	37
W =	3.56%	190

Future Total



ADM/Graham

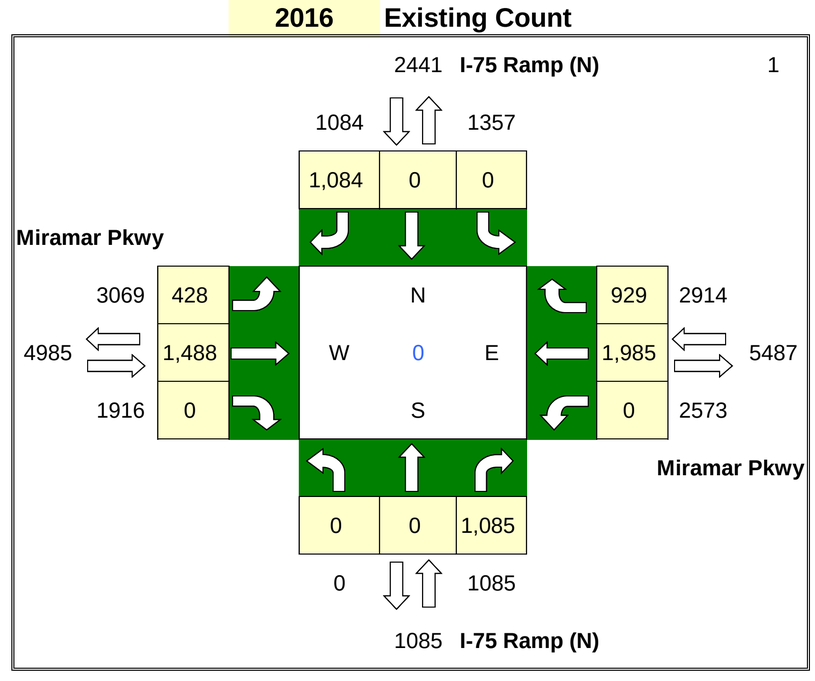
PM Turning Movement Volumes

N/S Roadway: I-75 Ramp (N)

E/W Roadway: Miramar Pkwy

Date Taken: 4/20/16

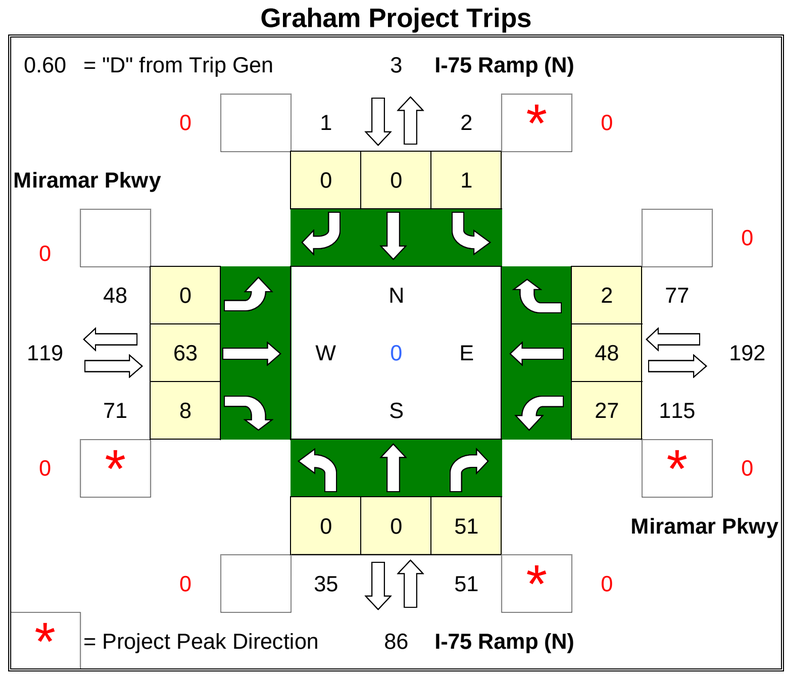
2016 Existing Count



% Annual Growth = 1.2% **Seasonal Factor =** 1.03

PHASE 2

Graham Project Trips



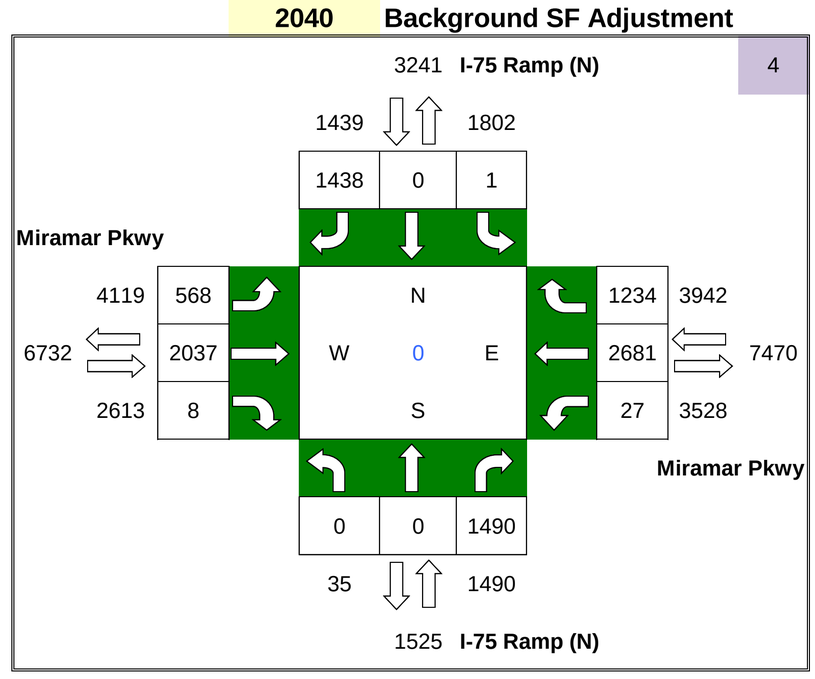
Project Trips

IN= 2,138

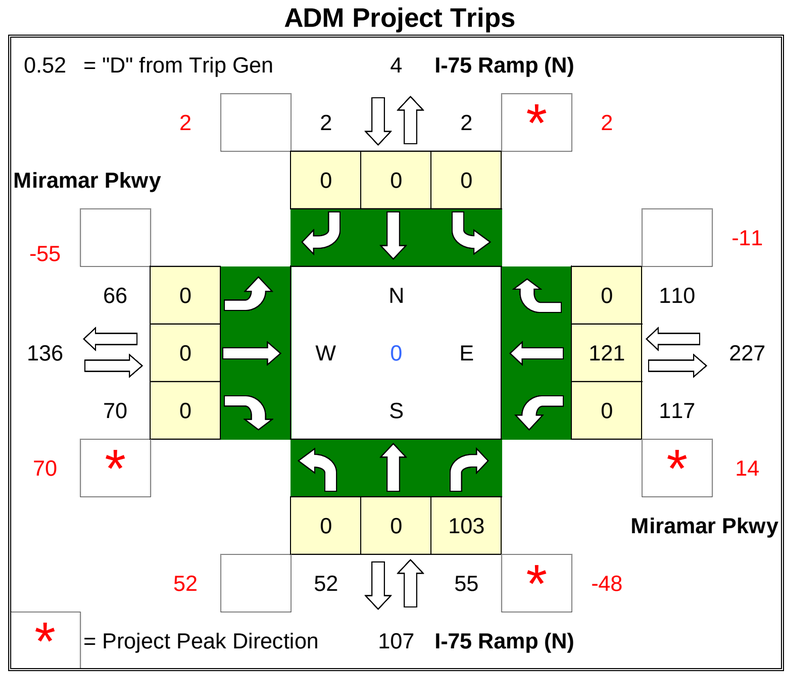
OUT= 3,177

	PD	#
N =	0.06%	3
E =	3.62%	192
S =	1.62%	86
W =	2.23%	119

2040 Background SF Adjustment



ADM Project Trips



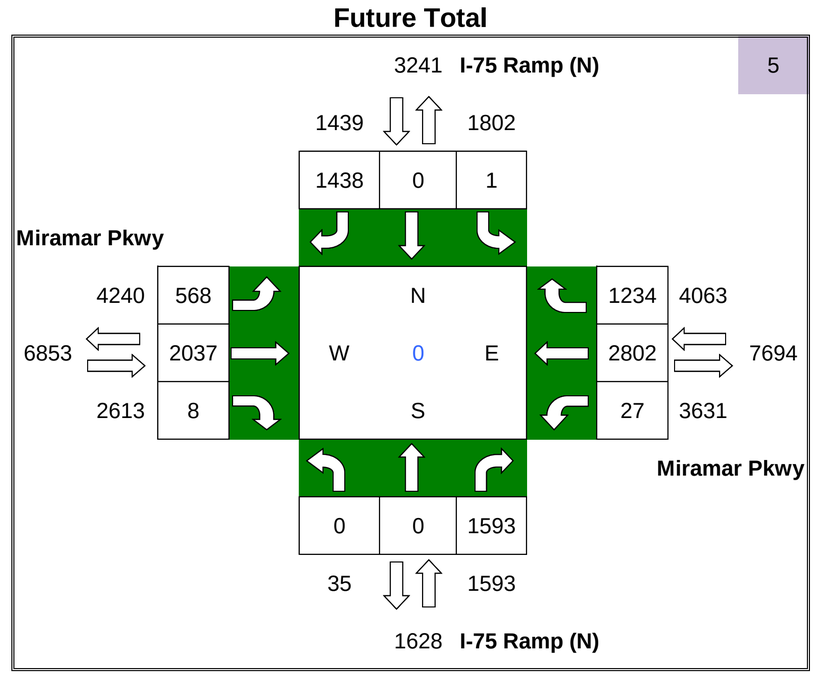
Project Trips

IN= 2,577

OUT= 2,753

	PD	#
N =	0.07%	4
E =	4.26%	227
S =	2.01%	107
W =	2.56%	136

Future Total



ADM/Graham

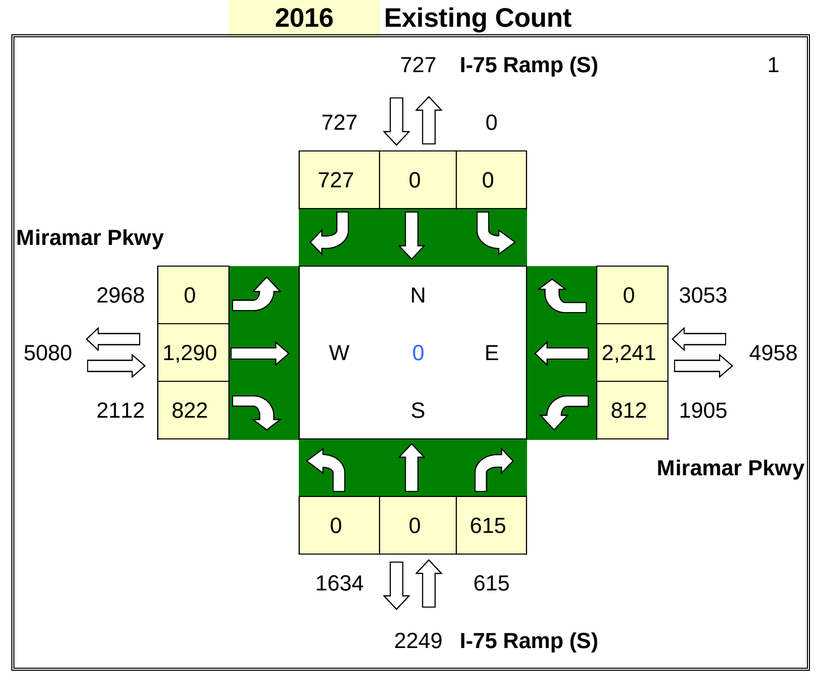
PM Turning Movement Volumes

N/S Roadway: I-75 Ramp (S)

E/W Roadway: Miramar Pkwy

Date Taken: 4/20/16

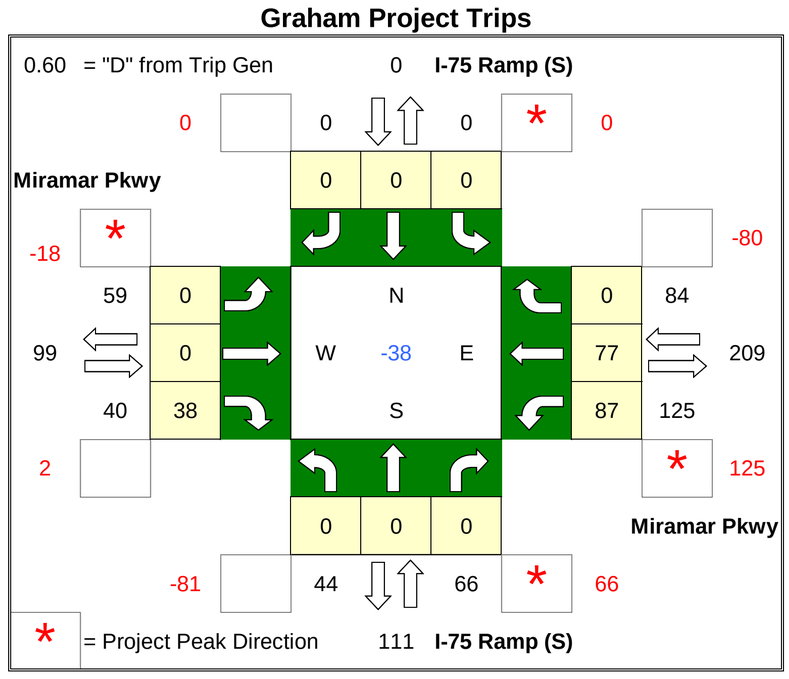
2016 Existing Count



% Annual Growth = 1.2% **Seasonal Factor =** 1.03

PHASE 2

Graham Project Trips



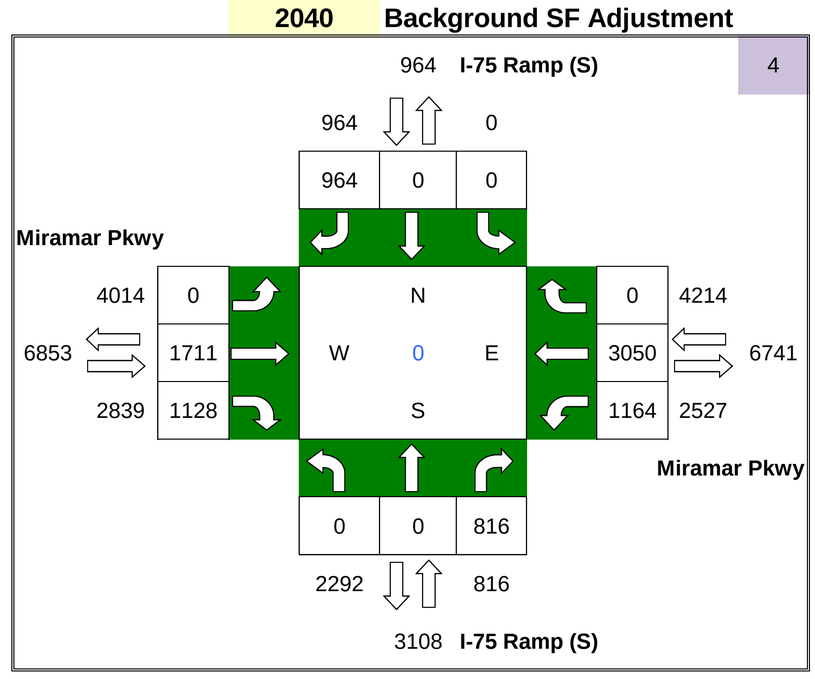
Project Trips

IN= 2,138

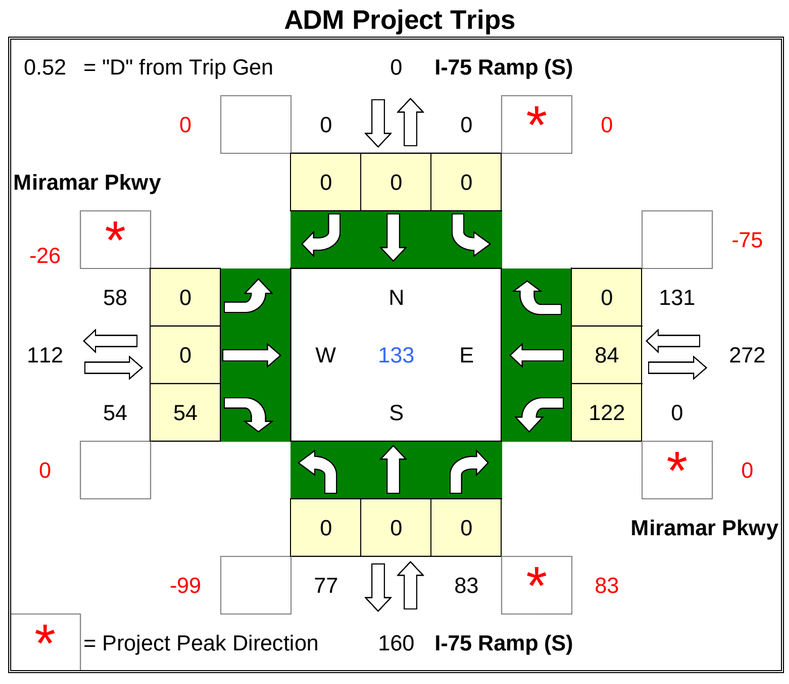
OUT= 3,177

	PD	#
N =	0.00%	0
E =	3.94%	209
S =	2.08%	111
W =	1.86%	99

2040 Background SF Adjustment



ADM Project Trips



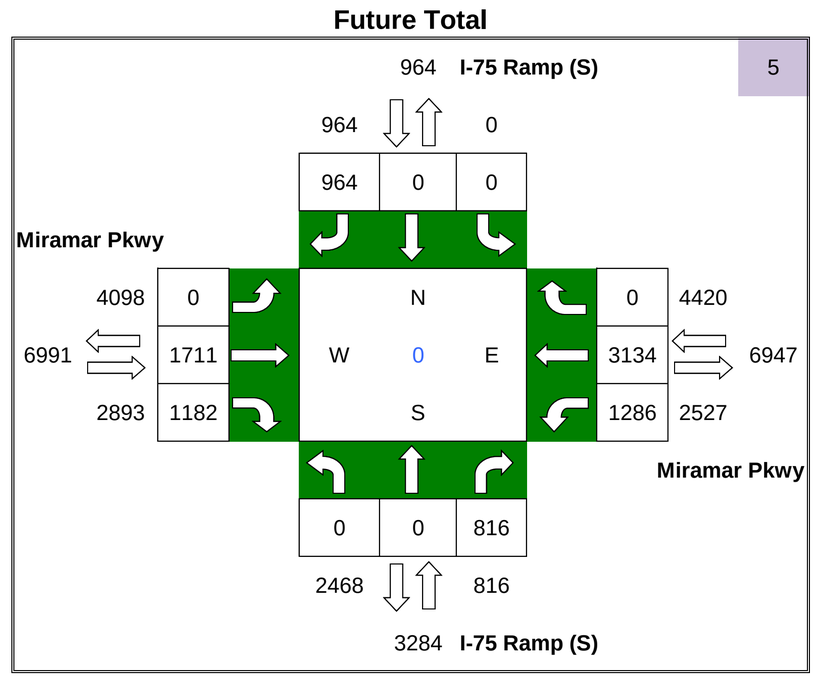
Project Trips

IN= 2,577

OUT= 2,753

	PD	#
N =	0.00%	0
E =	5.10%	272
S =	3.00%	160
W =	2.10%	112

Future Total



ADM/Graham

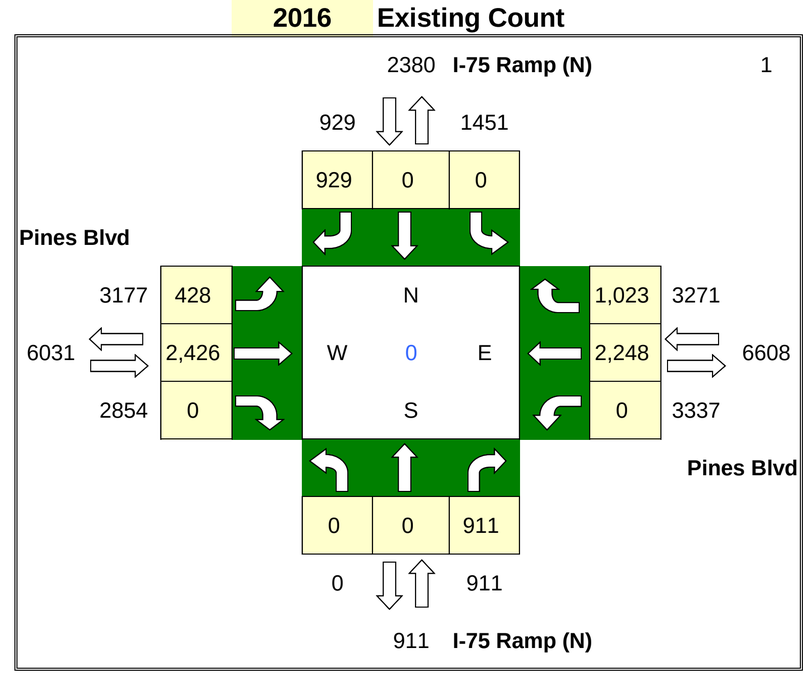
PM Turning Movement Volumes

N/S Roadway: I-75 Ramp (N)

E/W Roadway: Pines Blvd

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1% **Seasonal Factor =** 1.03

PHASE 2

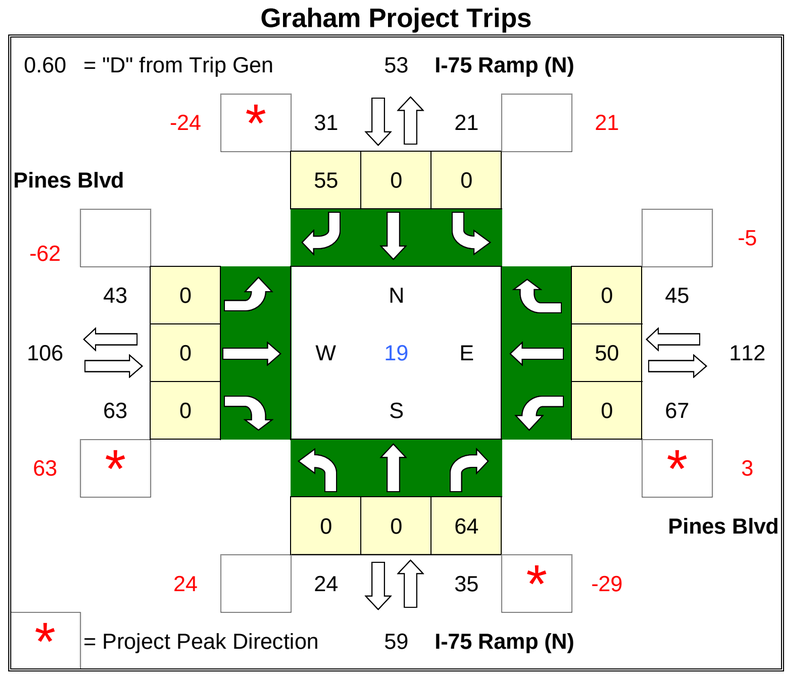
Graham Project Trips

Project Trips

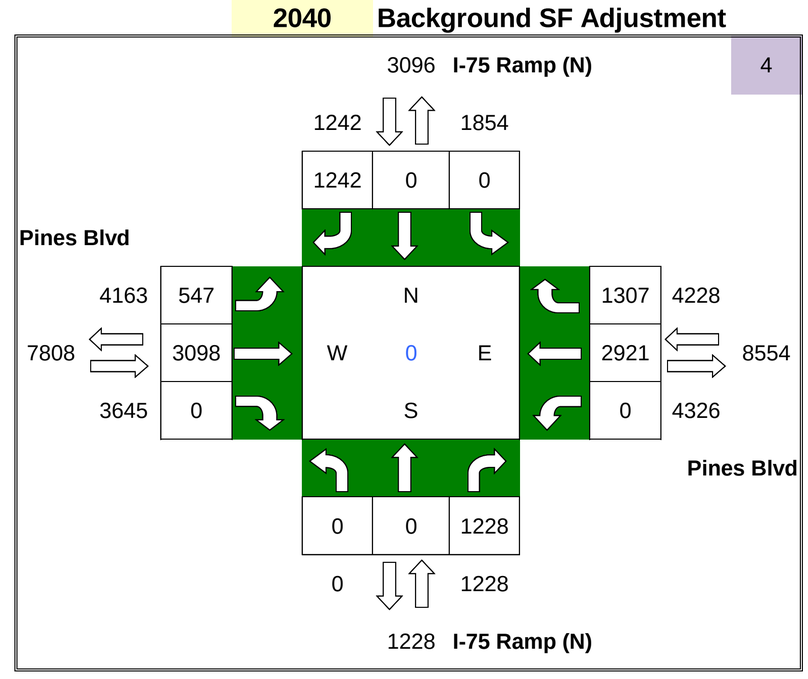
IN= 2,138

OUT= 3,177

	PD	#
N =	0.99%	53
E =	2.11%	112
S =	1.11%	59
W =	1.99%	106



2040 Background SF Adjustment



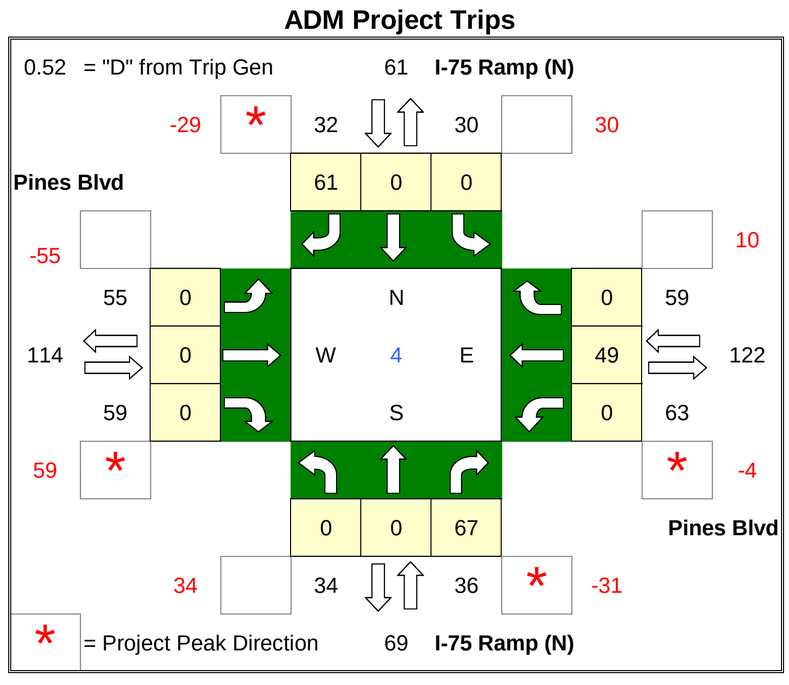
ADM Project Trips

Project Trips

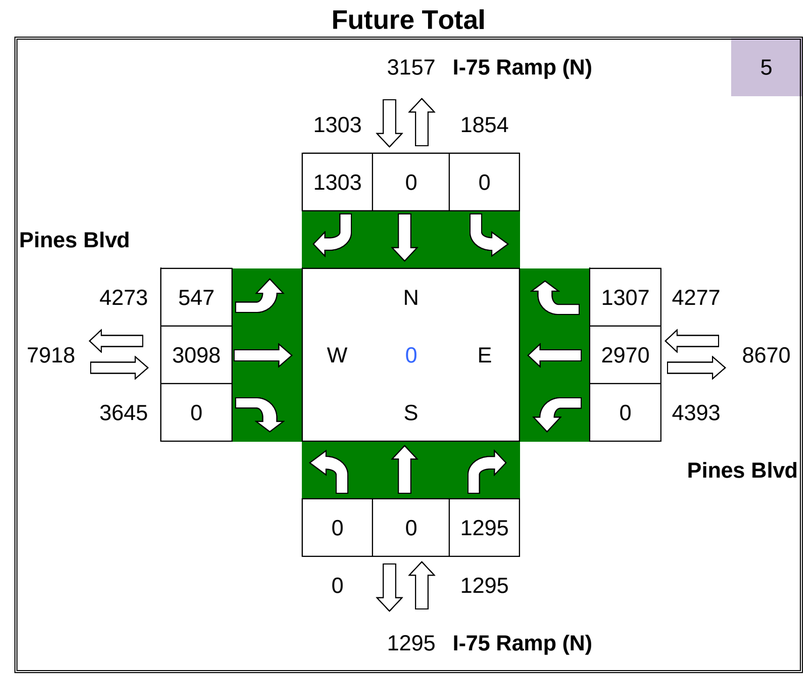
IN= 2,577

OUT= 2,753

	PD	#
N =	1.15%	61
E =	2.28%	122
S =	1.30%	69
W =	2.13%	114



Future Total



ADM/Graham

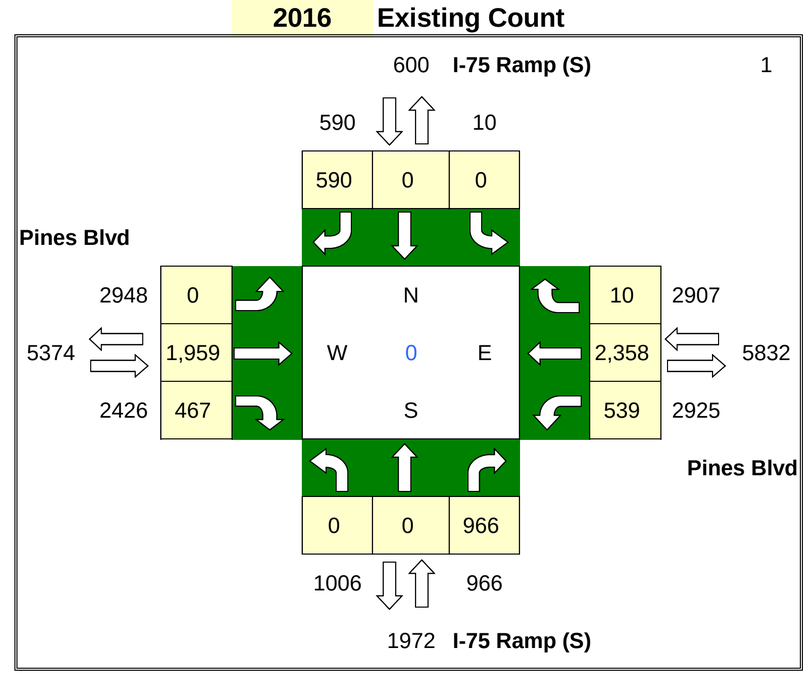
PM Turning Movement Volumes

N/S Roadway: I-75 Ramp (S)

E/W Roadway: Pines Blvd

Date Taken: 4/20/16

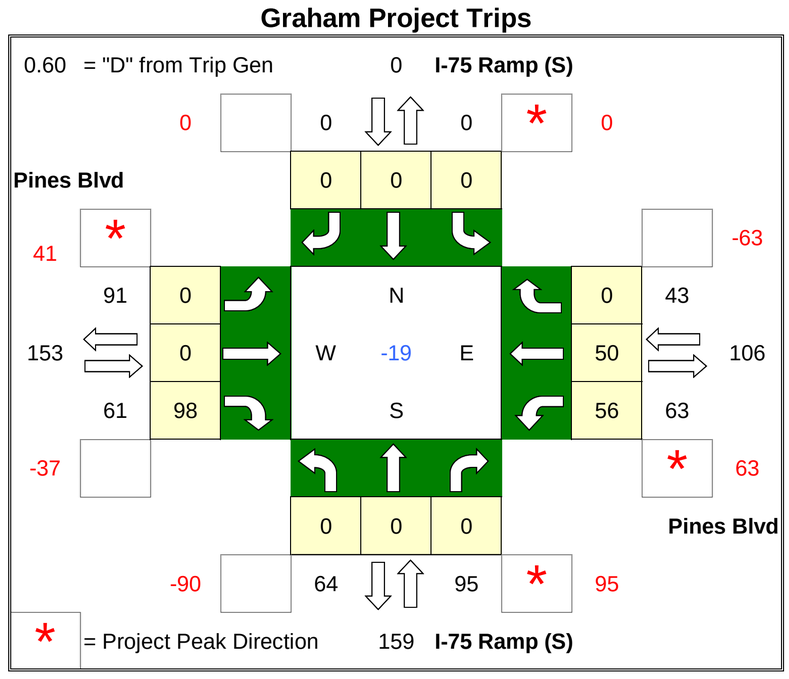
2016 Existing Count



% Annual Growth = 1% **Seasonal Factor =** 1.03

PHASE 2

Graham Project Trips

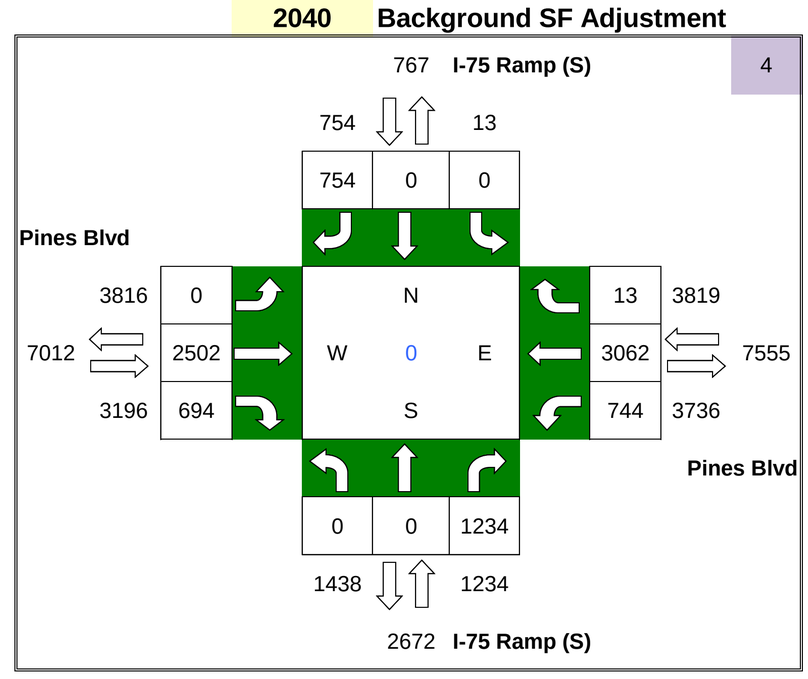


Project Trips

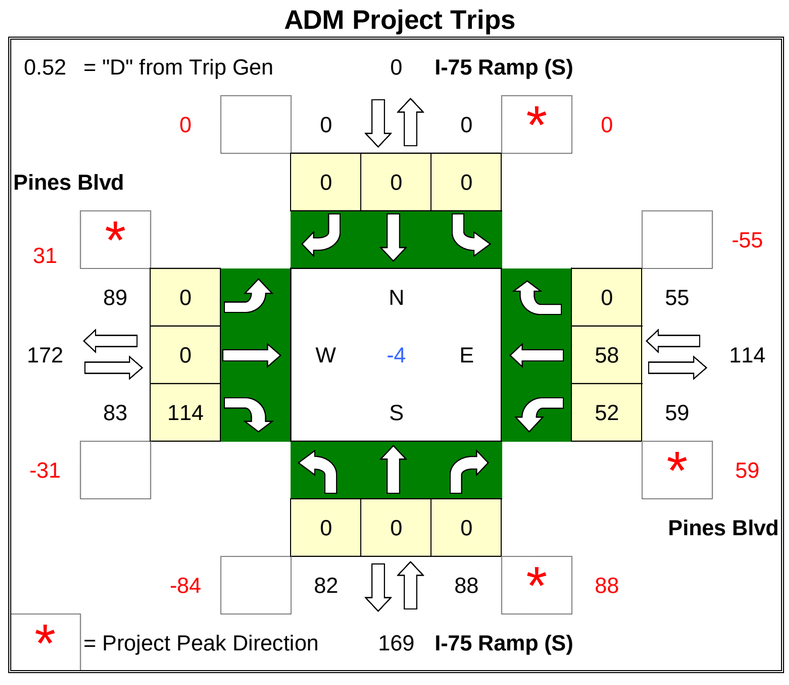
IN=	2,138
OUT=	3,177

	PD	#
N =	0.00%	0
E =	1.99%	106
S =	2.99%	159
W =	2.87%	153

2040 Background SF Adjustment



ADM Project Trips

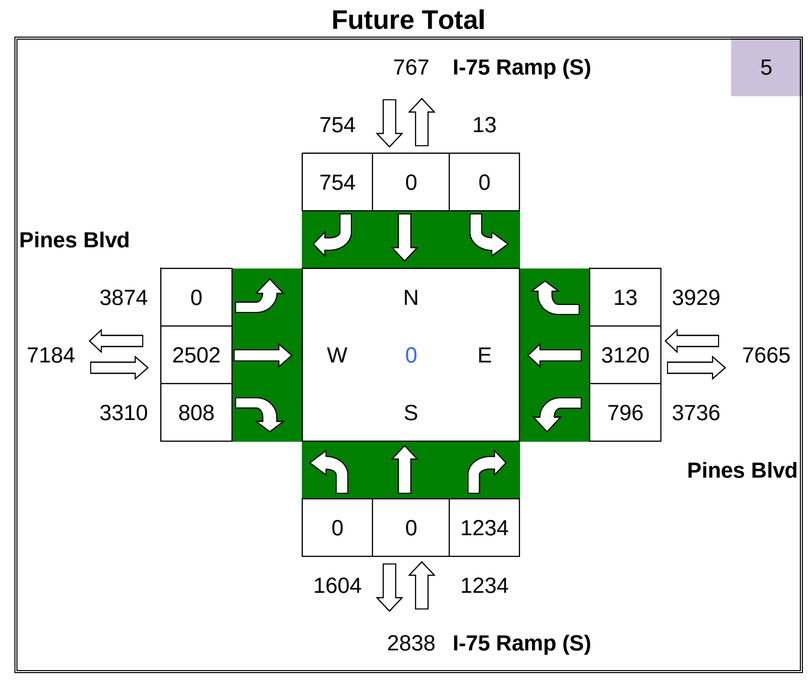


Project Trips

IN=	2,577
OUT=	2,753

	PD	#
N =	0.00%	0
E =	2.13%	114
S =	3.18%	169
W =	3.22%	172

Future Total



ADM/Graham

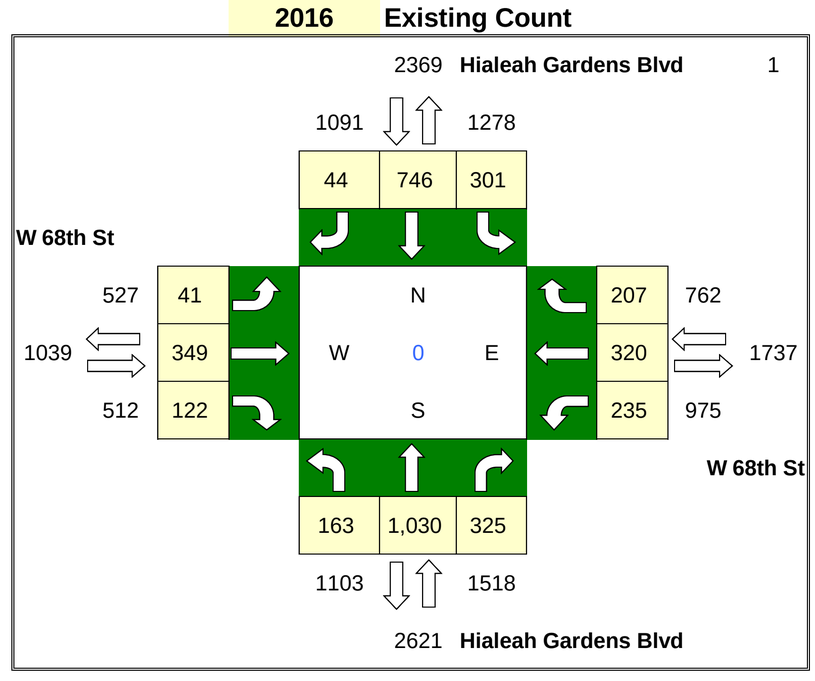
PM Turning Movement Volumes

N/S Roadway: Hialeah Gardens Blvd

E/W Roadway: W 68th St

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1.4% **Seasonal Factor =** 1.00

PHASE 2

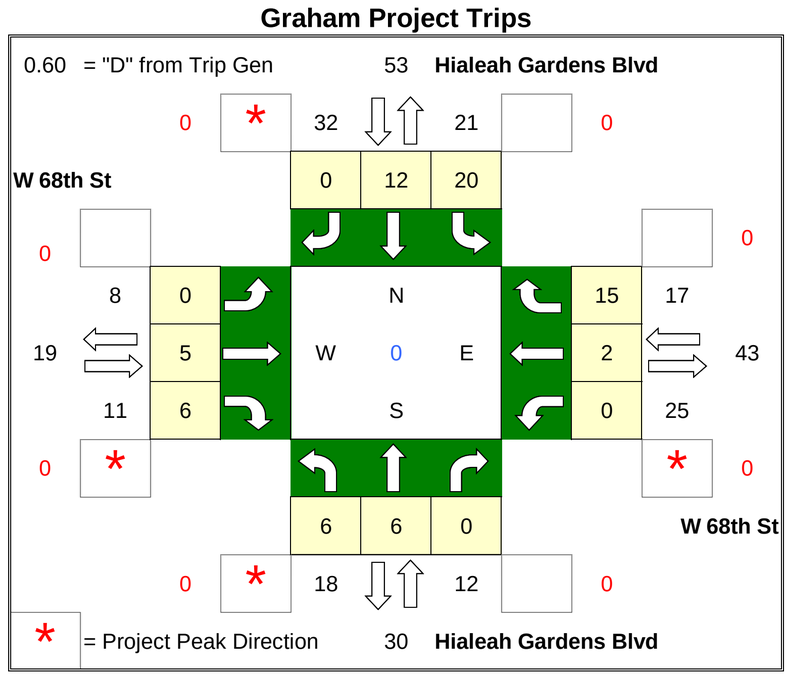
Graham Project Trips

Project Trips

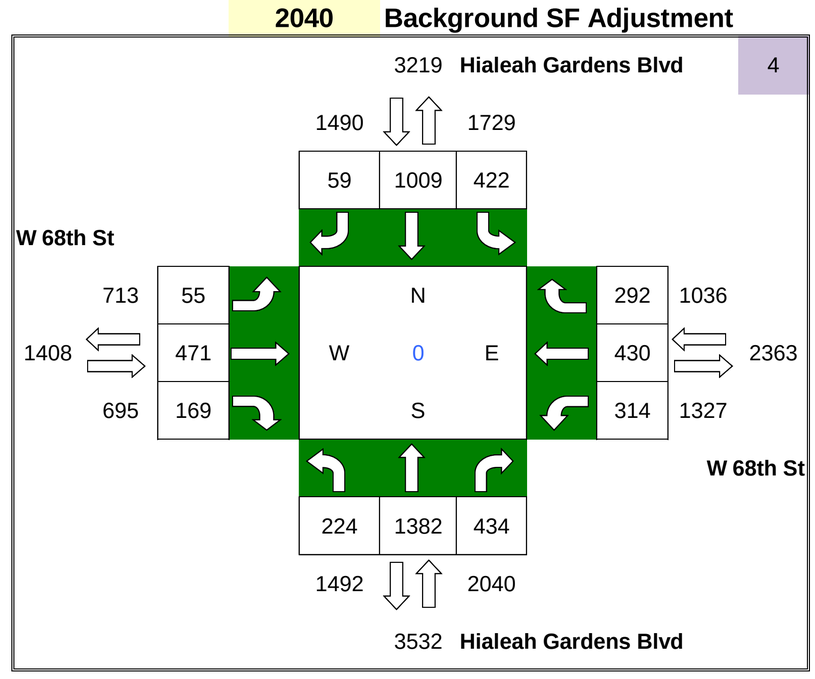
IN= 2,138

OUT= 3,177

	PD	#
N =	1.00%	53
E =	0.80%	43
S =	0.56%	30
W =	0.36%	19



2040 Background SF Adjustment



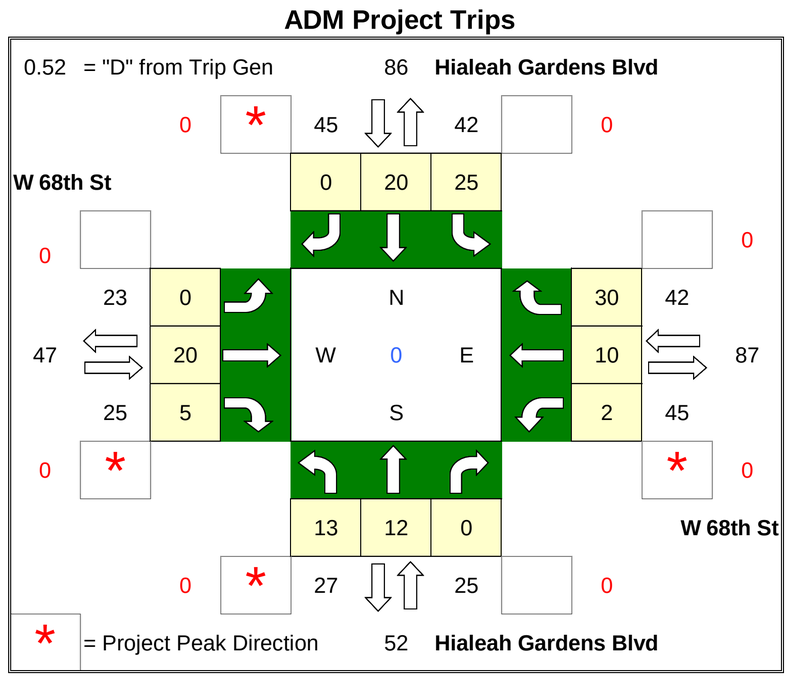
ADM Project Trips

Project Trips

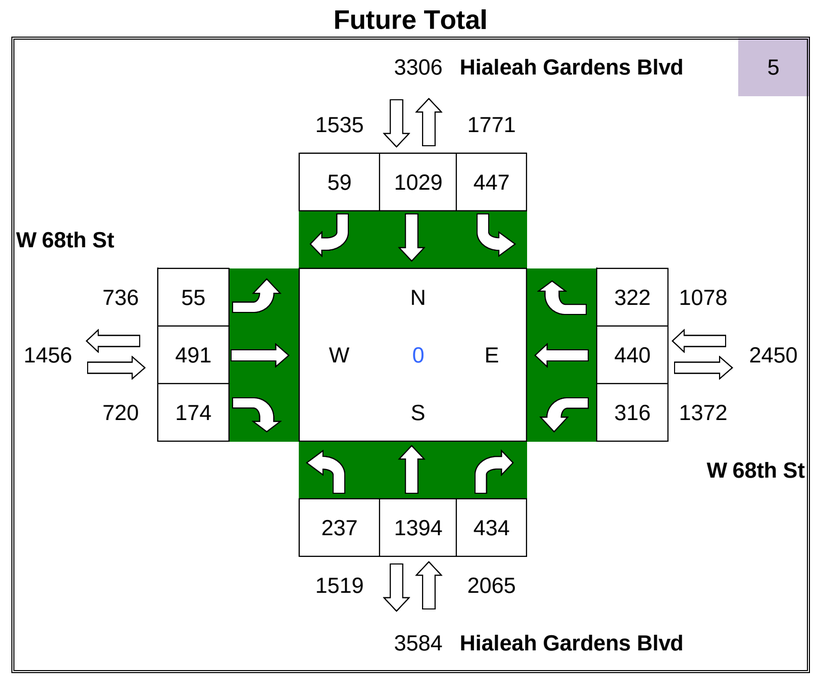
IN= 2,577

OUT= 2,753

	PD	#
N =	1.62%	86
E =	1.63%	87
S =	0.98%	52
W =	0.89%	47



Future Total



ADM/Graham

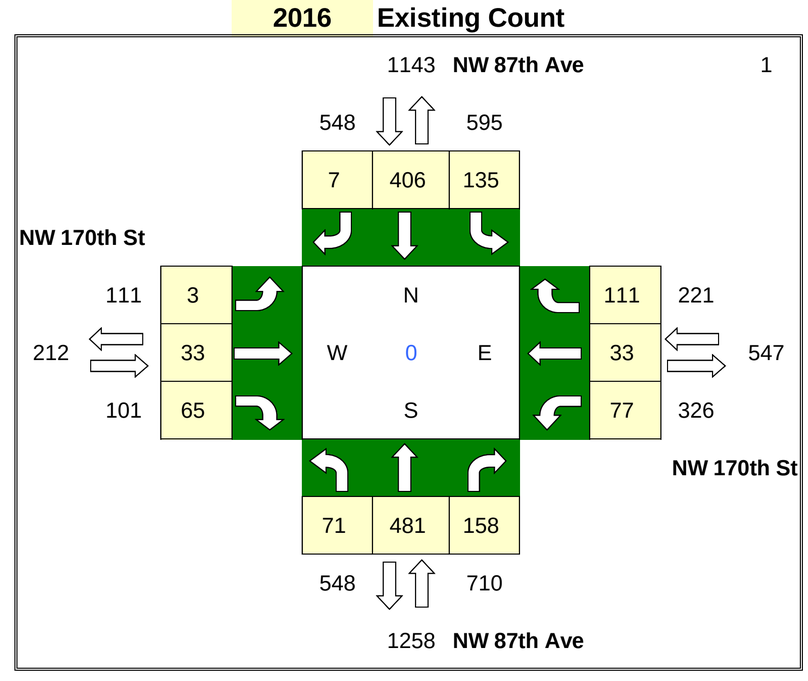
PM Turning Movement Volumes

N/S Roadway: NW 87th Ave

E/W Roadway: NW 170th St

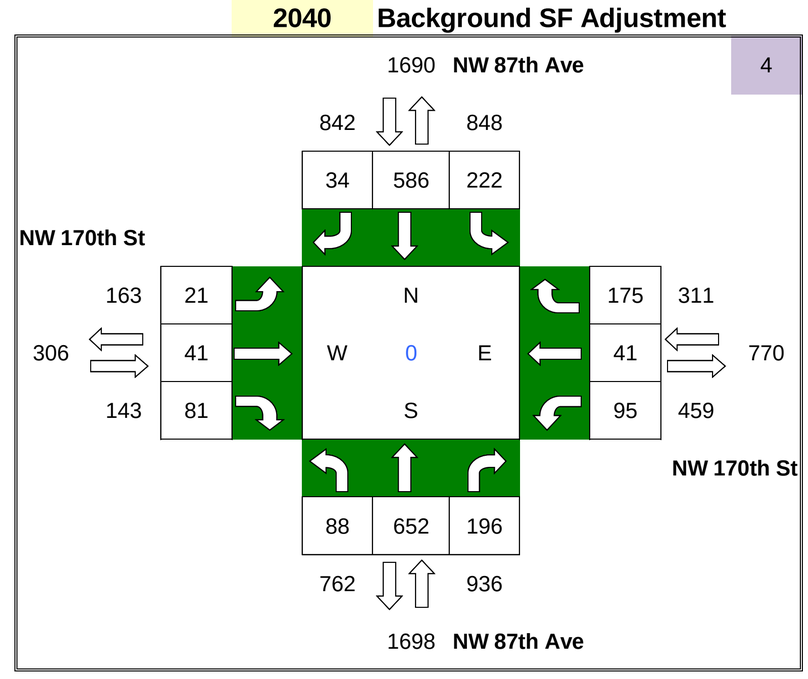
Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1% **Seasonal Factor =** 1.00

2040 Background SF Adjustment



PHASE 2

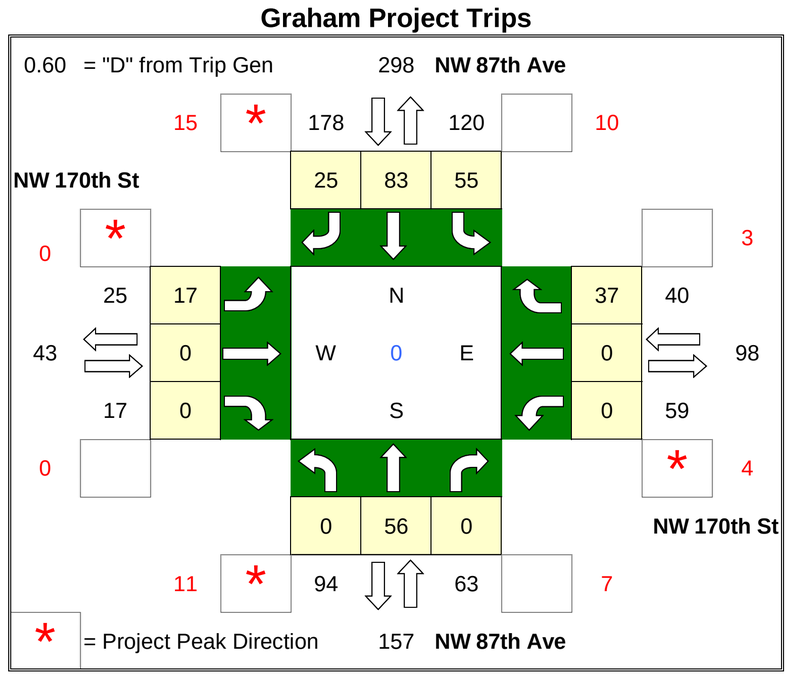
Graham Project Trips

Project Trips

IN= 2,138

OUT= 3,177

	PD	#
N =	5.60%	298
E =	1.85%	98
S =	2.95%	157
W =	0.80%	43



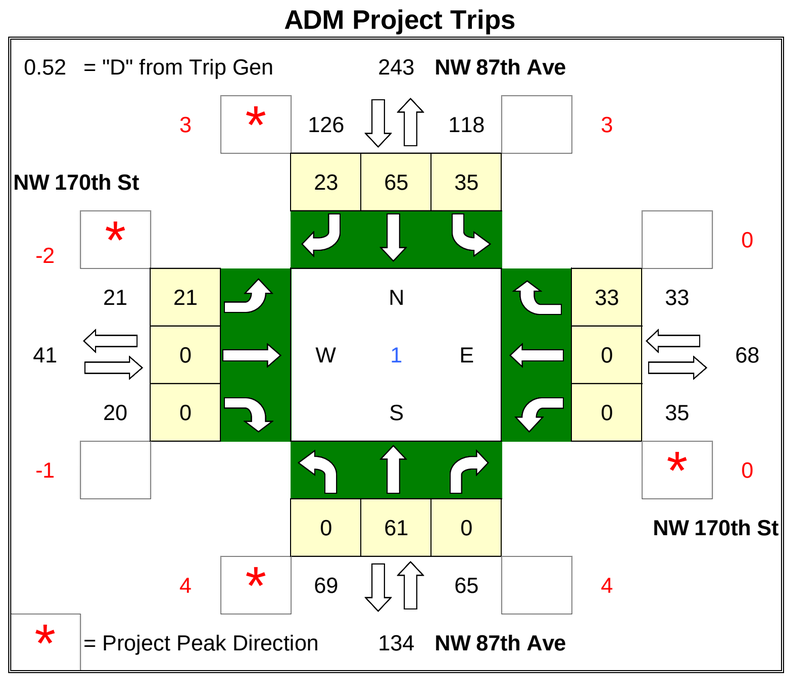
ADM Project Trips

Project Trips

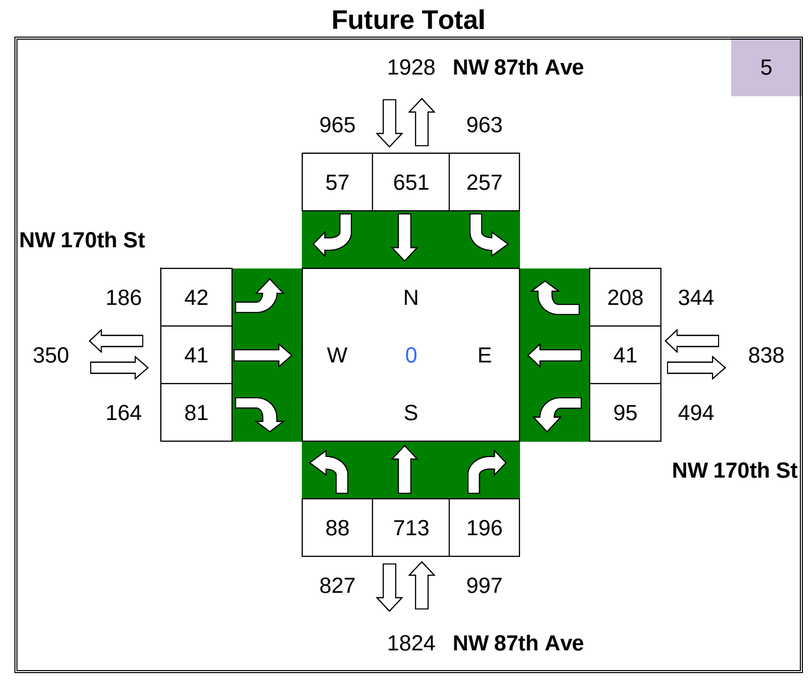
IN= 2,577

OUT= 2,753

	PD	#
N =	4.56%	243
E =	1.27%	68
S =	2.52%	134
W =	0.76%	41



Future Total



ADM/Graham

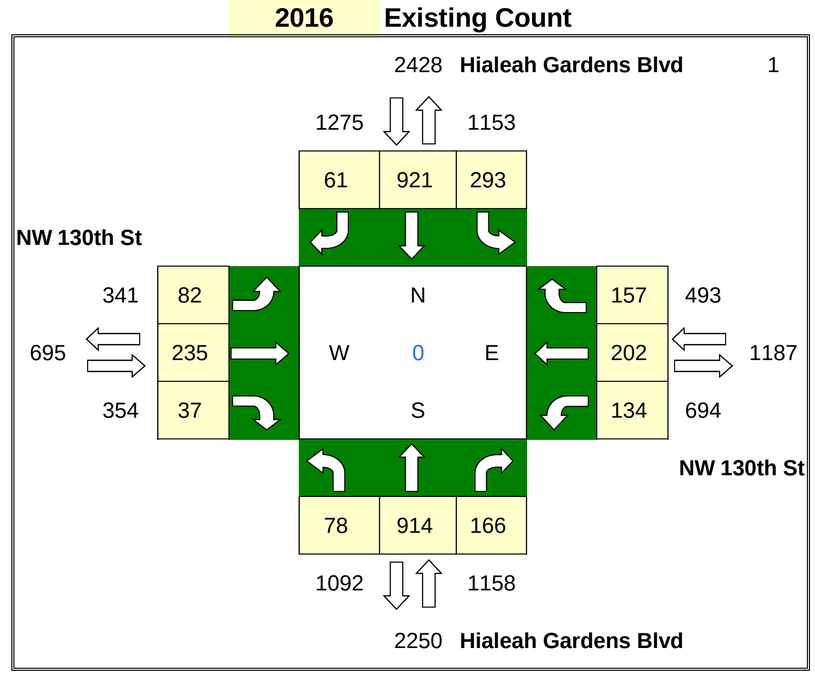
PM Turning Movement Volumes

N/S Roadway: Hialeah Gardens Blvd

E/W Roadway: NW 130th St

Date Taken: 4/20/16

2016 Existing Count



% Annual Growth = 1.4% **Seasonal Factor =** 1.00

PHASE 2

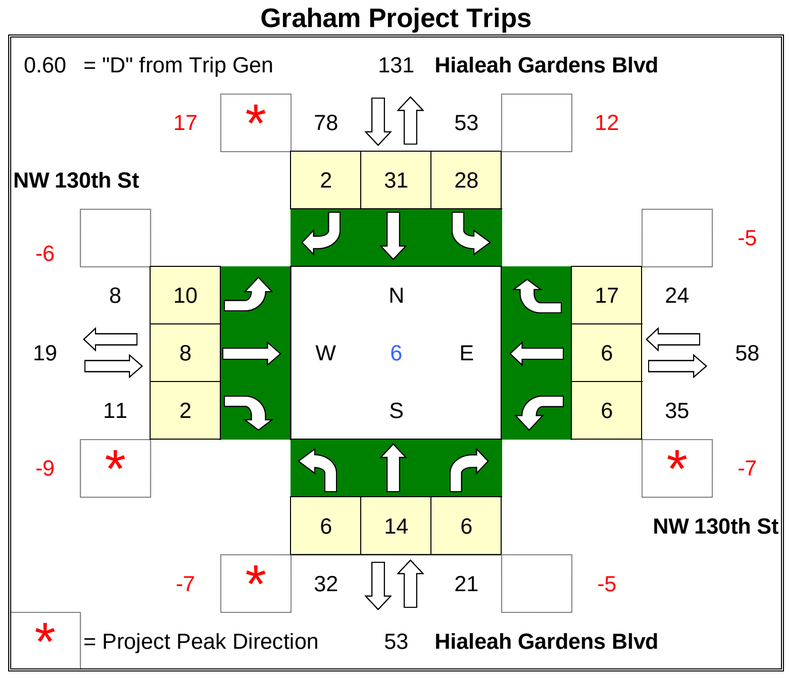
Project Trips

IN= 2,138

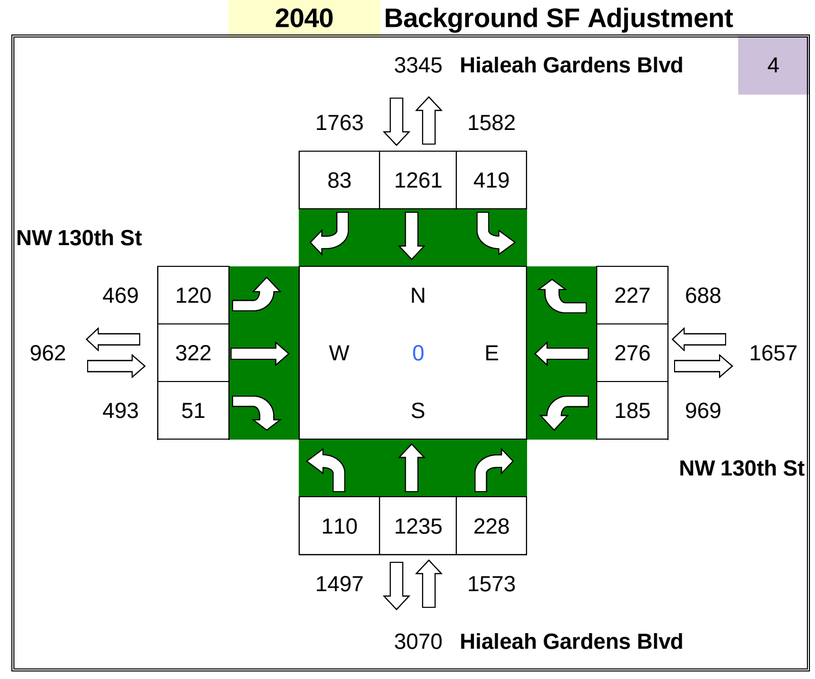
OUT= 3,177

	PD	#
N =	2.46%	131
E =	1.10%	58
S =	1.00%	53
W =	0.36%	19

Graham Project Trips



2040 Background SF Adjustment



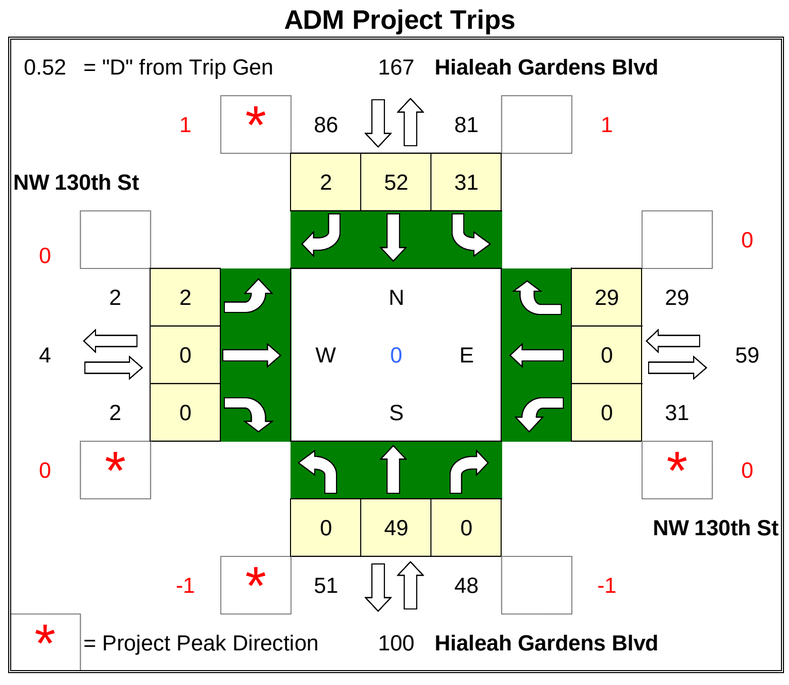
Project Trips

IN= 2,577

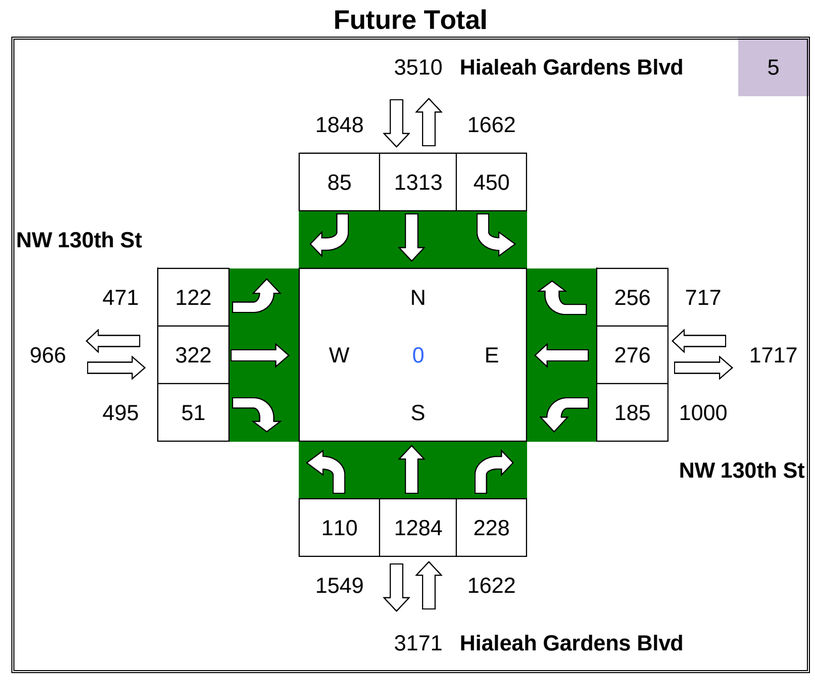
OUT= 2,753

	PD	#
N =	3.13%	167
E =	1.11%	59
S =	1.87%	100
W =	0.08%	4

ADM Project Trips



Future Total



ADM/Graham

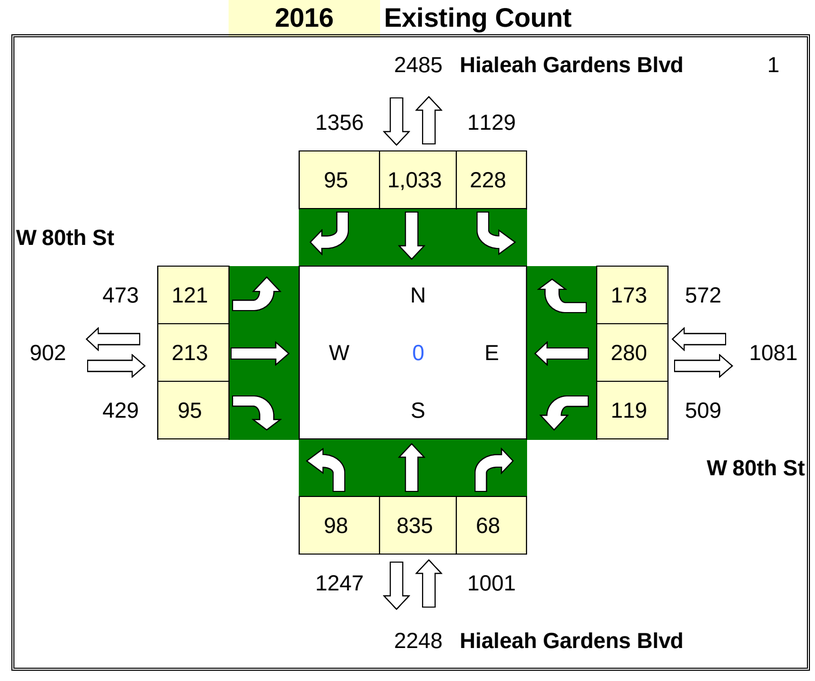
PM Turning Movement Volumes

N/S Roadway: Hialeah Gardens Blvd

E/W Roadway: W 80th St

Date Taken: 4/20/16

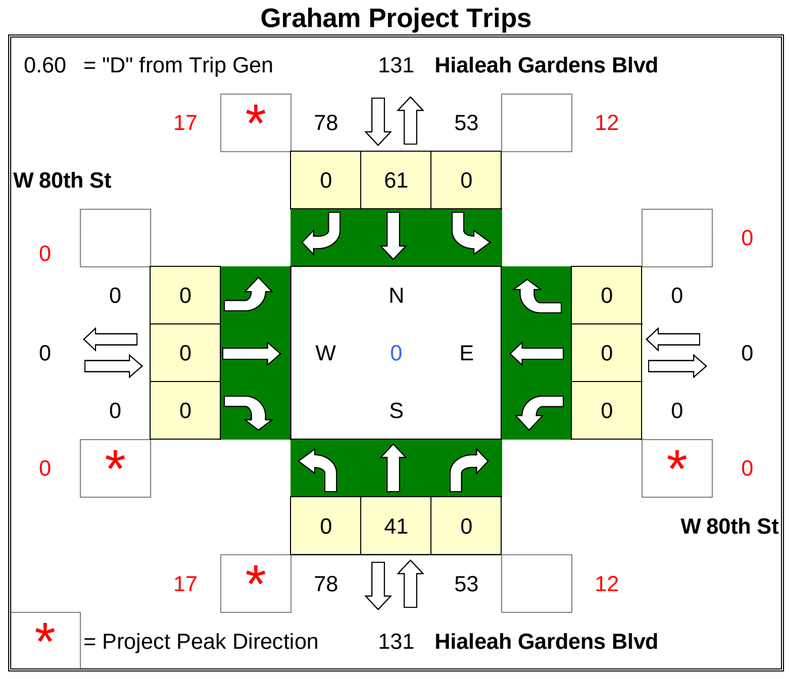
2016 Existing Count



% Annual Growth = 1.4% **Seasonal Factor =** 1.00

PHASE 2

Graham Project Trips



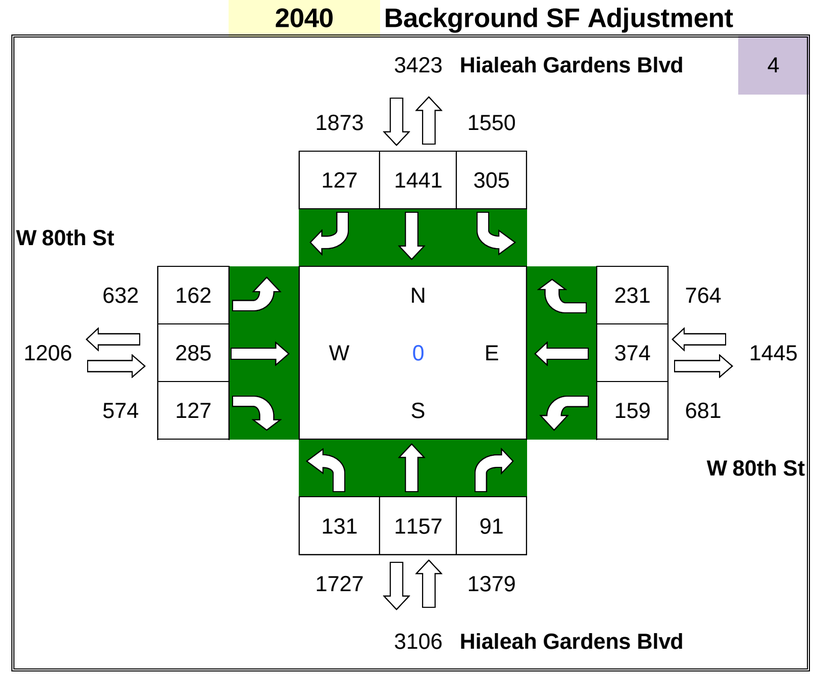
Project Trips

IN= 2,138

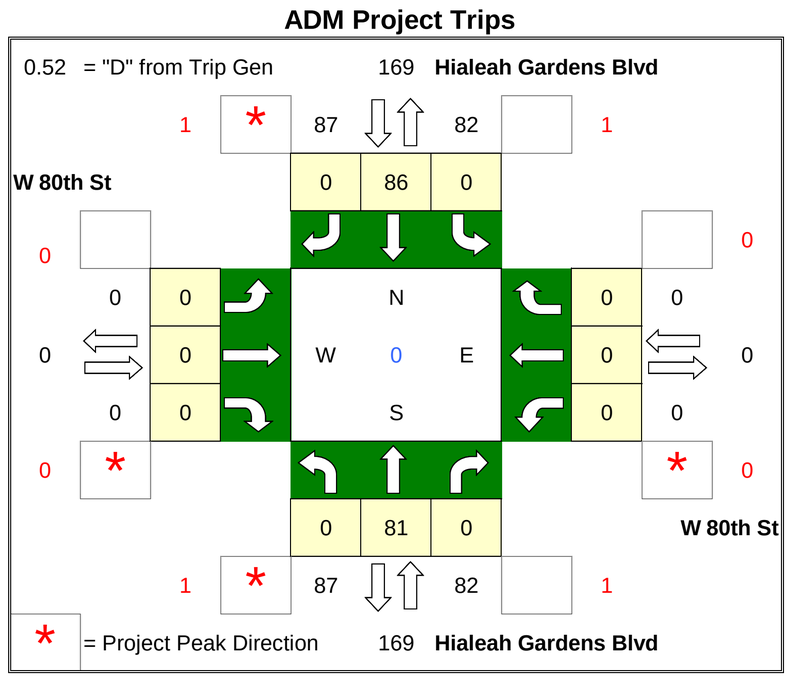
OUT= 3,177

	PD	#
N =	2.46%	131
E =	0.00%	0
S =	2.46%	131
W =	0.00%	0

2040 Background SF Adjustment



ADM Project Trips



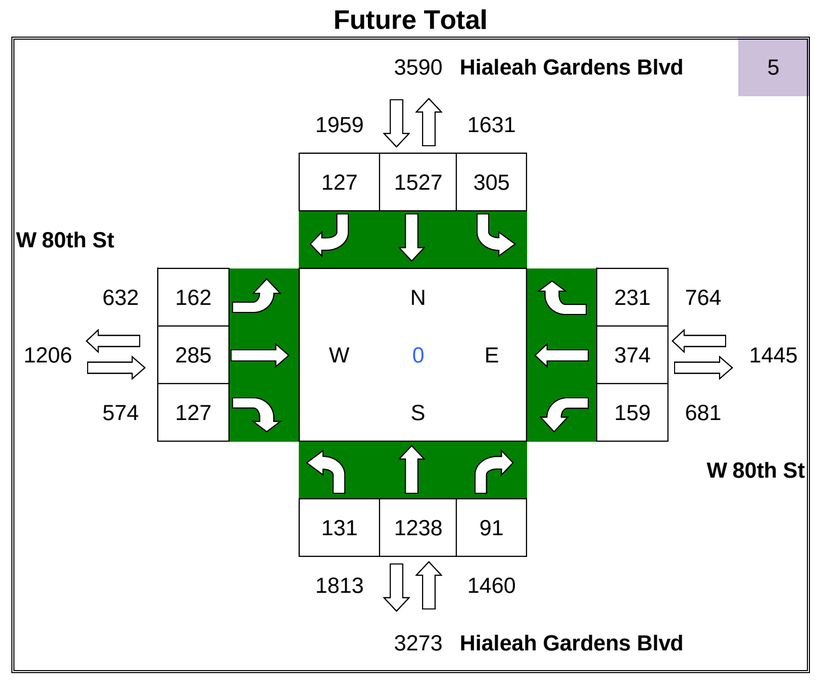
Project Trips

IN= 2,577

OUT= 2,753

	PD	#
N =	3.17%	169
E =	0.00%	0
S =	3.17%	169
W =	0.00%	0

Future Total



ADM/Graham

PM Turning Movement Volumes

Hialeah Gardens Blvd & W 84th St (TMC 53)

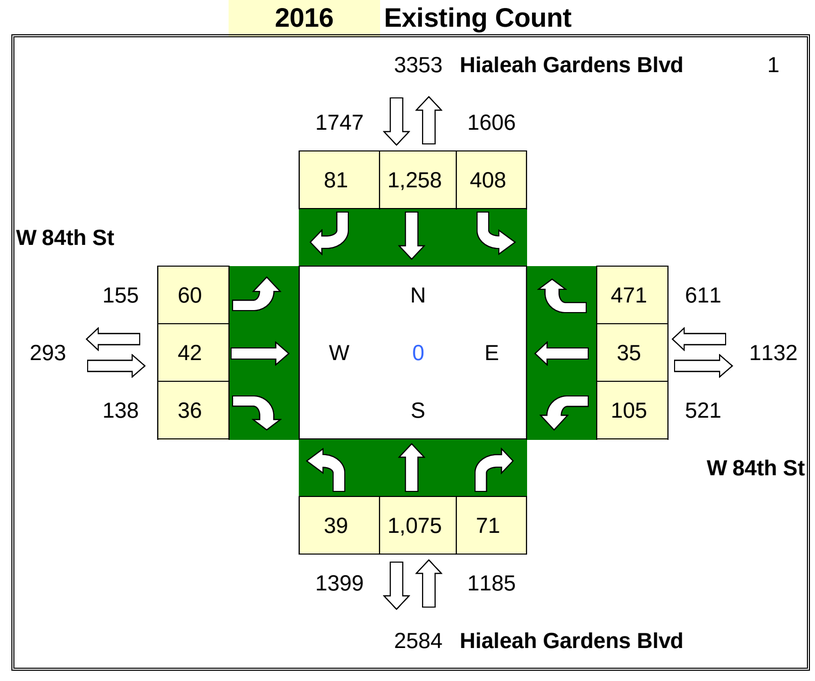
N/S Roadway: Hialeah Gardens Blvd

E/W Roadway: W 84th St

Date Taken: 4/20/16

W 84th St

2016 Existing Count



% Annual Growth = 1.4% **Seasonal Factor =** 1.00

PHASE 2

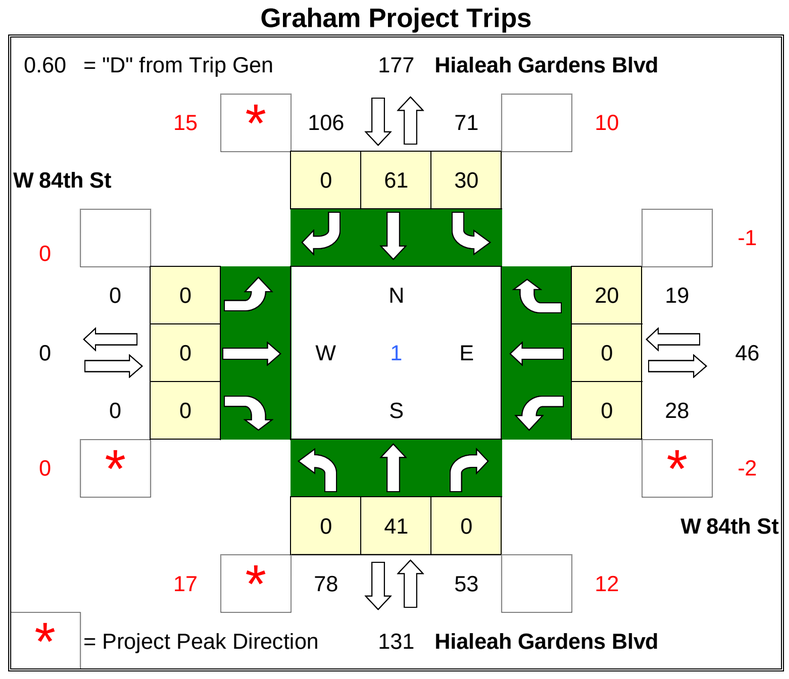
Project Trips

IN= 2,138

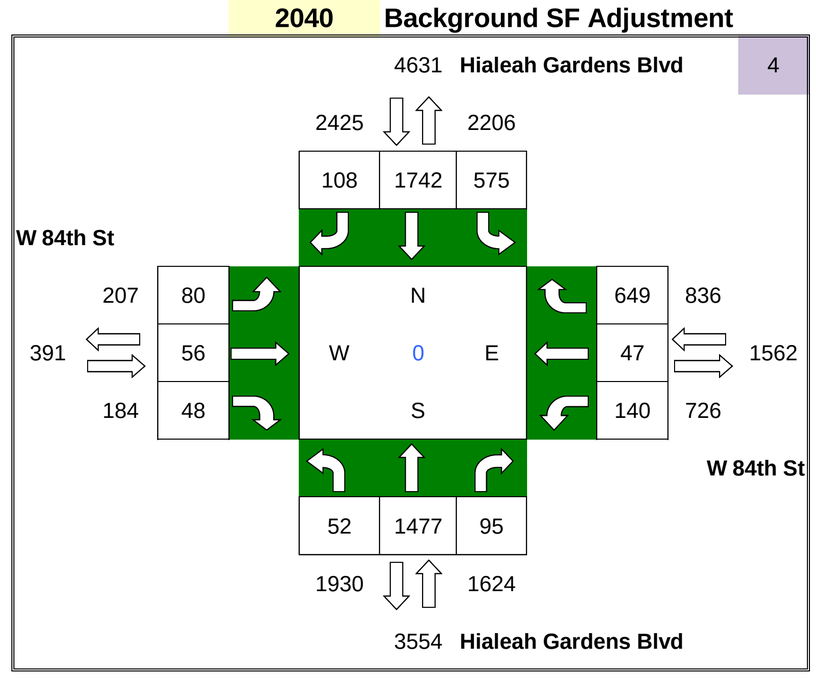
OUT= 3,177

	PD	#
N =	3.33%	177
E =	0.87%	46
S =	2.46%	131
W =	0.00%	0

Graham Project Trips



2040 Background SF Adjustment



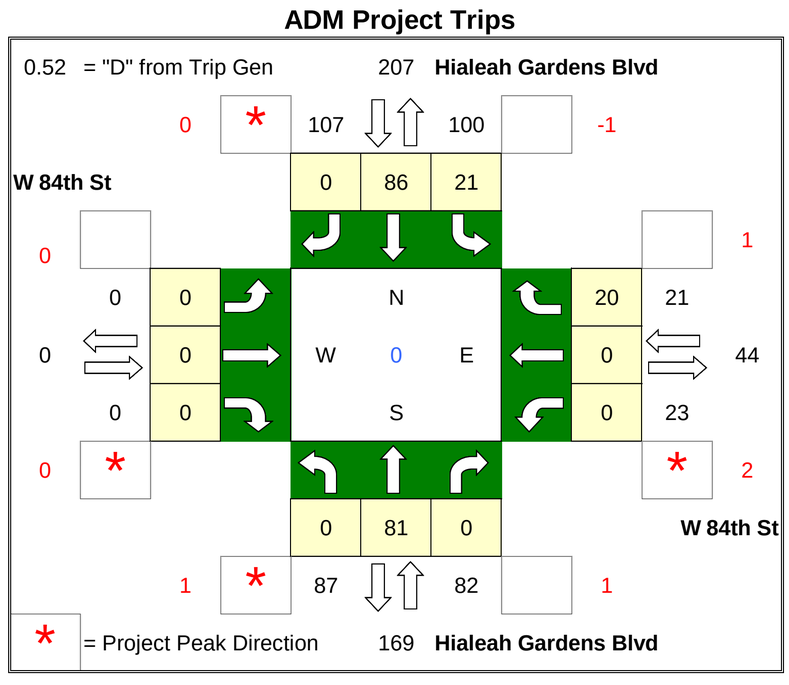
Project Trips

IN= 2,577

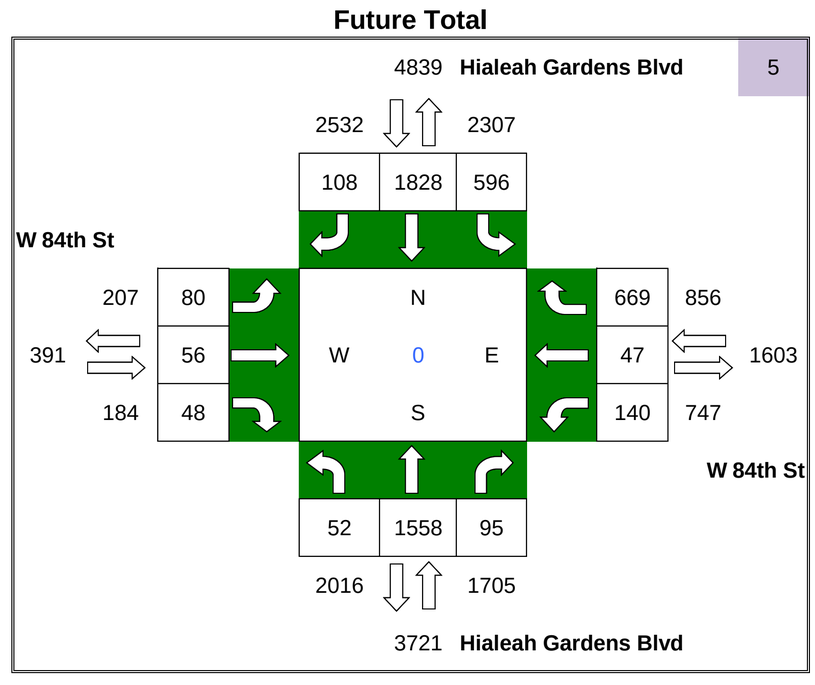
OUT= 2,753

	PD	#
N =	3.89%	207
E =	0.82%	44
S =	3.17%	169
W =	0.00%	0

ADM Project Trips



Future Total



ADM/Graham

PM Turning Movement Volumes

Hialeah Gardens Blvd & W 84th St (TMC 53)

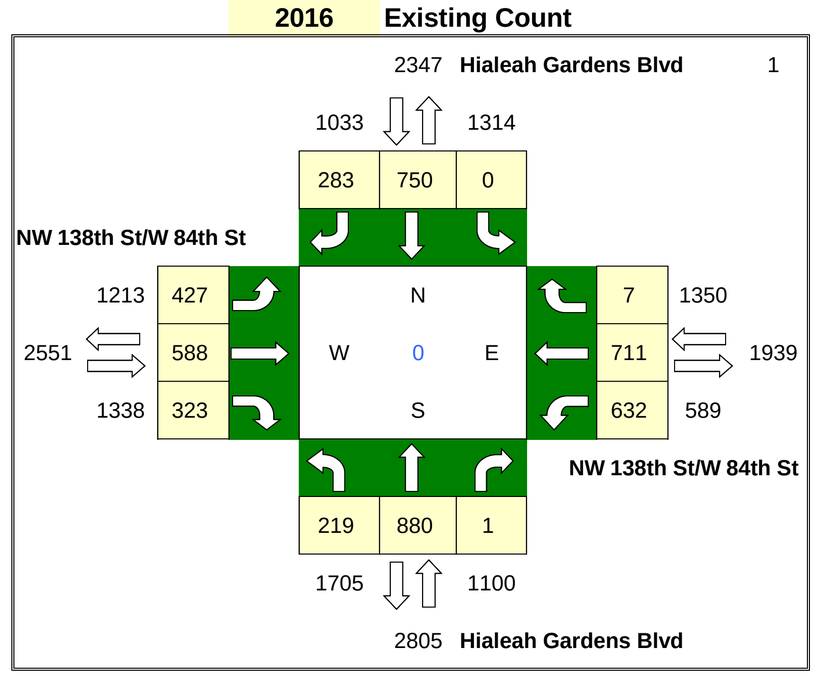
N/S Roadway: Hialeah Gardens Blvd

E/W Roadway: NW 138th St/W 84th St

Date Taken: 4/20/16

W 84th St

2016 Existing Count



% Annual Growth = 1.4% **Seasonal Factor =** 1.00

PHASE 2

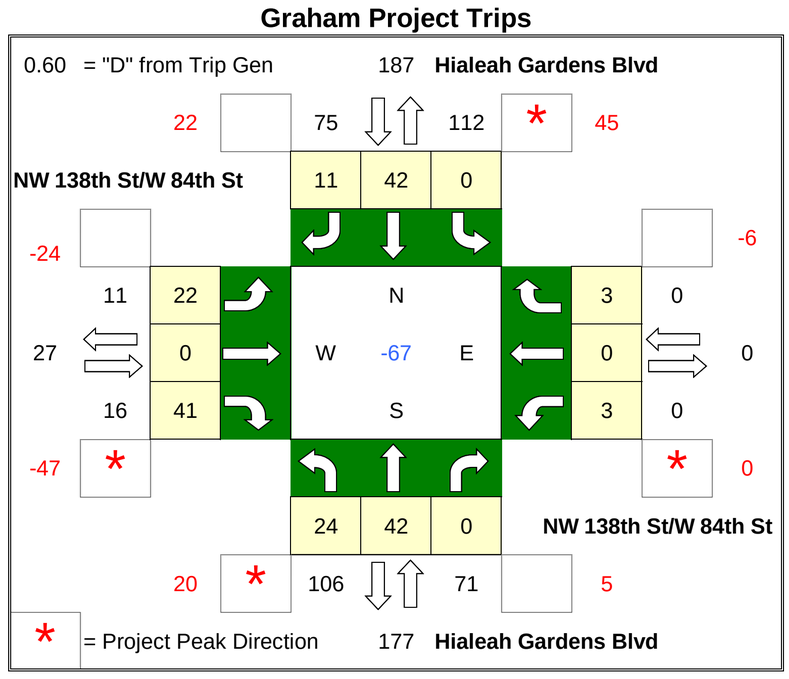
Project Trips

IN= 2,138

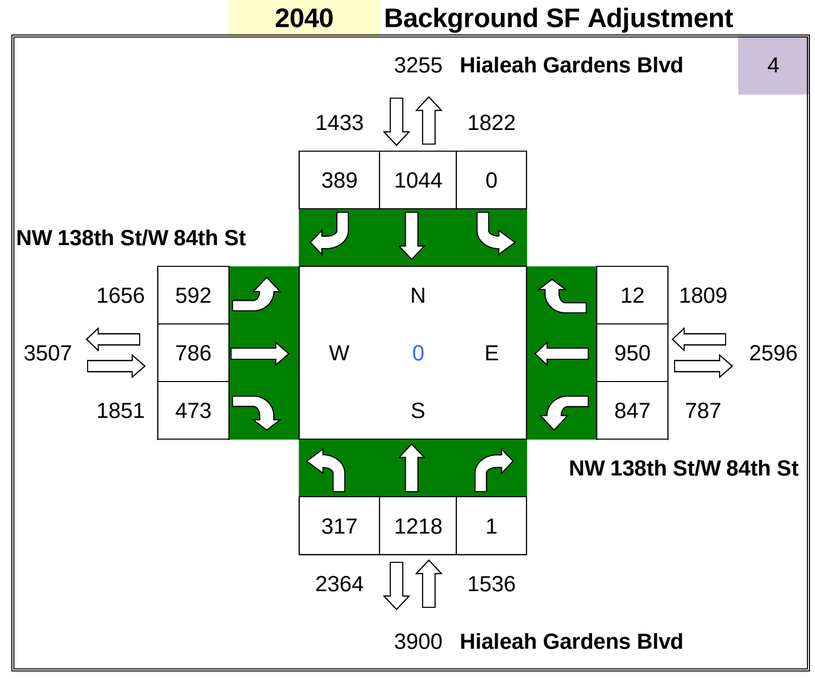
OUT= 3,177

	PD	#
N =	3.52%	187
E =	0.00%	0
S =	3.33%	177
W =	0.51%	27

Graham Project Trips



2040 Background SF Adjustment



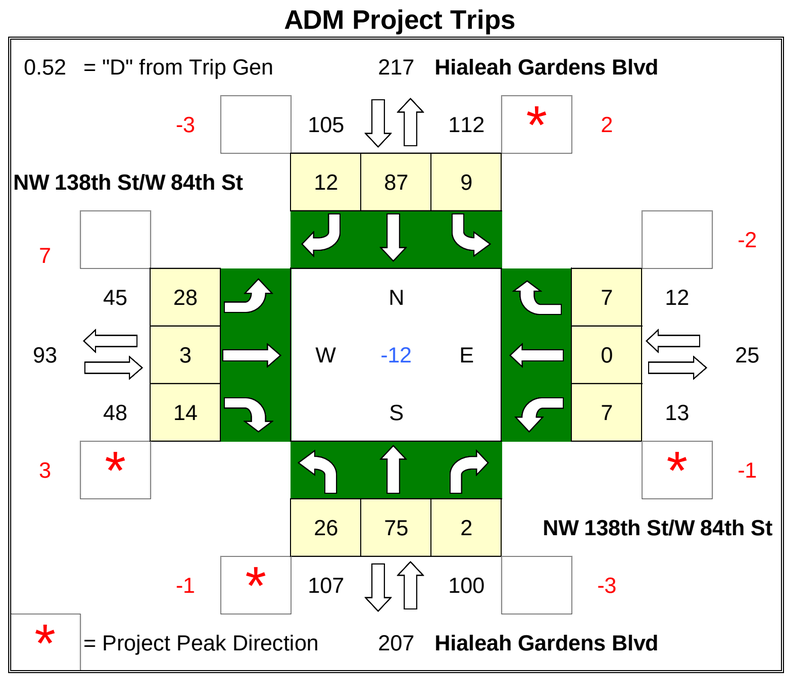
Project Trips

IN= 2,577

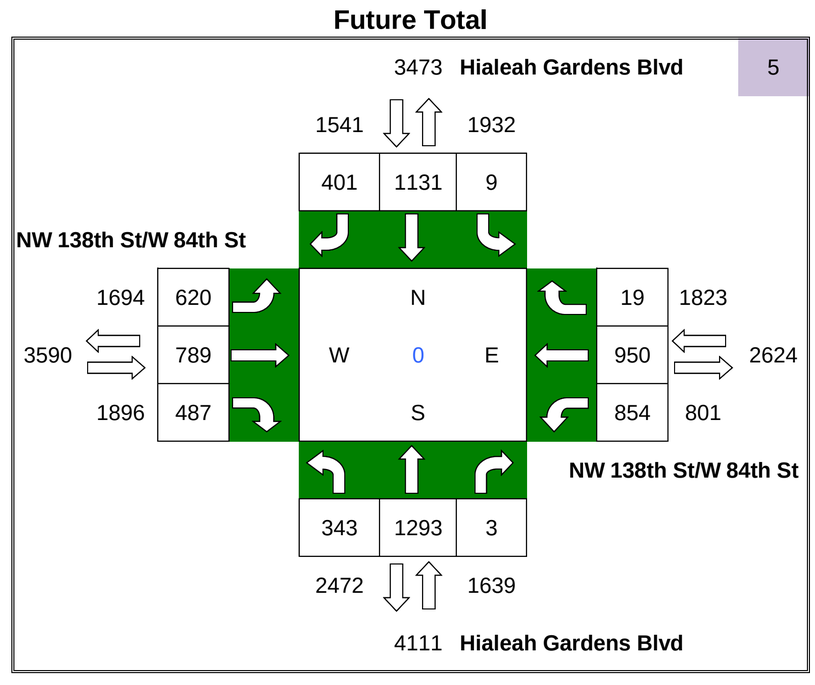
OUT= 2,753

	PD	#
N =	4.08%	217
E =	0.47%	25
S =	3.89%	207
W =	1.74%	93

ADM Project Trips



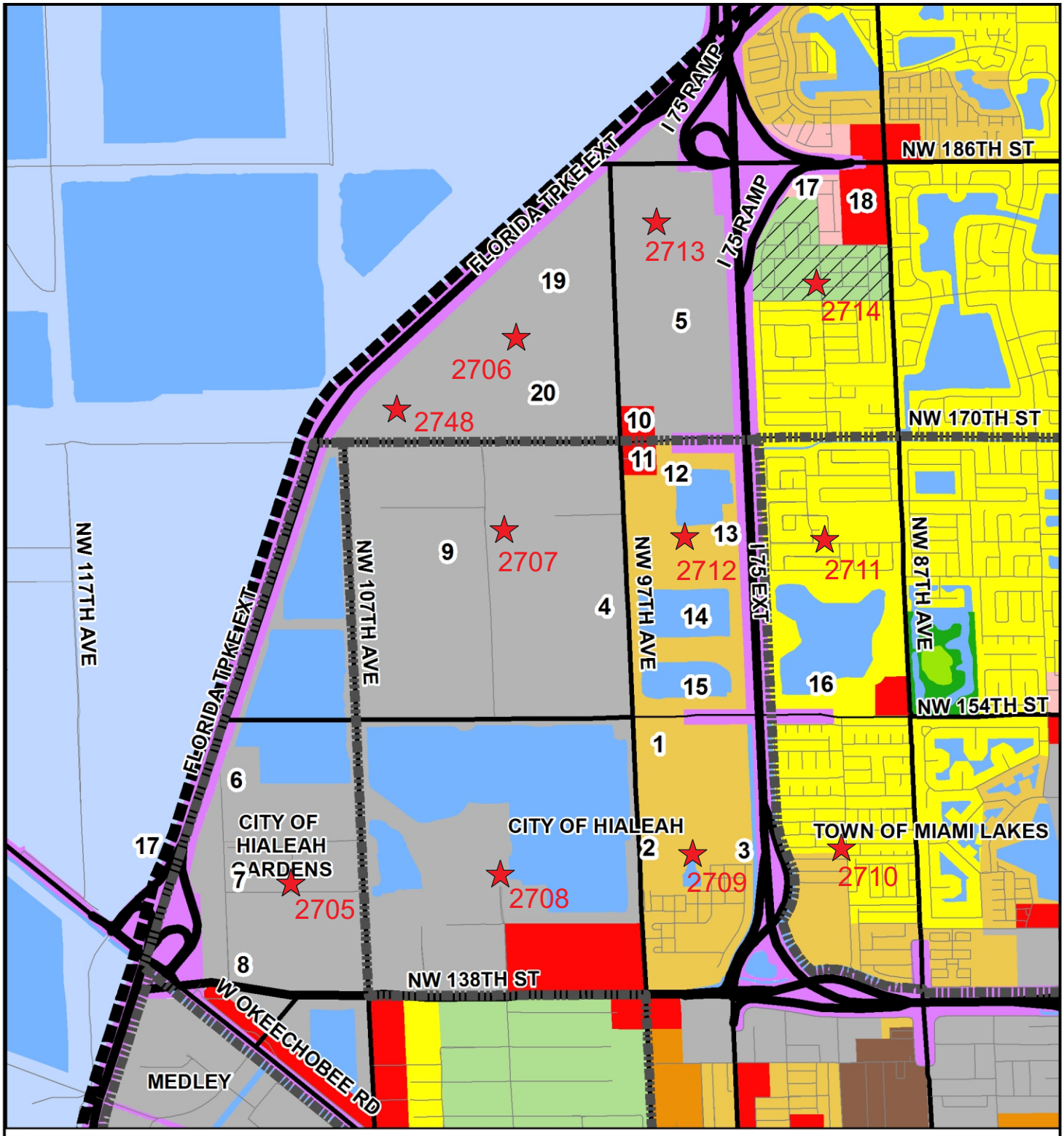
Future Total



APPENDIX I-L:
Comparison of Zdata

Platted Parcels in the Cities of Hialeah, Hialeah Gardens, and Unincorporated Miami-Dade County and Potential Development

No. on Map	T-Plat	Project Name/Owner	Location	Folio Nos.	Area (Acres /Sq. Ft.)	Jurisdiction	CDMP Land Use	Proposed Development	Traffic Report submitted	LCE Action
1	T-23557	Bonterra	NW 154 St. & NW 97 Ave.	04-2021-001-0330, 0170, 0320, 0180, 0310, 0190, 0300, 0200, 0280, and 0210		City of Hialeah	Residential	487 SF 370 Townhouses 314 Apartments	Yes	Add into TAZ 2709
2	T-23444	Bellagio Villas	W 138 St. & W 36 Ave.			City of Hialeah	Residential	170 Townhouses	Yes	Add into TAZ 2709
3	T-23371	Bellagio	NW 138 St. & NW 97 Ave.	04-2021-029-4160		City of Hialeah	Residential	209 SF 206 Townhouses	Yes	Add into TAZ 2709
4	T-23690	Erudition	NW 162 St. & NW 97 Ave.	04-2017-001-0491 04-2017-001-0080 04-2017-001-0081		City of Hialeah	Industrial	282 hotel rooms 73,500 sq. ft. school	Contact city	Add into TAZ 2707
5	T-22967	AMB I-75 Business Park	NW 170 St. & NW 97 Ave.	30-2009-001-0475, 0340,0460,0350, 0450,0360, 0370, 0380, 0390, & 0400		Unincorporated Miami-Dade	Industrial	1.1 million sq. ft. warehouses	Yes	Add into TAZ 2712
6	T-23241	Liebherr Tract	NW 154 St. & NW 107 Ave.	27-2019-003-0010		Hialeah Gardens	Industrial	41,588 sq. ft. office 32,421 sq. ft. warehouse	Contact city	Add into TAZ 2705
7	T-23361	Teba Subdivision	NW 144 St. & NW 109 Ave.	27-2019-004-0010		Hialeah Gardens	Industrial	3,375 sq. ft. warehouse 1,753 sq. ft. office	Contact city	Add into TAZ 2705
8	T-23141 (Not active)	Preferred Freezer Hialeah Gardens	NW 138 St. & NW 112 Ave.	27-2019-001-0640		Hialeah Gardens	Industrial	120,000 sq. ft. warehouse	Contact city	Add into TAZ 2705
9		FDG Beacon Countyline, LLC	NW 170 St. to NW 154 St. & NW 107 Ave. to NW 97 Ave.	Several folios		City of Hialeah	Industrial	Approx. 9,000,000 sq. ft. warehouse		Add into TAZ 2707
10		Sevilla Group & Irving Friedman TR	NW 170 St. & NW 97 Ave.	30-2009-001-0430 & 0431, and 30-2009-001-0412	54,450 sq. ft. 163,350 sq. ft. 386,813 sq. ft.	Unincorporated Miami-Dade	Industrial	302,307 sq. ft. Warehouses		Add into TAZ 2712
11		FP&L	NW 170 St. & NW 97 Ave.	04-2016-000-0860	107,985 sq. ft.(2.48 acres)	City of Hialeah	Residential	Power Station		Add into TAZ 2712
12		Atlas Hlh Heights LLC	NW 170 St. & NW 97 Ave.	04-2016-000-0011	4,888,303 sq. ft. (112.22 acres)	City of Hialeah	Residential	1,458 Townhomes		Add into TAZ 2712
13		F78 1 LLC	NW 160 St. & I-75	04-2016-000-0100	249,686 sq. ft. (5.75 acres)	City of Hialeah	Residential	74 Townhomes		Add into TAZ 2712
14		Lowell S. Dunn	NW 97 ave. & I-75	04-2016-000-0110	2,829,875 sq. ft. (64.96 acres)	City of Hialeah	Residential	844 Townhomes		Add into TAZ 2712
15		Lowell S. Dunn	NW 97 Ave. & NW 154 St.	04-2016-000-0060	2,597,918 sq. ft. (59.64 acres)	City of Hialeah	Residential	775 Townhomes		Add into TAZ 2712
16		F69 1 LLC F71 1 LLC	NW 87 Ave. & NW 154 St.	32-2015-001-0500 32-2016-000-0020	2,547,485 sq. ft. (58.48 acres) 6,729,497 sq. ft. (154.49 acres)	Miami Lakes	Residential	256 SF 226 Townhomes		Add into TAZ 2711
17		Northwest School Property LLC	NW 89 Ave. & NW 186 St.	30-2009-001-0140 30-2009-001-0140	258,529 sq. ft. (5.95 ares.) 171,932 sq. ft. (3.95 acres)	Unincorporated Miami-Dade	Office/Residential	Charter School:1,500 students (K-12)		Add into TAZ 2714
18		The Genet Family Limited Partners	NW 87 Ave. & NW 186 St.	30-2009-001-0010	1,225,648 sq. ft. (28.14 ac)	Unincorporated Miami-Dade	Business and Office	248,508 sq. ft. Commercial		Add into TAZ 2714
19		ADM (CDMP Application)	N of NW 178 St. betw. I-75 & HEFT		194.48 gross	Unincorporated Miami-Dade County	Industrial and Office	3,500,000 sq. ft. Retail 1,500,000 sq. ft. Entertainment 2,000 Hotel Rooms 1,200,000 sq. ft. Back of House	Yes (but to be revised)	Existing in Zdata Table (TAZ 2713 & 2748)
20		Graham Co. (CDMP Application)	betw. NW 170 St. & NW 178 St., & betw. I-75 & HEFT		339 gross	Unincorporated Miami-Dade County	Industrial and Office and Business and Office	2,000 Multi-family units 1,000,000 sq. ft. Retail 3,000,000 sq. ft. Business park (includes 1600 hotel rooms)	Yes (but to be revised)	Existing in Zdata Table (TAZ 2706)



CDMP LAND USE

- ESTATE DENSITY (1-2.5 DU/AC)
- ESTATE DENSITY W/ DENSITY INCREASE 1
- LOW DENSITY (2.5-6 DU/AC)
- LOW-MEDIUM DENSITY (6-13 DU/AC)
- MEDIUM DENSITY (13-25 DU/AC)
- MEDIUM-HIGH DENSITY (25-60 DU/AC)
- INDUSTRIAL AND OFFICE
- BUSINESS AND OFFICE
- OFFICE/RESIDENTIAL
- PARKS AND RECREATION
- OPEN LAND
- ENVIRONMENTALLY PROTECTED PARKS
- WATER
- TRANSPORTATION (ROW, RAIL, METRORAIL, ETC.)
- EXPRESSWAYS
- MAJOR ROADWAYS (3 OR MORE LANES)
- MINOR ROADWAYS (2 OR MORE LANES)
- 2020 URBAN DEVELOPMENT BOUNDARY
- MUNICIPAL BOUNDARY

0 0.25 0.5 Miles

N

Comparision of Model Revised Zdata and Original Zdata

	NAM	EL_TAZ_4	MD_TAZ_4	HI_TAZ_4	EL_ENRL_4	MD_ENRL_4	HI_ENRL_4	HHC0_4	HHC1_4	VC0_4	VC1_4	WC0_4	WC1_4	PC0_4	PC1_4	HMR_4	POP_4	INDE_4	COME_4	SVCE_4	TOTE_4
2040 Revised	2705	312	319	10	0	0	0	4	0	4	0	4	0	8	0	0	8	1471	855	140	2466
2040 Original	2705	312	319	10	0	0	0	4	0	4	0	4	0	8	0	0	8	1276	682	140	2098
2040 Revised	2706	18	25	26	0	0	0	1495	807	2594	2127	1963	1495	3329	3317	0	6648	5178	2877	5178	13233
2040 Original	2706	18	25	26	0	0	0	0	0	0	0	0	0	0	0	0	0	1096	643	116	1855
2040 Revised	2707	9	23	26	500	500	500	0	0	0	0	0	0	0	0	282	0	13332	1121	192	14645
2040 Original	2707	9	23	26	0	0	0	0	0	0	0	0	0	0	0	0	0	2082	1121	0	3203
2040 Revised	2709	9	23	10	77	0	94	1622	1794	2821	4766	2138	3325	4549	9270	0	9833	27	90	293	410
2040 Original	2709	9	23	10	77	0	94	788	872	1371	2316	1039	1616	3237	6596	0	9833	27	90	293	410
2040 Revised	2711	23	23	26	0	0	0	689	997	1200	2652	907	1850	1769	4720	0	5395	5	91	167	263
2040 Original	2711	23	23	26	0	0	0	492	712	857	1894	648	1321	1471	3924	0	5395	5	91	167	263
2040 Revised	2712	9	23	26	0	0	0	2765	1487	4820	3962	3650	2765	6866	6824	0	6538	378	94	204	676
2040 Original	2712	9	23	26	0	0	0	716	385	1248	1026	945	716	3279	3259	0	6538	0	94	204	298
2040 Revised	2713	18	25	26	0	0	0	0	0	0	0	0	0	0	0	1061	0	0	4645	2946	7591
2040 Original	2713	18	25	26	0	0	0	0	0	0	0	0	0	0	0	0	0	946	556	100	1602
2040 Revised	2714	18	25	26	1422	1062	762	398	575	693	1526	524	1066	1073	2865	0	3938	19	897	963	1879
2040 Original	2714	18	25	26	672	312	762	398	575	693	1526	524	1066	1073	2865	0	3938	19	276	913	1208
2040 Revised	2748	46	151	146	0	0	0	0	0	0	0	0	0	0	0	460	0	0	2011	1275	3286
2040 Original	2748	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	NAM	EL_TAZ_4	MD_TAZ_4	HI_TAZ_4	EL_ENRL_4	MD_ENRL_4	HI_ENRL_4	HHC0_4	HHC1_4	VC0_4	VC1_4	WC0_4	WC1_4	PC0_4	PC1_4	HMR_4	POP_4	INDE_4	COME_4	SVCE_4	TOTE_4
2020 Revised	2705	312	319	10	0	0	0	4	0	4	0	4	0	7	0	0	7	1471	855	140	2466
2020 Original	2705	312	319	10	0	0	0	4	0	4	0	4	0	7	0	0	7	496	244	75	815
2020 Revised	2706	18	25	26	0	0	0	374	202	649	532	491	374	832	829	0	1661	432	432	432	1296
2020 Original	2706	18	25	26	0	0	0	0	0	0	0	0	0	0	0	0	0	365	214	39	618
2020 Revised	2707	9	23	26	500	500	500	0	0	0	0	0	0	0	0	282	0	13332	1121	192	14645
2020 Original	2707	9	23	26	0	0	0	0	0	0	0	0	0	0	0	0	0	694	374	0	1068
2020 Revised	2709	9	23	10	79	0	76	1097	1213	1906	3219	1443	2247	2391	4873	0	3278	27	90	293	410
2020 Original	2709	9	23	10	79	0	76	263	291	457	772	346	539	1079	2199	0	3278	16	31	158	205
2020 Revised	2711	23	23	26	0	0	0	556	804	968	2139	733	1492	1258	3358	0	3522	5	91	167	263
2020 Original	2711	23	23	26	0	0	0	359	519	625	1381	473	963	960	2562	0	3522	4	52	80	136
2020 Revised	2712	9	23	26	0	0	0	2291	1227	3988	3278	3020	2291	4681	4651	0	2179	378	94	204	676
2020 Original	2712	9	23	26	0	0	0	239	128	416	342	315	239	1093	1086	0	2179	0	31	68	99
2020 Revised	2713	18	25	26	0	0	0	0	0	0	0	0	0	0	0	831	0	0	3637	2307	5944
2020 Original	2713	18	25	26	0	0	0	0	0	0	0	0	0	0	0	0	0	315	185	33	533
2020 Revised	2714	18	25	26	1438	1069	620	372	537	647	1425	489	995	968	2586	0	3554	19	897	963	1879
2020 Original	2714	18	25	26	688	319	620	372	537	647	1425	489	995	968	2586	0	3554	16	95	476	587
2020 Revised	2748	46	151	146	0	0	0	0	0	0	0	0	0	0	0	410	0	0	1791	1136	2927
2020 Original	2748	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Note: Socio-economic data for revised school enrollment, residential and employment shown here. No changes were made to other cells within the socio-economic model input file

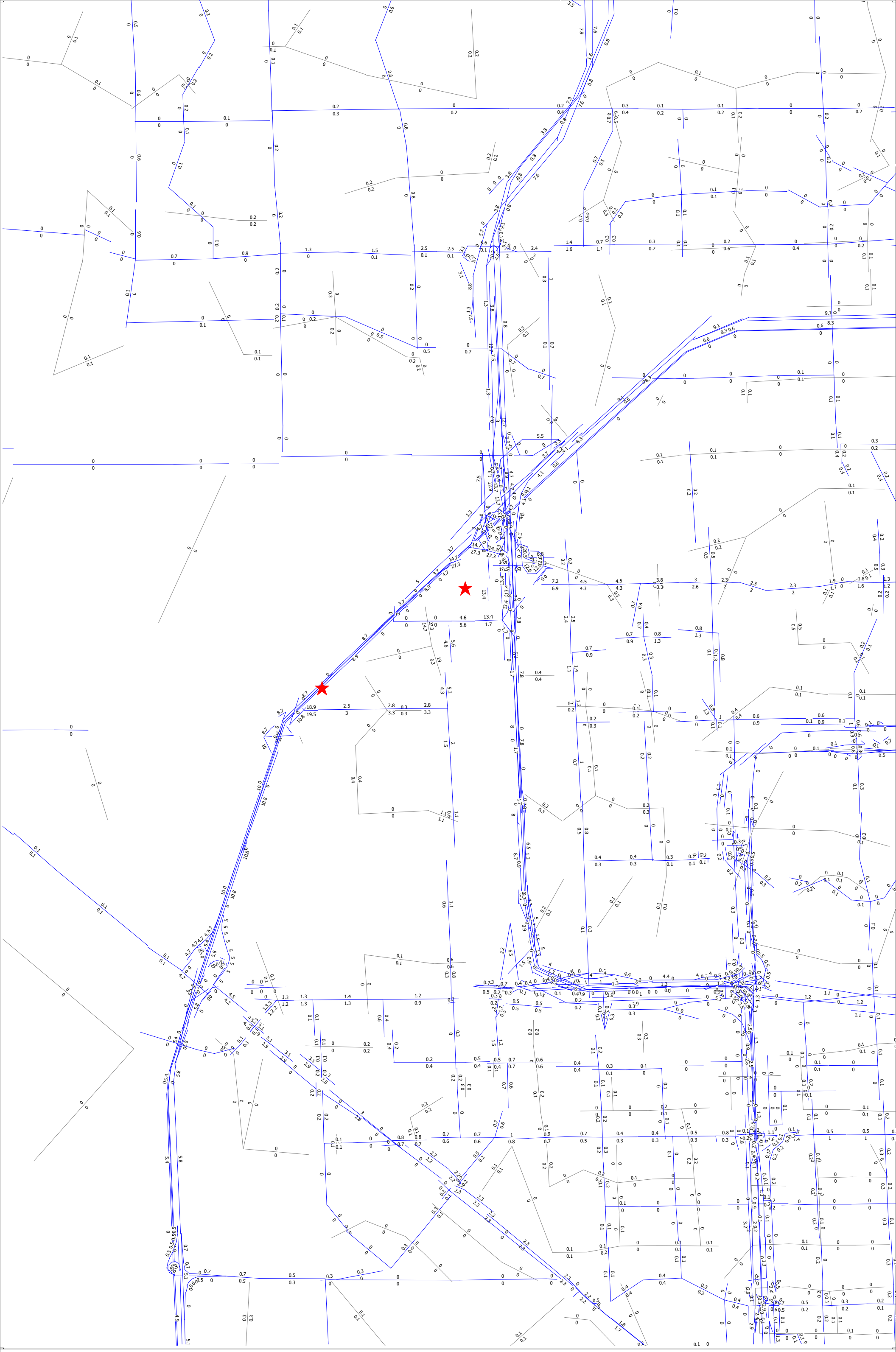
Description of TAZ Database Attributes

Field		Name	Description
1,3,10,26,42,57		NAME,TAZ_REG,TAZRGNS_YY,RTAZZ1B_YY,RTAZZD2_YY,REgWzn	Regional TAZ number (SERPM65 - 2005 Based) - YY stands for Year (05=2005 & 30=2030)
2		AREA	Gross area in square feet
4,11,27,43,58		TAZ_MPO,TAZMPOS_YY,UTAZZ1B_YY,UTAZZD2_YY,UrbWzn	MPO TAZ number (SERPM65 -2005 Based)
5,53		AREA_TFT, GR_SQ_TFT	Gross area in 1/10 square feet
6		SRTINDEX	A sort Index
7		TAZ_MPO_00	MPO TAZ number (SERPM6 -2000 Based)
8		TAZ_REG_00	Regional TAZ number (SERPM6 - 2000 Based)
9,25,41,52,60		COUNTY,CNTYSCH,Cnty_Zd1B,Cnty_Zd2,CntyWlk	County number (1=Palm Beach, 2=Broward, 3=Miami-Dade)
12	School File Data	EL_TAZ_YY	Grade (public) school TAZ_MPO assigned to students living in the TAZ_MPO in field 4
13		MD_TAZ_YY	Middle (public) school TAZ_MPO assigned to students living in the TAZ_MPO in field 4
14		HI_TAZ_YY	High (public) school TAZ_MPO assigned to students living in the TAZ_MPO in field 4
15		EL_ENRL_YY	Enrollment for grade (public) school indicated in field 4
16		MD_ENRL_YY	Enrollment for middle (public) school indicated in field 4
17		HI_ENRL_YY	Enrollment for high (public) school indicated in field 4
18		PRVENRL_YY	Private school enrollment at schools (NOT College & University) indicated in field 4
19		CU_ENRL_YY	College & Universityl enrollments indicated in field 4
20		ELEMTR	School trip rate (override DEFAULT) for students enrolled in grade (public) school indicated in field 4
21		MIDTR	School trip rate (override DEFAULT) for students enrolled in middle (public) school indicated in field 4
22		HIGHTR	School trip rate (override DEFAULT) for students enrolled in high (public) school indicated in field 4
23		PRIVTR	School trip rate (override DEFAULT) for students enrolled in private school indicated in field 4
24		COLUNVTR	School trip rate (override DEFAULT) for students enrolled in college & University indicated in field 4
28	ZDATA1B File Data	REFTZ_YY	MPO reference TAZ number
29		HHC0_YY	Households without children (<18 years age)
30		HHC1_YY	Households with children
31		VC0_YY	Vehicles in households without children category
32		VC1_YY	Vehicles in households with children category
33		WC0_YY	Workers in households without children category
34		WC1_YY	Workers in households with children category
35		PC0_YY	Persons in households without children category
36		PC1_YY	Persons in households with children category
37		HMR_YY	Total occupied hotel/motel rooms
38		TD_YY	Transit districts (1=MD CBD, 2=BO CBD, 3=PB CBD, 4=MD Other, 5=BO Other, 6=PB Other)

Field		Name	Description
39		JEFFDIST	User Specified Districts (1-13=Miami-Dade,14=Broward,15=Palm Beach) to compare model vs. CTPP trips
40		POP_YY	Total population
44	ZDATA2 File Data	CARD2	"2"- Card Type for Employment Data
45	ZDATA2 File Data	SEC_YY	ZDATA2's sector number
46	ZDATA2 File Data	INDE_YY	Industrial employment (SIC=1-39 & NAICS=11,21,23,31-33)
47	ZDATA2 File Data	COME_YY	Commercial employment (SIC=50-59 & NAICS=42,44-45,722)
48	ZDATA2 File Data	SVCE_YY	Service employment (SIC=40-49, 60-99 & NAICS=22,48-49,51-56,61,62,71,721,81,99 & Govt Emp)
49	ZDATA2 File Data	TOTE_YY	Total employment (SIC=1-99 & NAICS=11-99 & Govt Emp)
50	ZDATA2 File Data	SPK_YY	Short-term (3-hour) parking cost (in cents)
51	ZDATA2 File Data	LPK_YY	Long-term (9-hour) parking cost (in cents)
54		EXC_SQ_TFT	Non-overlapping exceptional areas (water, parks and roadway right-of-way) in 1/10 square feet
55		NET_SQ_TFT	Net areas (gross minus exceptional) in 1/10 square feet
56		PCT_LEFT	Percentages of usable (Net) gross areas
59		WlkIndx_YY	Non-motorized Friendliness Index (0-3)
61		ARSM_NET	Net area in square miles
62		ARACRS_NET	Net area in acres
63		REGTAZN_YY	Regional zone centroid number extracted from network
64		REGTAZX_YY	X-coordinate of zone centroids
65		REGTAZY_YY	Y-coordinate of zone centroids
66		SPOP_YY	Total population of 1-mile radius of the TAZ centroid
67		SEMP_YY	Total employment of 1-mile radius of the TAZ centroid
68		SACRES_YY	Areas in acres of 1-mile radius of the TAZ centroid
69		SADEN_YY	Activity density of 1-mile radius of the TAZ centroid
70		SAT1_YY	Activity based density area types (1=CBD, 2=High-Density-NonCBD, 3=Medium-Density-NonCBD, 4=Low-Density-NonCBD, 5=Very-Low-Density-NonCBD)
71		DISTRICT	User Specified Districts (1-20=Palm Beach,21-35=Broward,51-66=Miami-Dade) to compare model vs. CTPP trips
72		SPGEN	Special Generator Indicator (1=yes, 0=no)

APPENDIX I-M:
Model Plots

APPENDIX I-M1:
American Dream Miami 2020 Project Land Use on 2020 network for CDMP & Zoning (Plots with Project Percentage Distribution)



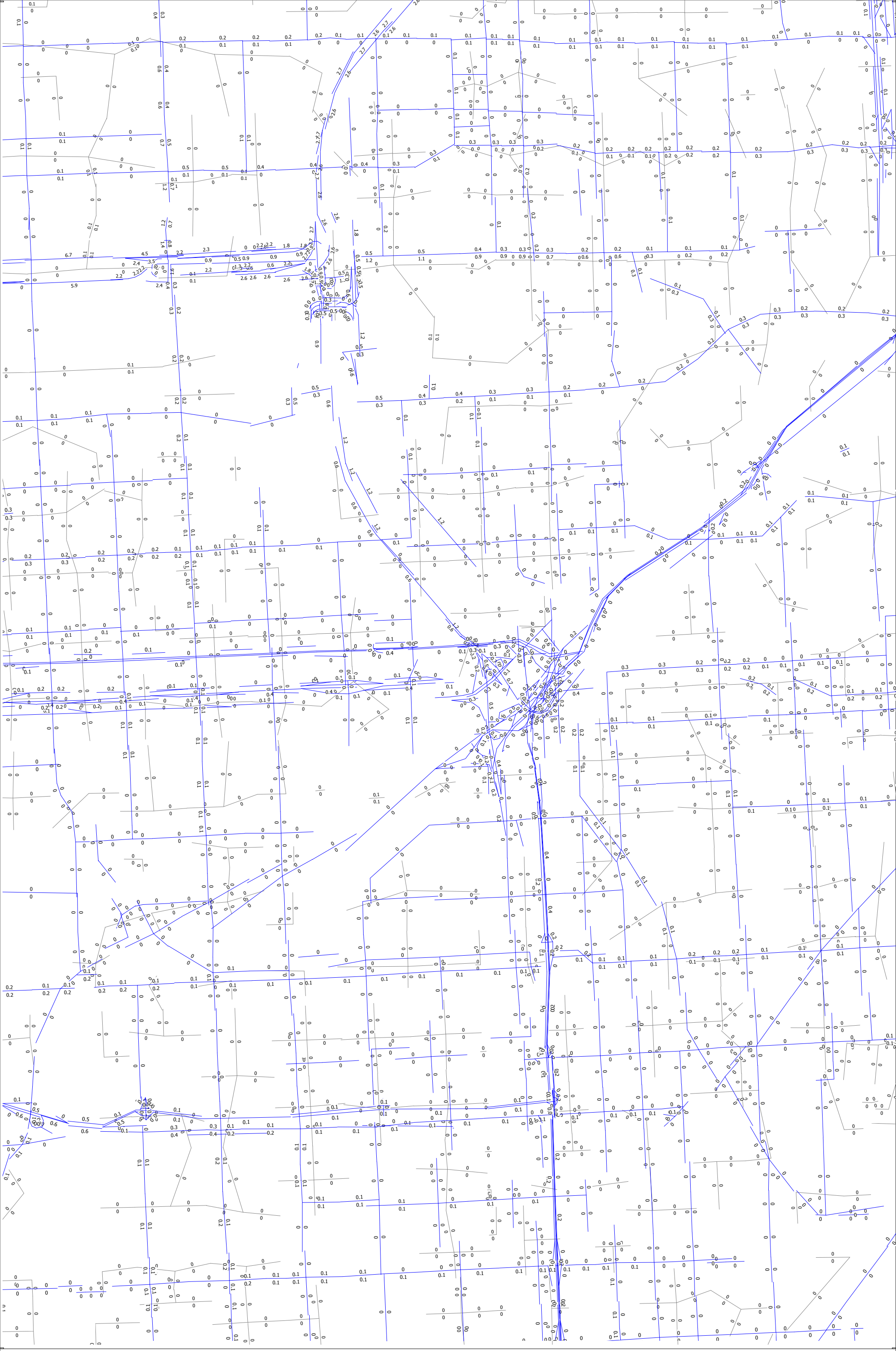
2020 LU on 2020 Network for CDMP & Zoning - ADM (NorthWest)

(Licensed to Leftwich Consulting Engineers)

2020 LU on 2020 Network for CDMP & Zoning - ADM (NorthMiddle)

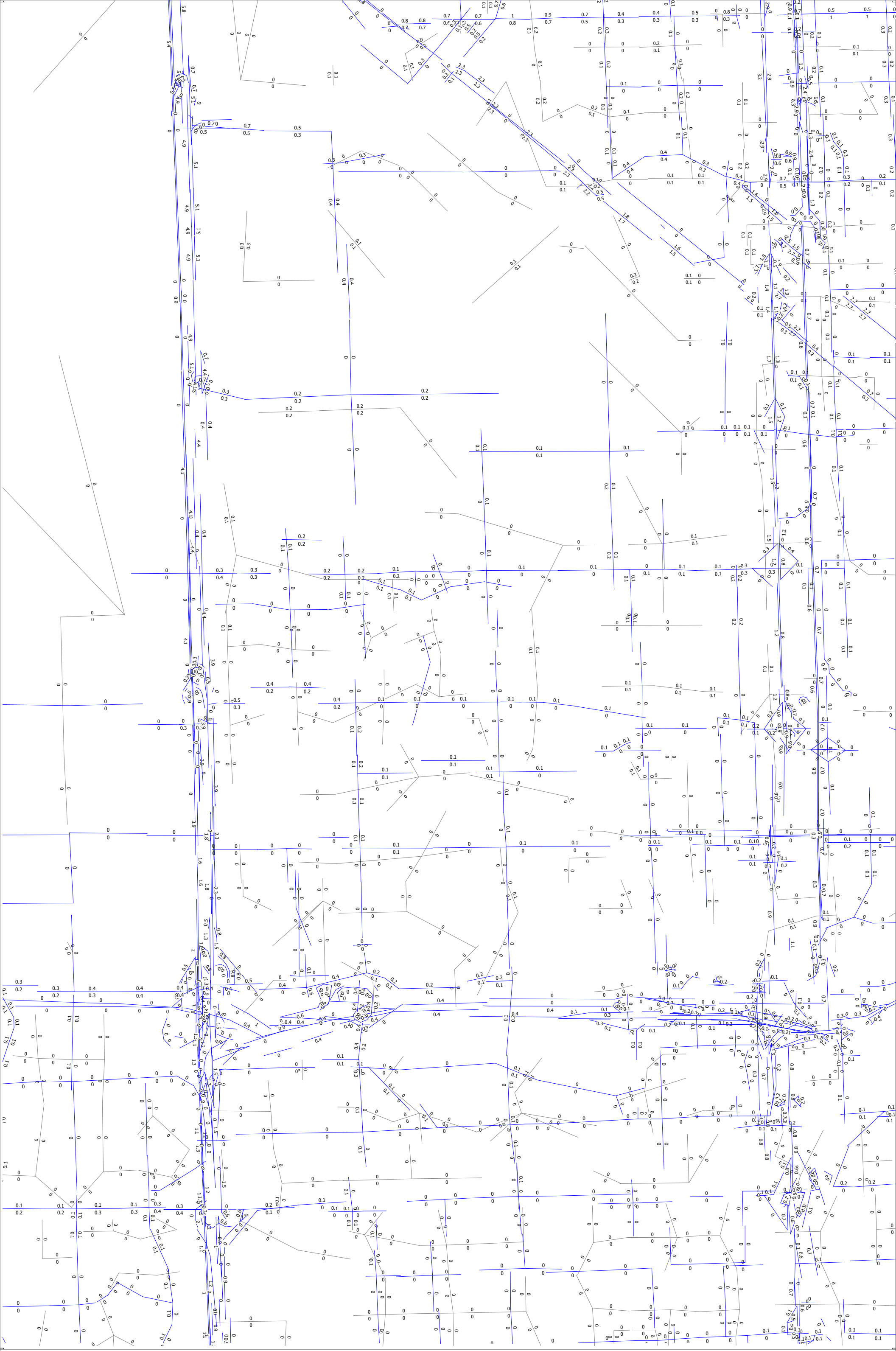
cube

(Licensed to Leftwich Consulting Engineers)



2020 LU on 2020 Network for CDMP & Zoning - ADM (NorthEast)

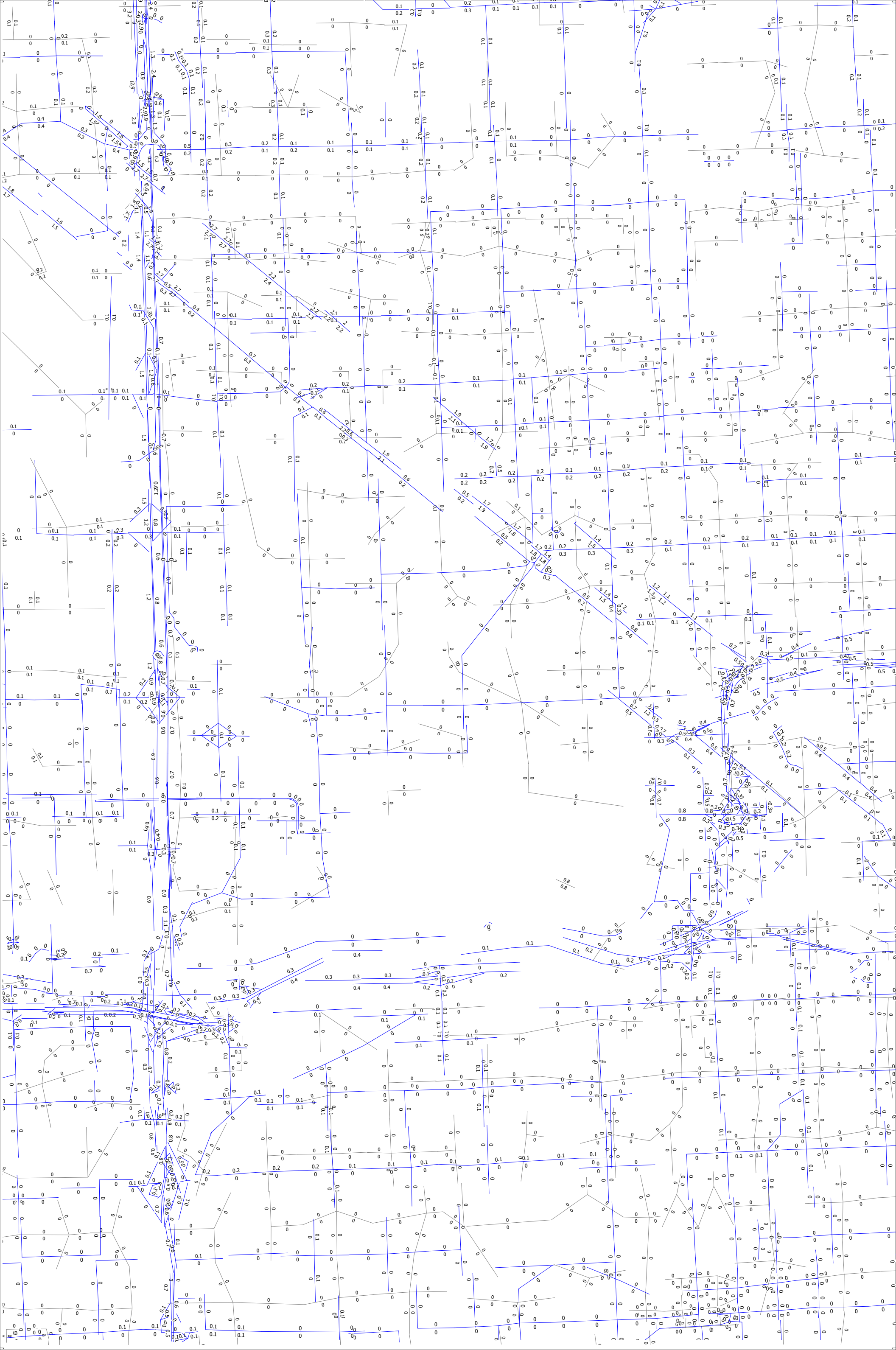
(Licensed to Leftwich Consulting Engineers)



2020 LU on 2020 Network for CDMP & Zoning - ADM (SouthWest)

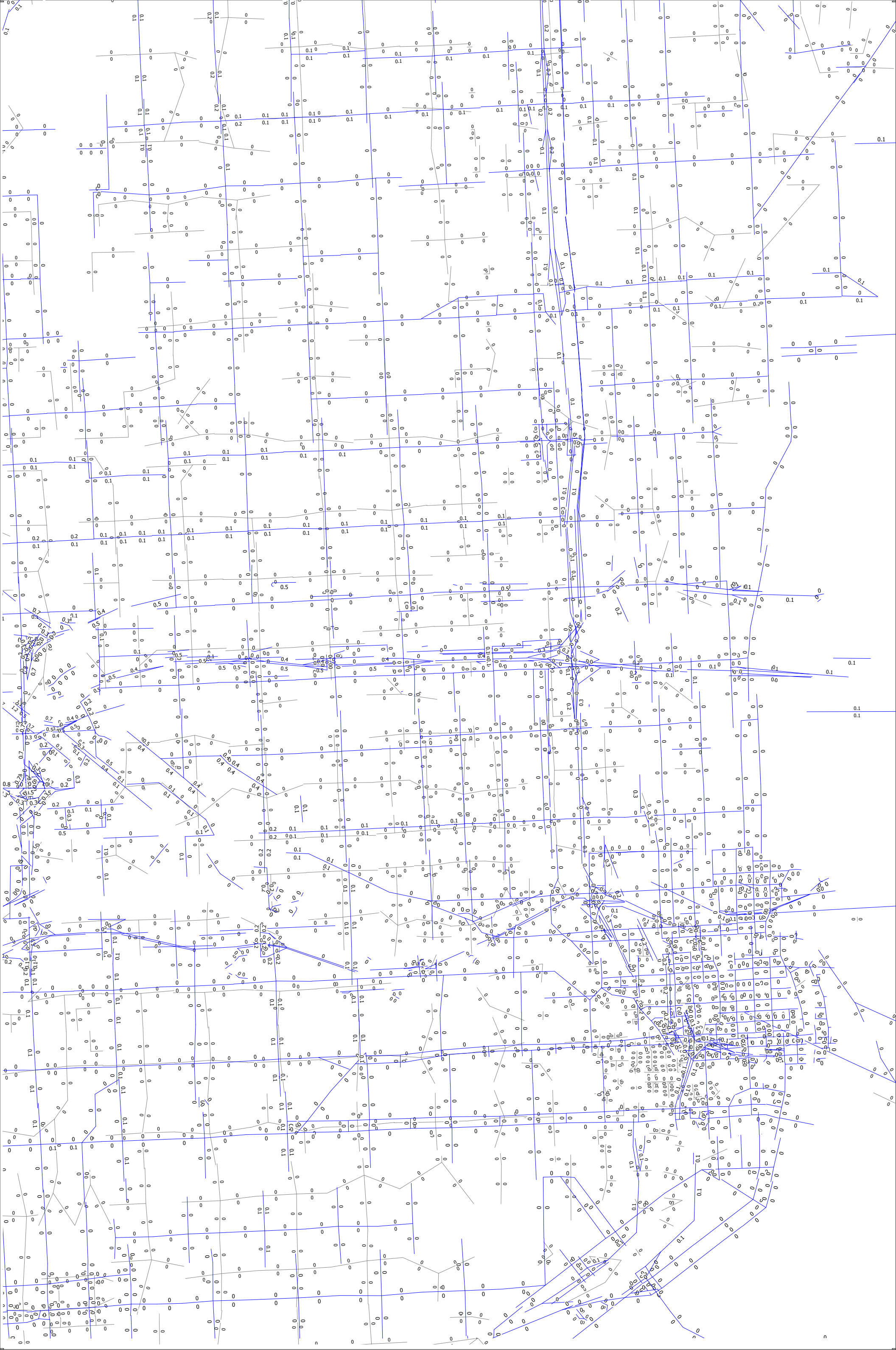
cube

(Licensed to Leftwich Consulting Engineers)



2020 LU on 2020 Network for CDMP & Zoning - ADM (SouthMiddle)

(Licensed to Leftwich Consulting Engineers)

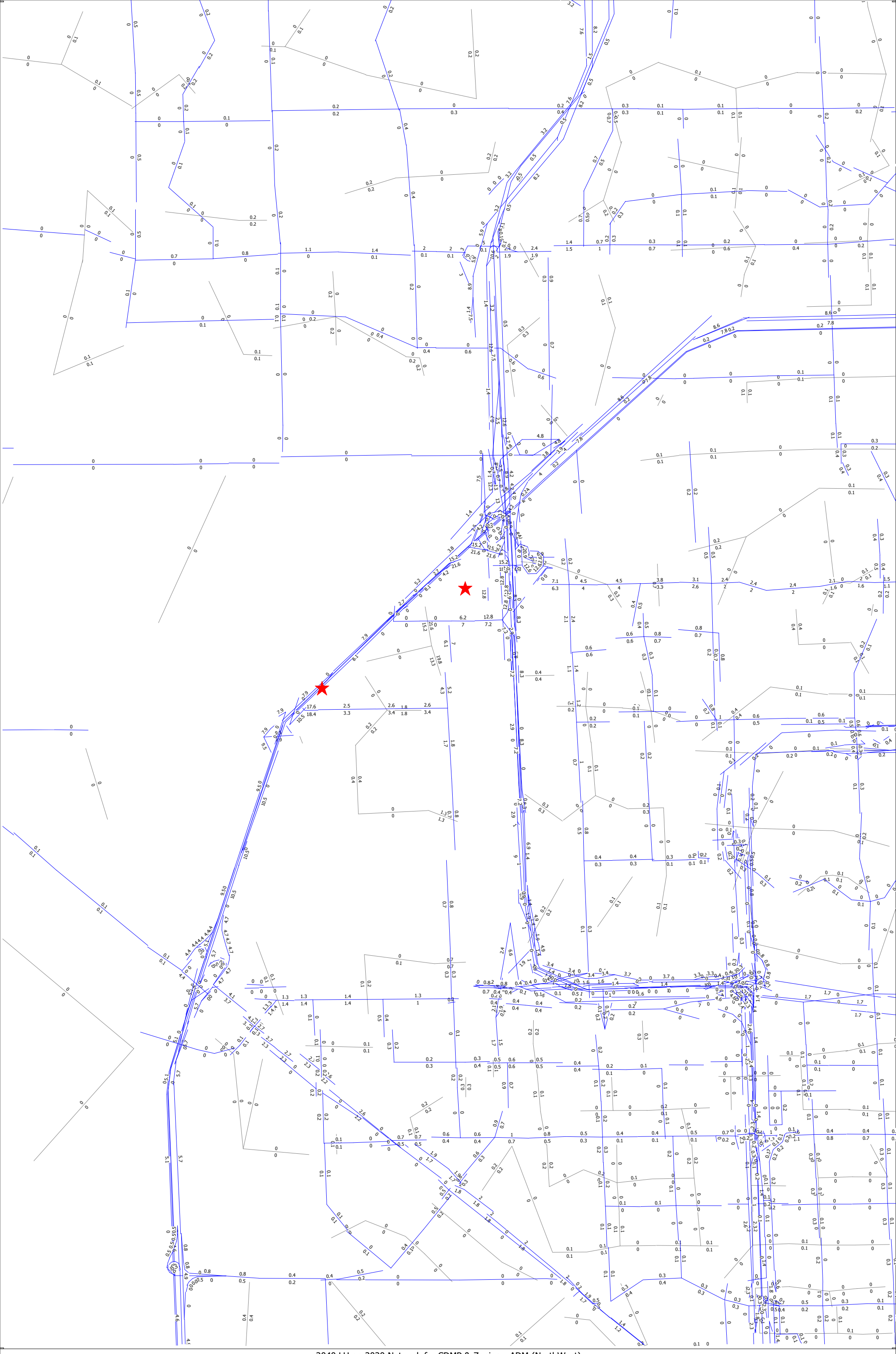


2020 LU on 2020 Network for CDMP & Zoning - ADM (SouthEast)

cube

(Licensed to Leftwich Consulting Engineers)

APPENDIX I-M2:
American Dream Miami 2040 Project Land Use on 2020 network for Zoning (Plots with Project Percentage Distribution)



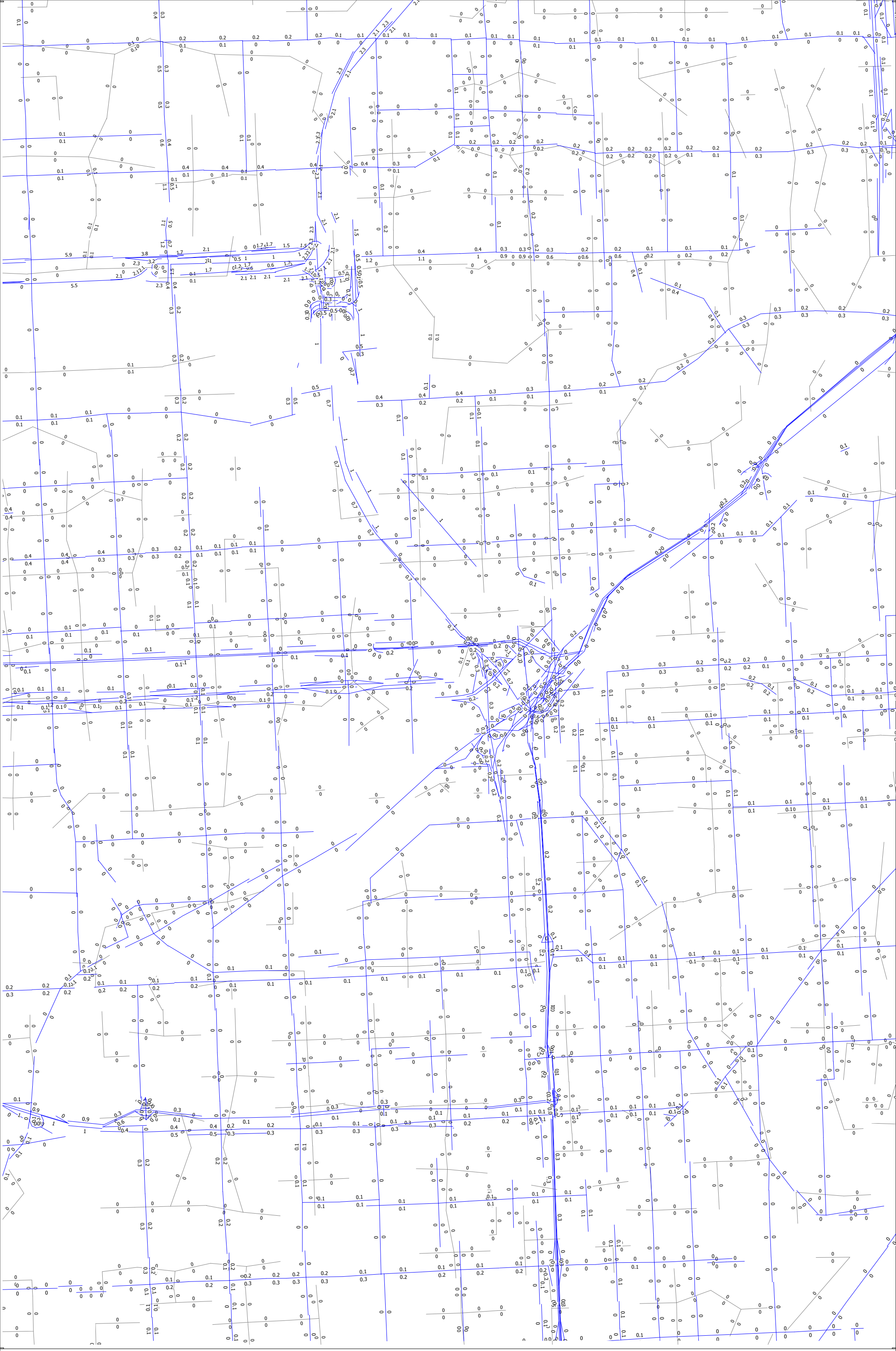
2040 LU on 2020 Network for CDMP & Zoning - ADM (NorthWest)

(Licensed to Leftwich Consulting Engineers)

2040 LU on 2020 Network for CDMP & Zoning - ADM (NorthMiddle)

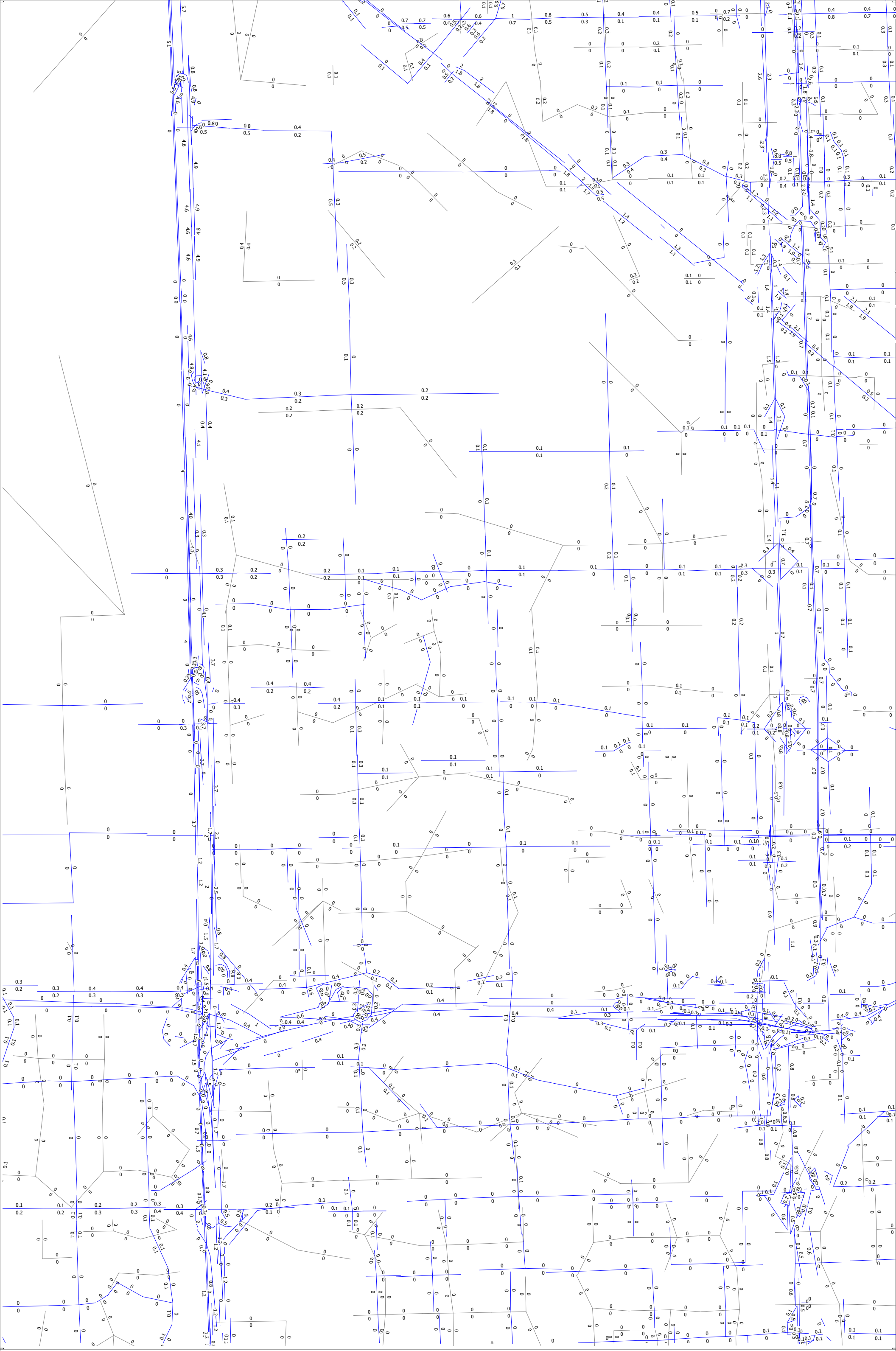
cube

(Licensed to Leftwich Consulting Engineers)



2040 LU on 2020 Network for CDMP & Zoning - ADM (NorthEast)

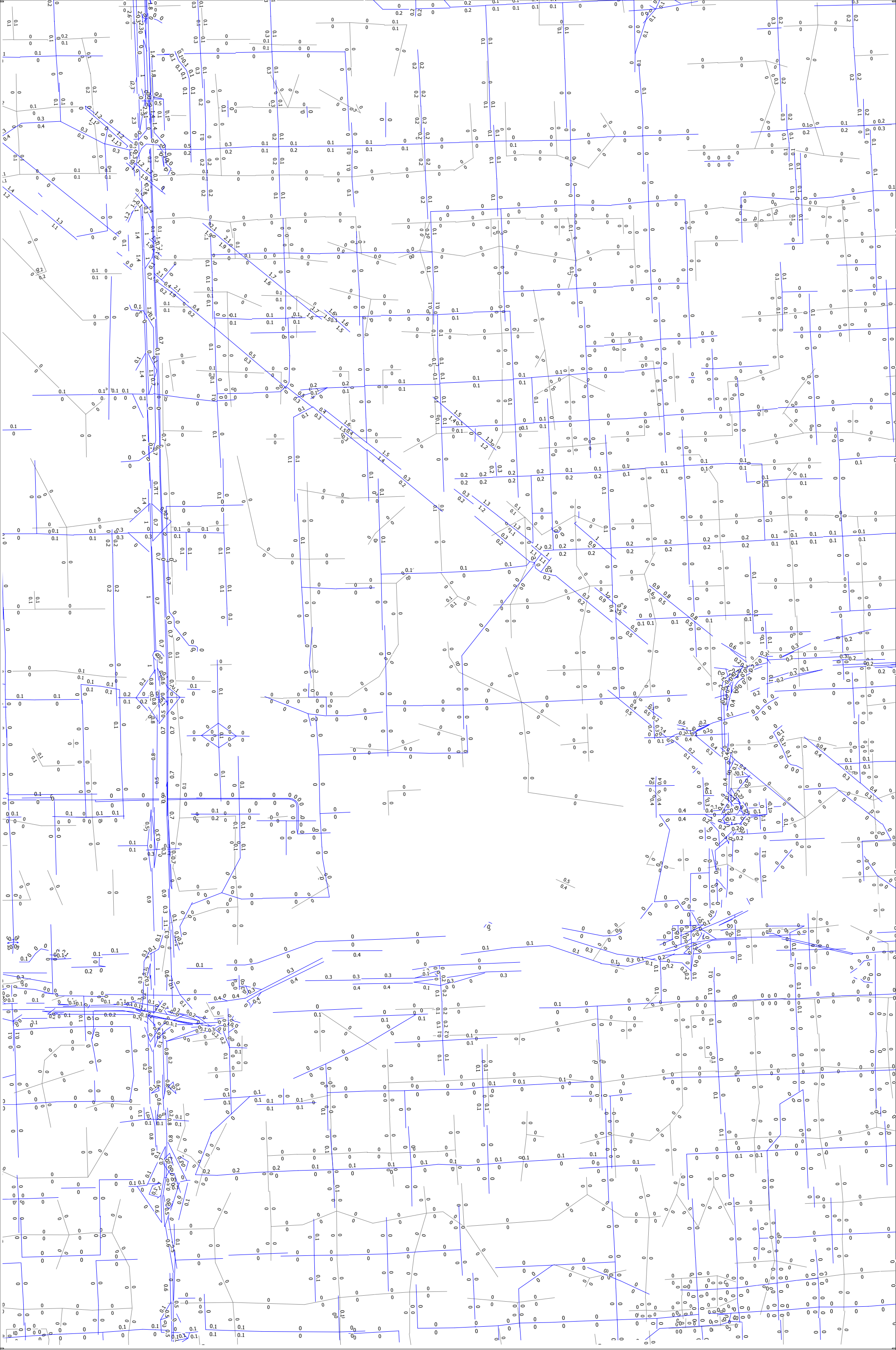
(Licensed to Leftwich Consulting Engineers)



2040 LU on 2020 Network for CDMP & Zoning - ADM (SouthWest)

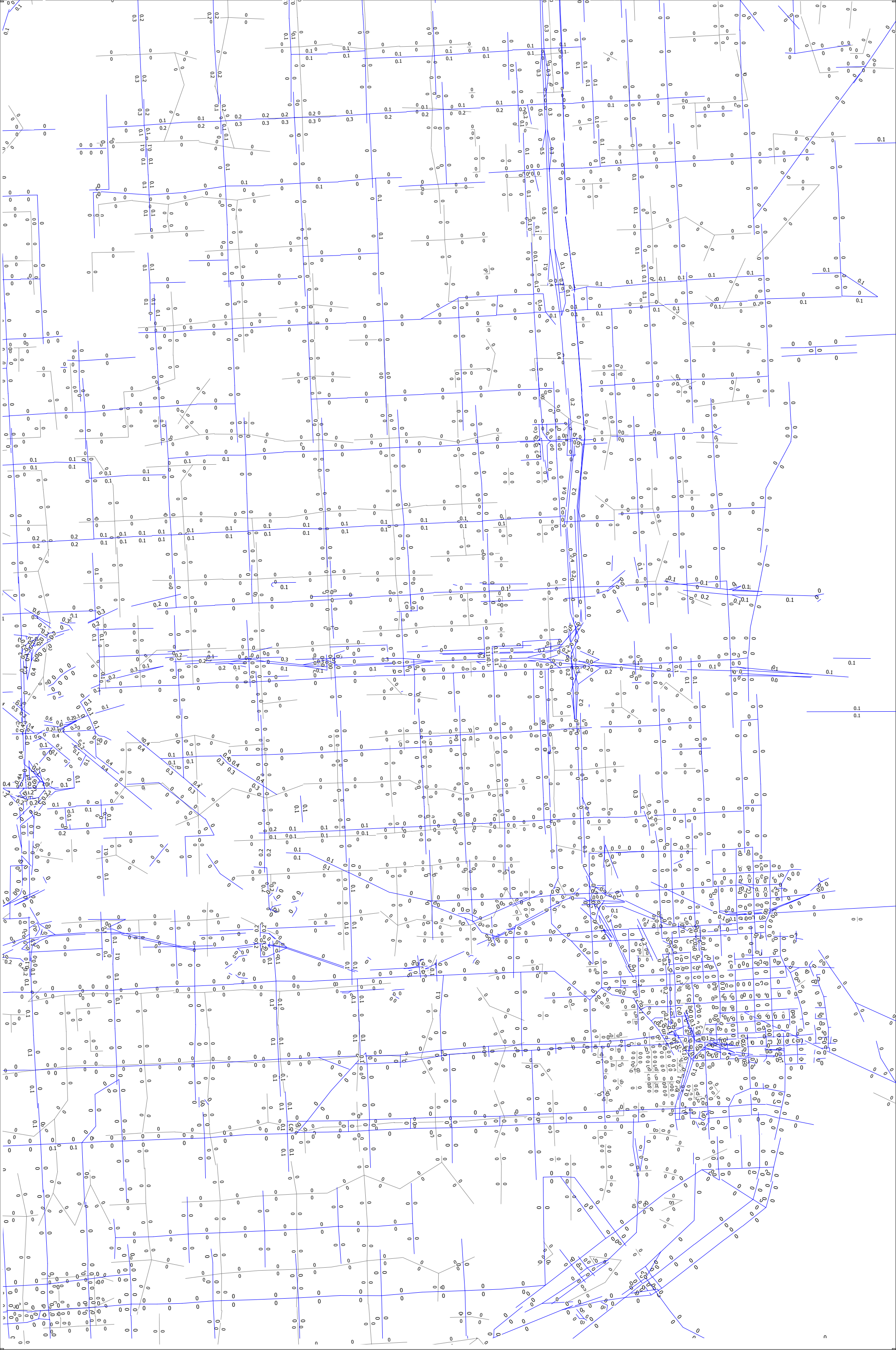
cube

(Licensed to Leftwich Consulting Engineers)



2040 LU on 2020 Network for CDMP & Zoning - ADM (SouthMiddle)

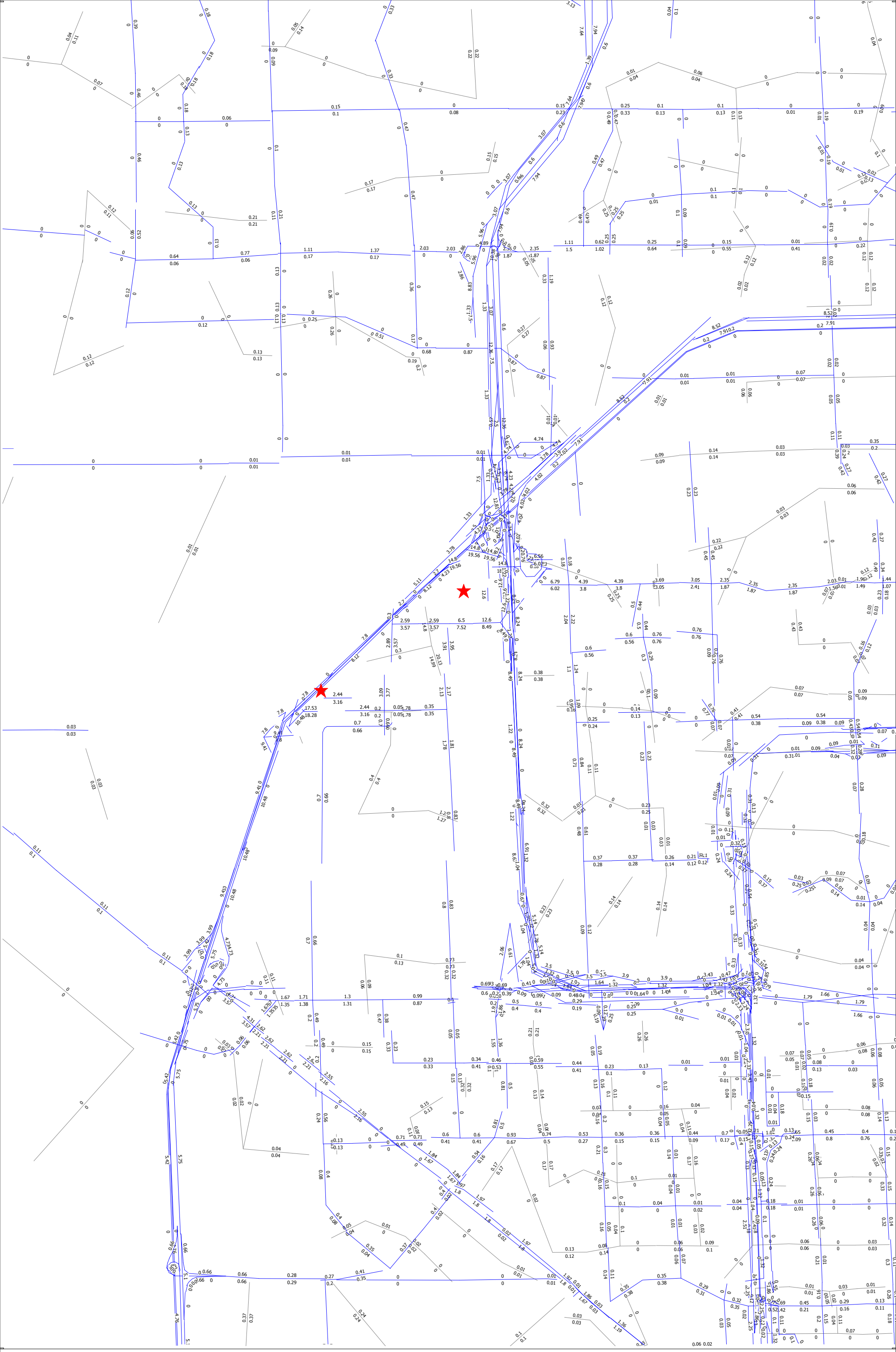
(Licensed to Leftwich Consulting Engineers)



2040 LU on 2020 Network for CDMP & Zoning - ADM (SouthEast)

(Licensed to Leftwich Consulting Engineers)

APPENDIX I-M3:
American Dream Miami 2040 Project Land Use on 2040 network for CDMP (Plots with Project Percentage Distribution)



2040 LU on 2040 Network for CDMP - ADM (SouthWest)

(Licensed to Leftwich Consulting Engineers)

2040 LU on 2040 Network for CDMP - ADM (NorthMiddle)

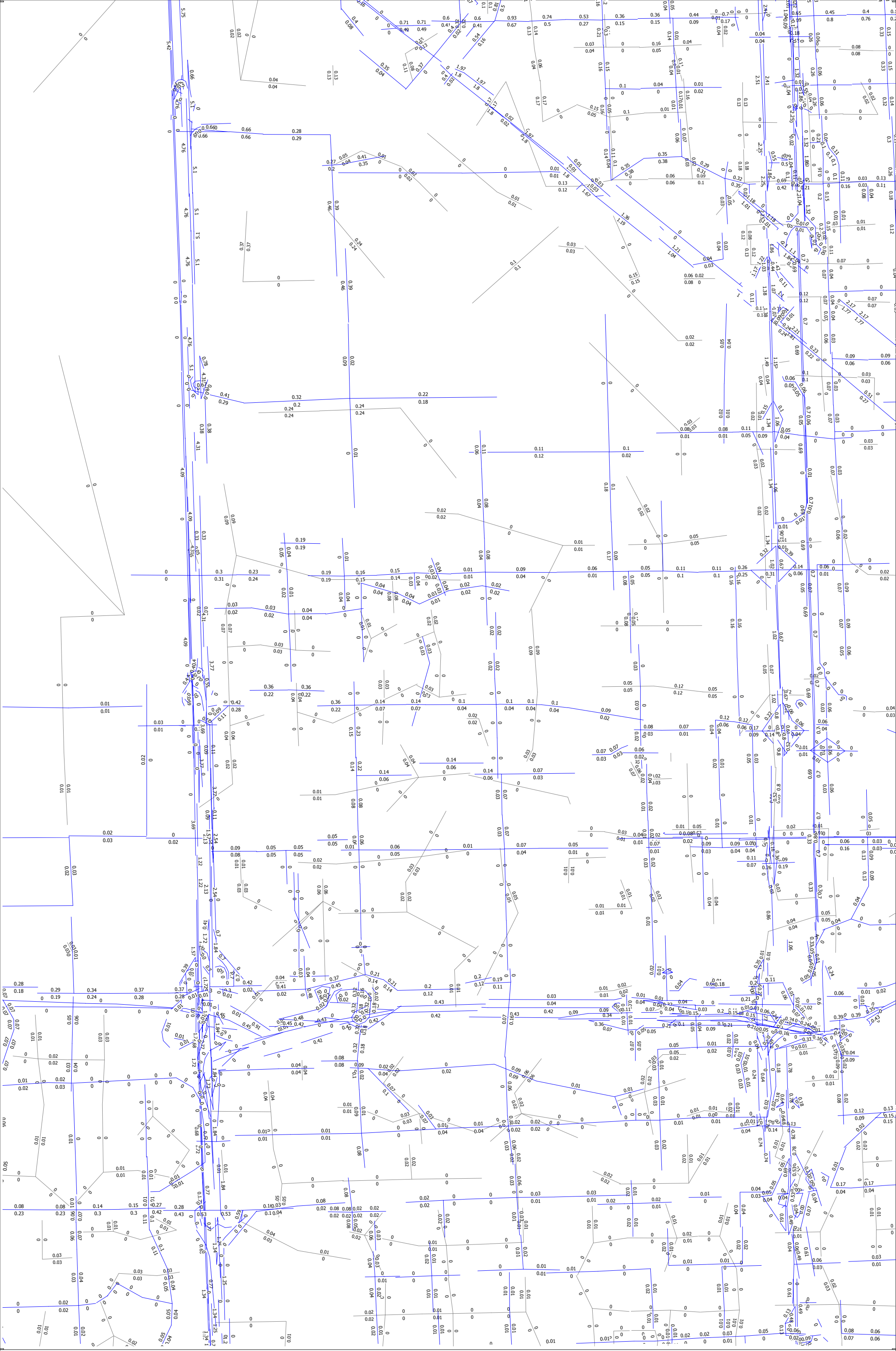
cube

(Licensed to Leftwich Consulting Engineers)

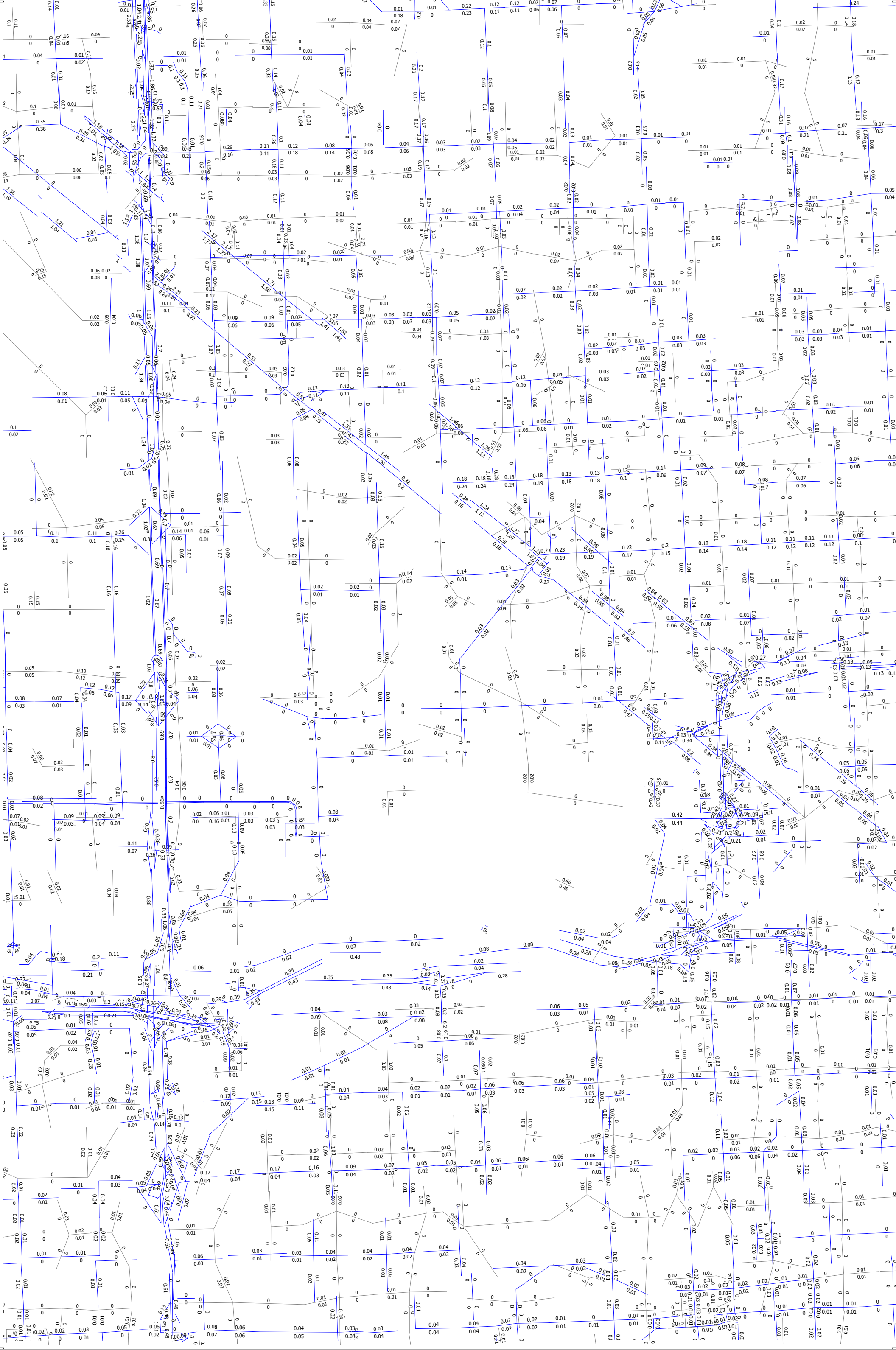
2040 LU on 2040 Network for CDMP - ADM (NorthEast)

cube

(Licensed to Leftwich Consulting Engineers)

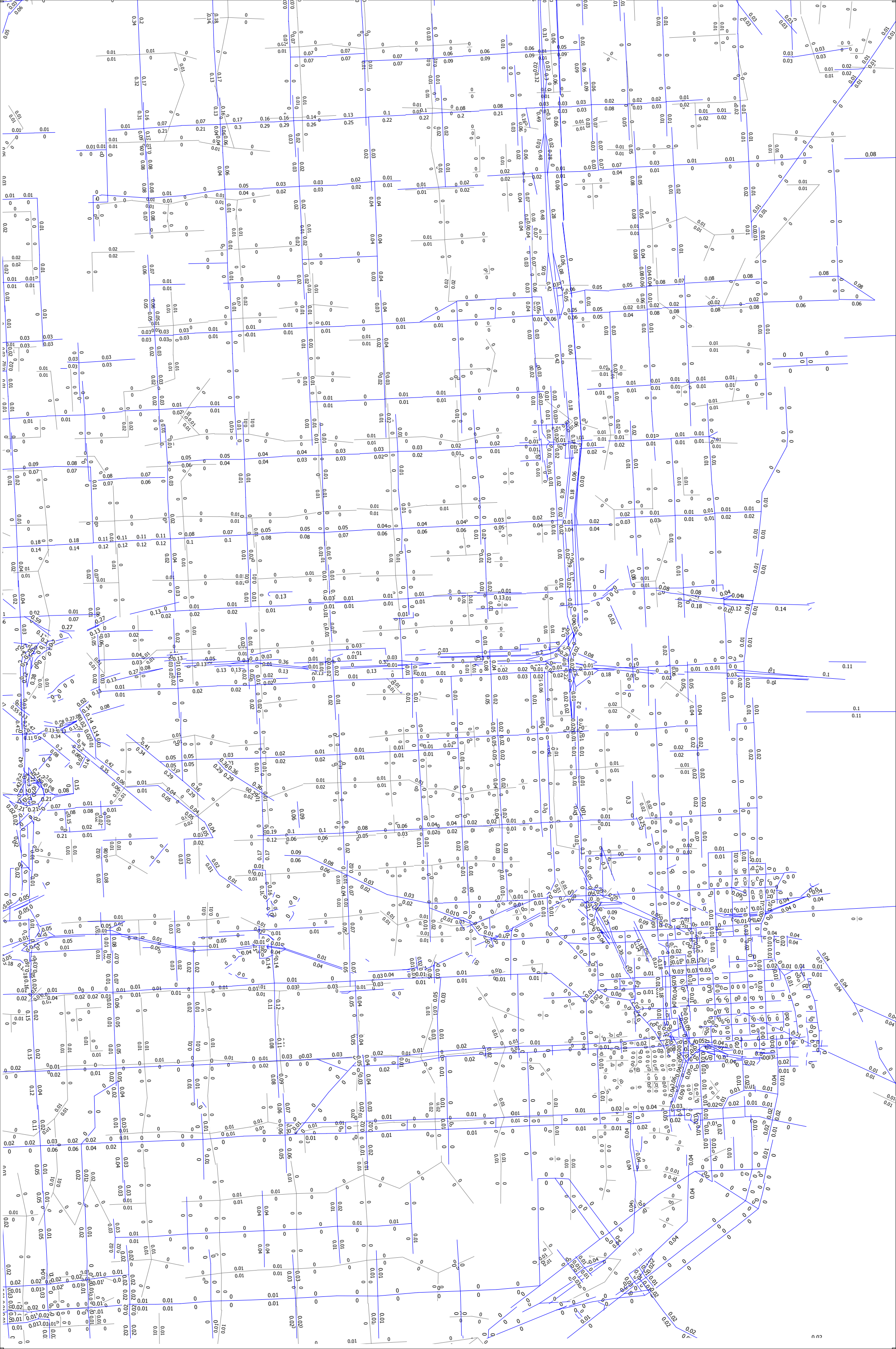


2040 LU on 2040 Network for CDMP - ADM (SouthWest)



2040 LU on 2040 Network for CDMP - ADM (SouthMiddle)

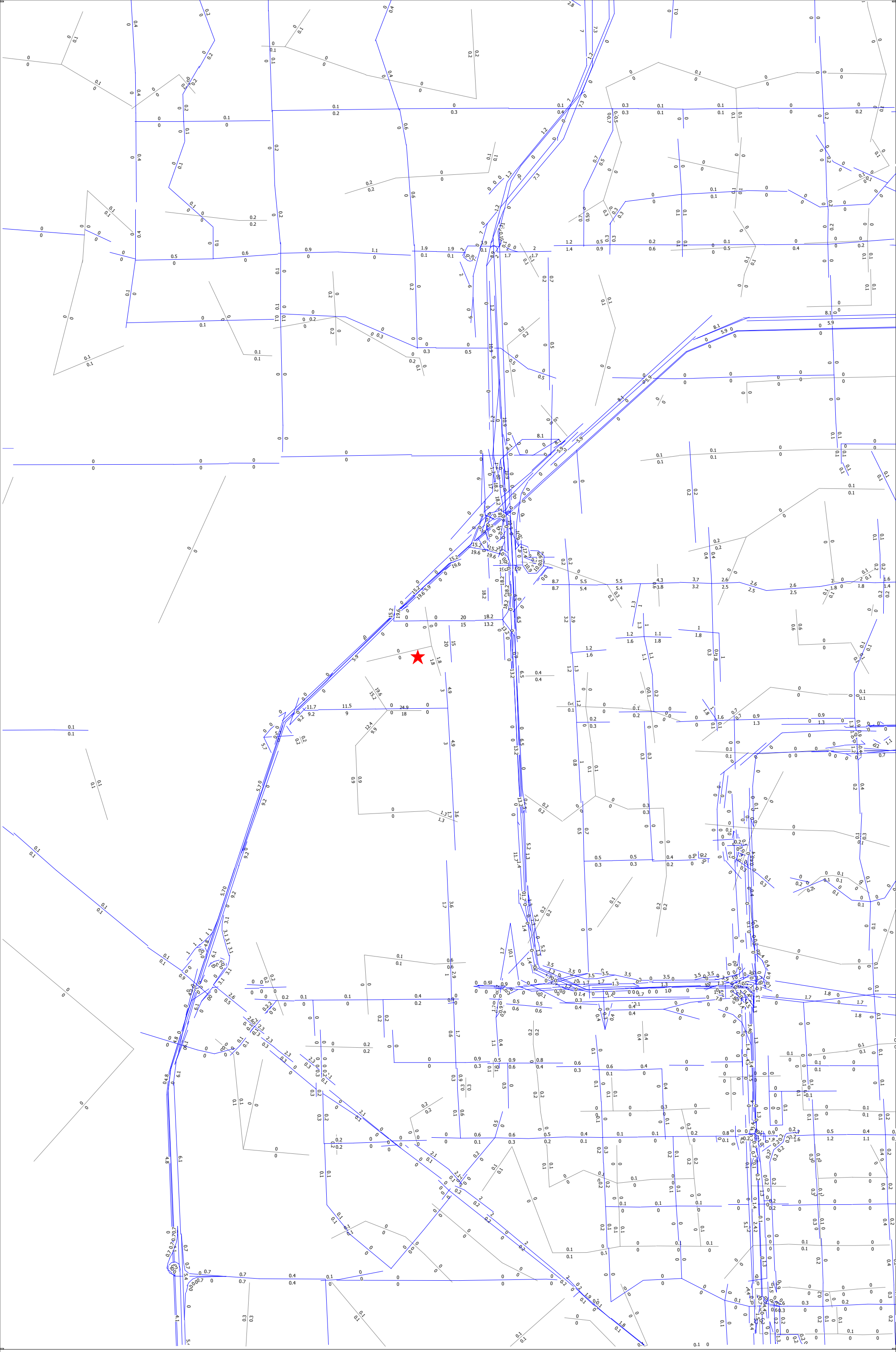
(Licensed to Leftwich Consulting Engineers)



2040 LU on 2040 Network for CDMP - ADM (SouthEast)

(Licensed to Leftwich Consulting Engineers)

APPENDIX I-M4:
Graham 2020 Project Land Use on 2020 network for CDMP & Zoning (Plots with Project Percentage Distribution)



2020 LU on 2020 Network for CDMP & Zoning - Graham (NorthWest)

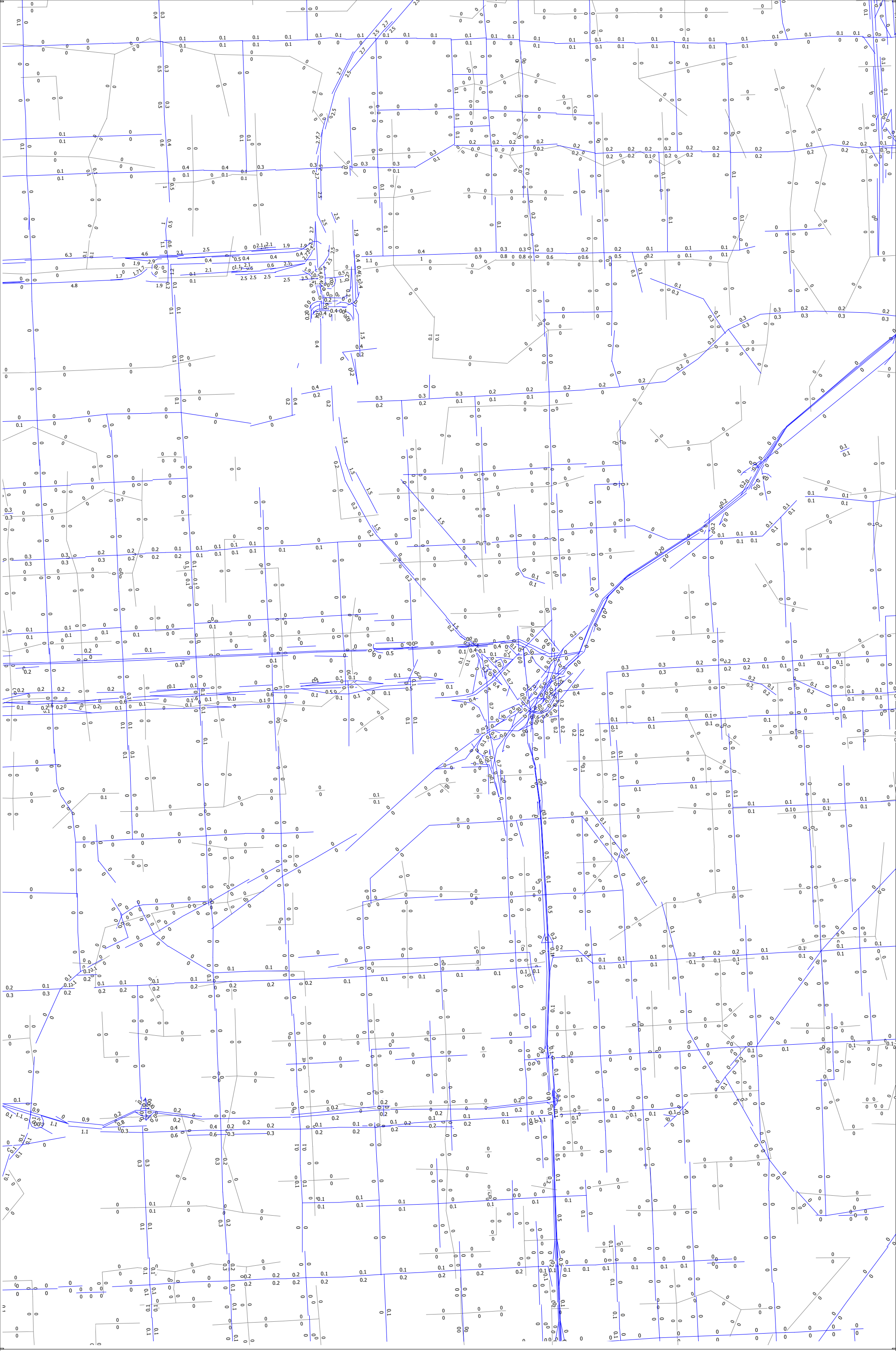
cube

(Licensed to Leftwich Consulting Engineers)

2020 LU on 2020 Network for CDMP & Zoning - Graham (NorthMiddle)

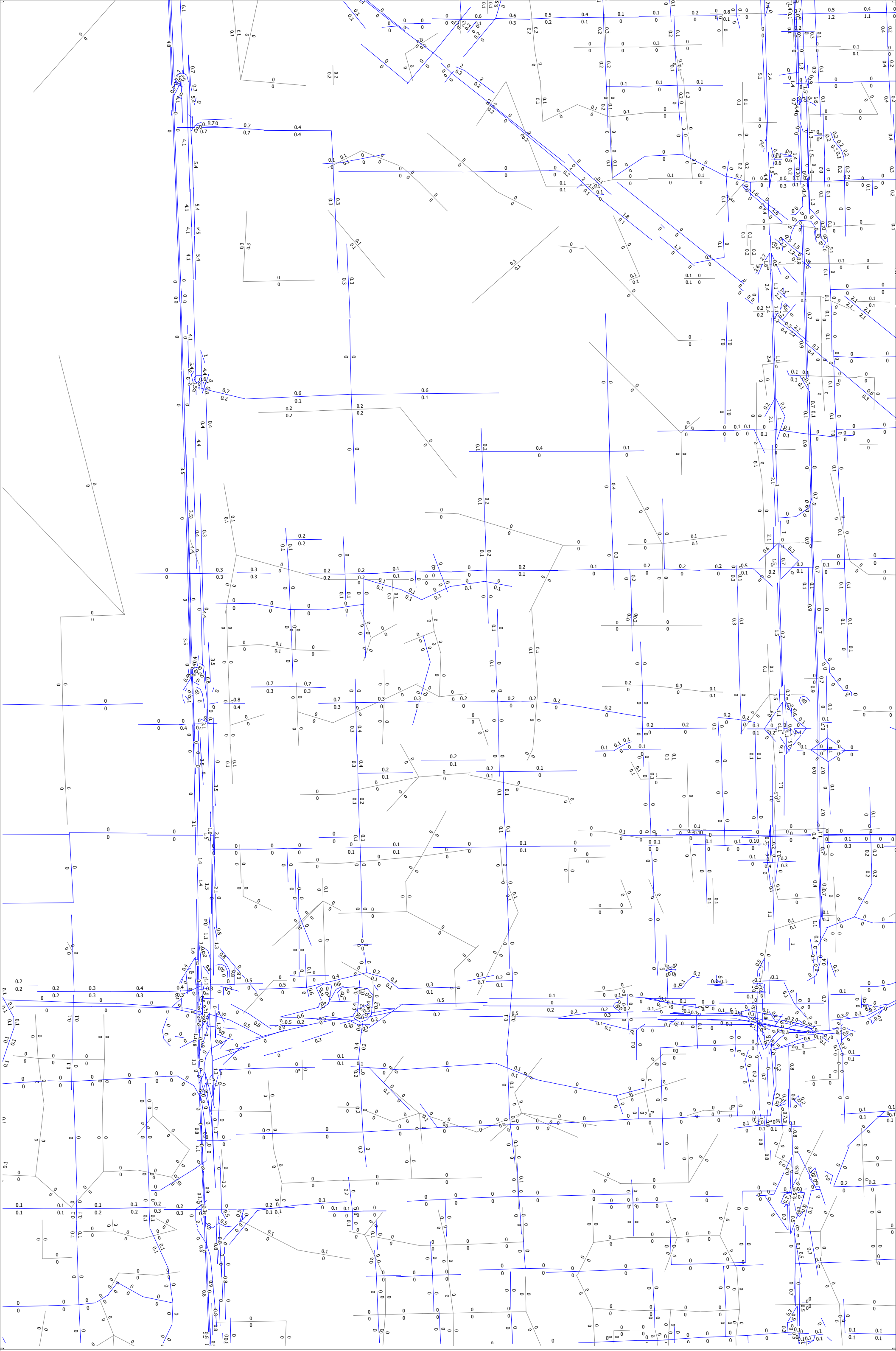
cube

(Licensed to Leftwich Consulting Engineers)



2020 LU on 2020 Network for CDMP & Zoning - Graham (NorthEast)

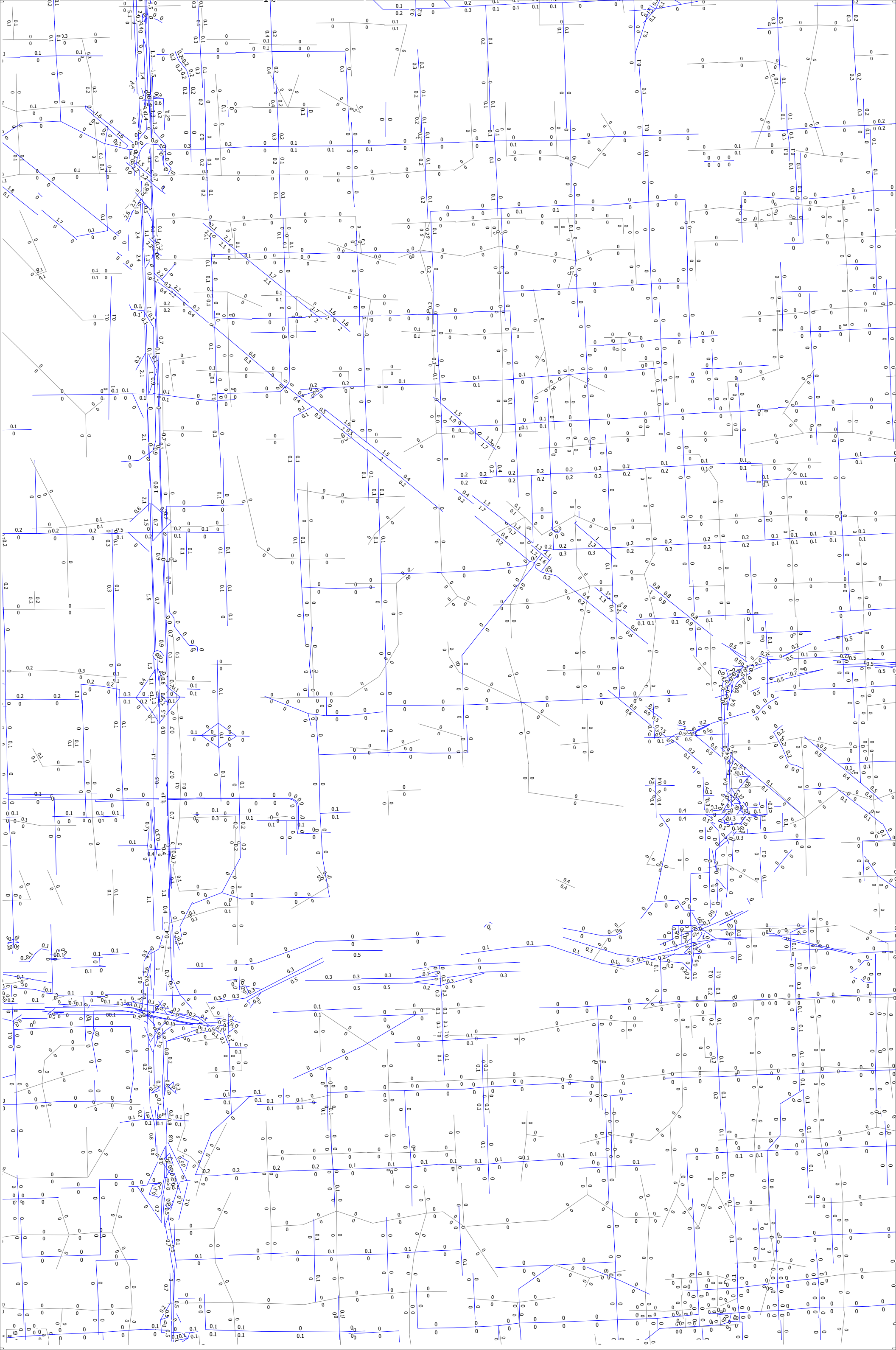
(Licensed to Leftwich Consulting Engineers)



2020 LU on 2020 Network for CDMP & Zoning - Graham (SouthWest)

cube

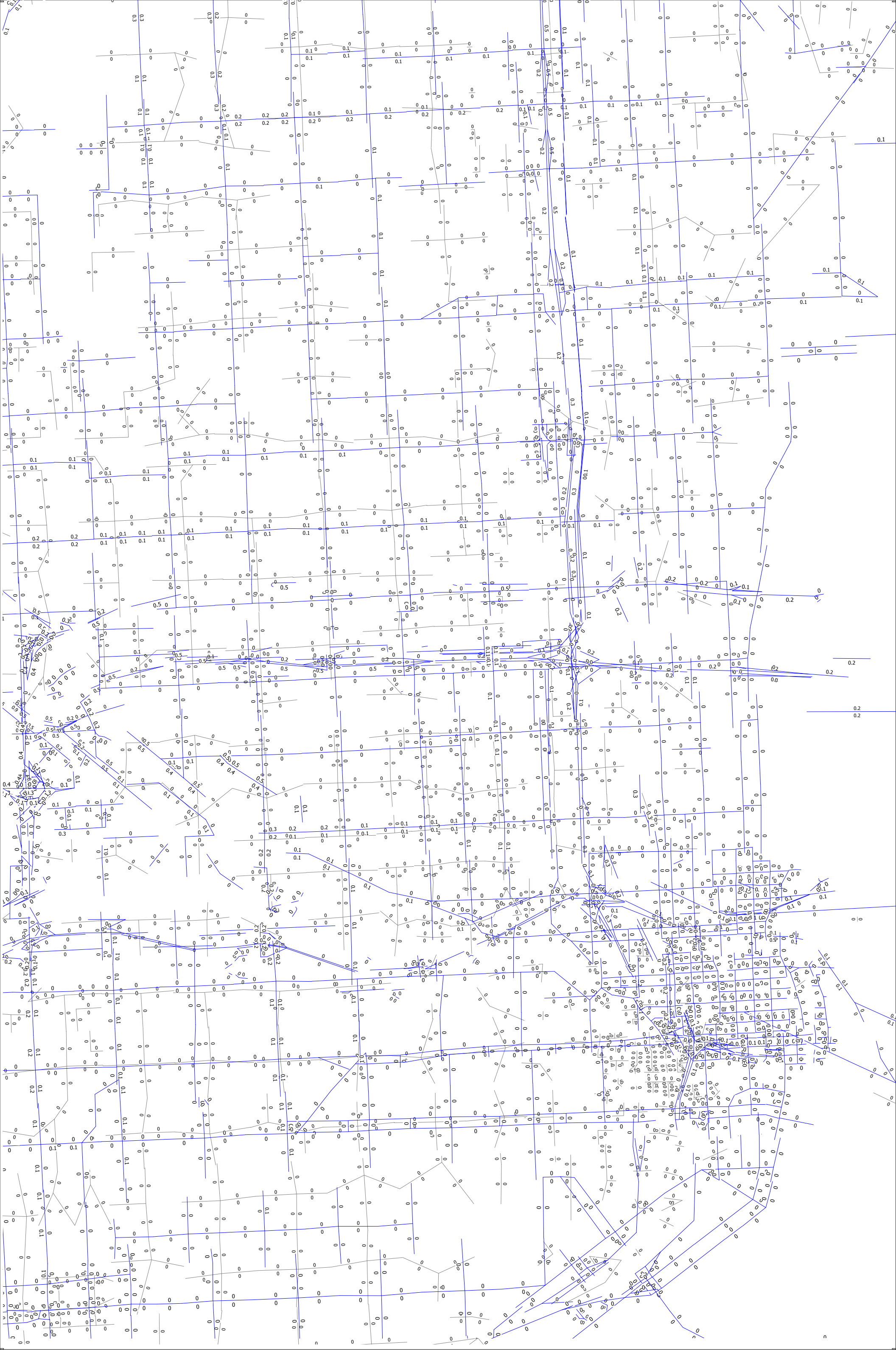
(Licensed to Leftwich Consulting Engineers)



2020 LU on 2020 Network for CDMP & Zoning - Graham (SouthMiddle)

cube

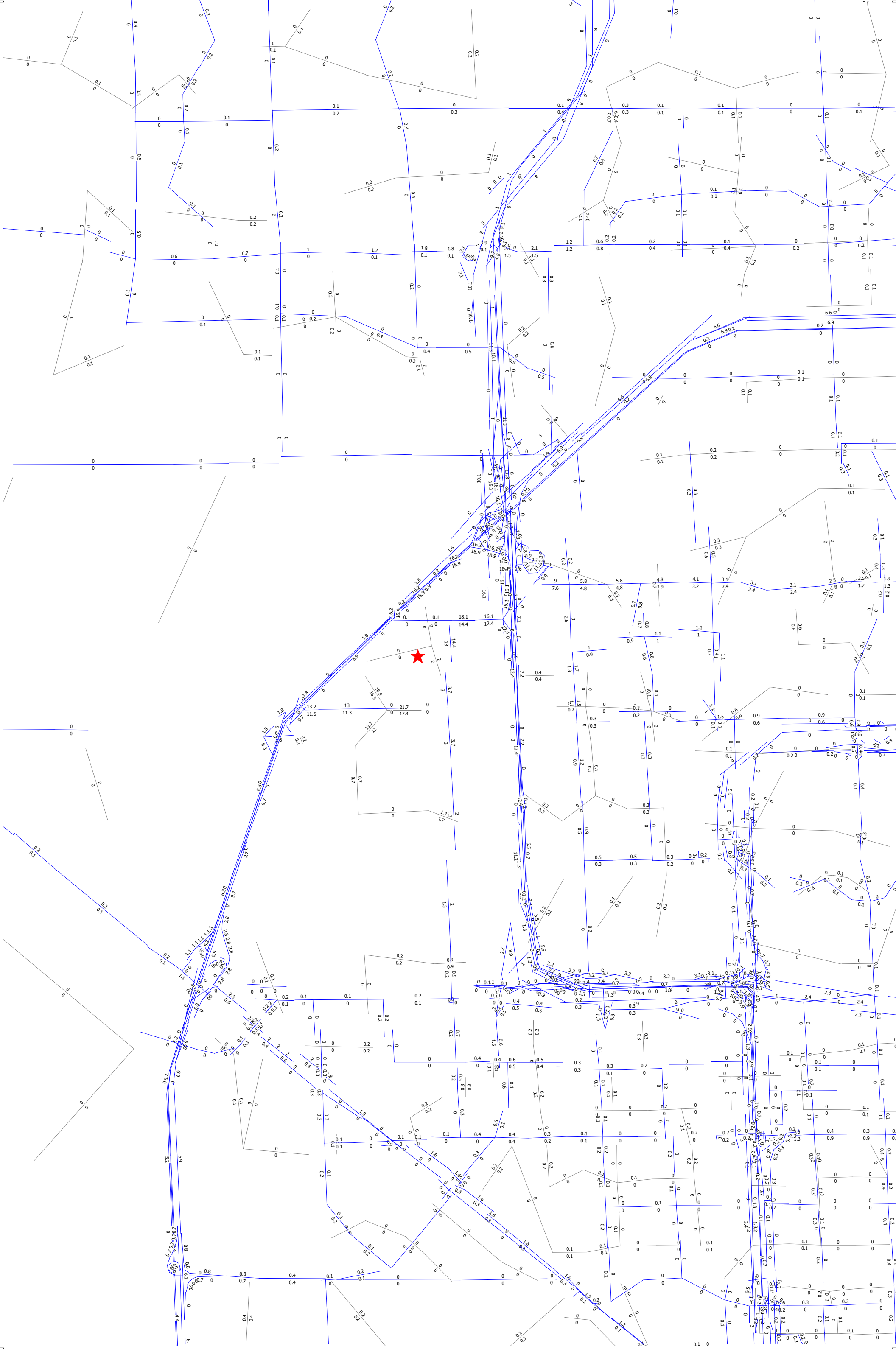
(Licensed to Leftwich Consulting Engineers)



2020 LU on 2020 Network for CDMP & Zoning - Graham (SouthEast)

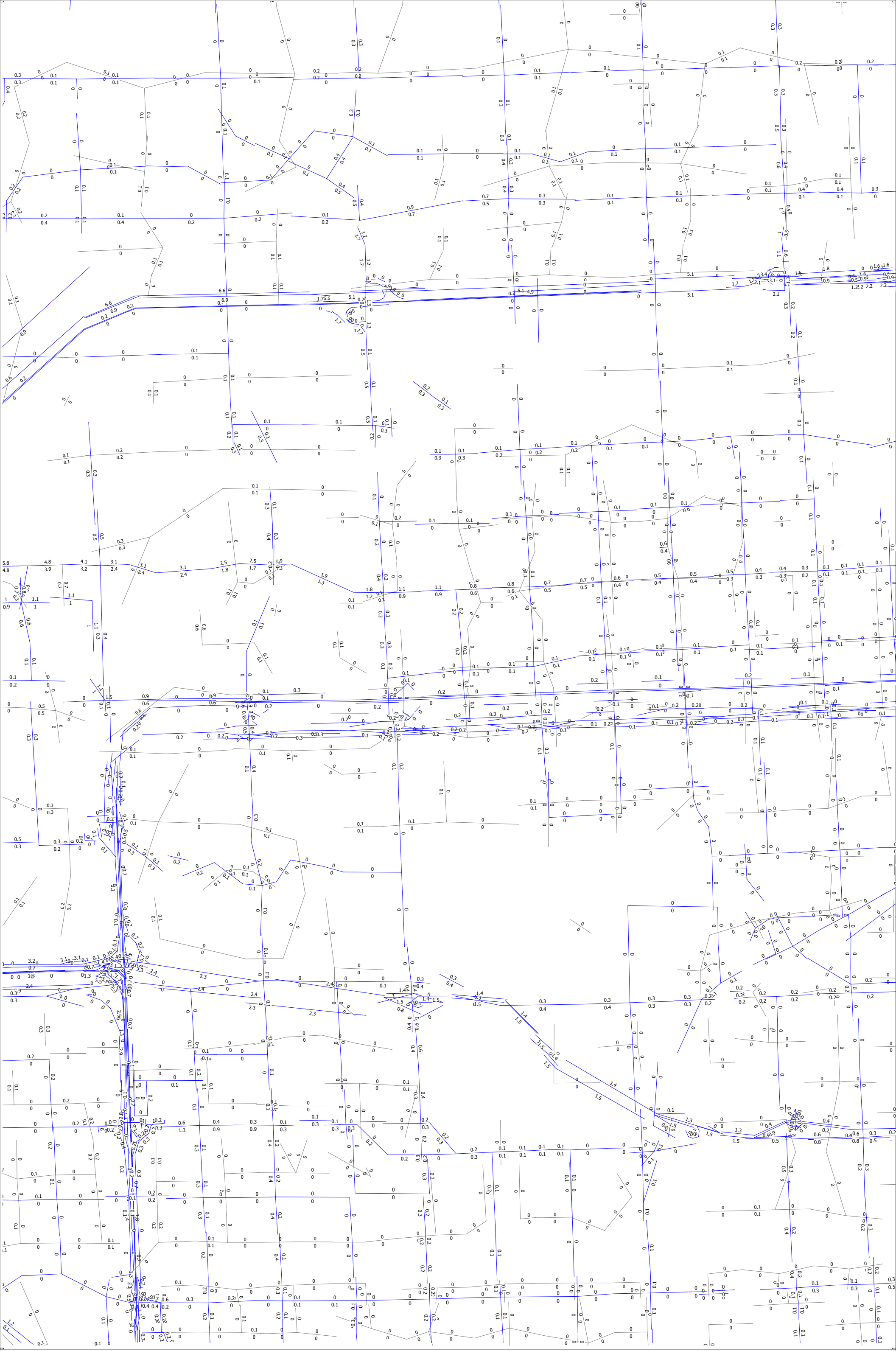
(Licensed to Leftwich Consulting Engineers)

APPENDIX I-M5:
Graham 2040 Project Land Use on 2020 network for Zoning
(Plots with Project Percentage Distribution)



2040 LU on 2020 Network for CDMP & Zoning - Graham (NorthWest)

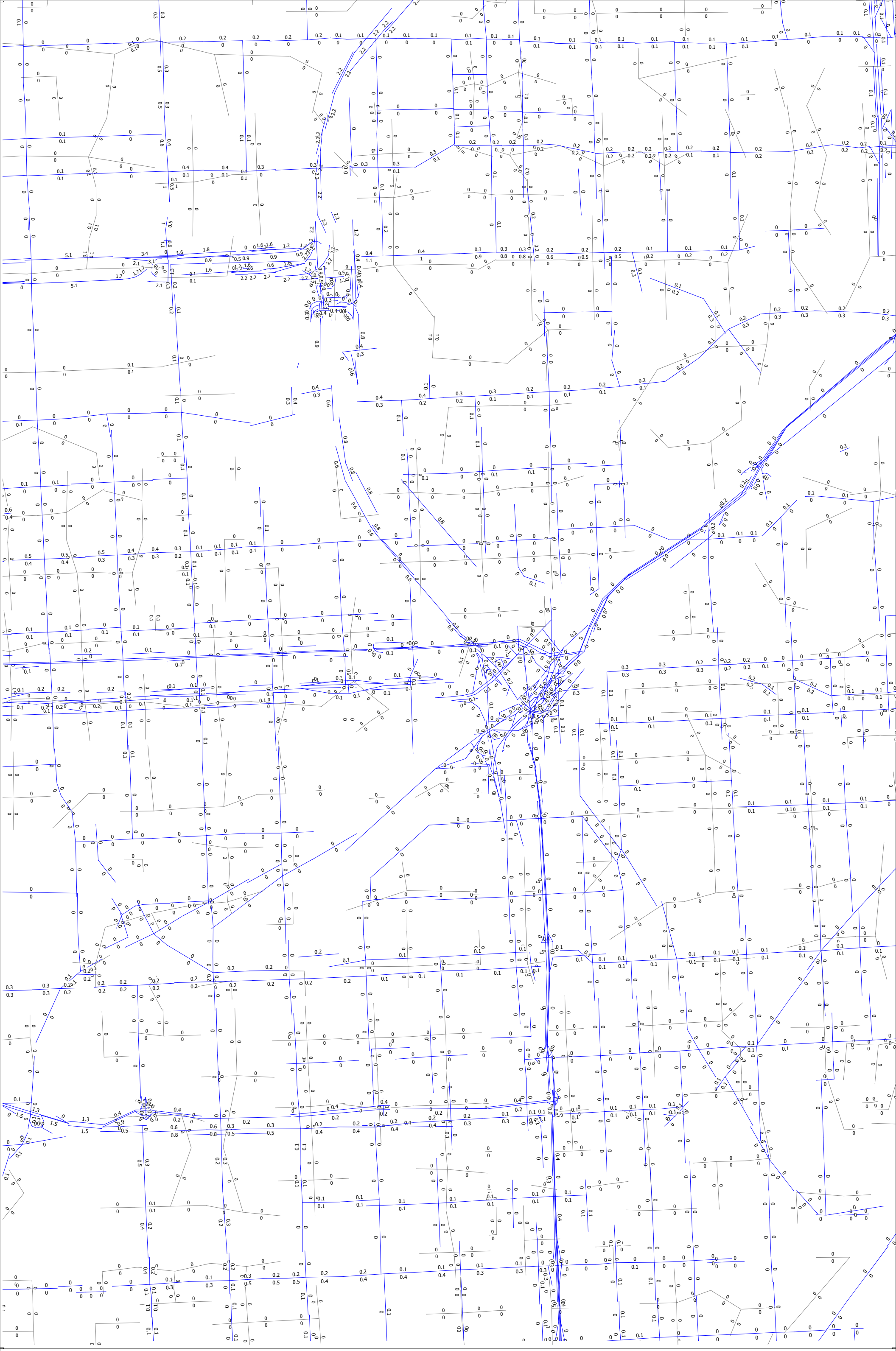
(Licensed to Leftwich Consulting Engineers)



2040 LU on 2020 Network for CDMP & Zoning - Graham (NorthMiddle)

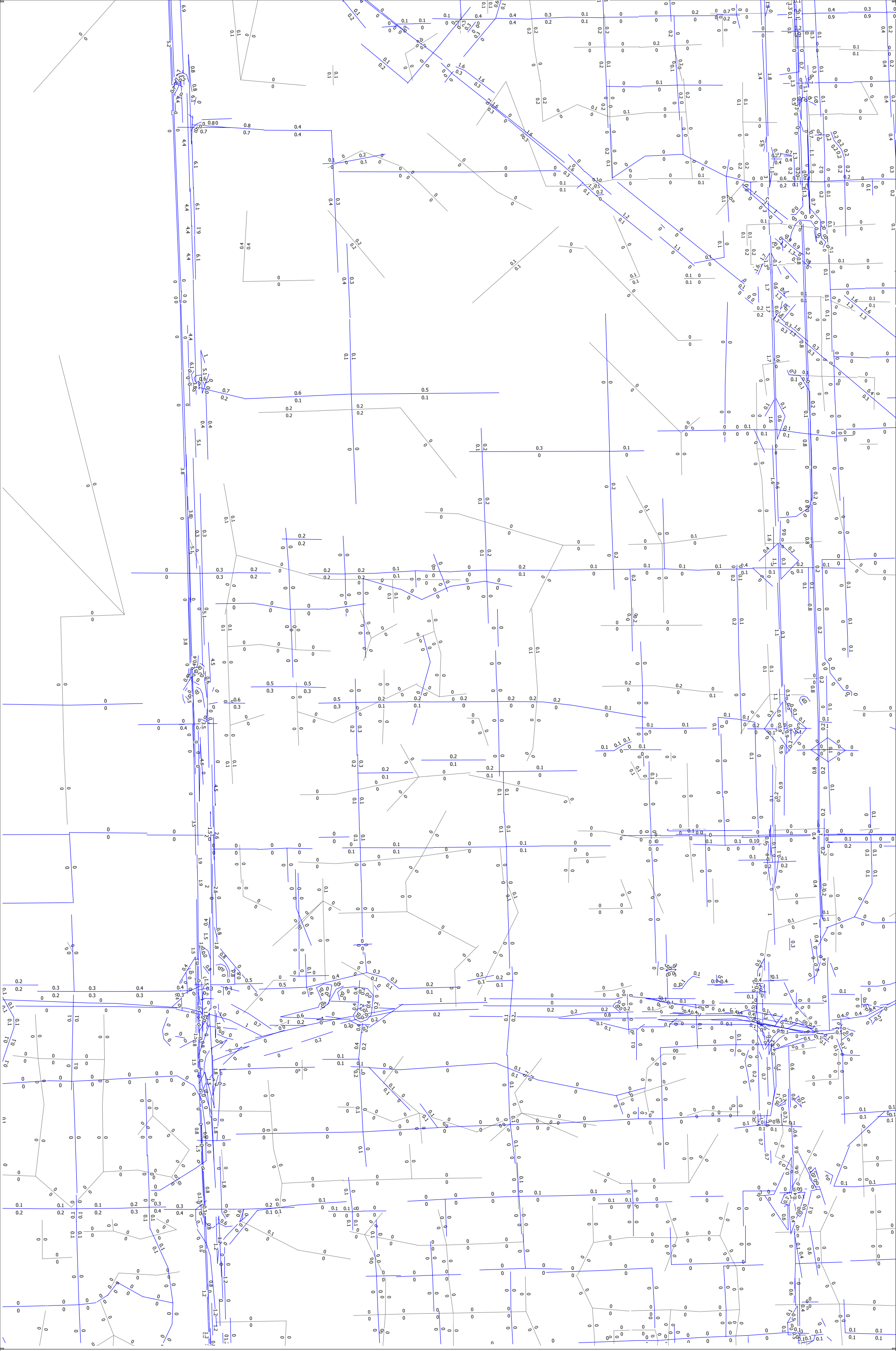
cube

(Licensed to Leftwich Consulting Engineers)



2040 LU on 2020 Network for CDMP & Zoning - Graham (NorthEast)

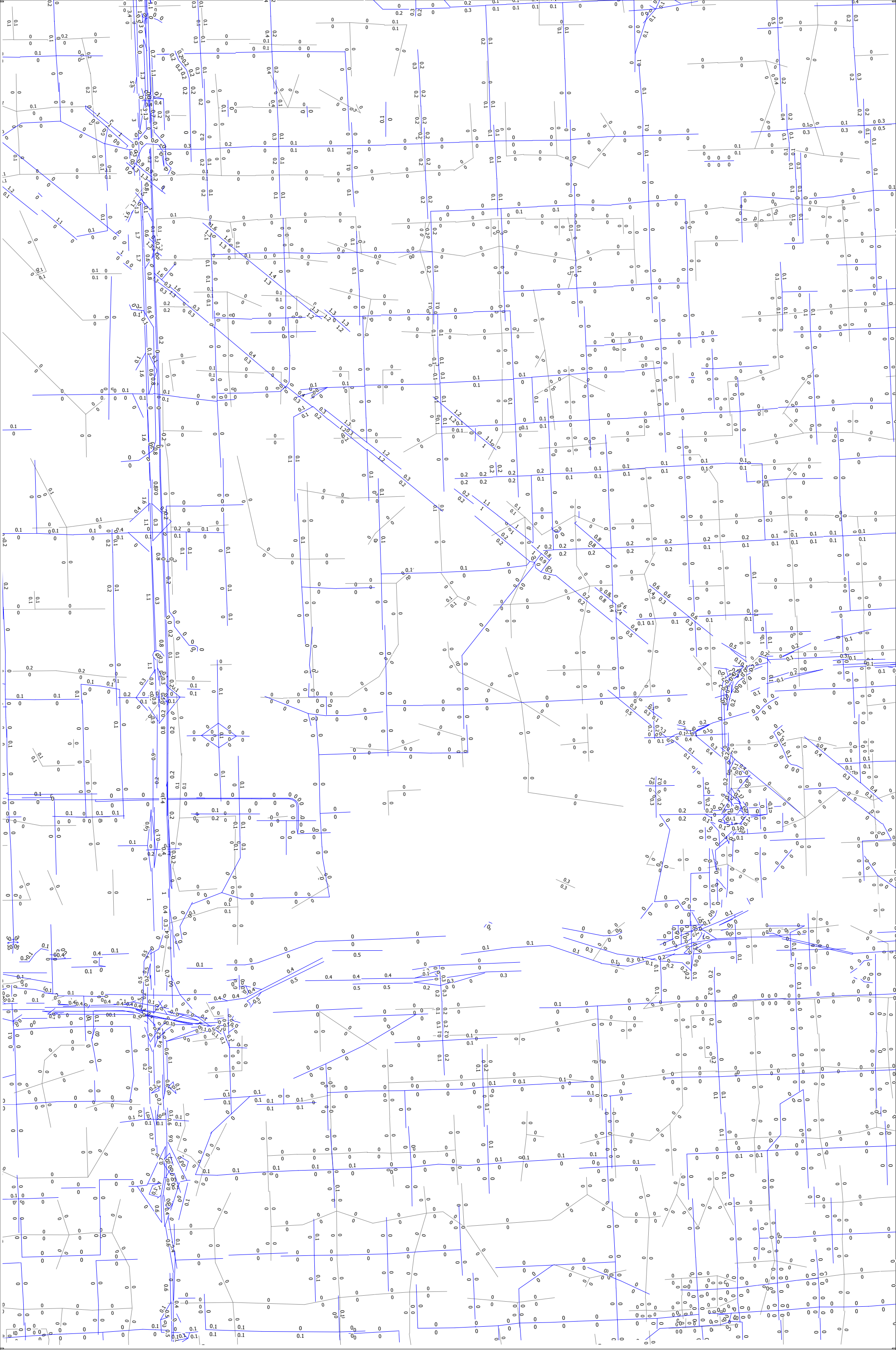
(Licensed to Leftwich Consulting Engineers)



2040 LU on 2020 Network for CDMP & Zoning - Graham (SouthWest)

cube

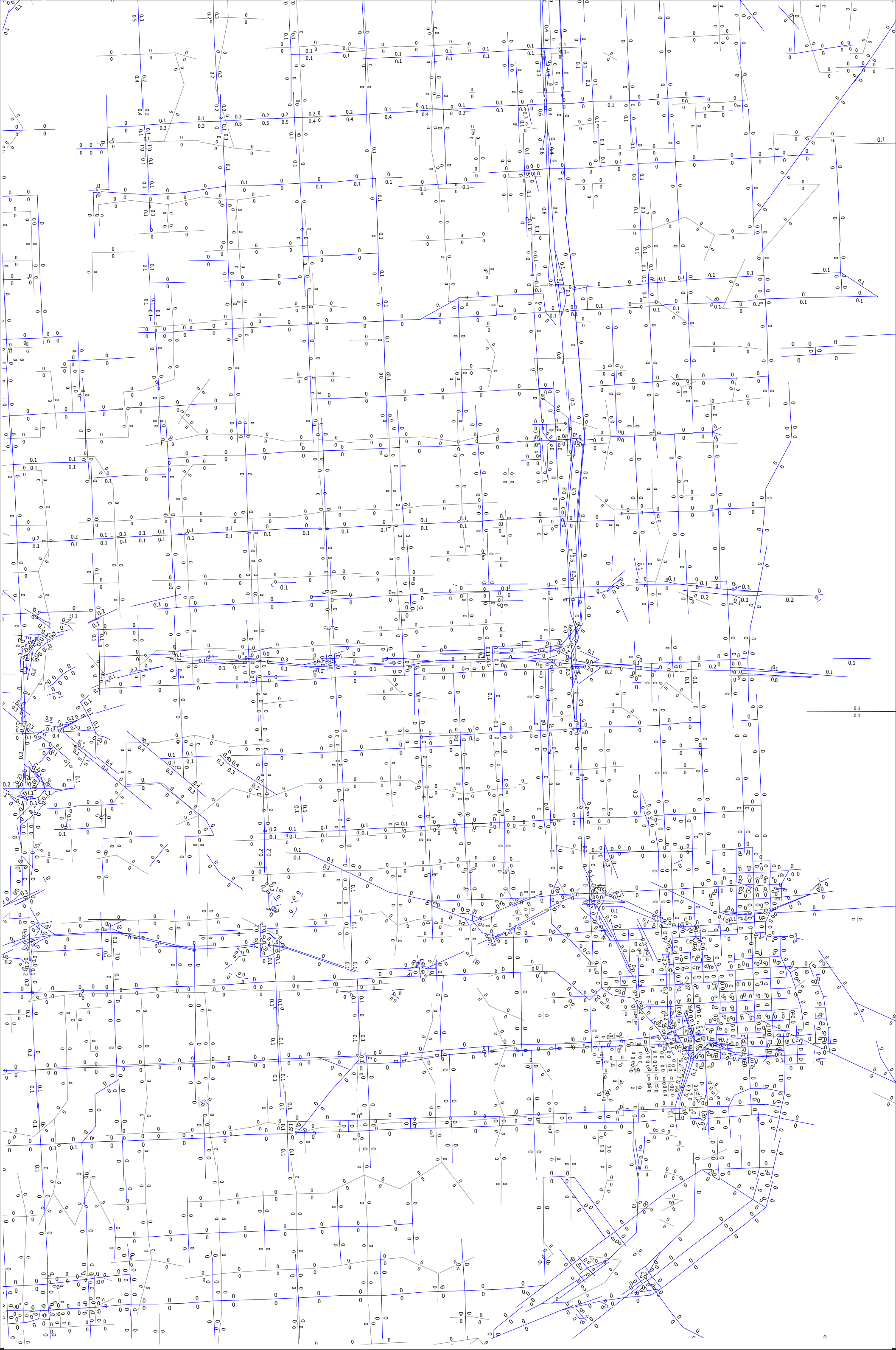
(Licensed to Leftwich Consulting Engineers)



2040 LU on 2020 Network for CDMP & Zoning - Graham (SouthMiddle)

cube

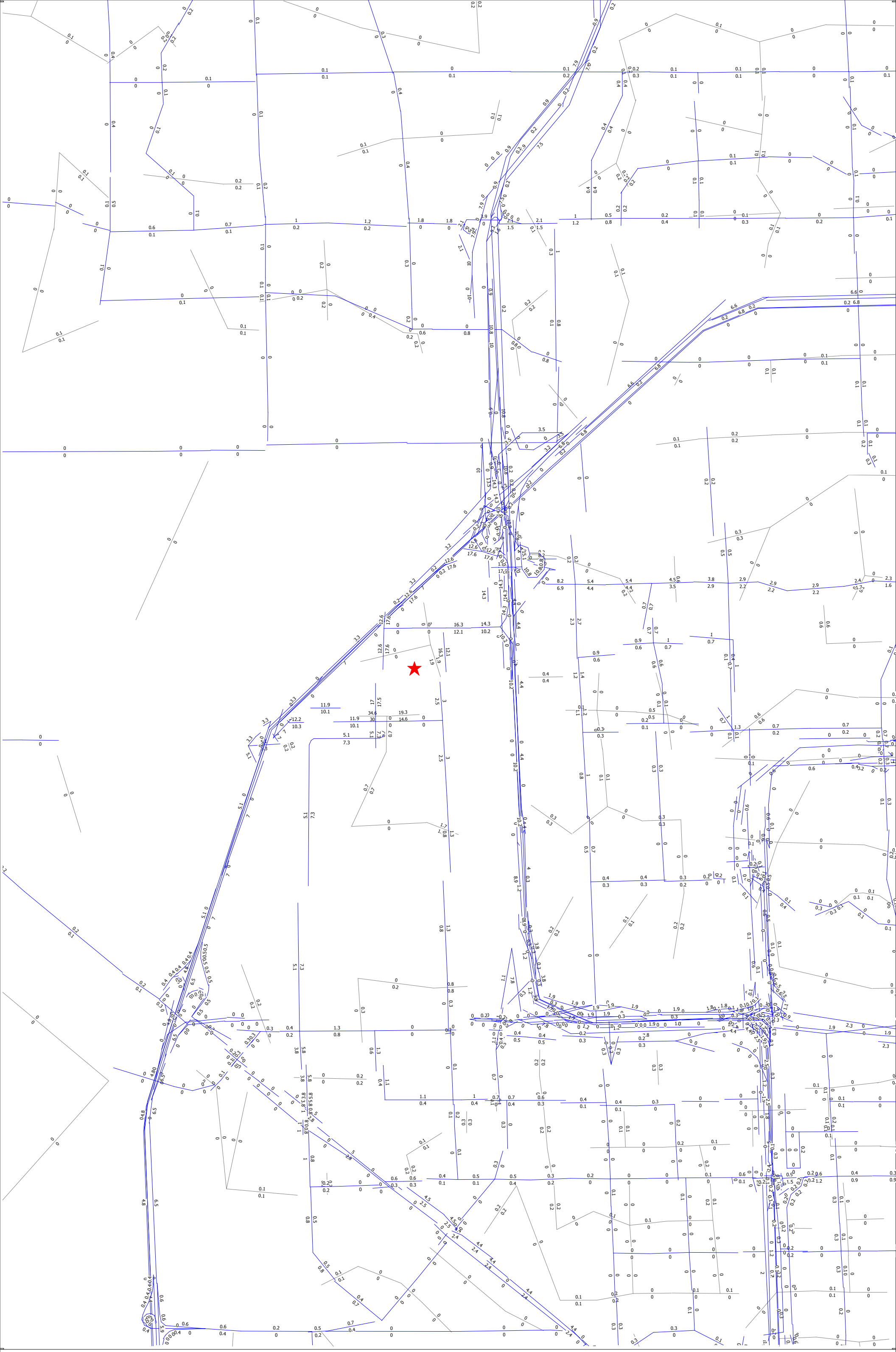
(Licensed to Leftwich Consulting Engineers)



2040 LU on 2020 Network for CDMP & Zoning - Graham (SouthEast)

(Licensed to Leftwich Consulting Engineers)

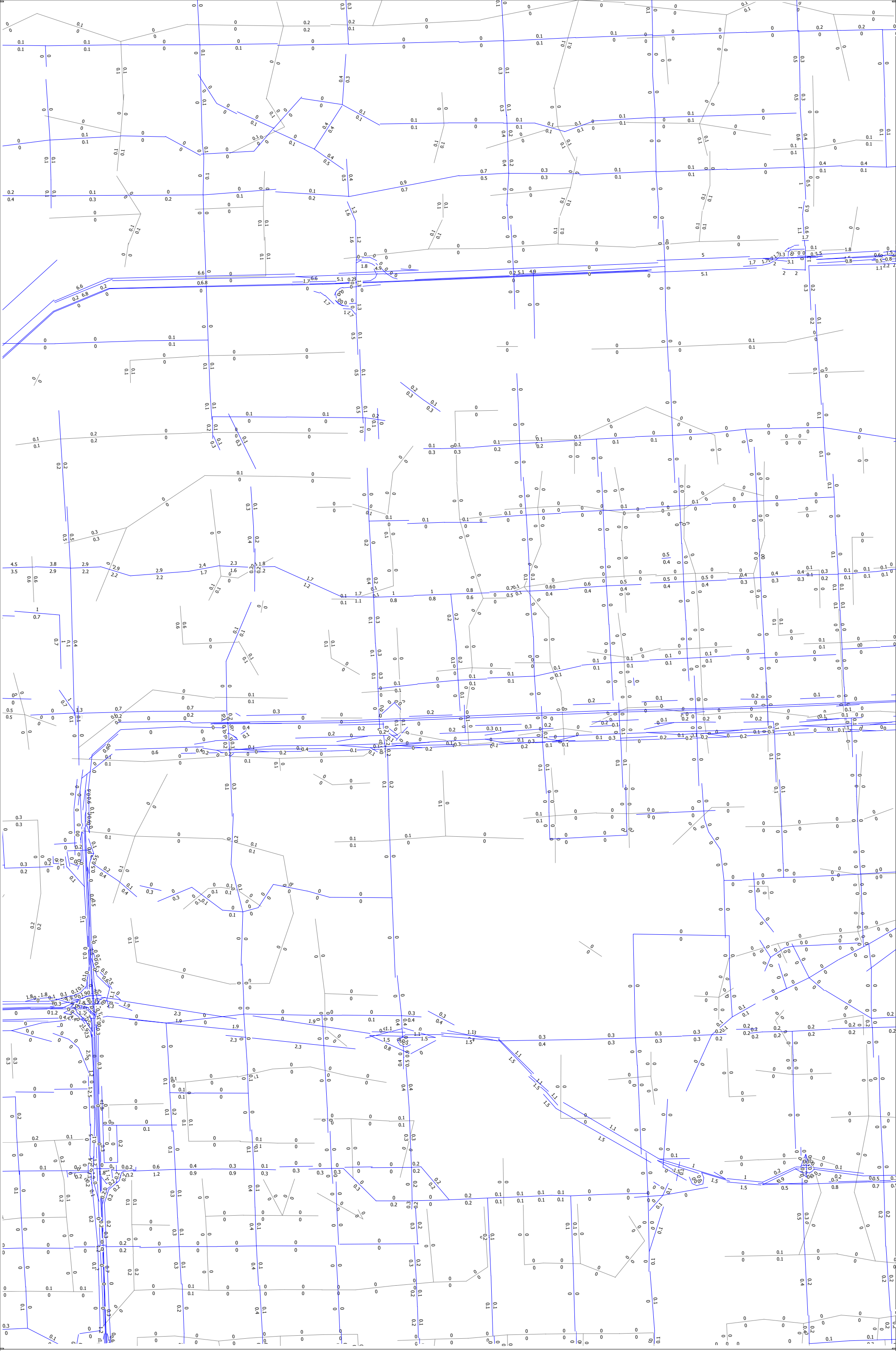
APPENDIX I-M6:
Graham 2040 Project Land Use on 2040 network for CDMP
(Plots with Project Percentage Distribution)



2040 LU on 2040 Network for CDMP - Graham (NorthWest)

cube

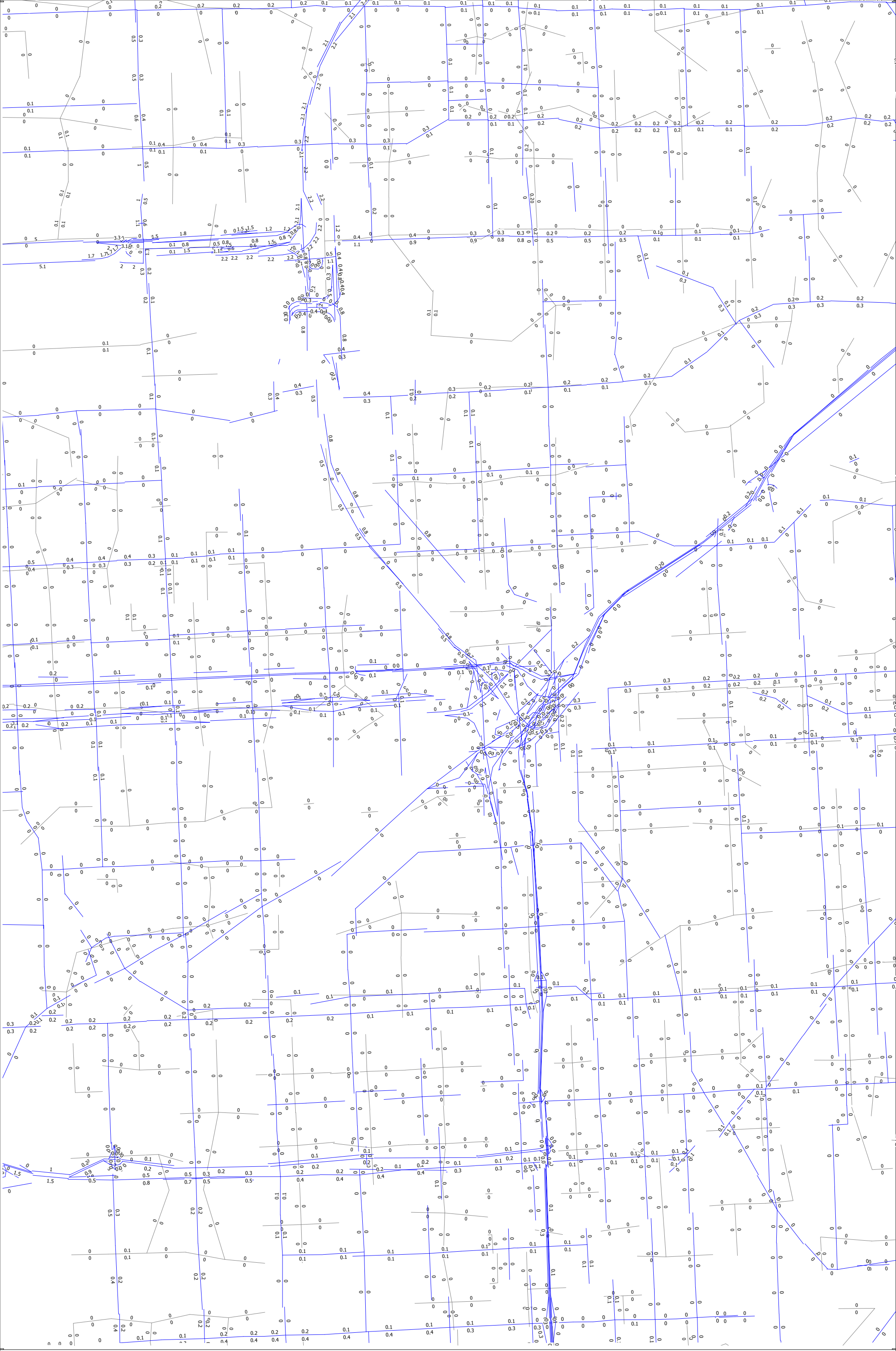
(Licensed to Leftwich Consulting Engineers)



2040 LU on 2040 Network for CDMP - Graham (NorthMiddle)

cube

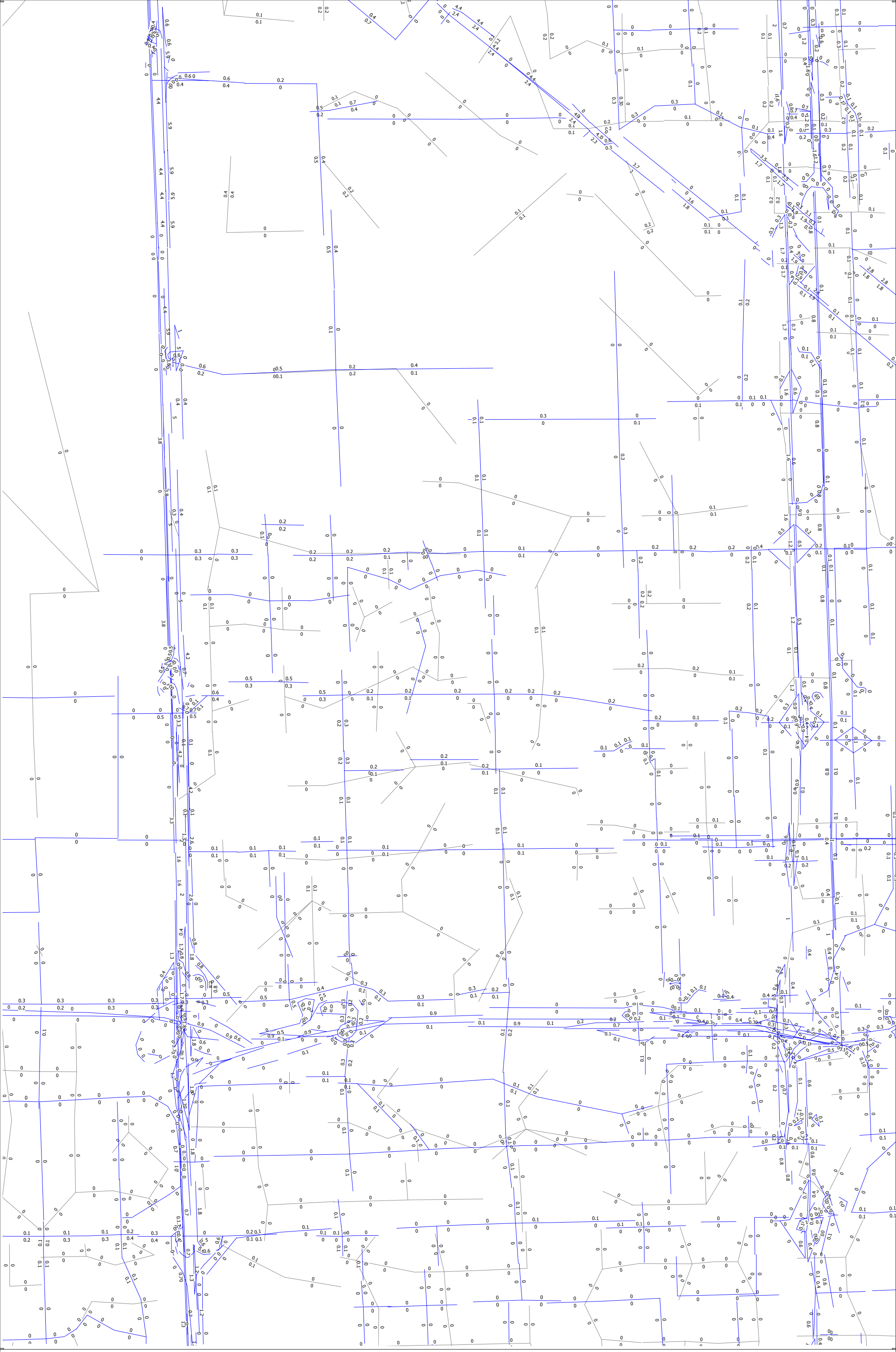
(Licensed to Leftwich Consulting Engineers)



2040 LU on 2040 Network for CDMP - Graham (NorthEast)

cube

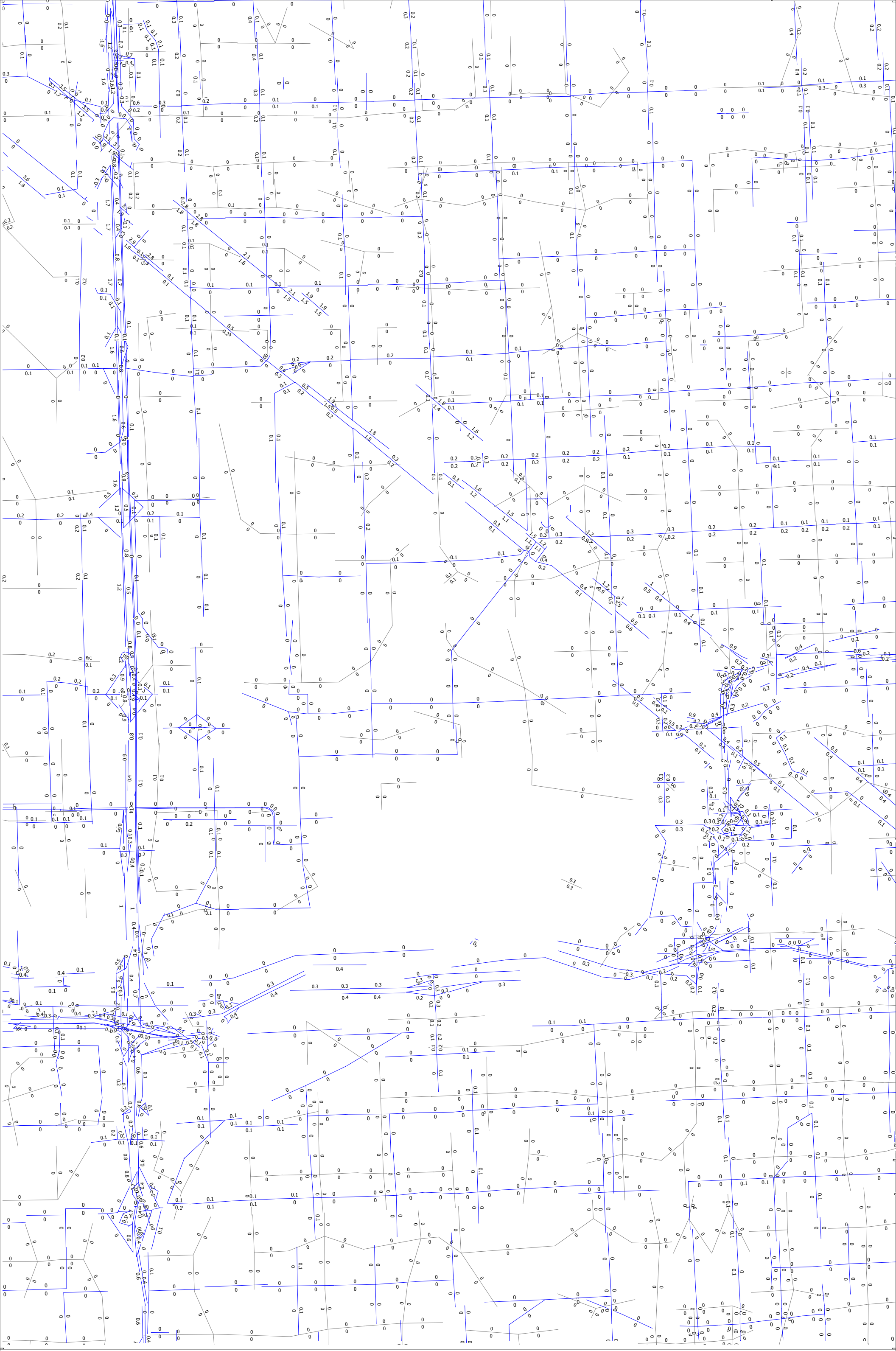
(Licensed to Leftwich Consulting Engineers)



2040 LU on 2040 Network for CDMP - Graham (SouthWest)

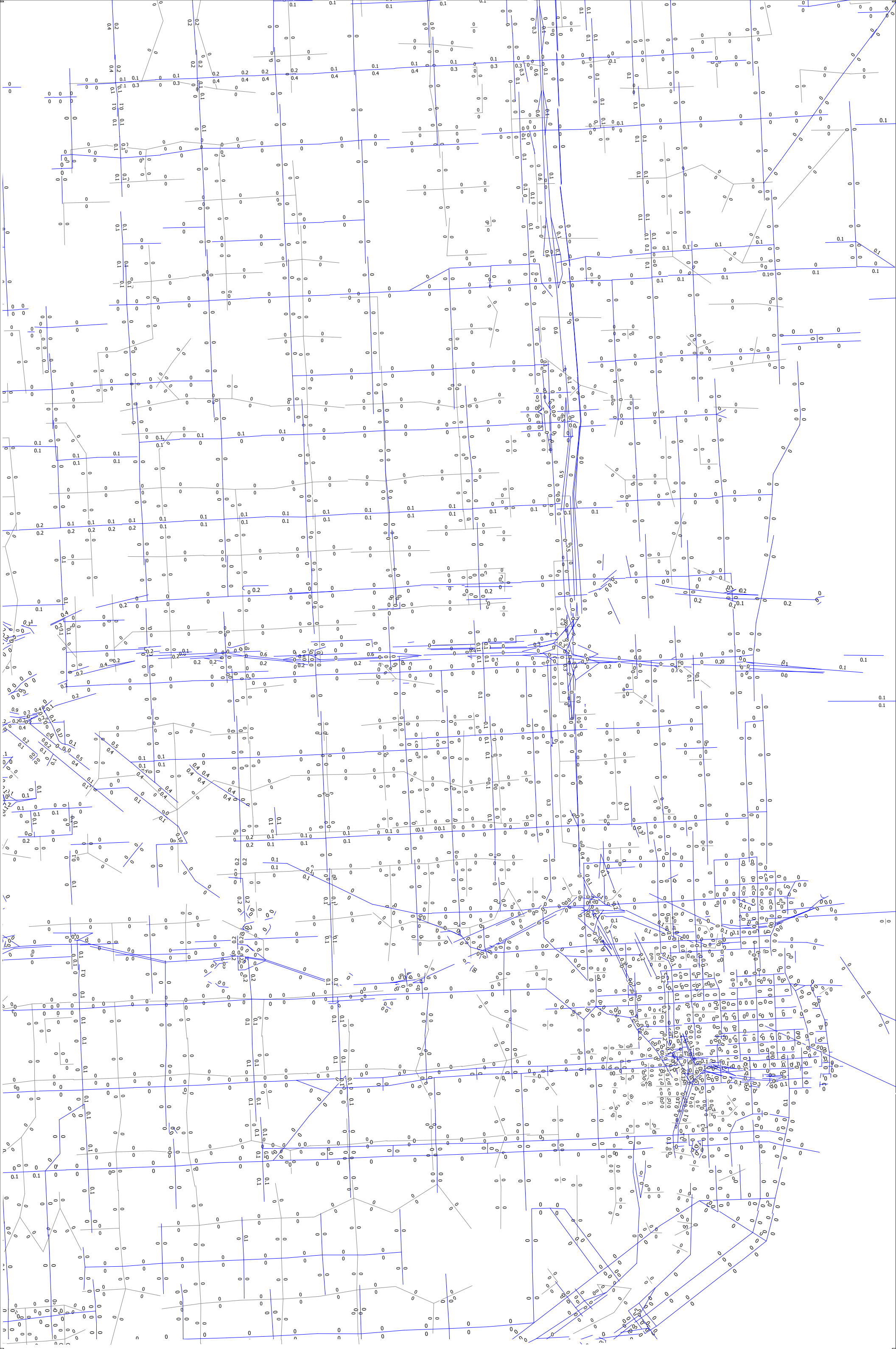
cube

(Licensed to Leftwich Consulting Engineers)



2040 LU on 2040 Network for CDMP - Graham (SouthMiddle)

(Licensed to Leftwich Consulting Engineers)

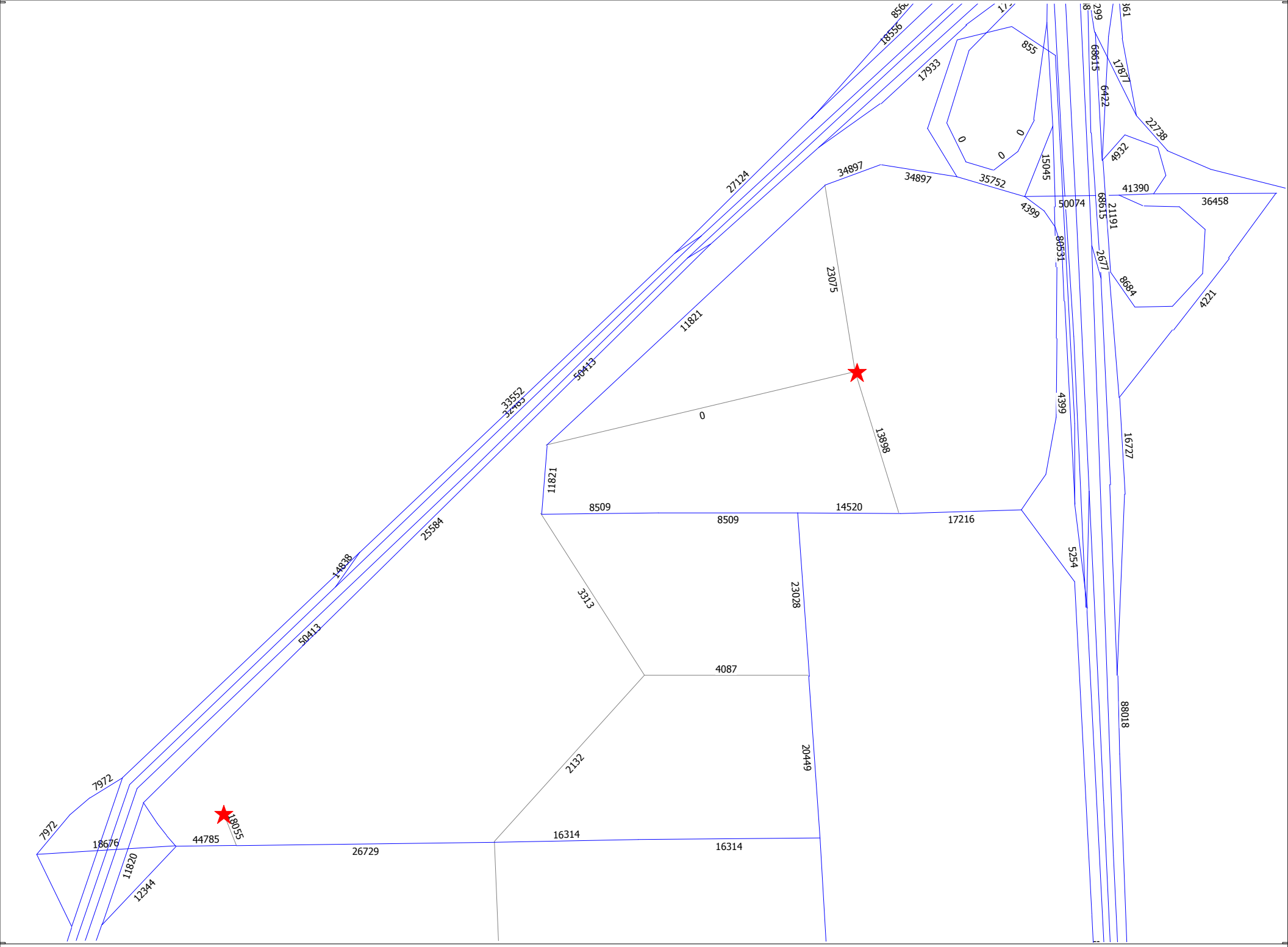


2040 LU on 2040 Network for CDMP - Graham (SouthEast)

cube

(Licensed to Leftwich Consulting Engineers)

APPENDIX I-M7:
American Dream Miami 2020 Project Land Use on 2020 network for CDMP & Zoning (Plots with Select Node Volume Distribution)

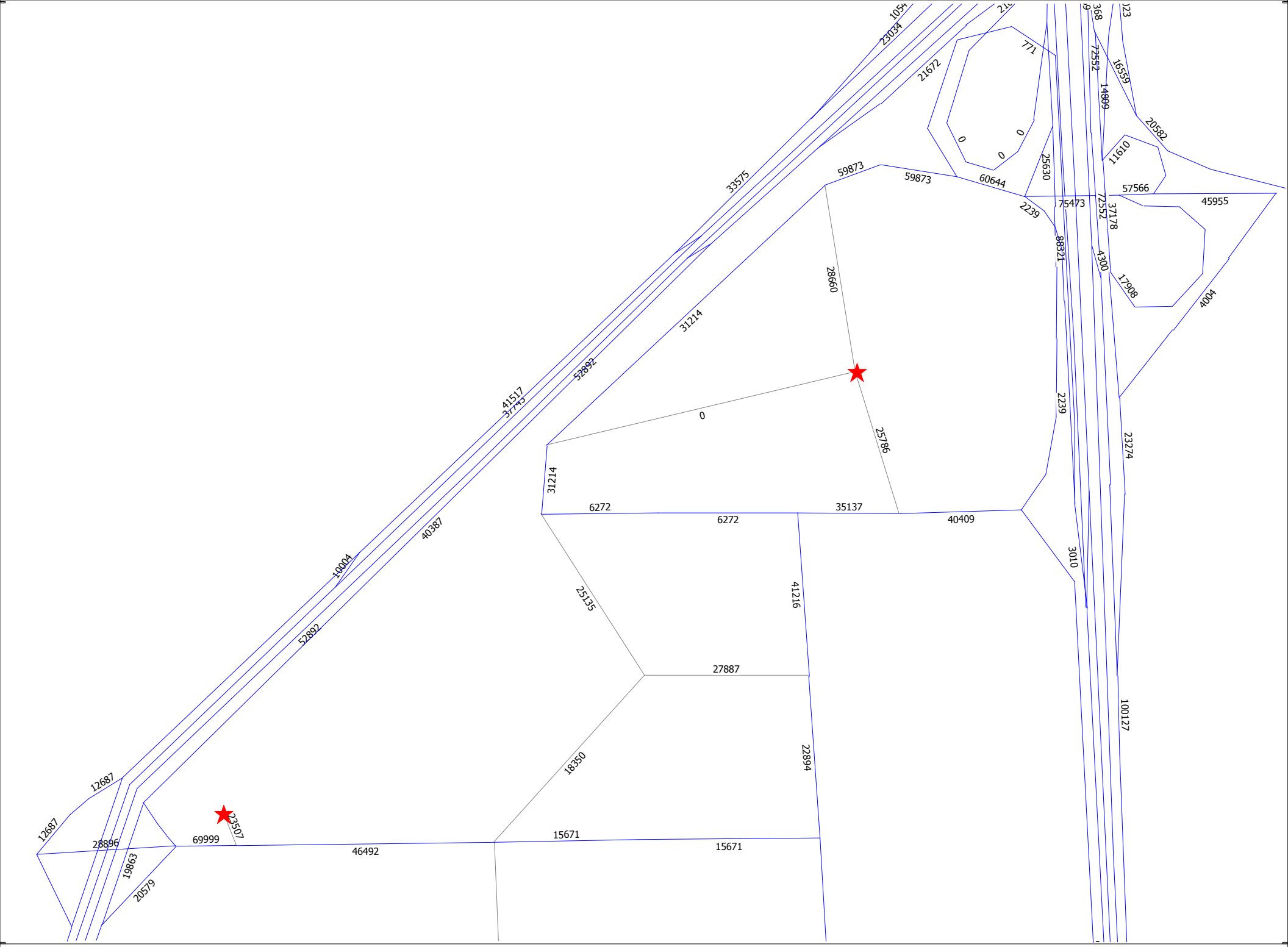


2020 LU on 2020 Network for CDMP & Zoning - ADM (Select Zones Volume Distribution)

cube

(Licensed to Leftwich Consulting Engineers)

APPENDIX I-M8:
American Dream Miami 2040 Project Land Use on 2020 network for Zoning (Plots with Select Node Volume Distribution)

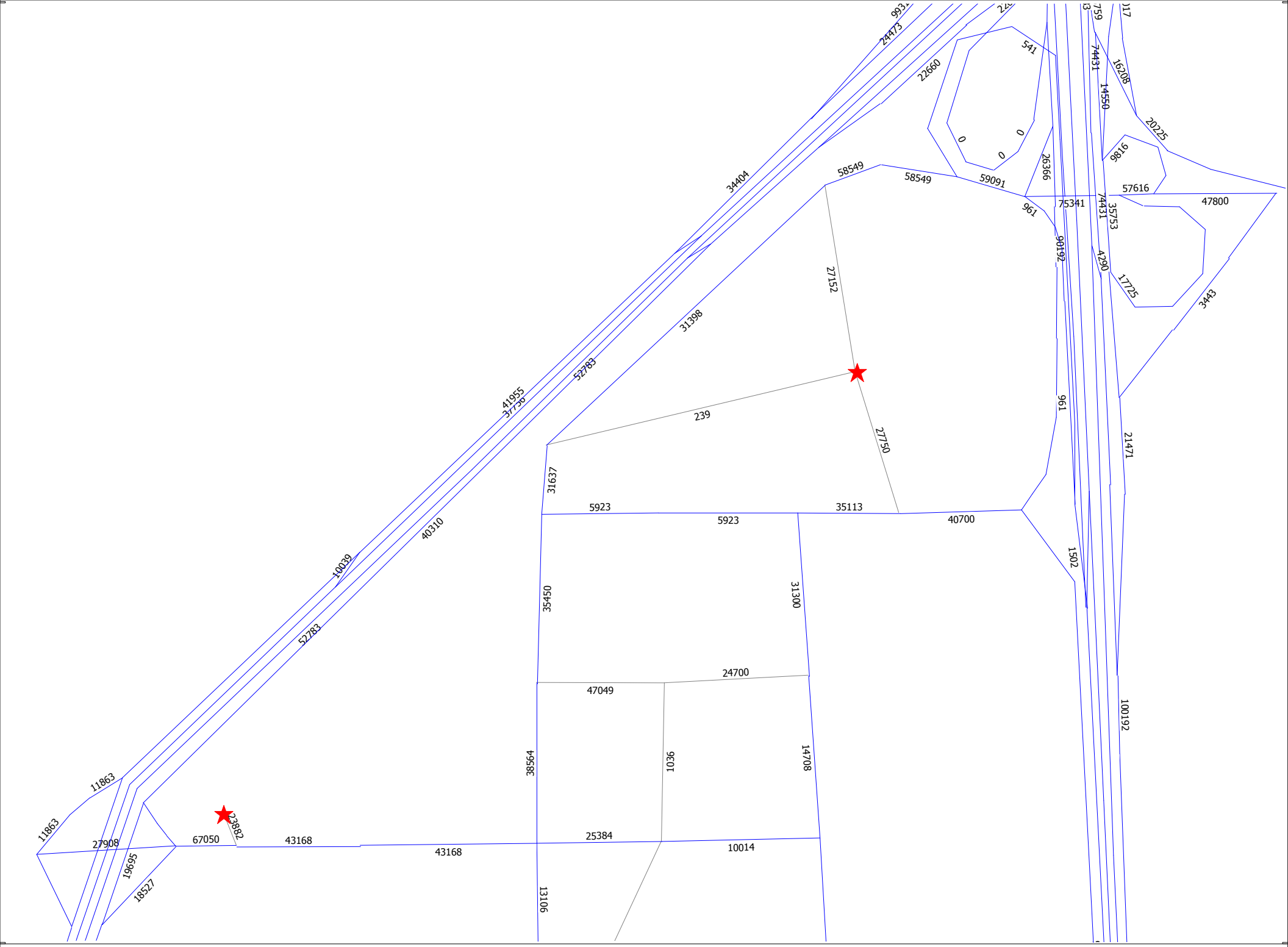


2040 LU on 2020 Network for CDMP & Zoning - ADM (Select Zones Volume Distribution)

cube

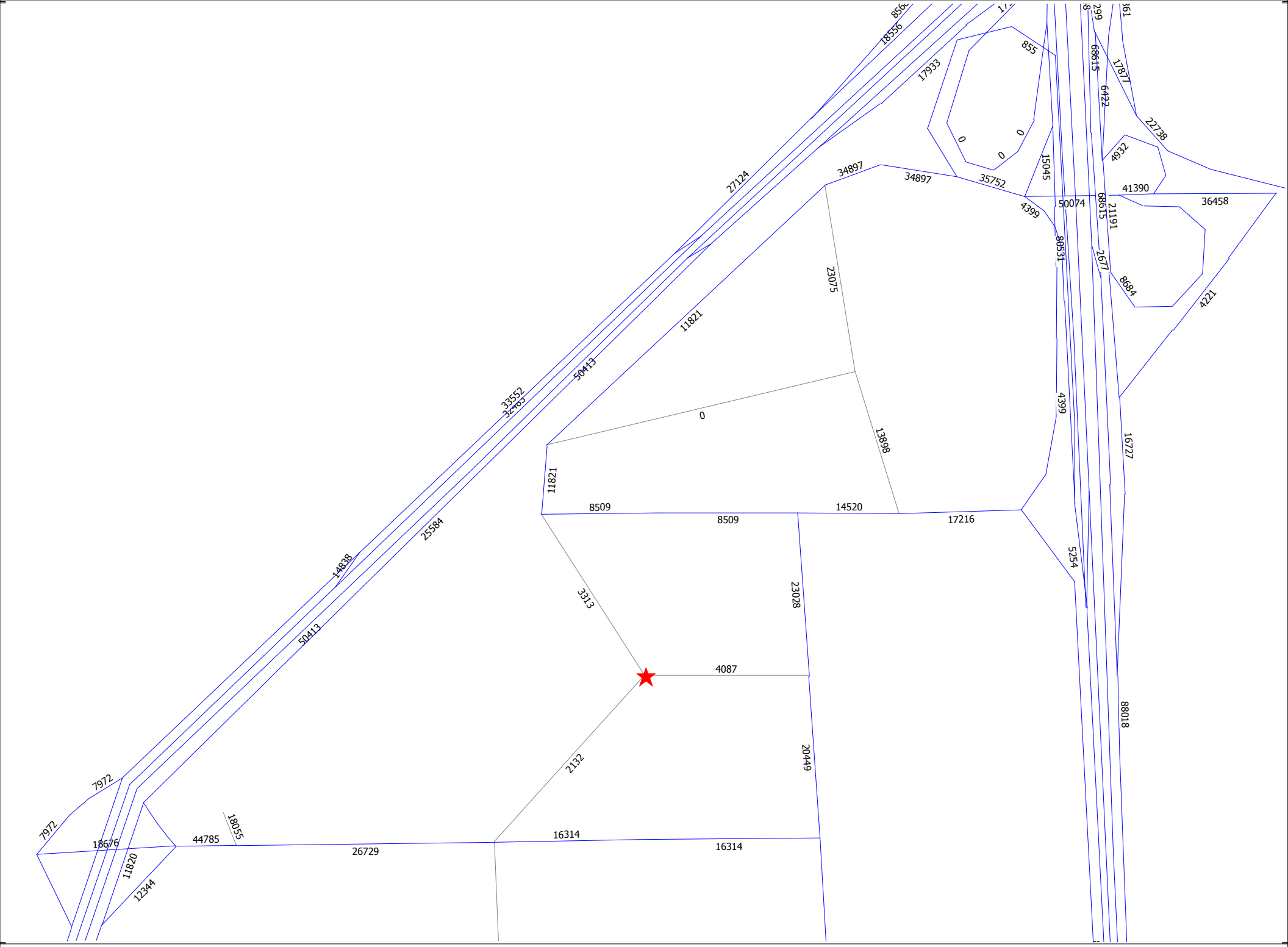
(Licensed to Leftwich Consulting Engineers)

APPENDIX I-M9:
American Dream Miami 2040 Project Land Use on 2040 network for CDMP (Plots with Select Node Volume Distribution)



2040 LU on 2040 Network for CDMP - ADM (Select Zones Volume Distribution)

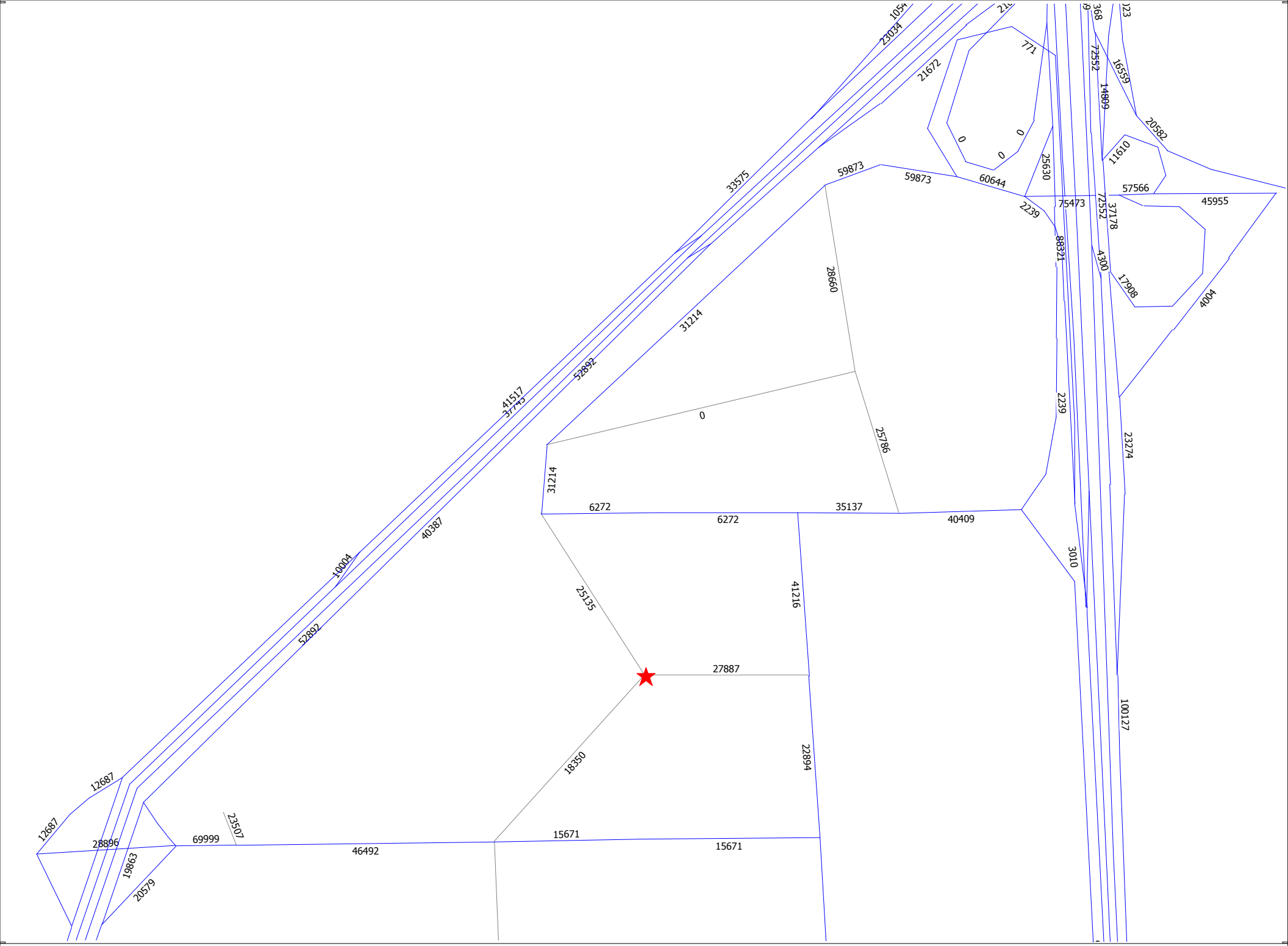
APPENDIX I-M10:
Graham 2020 Project Land Use on 2020 network for CDMP & Zoning (Plots with Select Node Volume Distribution)



2020 LU on 2020 Network for CDMP & Zoning - Graham (Select Zones Volume Distribution)

cube
(Licensed to Leftwich Consulting Engineers)

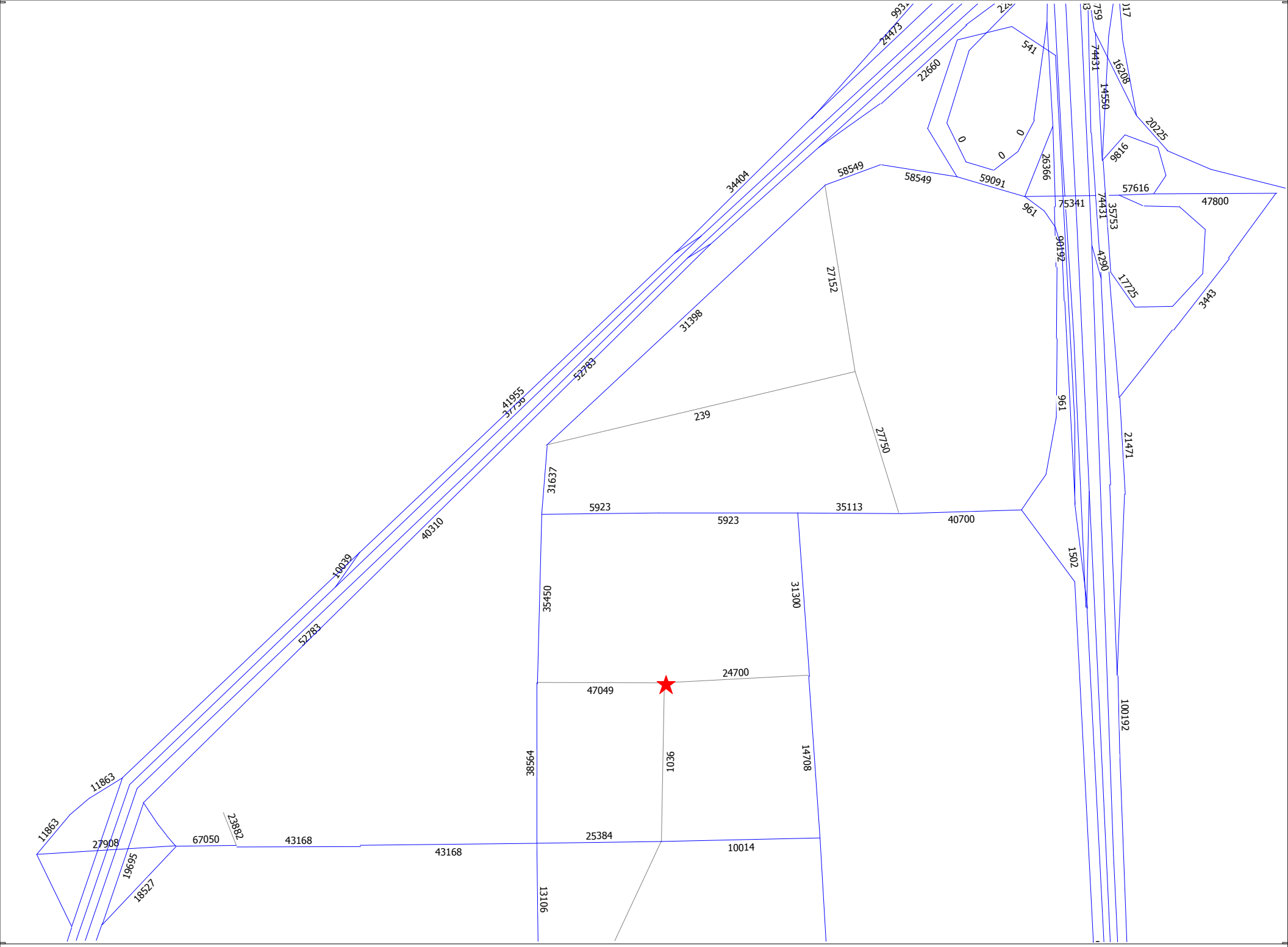
APPENDIX I-M11:
Graham 2040 Project Land Use on 2020 network for Zoning (Plots with Select Node Volume Distribution)



2040 LU on 2020 Network for CDMP & Zoning - Graham (Select Zones Volume Distribution)

cube
(Licensed to Leftwich Consulting Engineers)

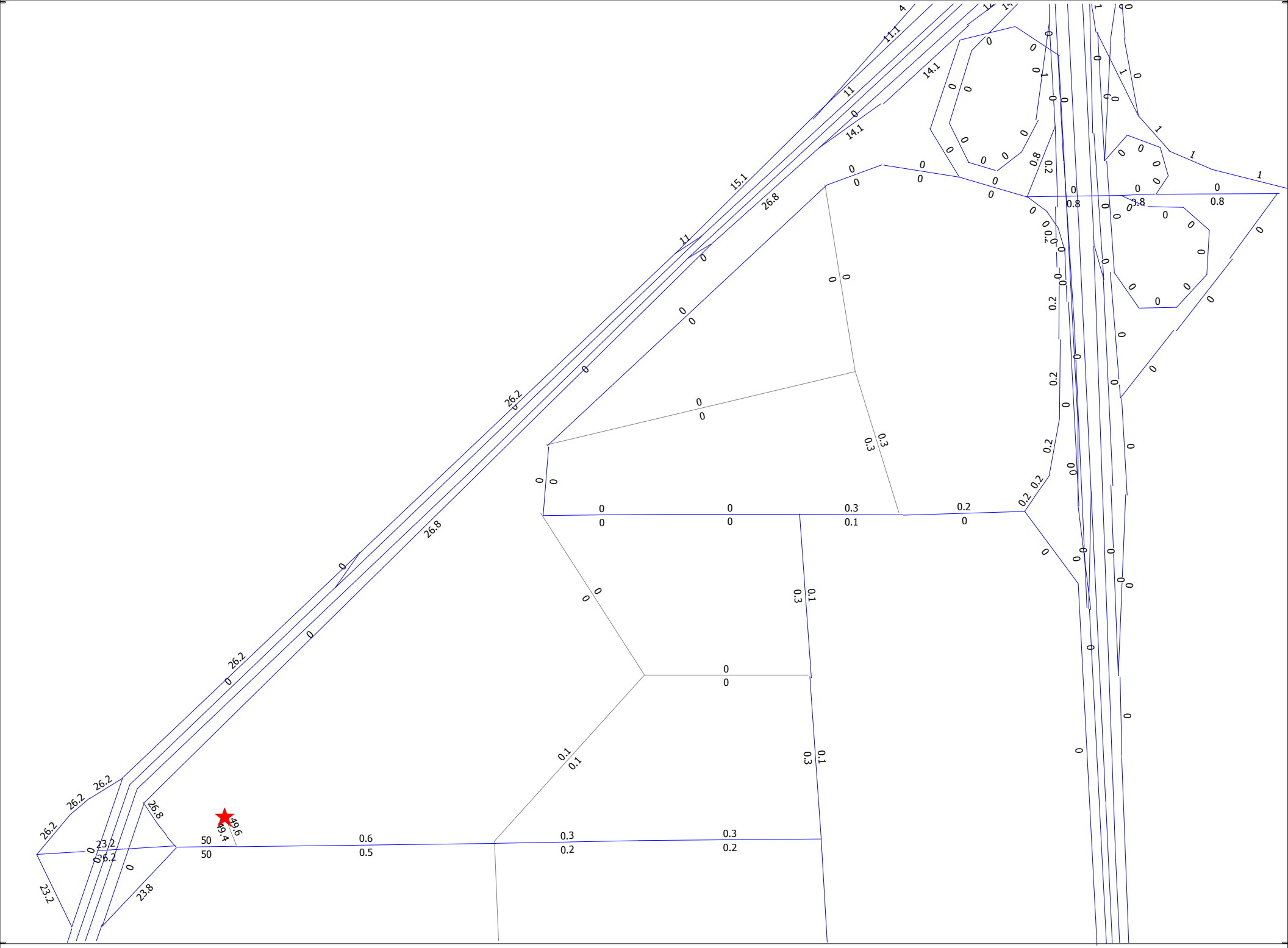
APPENDIX I-M12:
Graham 2040 Project Land Use on 2040 network for CDMP (Plots with Select Node Volume Distribution)



2040 LU on 2040 Network for CDMP - Graham (Select Zones Volume Distribution)

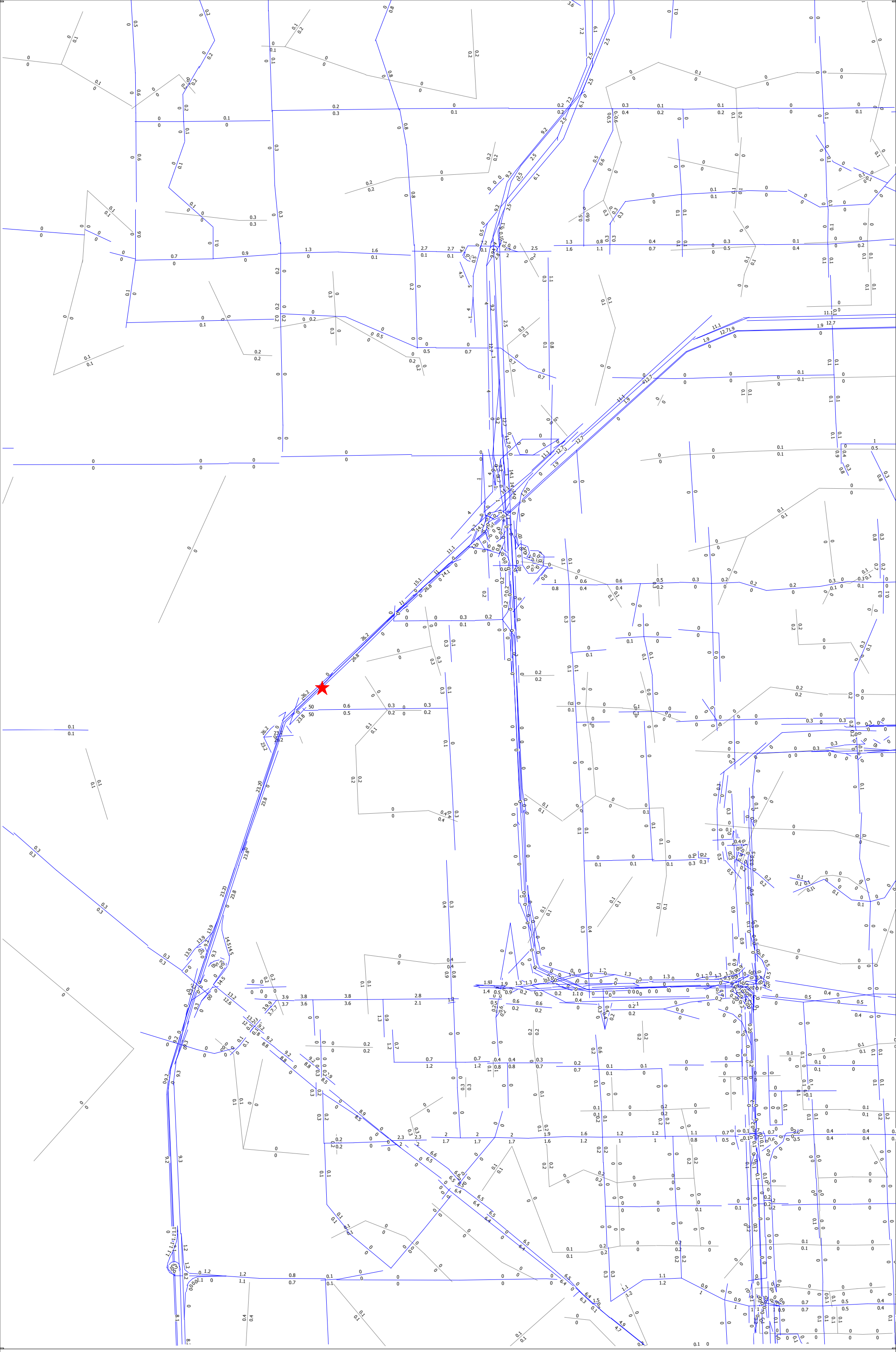
cube
(Licensed to Leftwich Consulting Engineers)

APPENDIX I-M13:
American Dream Miami 2020 Project Land Use on 2020 network for CDMP & Zoning (Plots with Select Node Project Percentage Distribution for 30% TAZ near HEFT/NW170th)



2020 LU on 2020 Network CDMP & Zoning - ADM (Select Zone for TAZ 183) Percentage Distribution (Zoom In)

cube
(Licensed to Leftwich Consulting Engineers)



2020 LU on 2020 Network CDMP & Zoning - ADM (Select Zone for TAZ 183) Percentage Distribution (NorthWest)

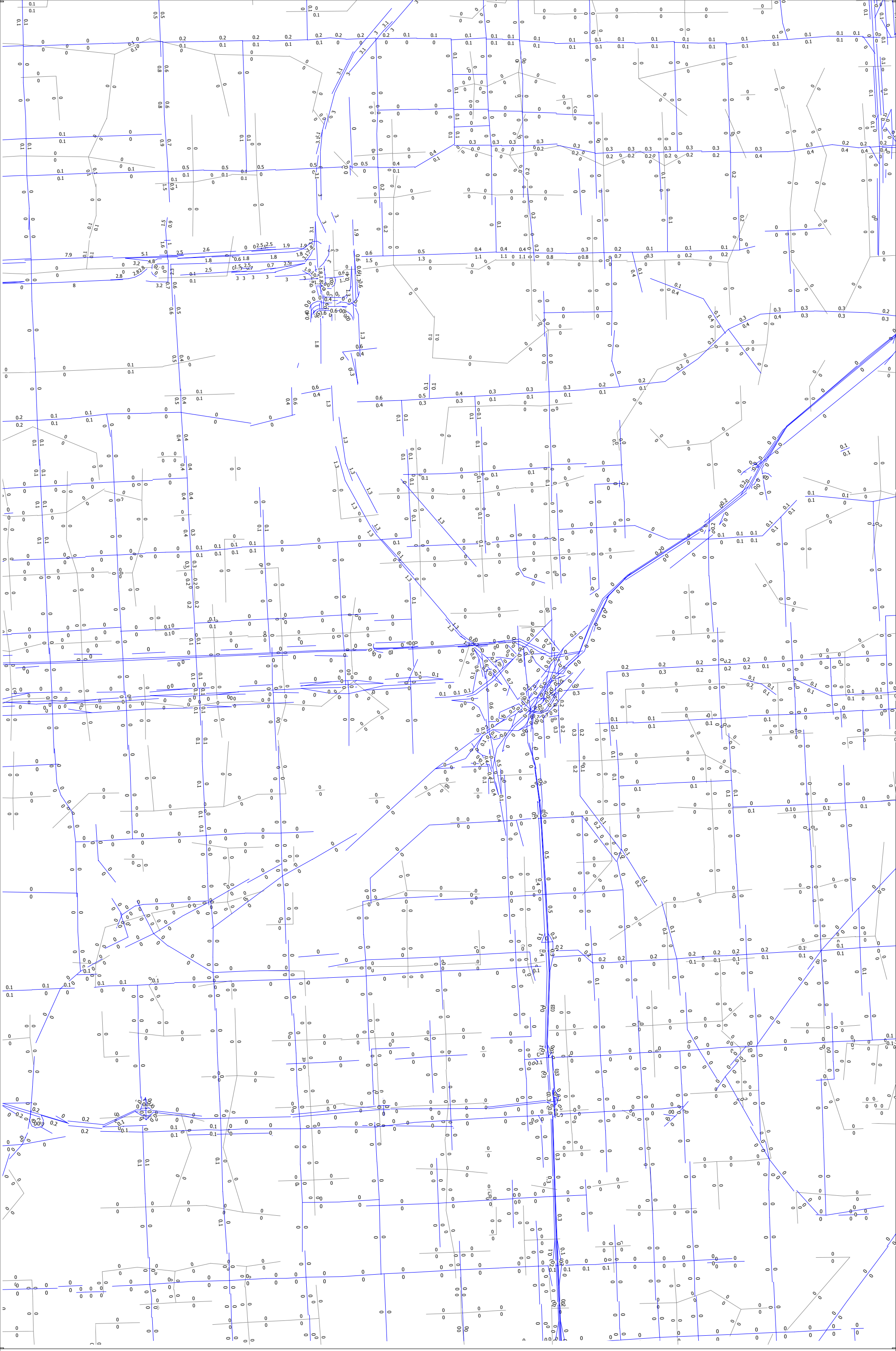
cube

(Licensed to Leftwich Consulting Engineers)

2020 LU on 2020 Network CDMP & Zoning - ADM (Select Zone for TAZ 183) Percentage Distribution (NorthMiddle)

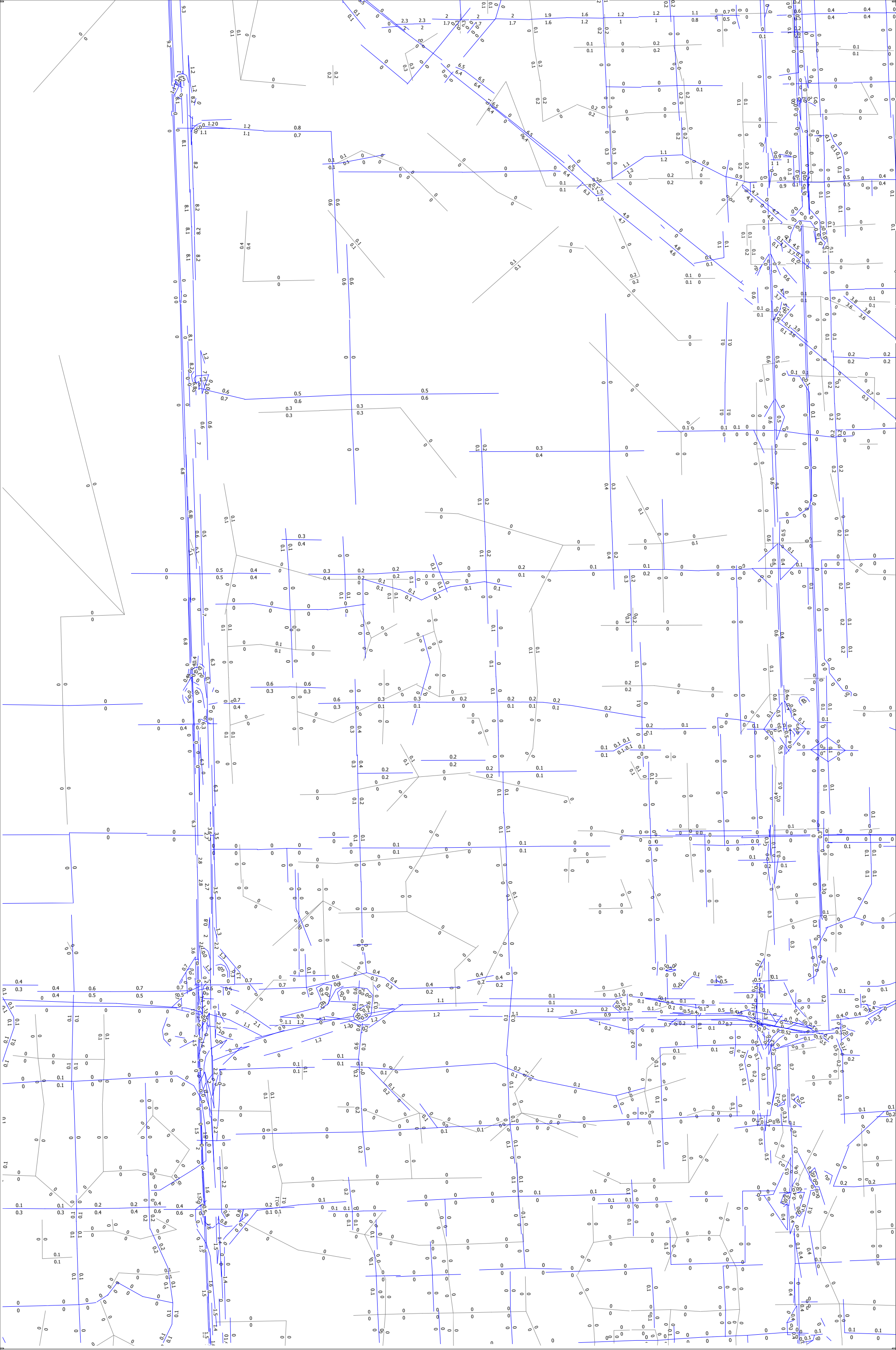
cube

(Licensed to Leftwich Consulting Engineers)



2020 LU on 2020 Network CDMP & Zoning - ADM (Select Zone for TAZ 183) Percentage Distribution (NorthEast)

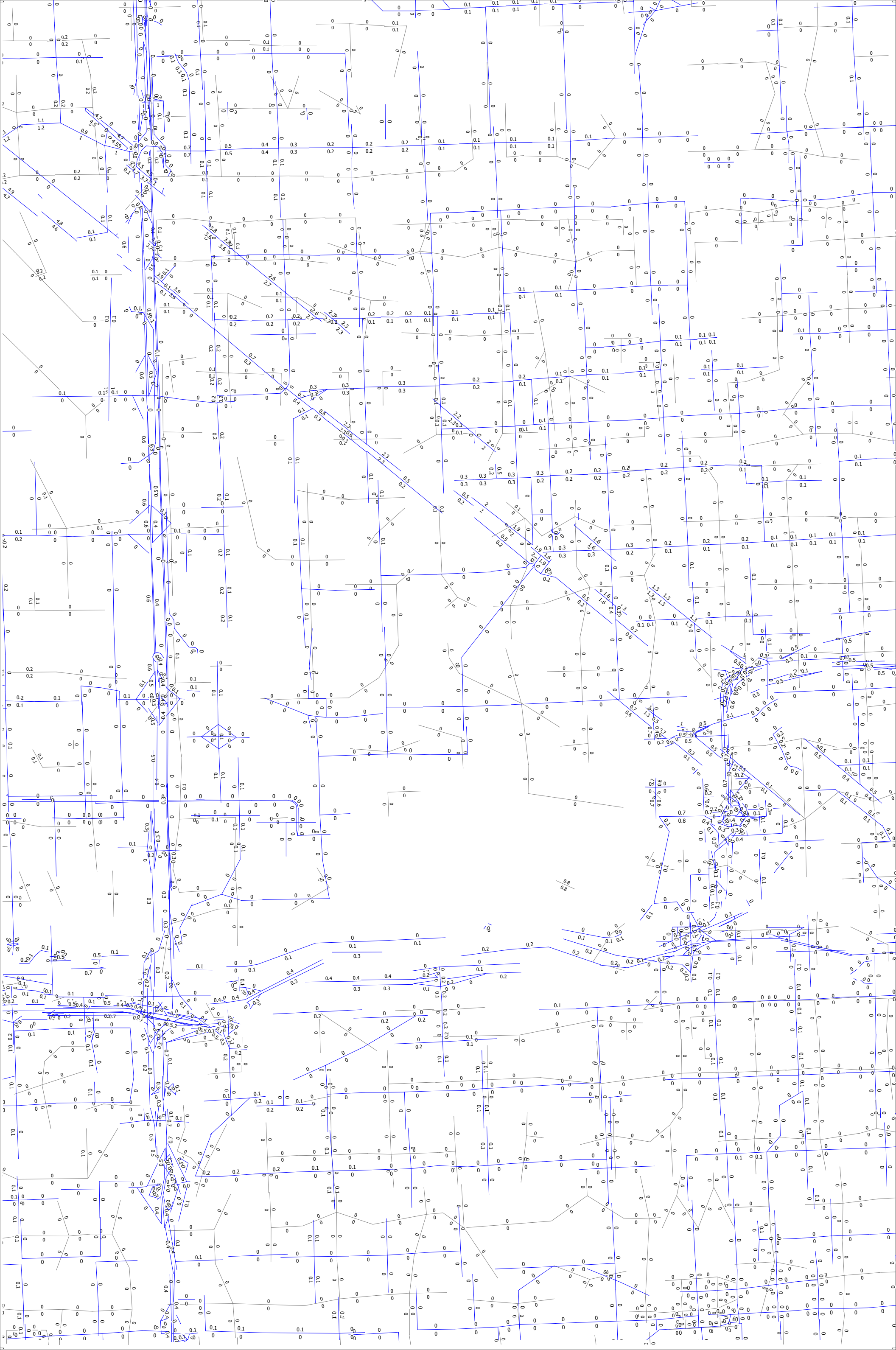
(Licensed to Leftwich Consulting Engineers)



2020 LU on 2020 Network CDMP & Zoning - ADM (Select Zone for TAZ 183) Percentage Distribution (SouthWest)

cube

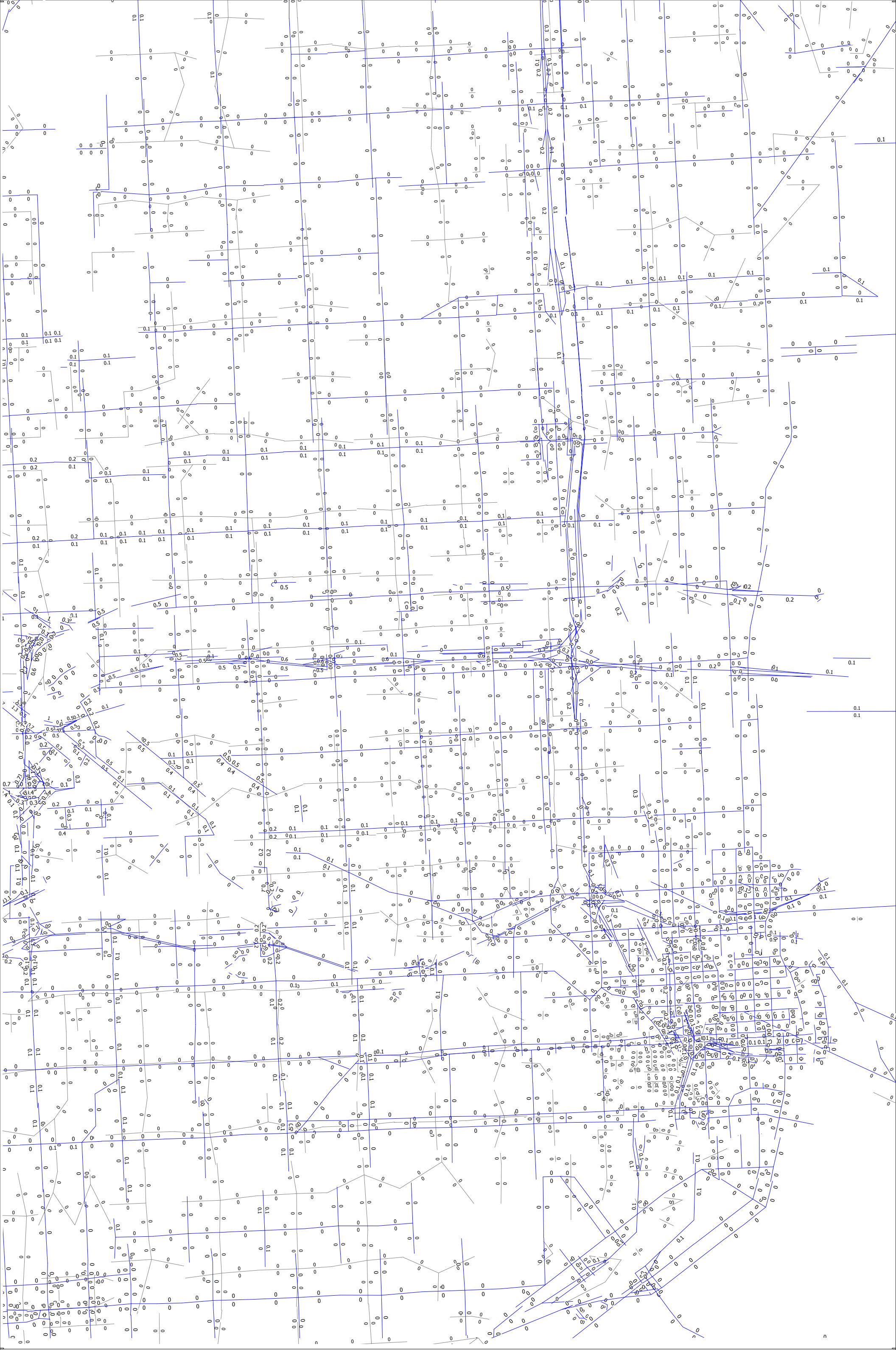
(Licensed to Leftwich Consulting Engineers)



2020 LU on 2020 Network CDMP & Zoning - ADM (Select Zone for TAZ 183) Percentage Distribution (SouthMiddle)

cube

(Licensed to Leftwich Consulting Engineers)

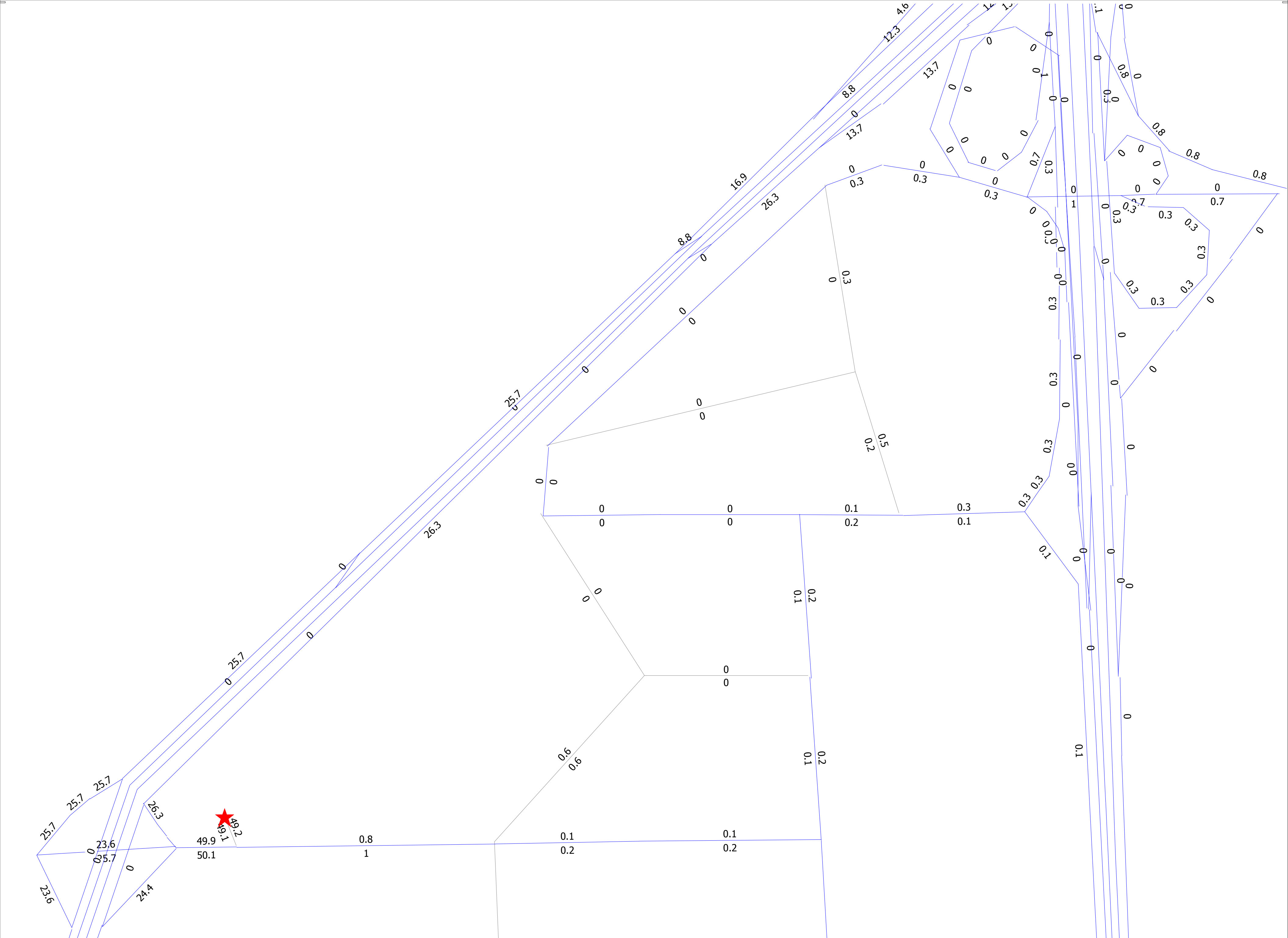


2020 LU on 2020 Network CDMP & Zoning - ADM (Select Zone for TAZ 183) Percentage Distribution (SouthEast)

cube

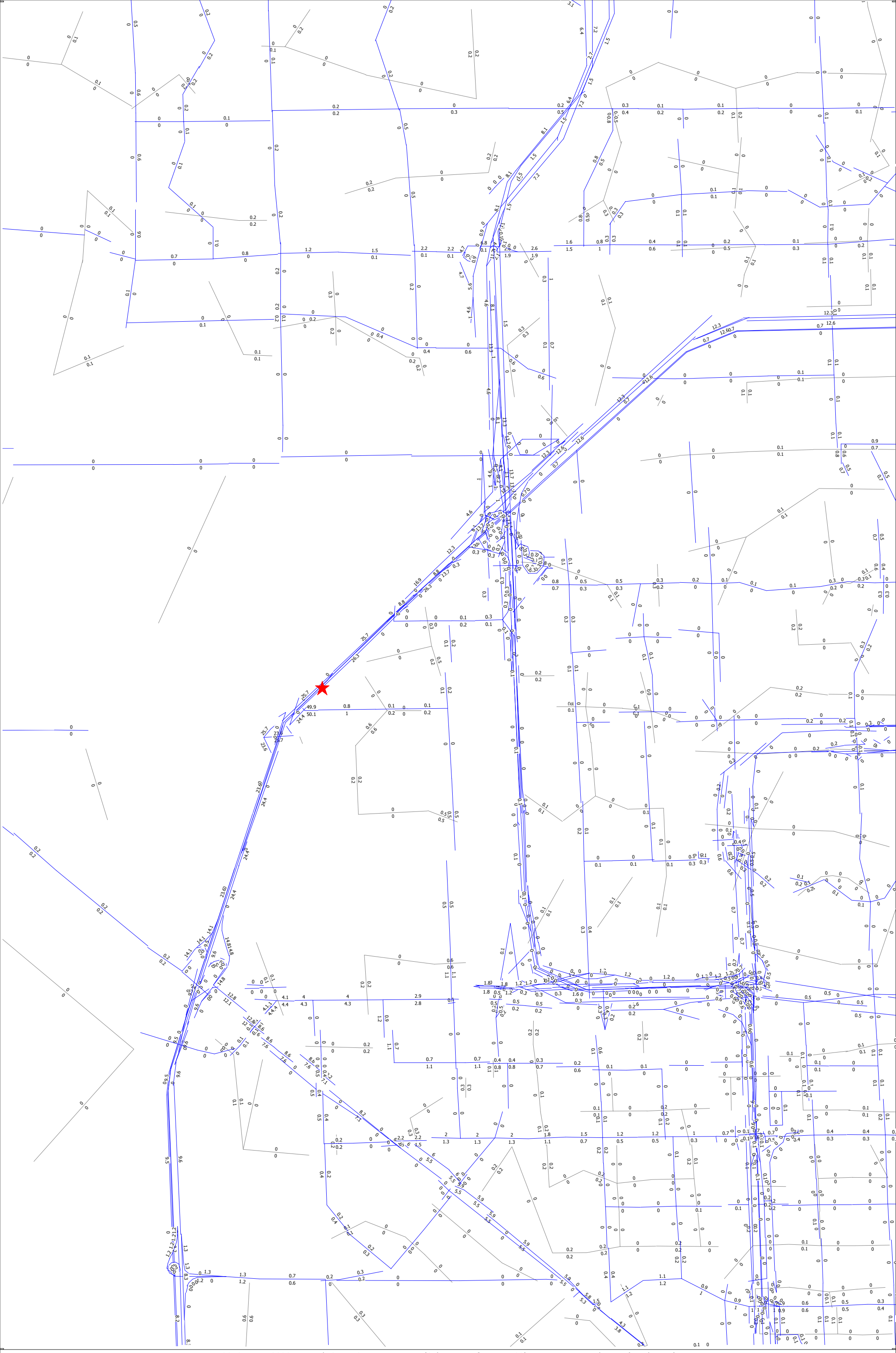
(Licensed to Leftwich Consulting Engineers)

APPENDIX I-M14:
American Dream Miami 2040 Project Land Use on 2020 network for Zoning (Plots with Select Node Project Percentage Distribution for 30% TAZ near HEFT/NW170th)



2040 LU on 2020 Network CDMP & Zoning - ADM (Select Zone for TAZ 183) Percentage Distribution (Zoom In)

(Licensed to Leftwich Consulting Engineers)



2040 LU on 2020 Network CDMP & Zoning - ADM (Select Zone for TAZ 183) Percentage Distribution (NorthWest)

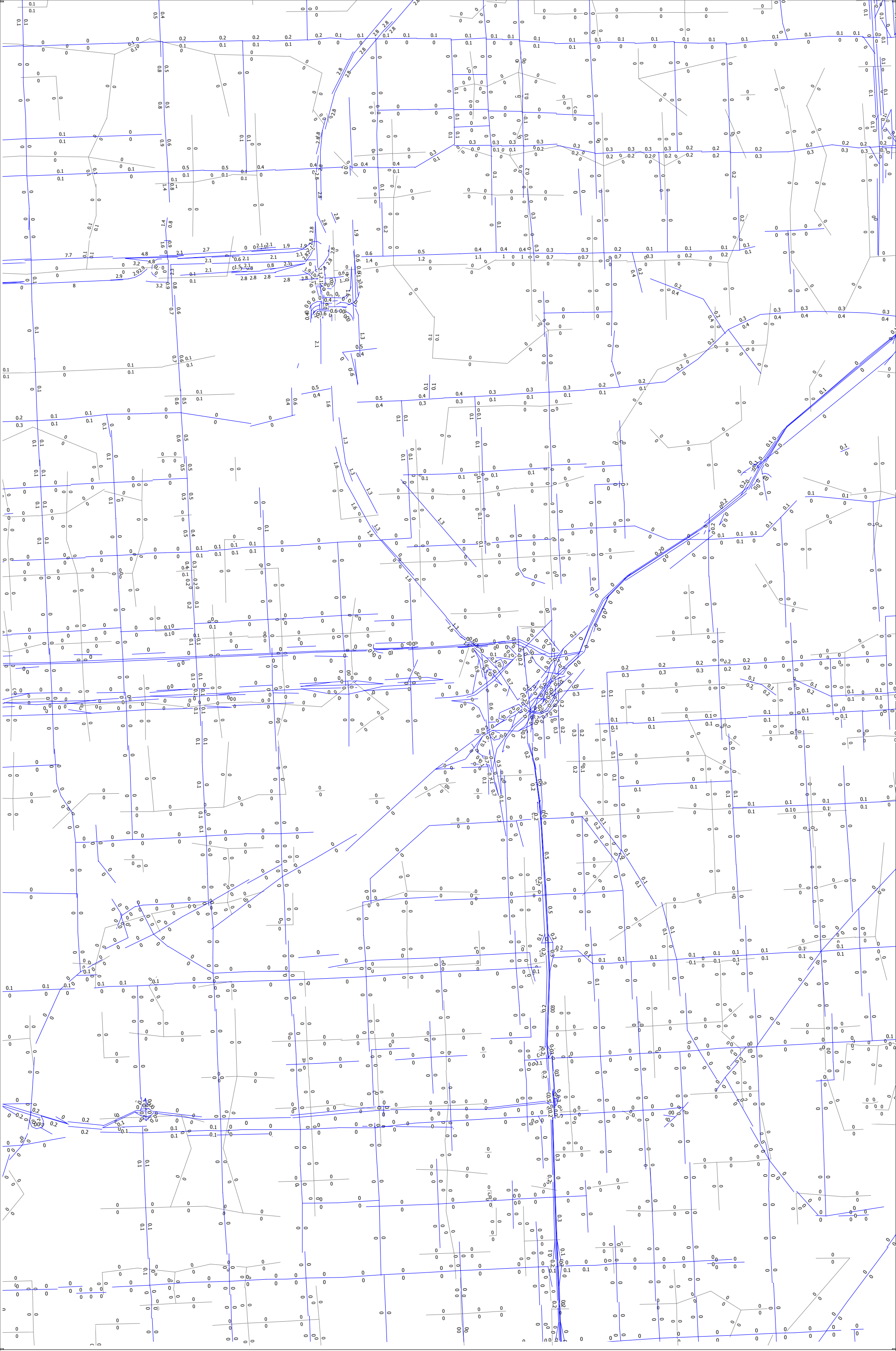
cube

(Licensed to Leftwich Consulting Engineers)

2040 LU on 2020 Network CDMP & Zoning - ADM (Select Zone for TAZ 183) Percentage Distribution (NorthMiddle)

cube

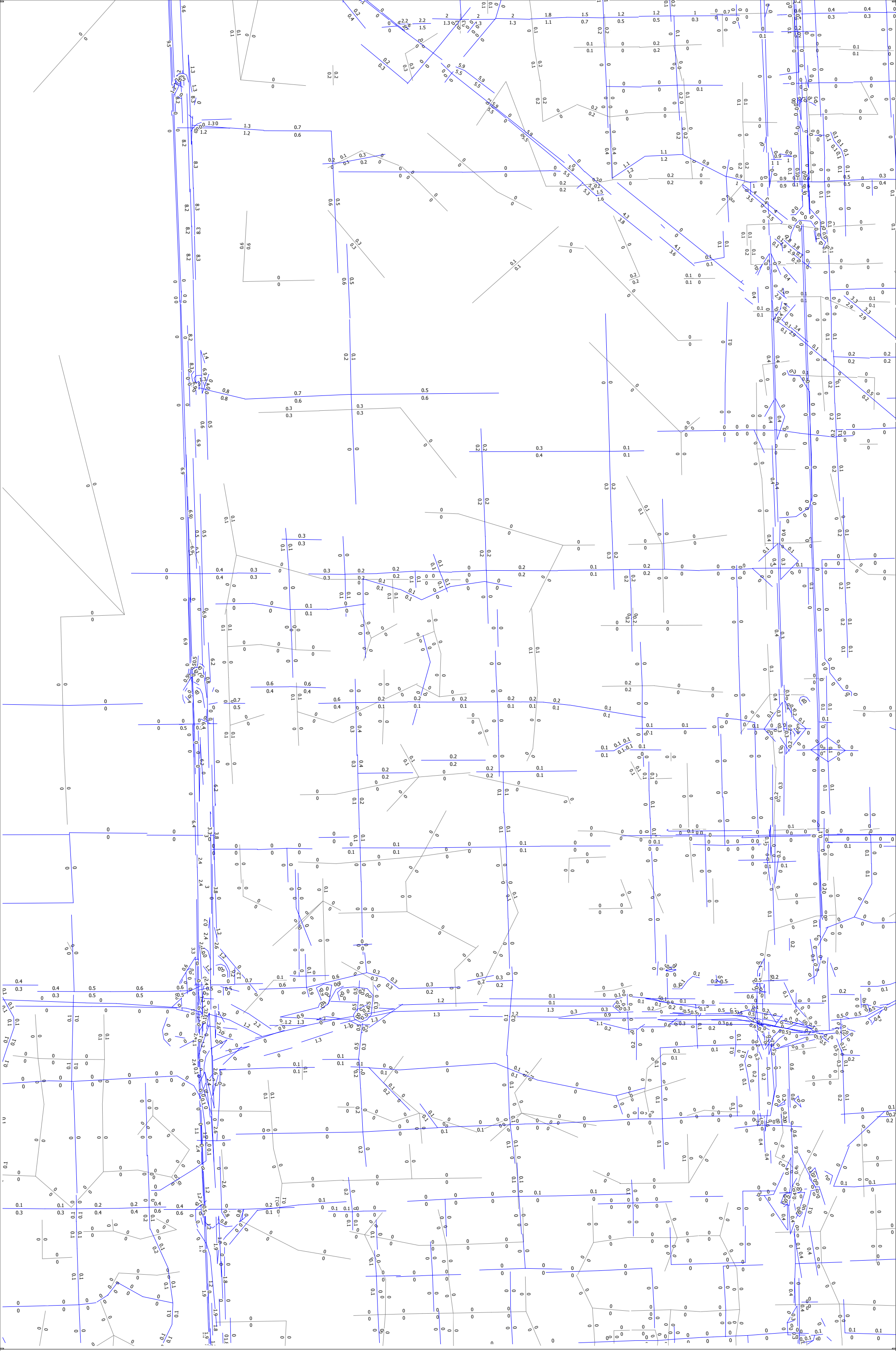
(Licensed to Leftwich Consulting Engineers)



2040 LU on 2020 Network CDMP & Zoning - ADM (Select Zone for TAZ 183) Percentage Distribution (NorthEast)

cube

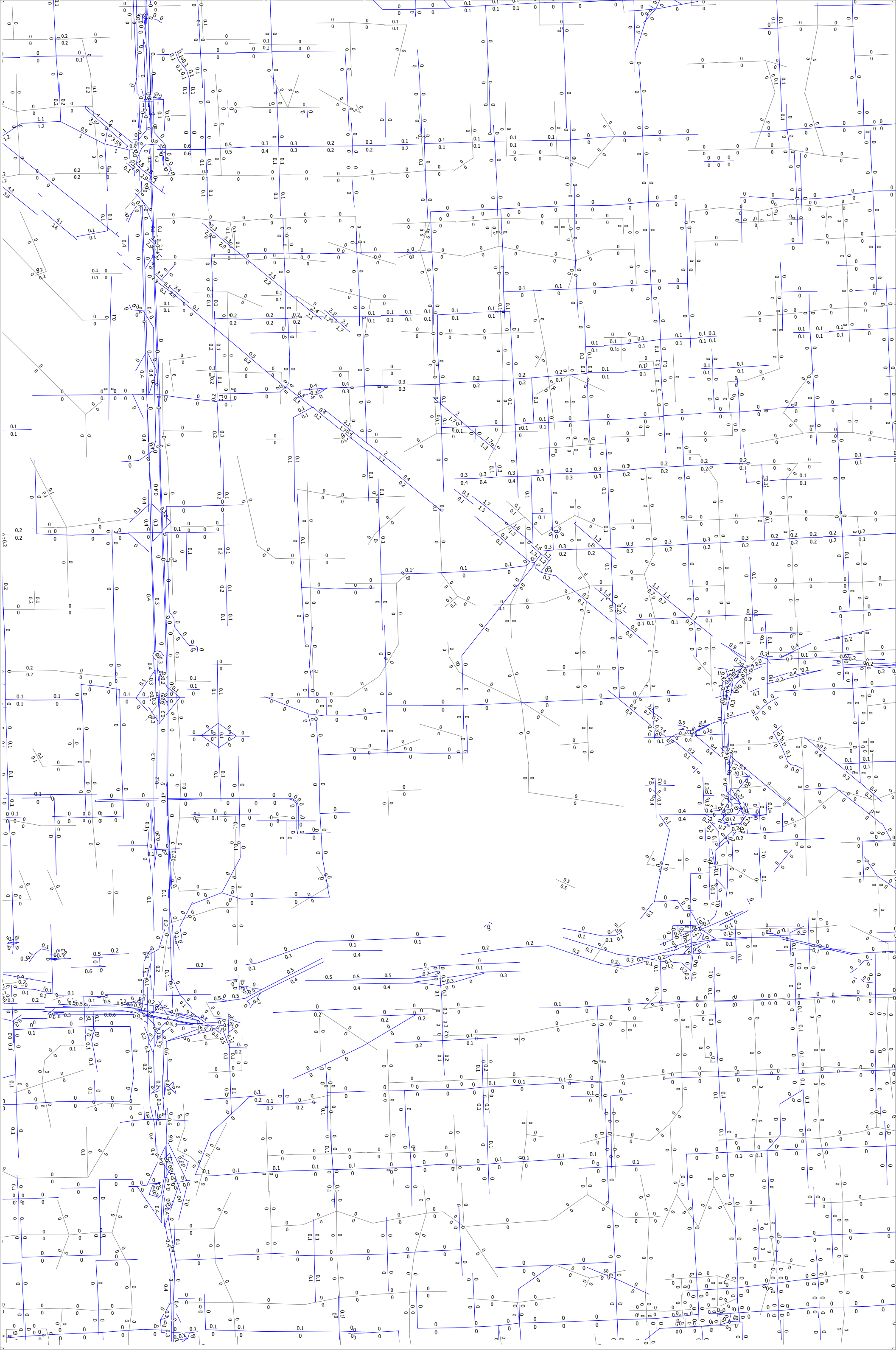
(Licensed to Leftwich Consulting Engineers)



2040 LU on 2020 Network CDMP & Zoning - ADM (Select Zone for TAZ 183) Percentage Distribution (SouthWest)

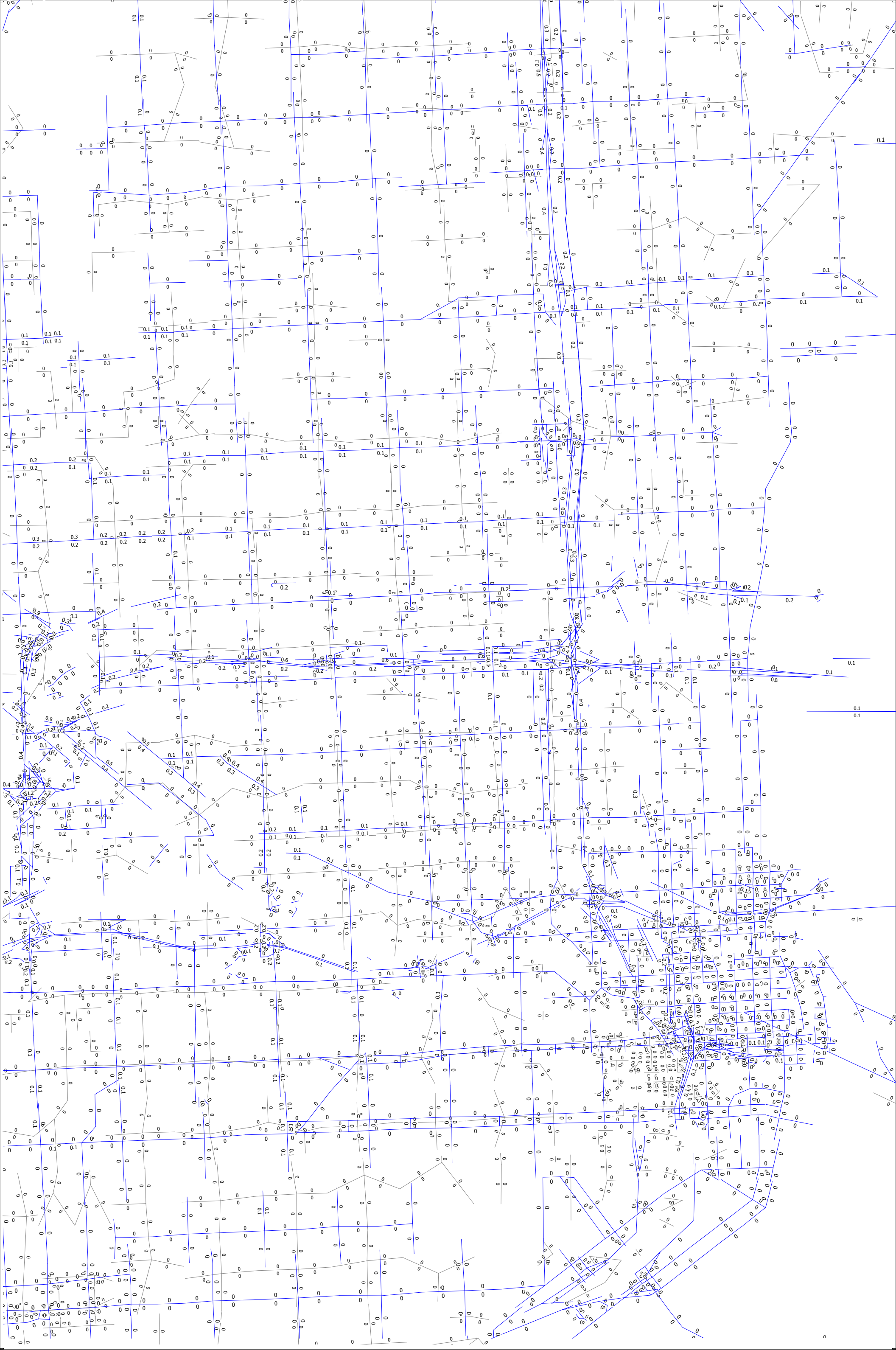
cube

(Licensed to Leftwich Consulting Engineers)



2040 LU on 2020 Network CDMP & Zoning - ADM (Select Zone for TAZ 183) Percentage Distribution (SouthMiddle)

(Licensed to Leftwich Consulting Engineers)

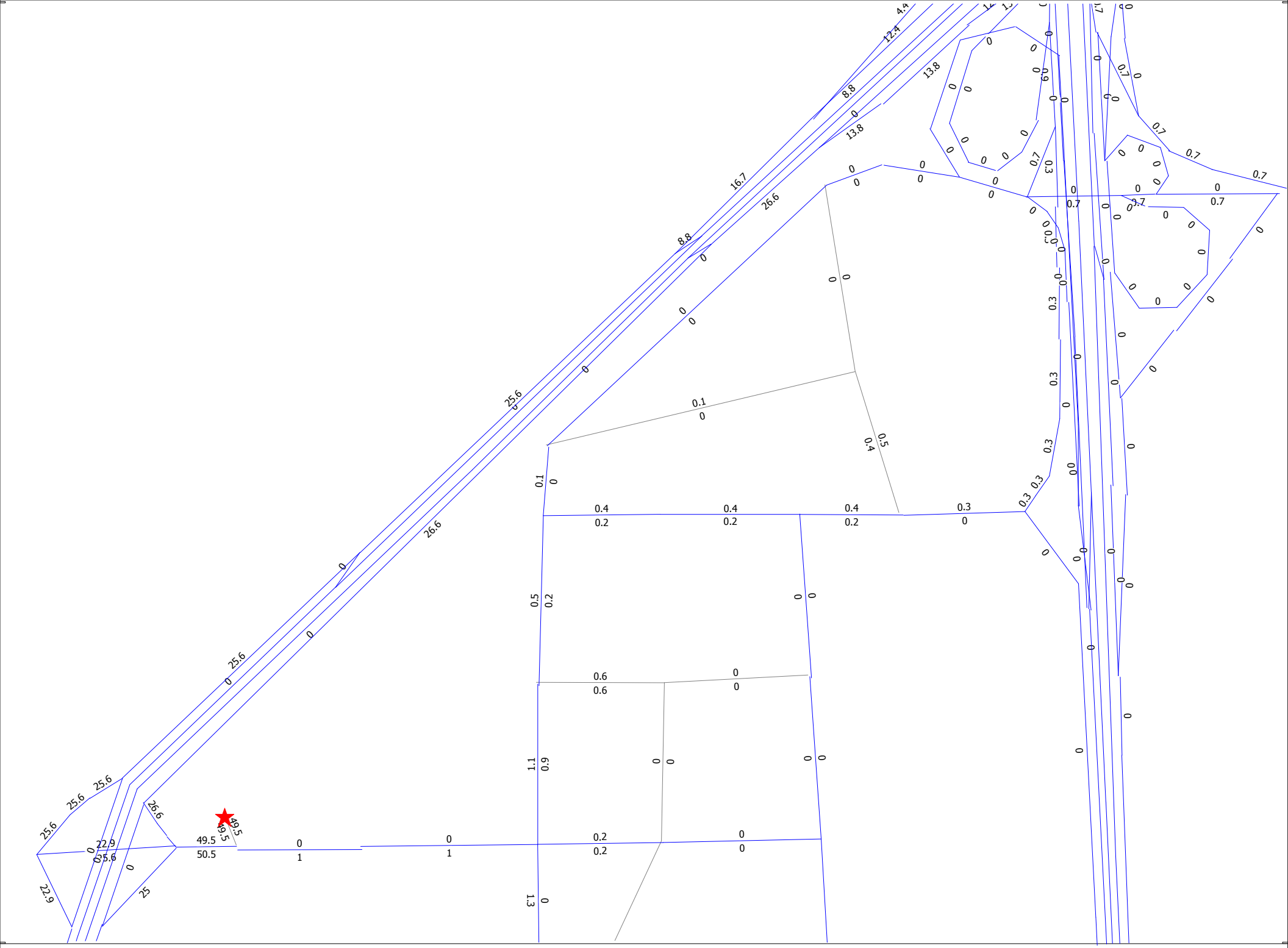


2040 LU on 2020 Network CDMP & Zoning - ADM (Select Zone for TAZ 183) Percentage Distribution (SouthEast)

cube

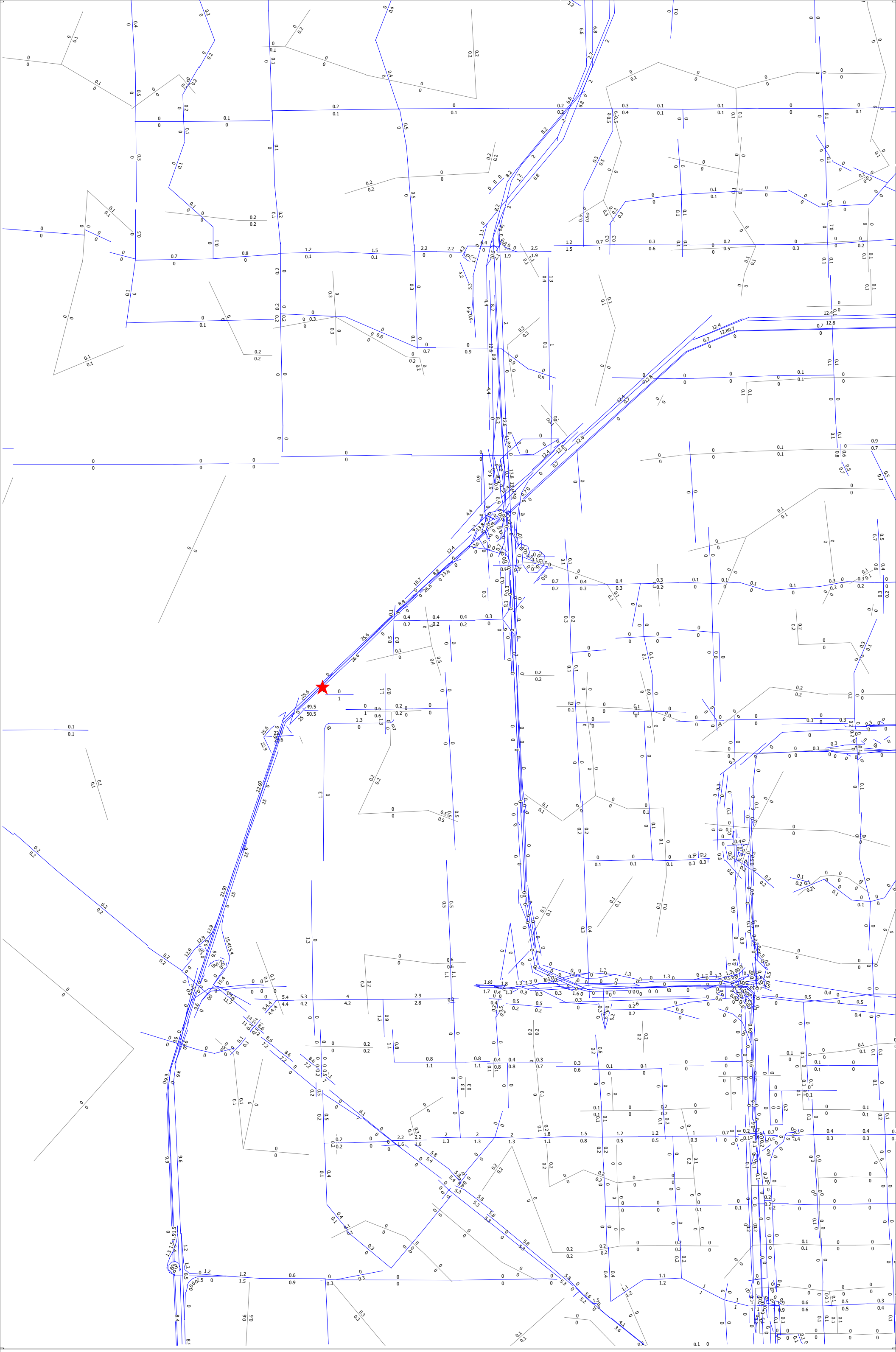
(Licensed to Leftwich Consulting Engineers)

APPENDIX I-M15:
American Dream Miami 2040 Project Land Use on 2040 network for CDMP (Plots with Select Node Project Percentage Distribution for 30% TAZ near HEFT/NW170th)



2040 LU on 2040 Network CDMP - ADM (Select Zone for TAZ 183) Percentage Distribution (Zoom In)

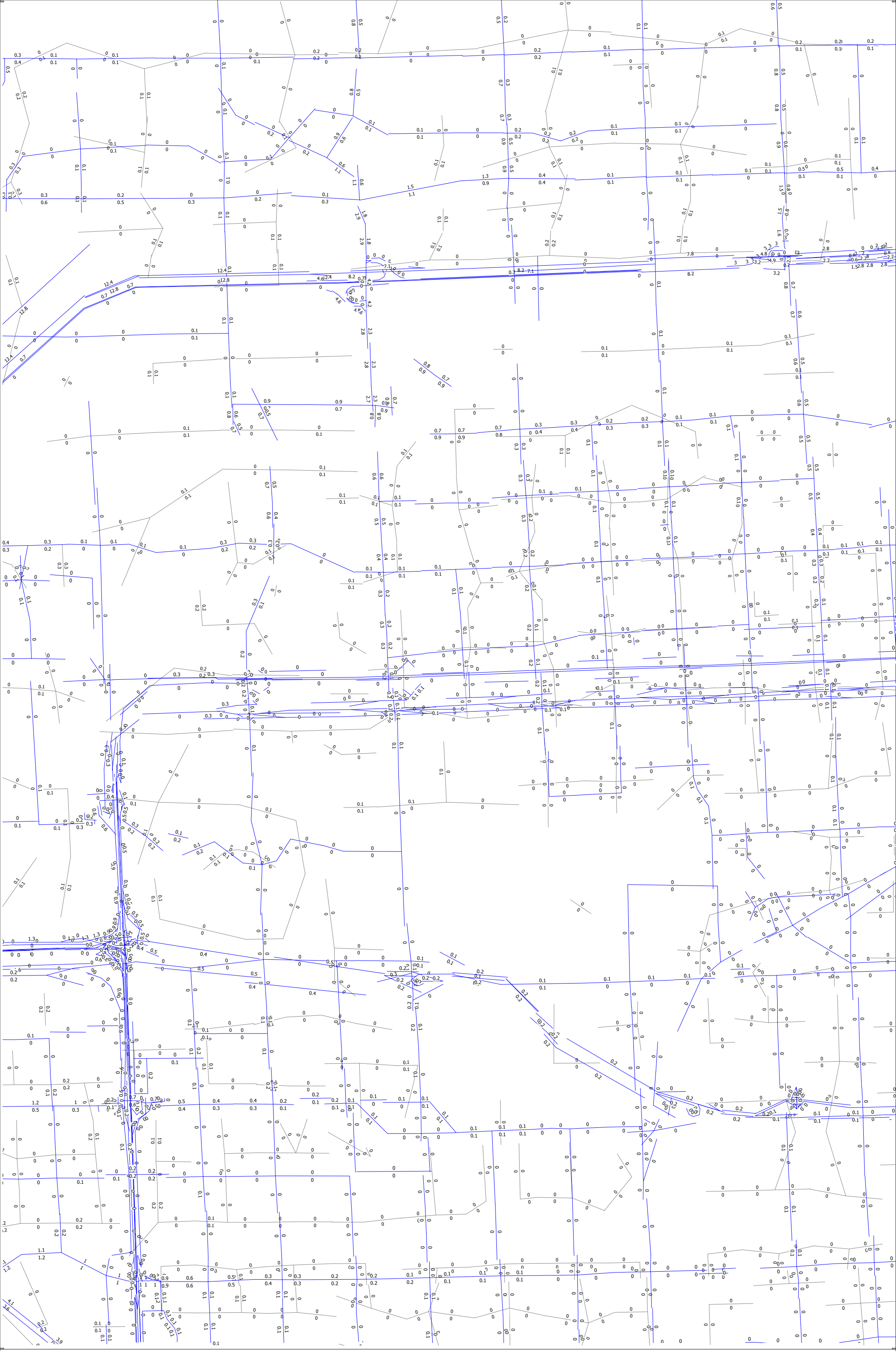
cube
(Licensed to Leftwich Consulting Engineers)



2040 LU on 2040 Network CDMP - ADM (Select Zone for TAZ 183) Percentage Distribution (NorthWest)

cube

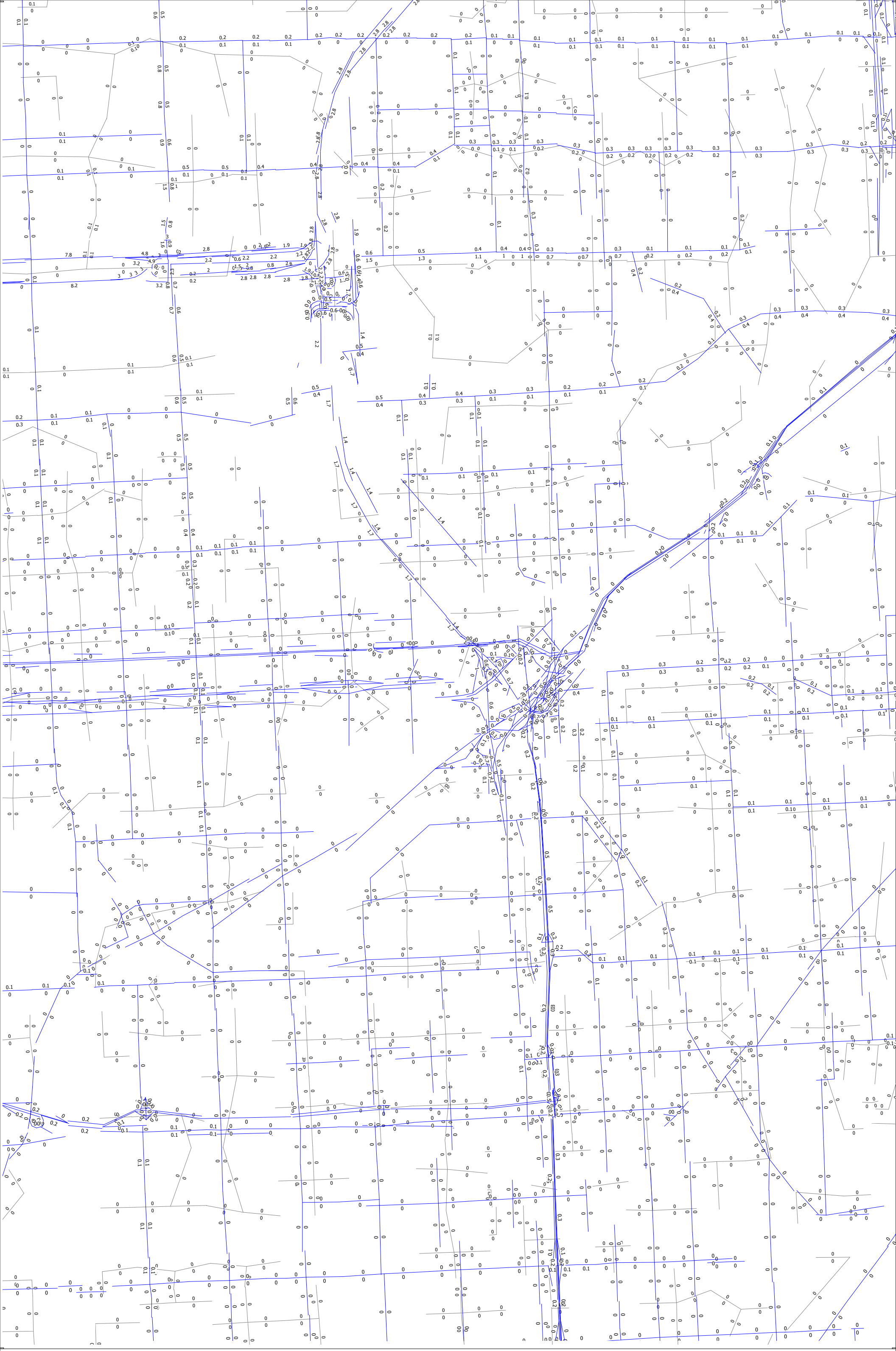
(Licensed to Leftwich Consulting Engineers)



2040 LU on 2040 Network CDMP - ADM (Select Zone for TAZ 183) Percentage Distribution (NorthMiddle)

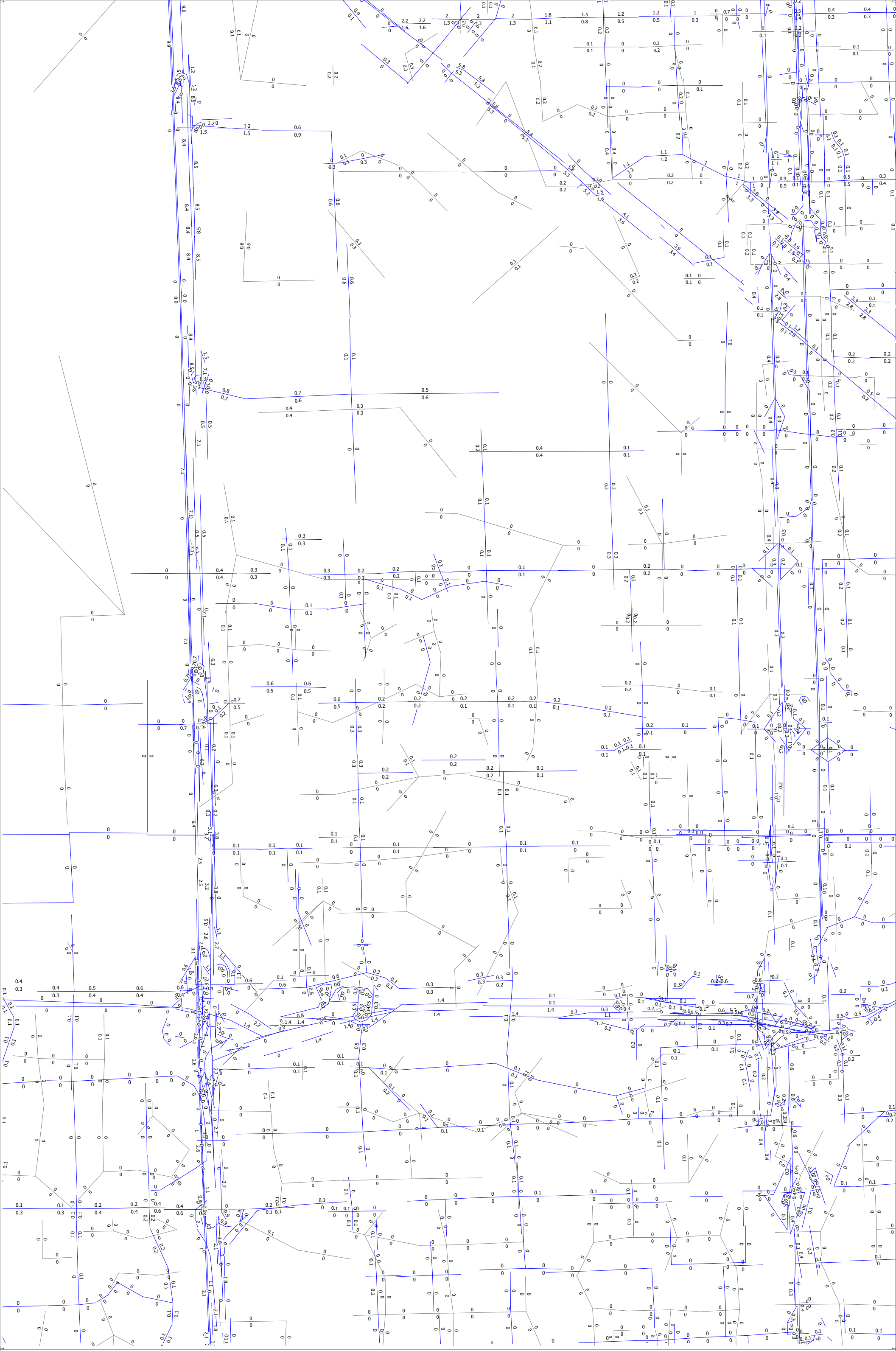
cube

(Licensed to Leftwich Consulting Engineers)



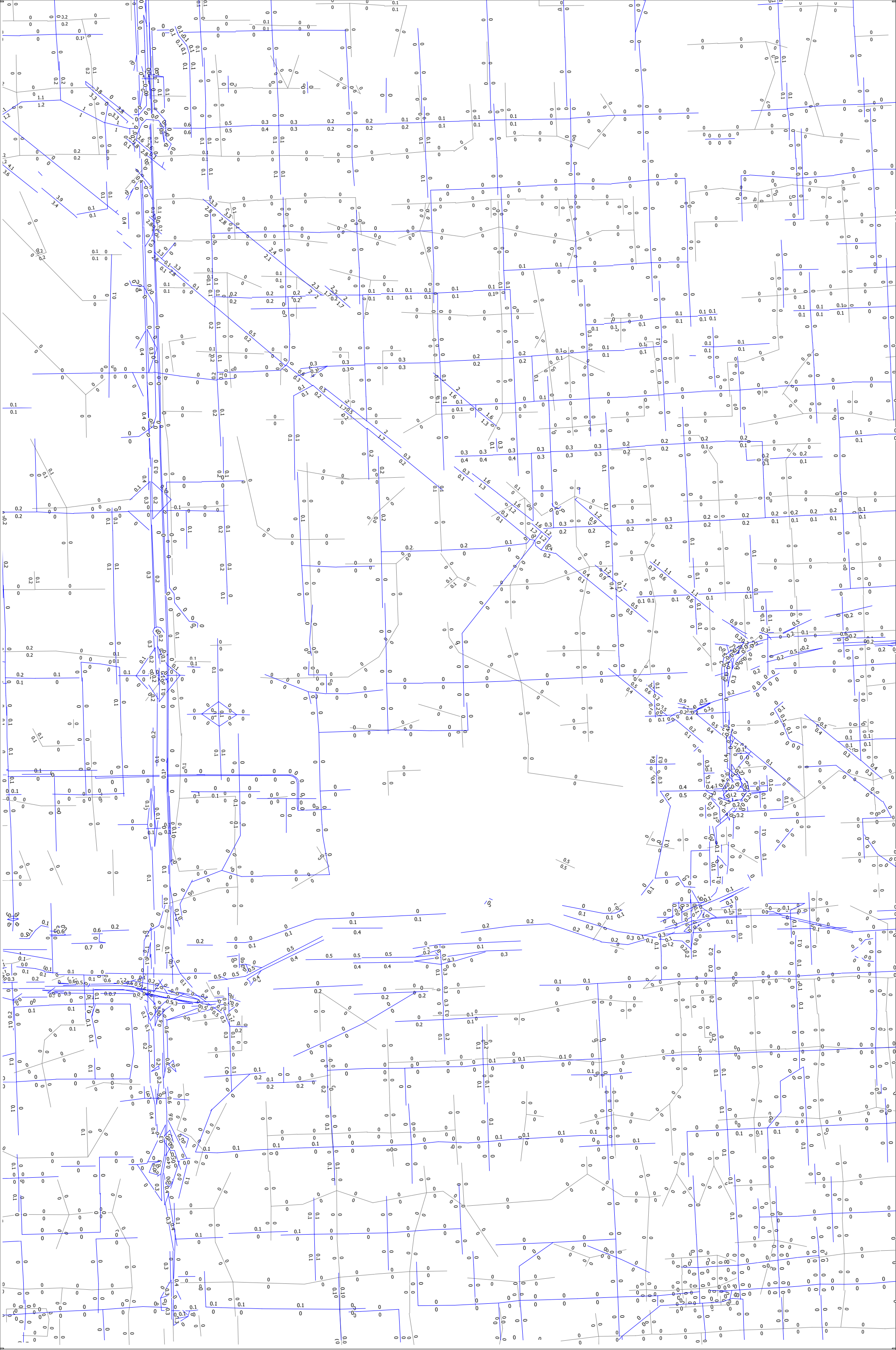
2040 LU on 2040 Network CDMP - ADM (Select Zone for TAZ 183) Percentage Distribution (NorthEast)

(Licensed to Leftwich Consulting Engineers)



2040 LU on 2040 Network CDMP - ADM (Select Zone for TAZ 183) Percentage Distribution (SouthWest)

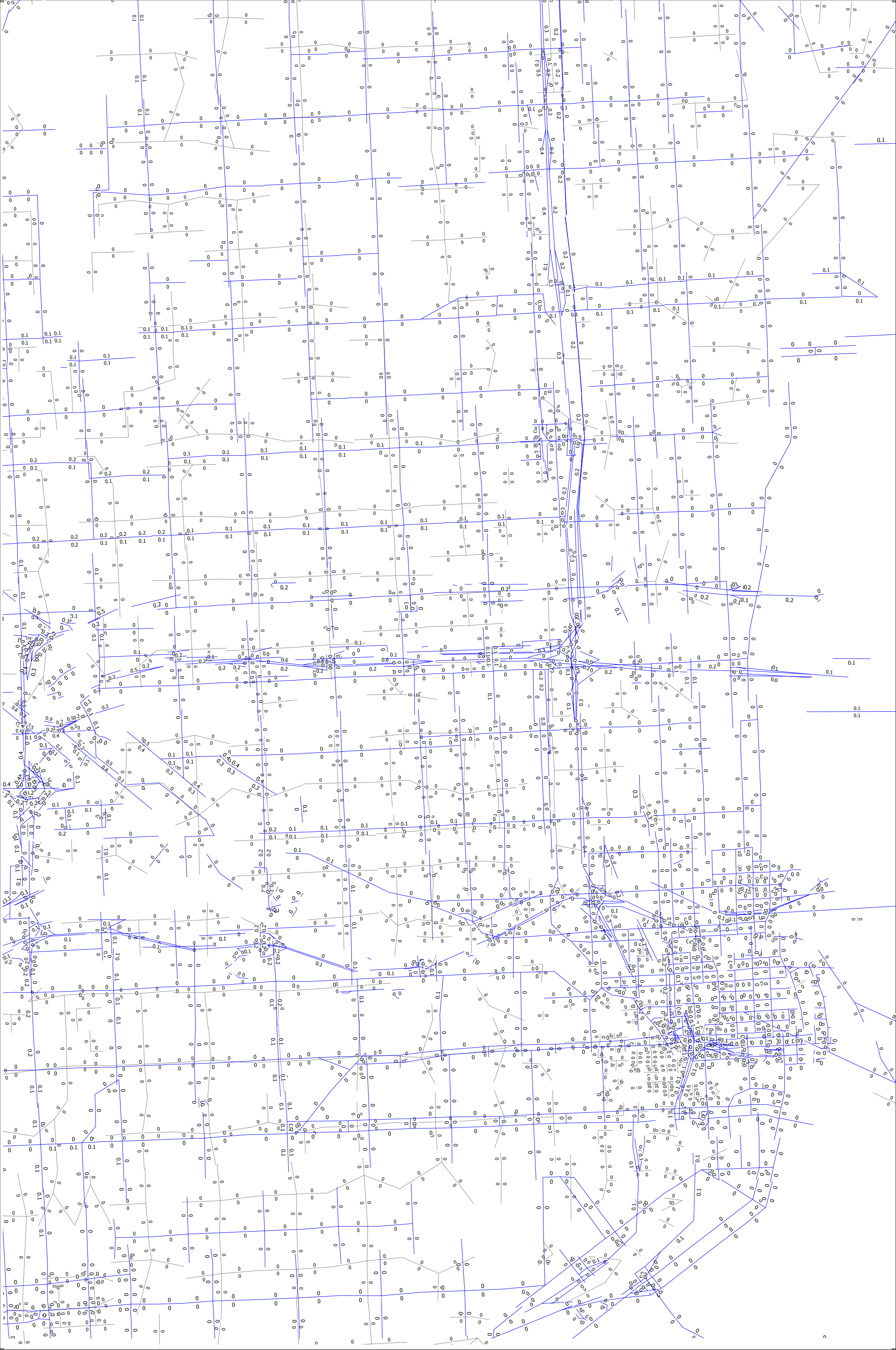
(Licensed to Leftwich Consulting Engineers)



2040 LU on 2040 Network CDMP - ADM (Select Zone for TAZ 183) Percentage Distribution (SouthMiddle)

cube

(Licensed to Leftwich Consulting Engineers)



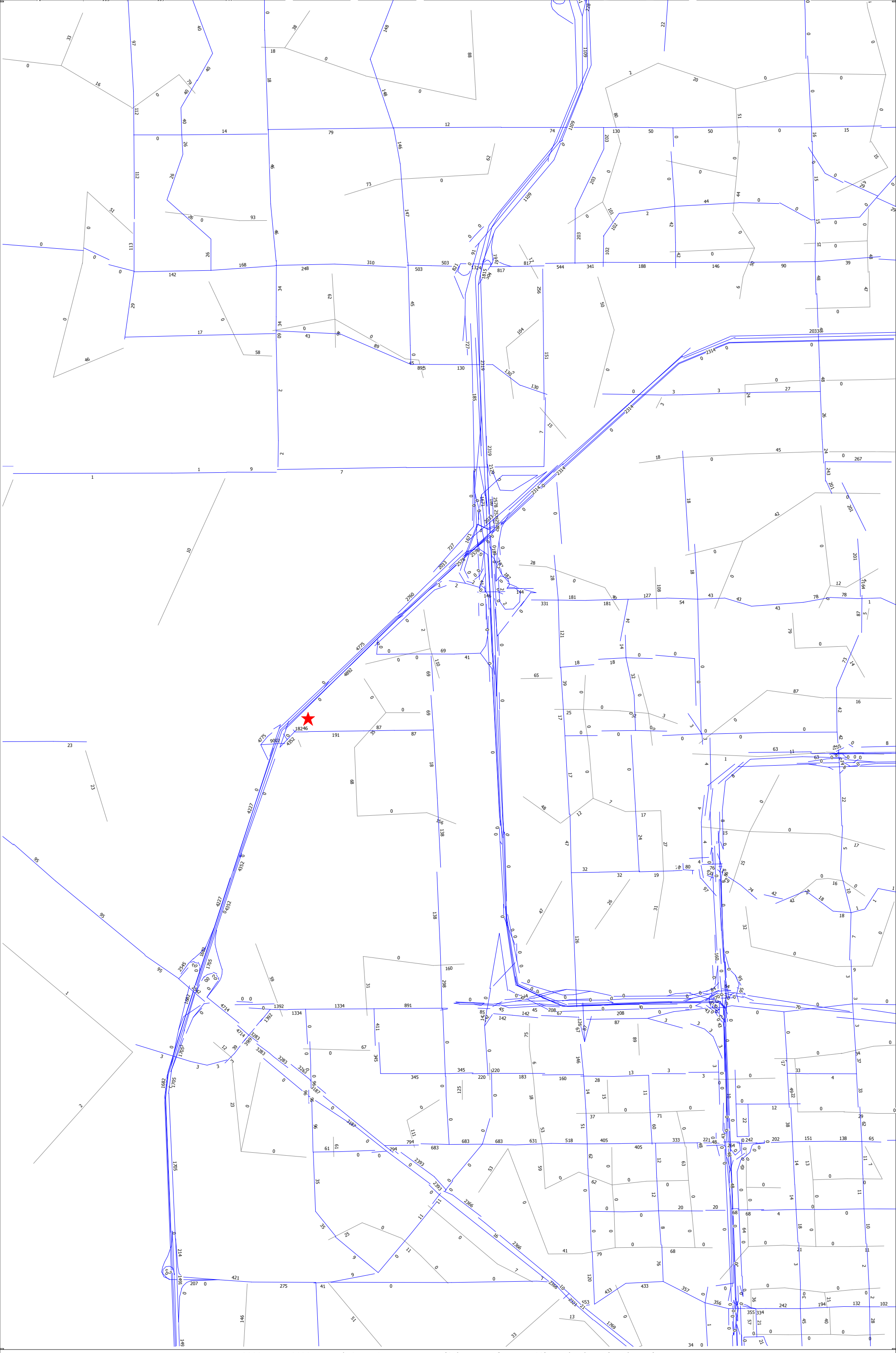
2040 LU on 2040 Network CDMP - ADM (Select Zone for TAZ 183) Percentage Distribution (SouthEast)

(Licensed to Leftwich Consulting Engineers)

APPENDIX I-M16:
American Dream Miami 2020 Project Land Use on 2020 network for CDMP (Plots with Select Node Volume Distribution for 30% TAZ near HEFT/NW170th)

2020 LU on 2020 Network CDMP & Zoning - ADM (Select Zone for TAZ 183) Total Volume (Zoom In)

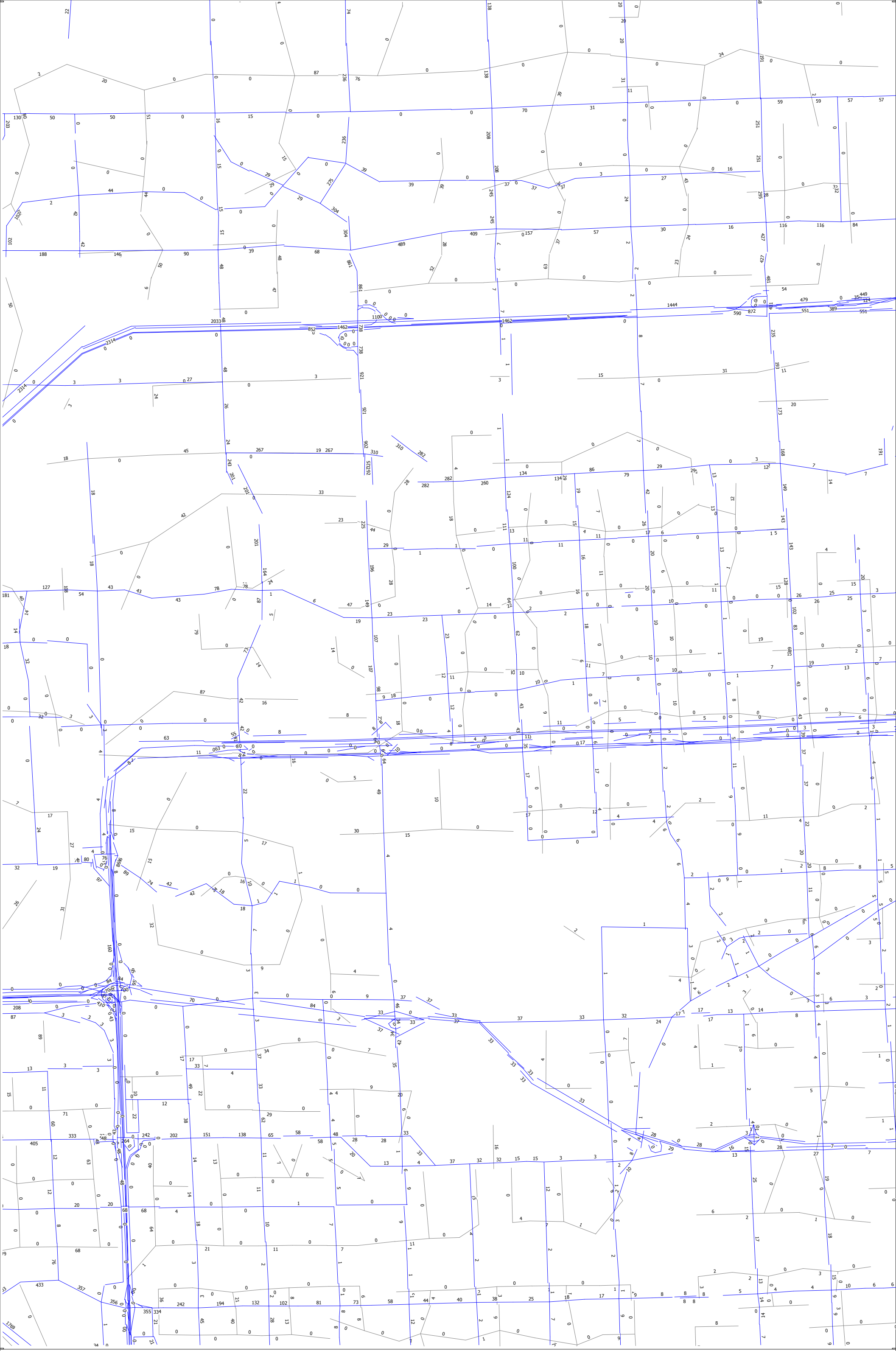
cube
(Licensed to Leftwich Consulting Engineers)



2020 LU on 2020 Network CDMP & Zoning - ADM (Select Zone for TAZ 183) Total Volume (NorthWest)

cube

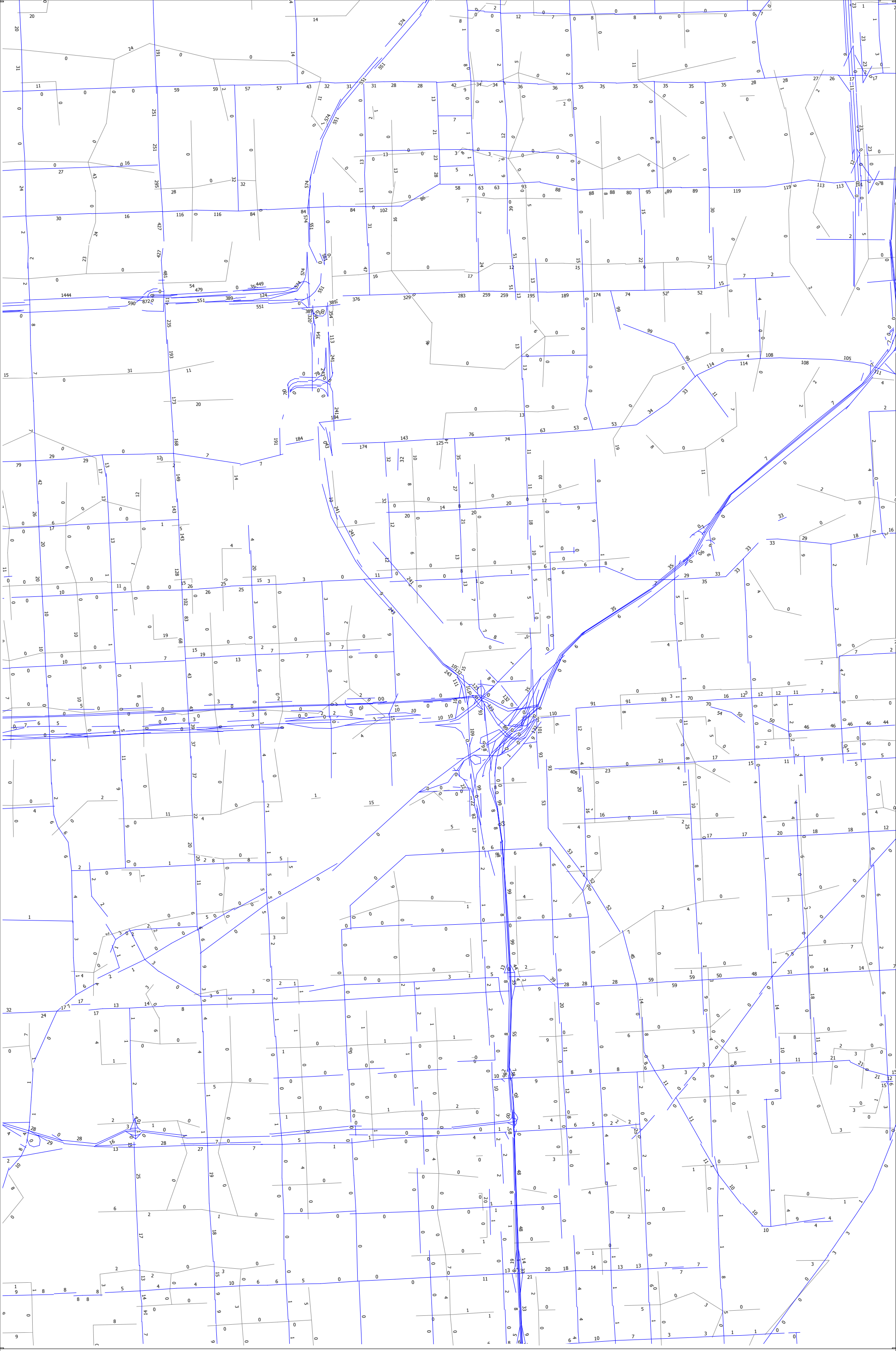
(Licensed to Leftwich Consulting Engineers)



2020 LU on 2020 Network CDMP & Zoning - ADM (Select Zone for TAZ 183) Total Volume (NorthMiddle)

cube

(Licensed to Leftwich Consulting Engineers)



2020 LU on 2020 Network CDMP & Zoning - ADM (Select Zone for TAZ 183) Total Volume (NorthEast)

cube

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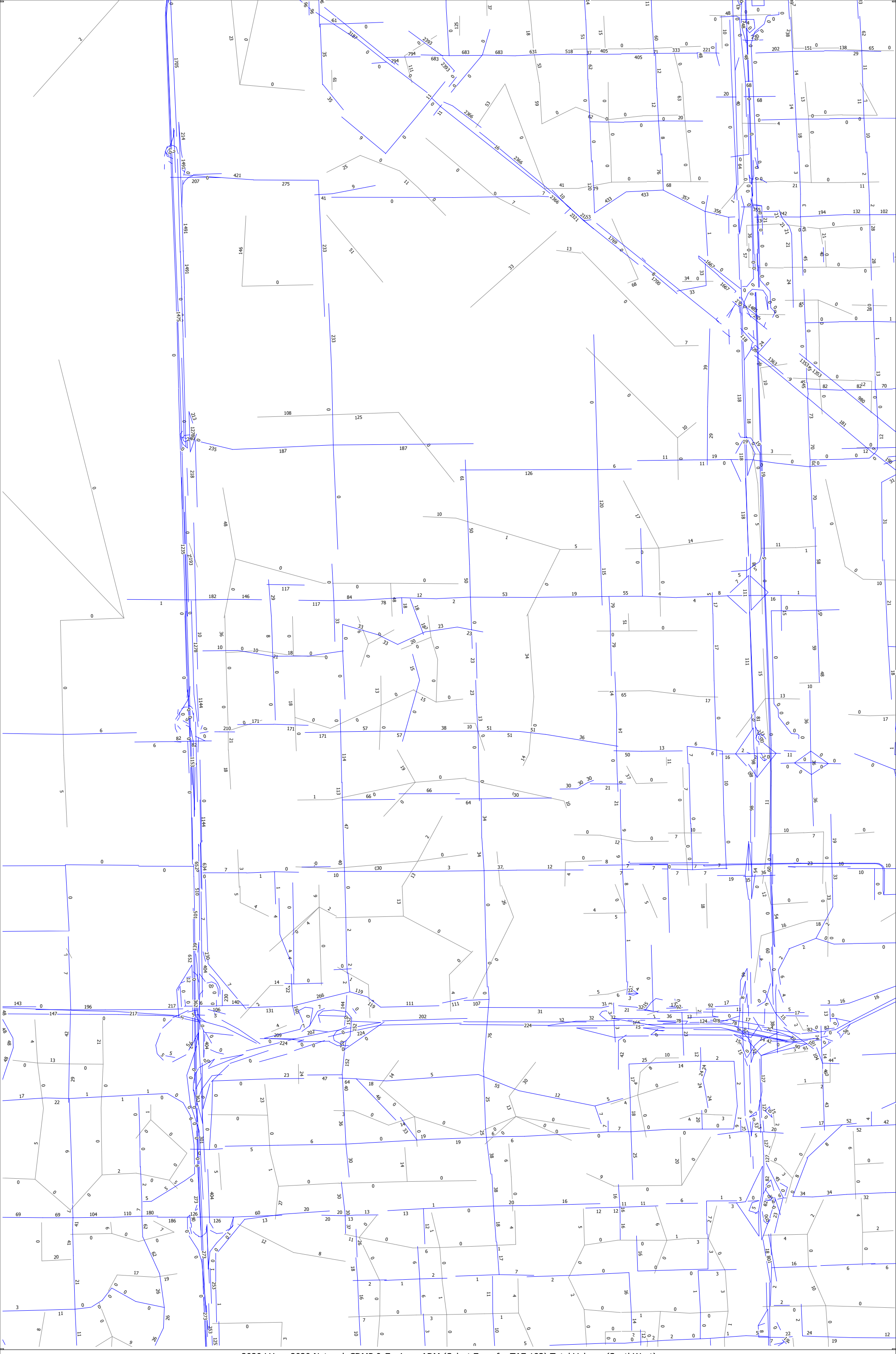

2020 LU on 2020 Network CDMP & Zoning - ADM (Select Zone for TAZ 183) Total Volume (SouthWest)

cube

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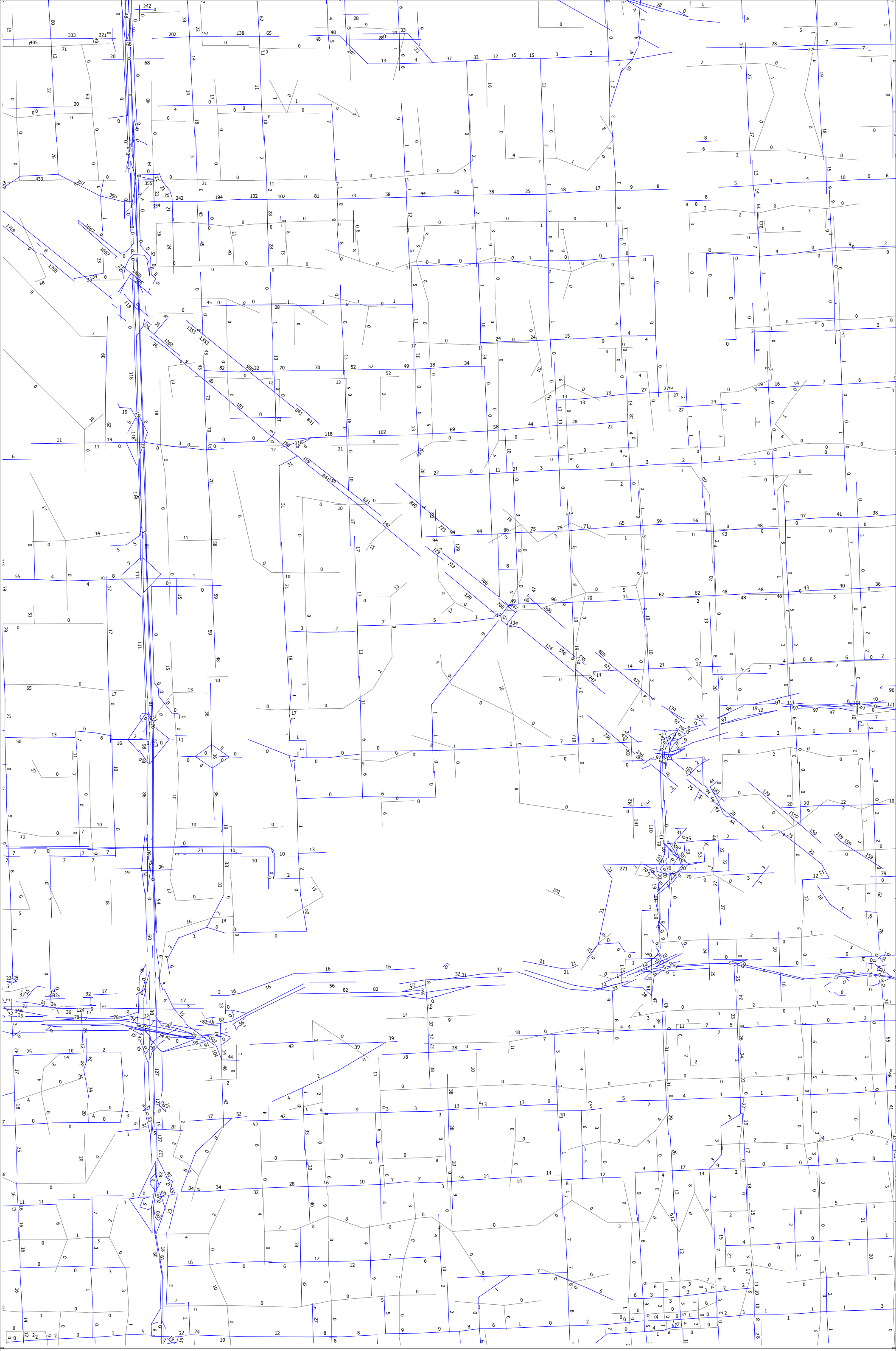

2020 LU on 2020 Network CDMP & Zoning - ADM (Select Zone for TAZ 183) Total Volume (SouthMiddle)

cube

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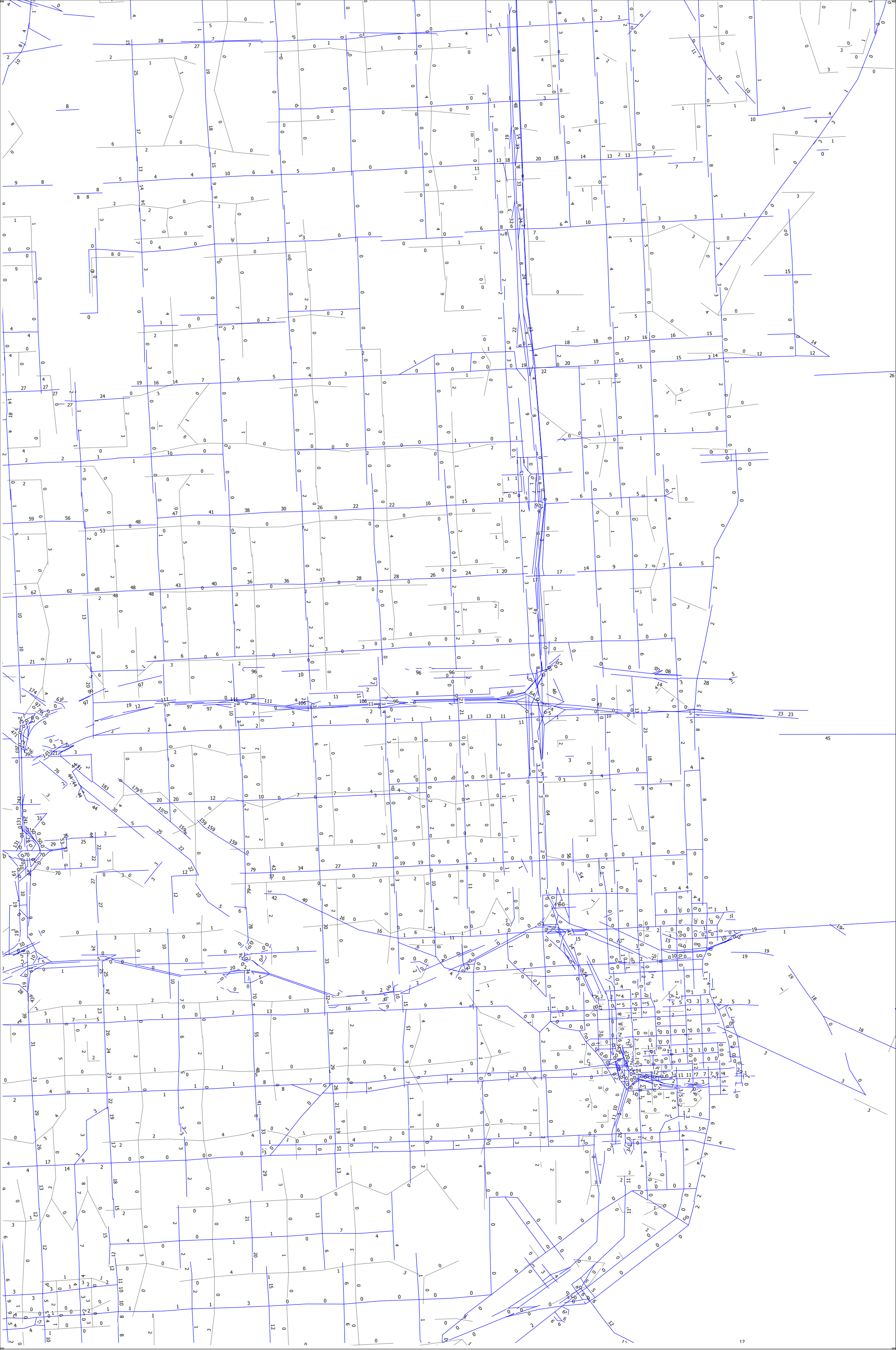

2020 LU on 2020 Network CDMP & Zoning - ADM (Select Zone for TAZ 183) Total Volume (SouthEast)

cube

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APPENDIX I-M17:
American Dream Miami 2040 Project Land Use on 2020 network for CDMP (Plots with Select Node Volume Distribution for 30% TAZ near HEFT/NW170th)

2040 LU on 2020 Network CDMP & Zoning - ADM (Select Zone for TAZ 183) Total Volume (Zoom In)

cube
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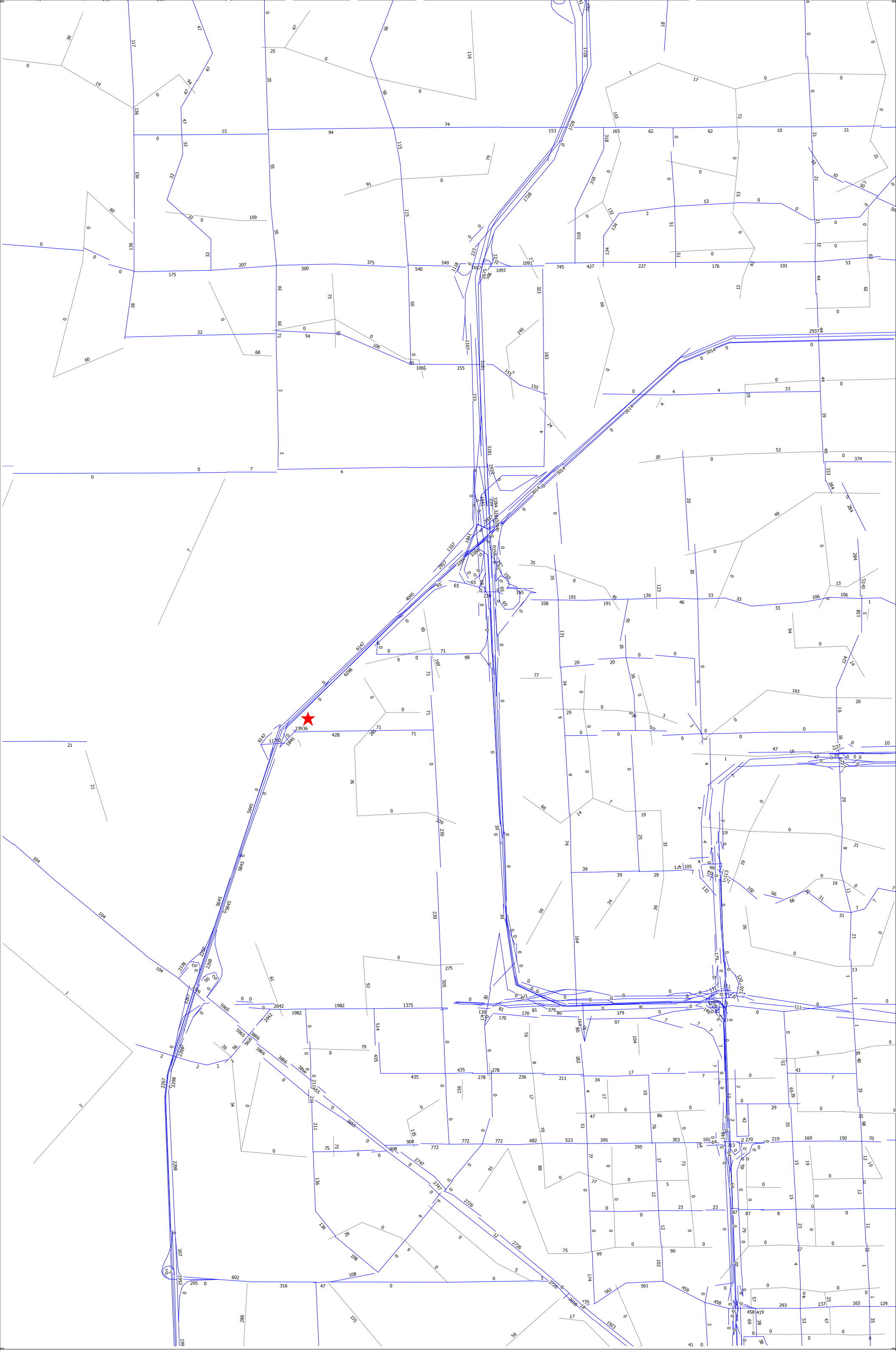
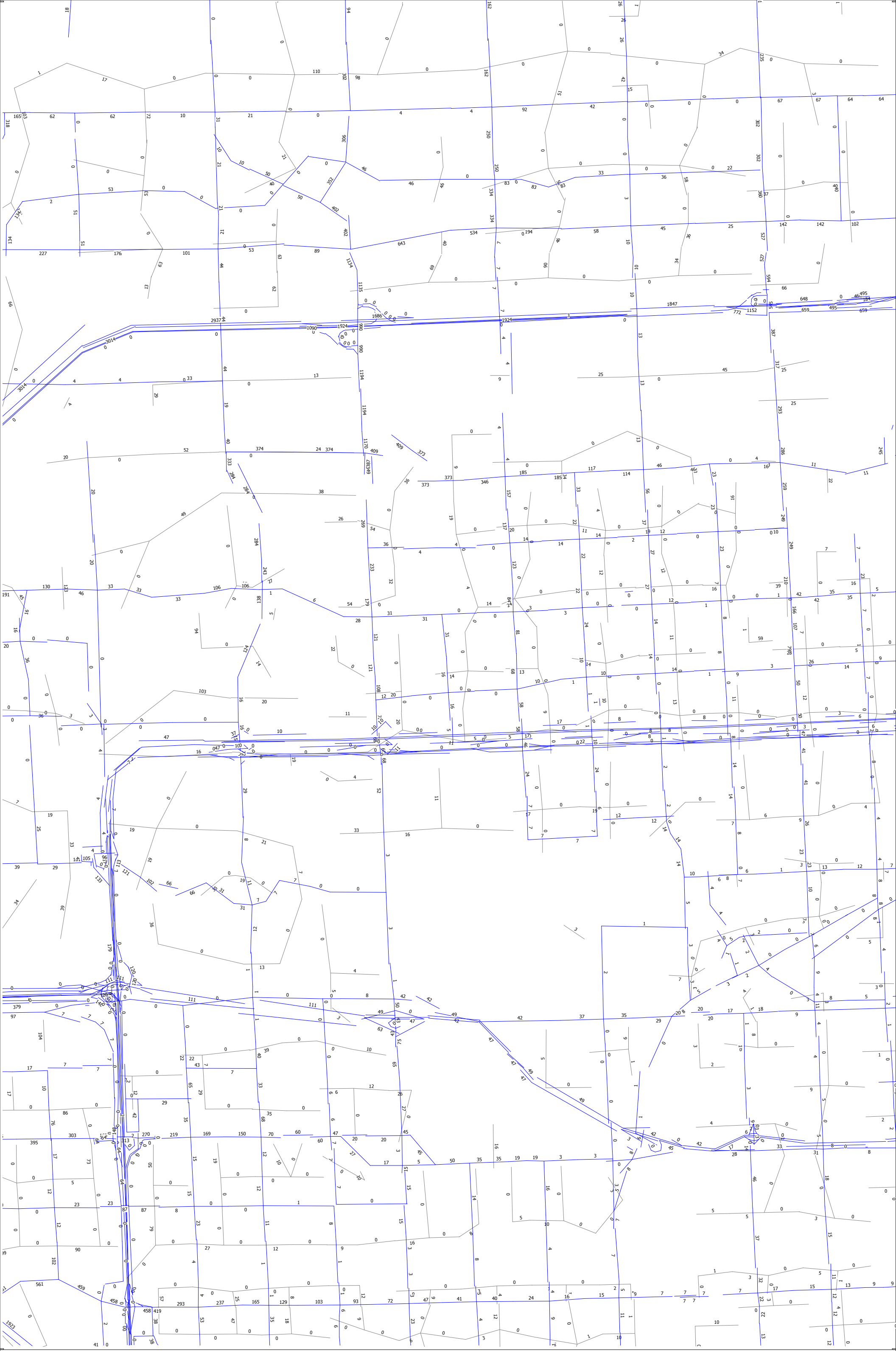


2040 LU on 2020 Network CDMP & Zoning - ADM (Select Zone for TAZ 183) Total Volume (Northwest)

cube

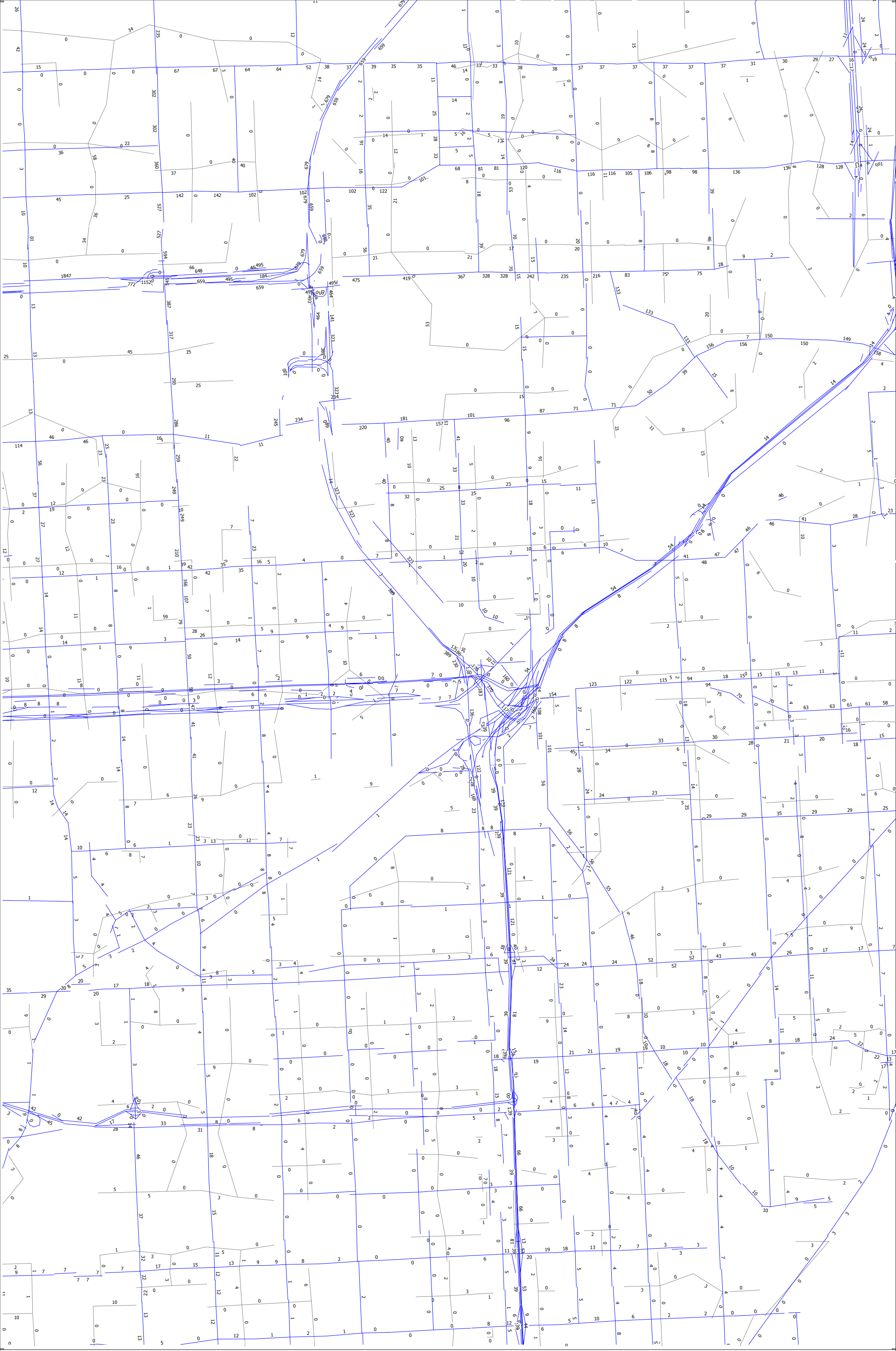
(Licensed to Leftwich Consulting Engineers)



2040 LU on 2020 Network CDMP & Zoning - ADM (Select Zone for TAZ 183) Total Volume (NorthMiddle)

cube

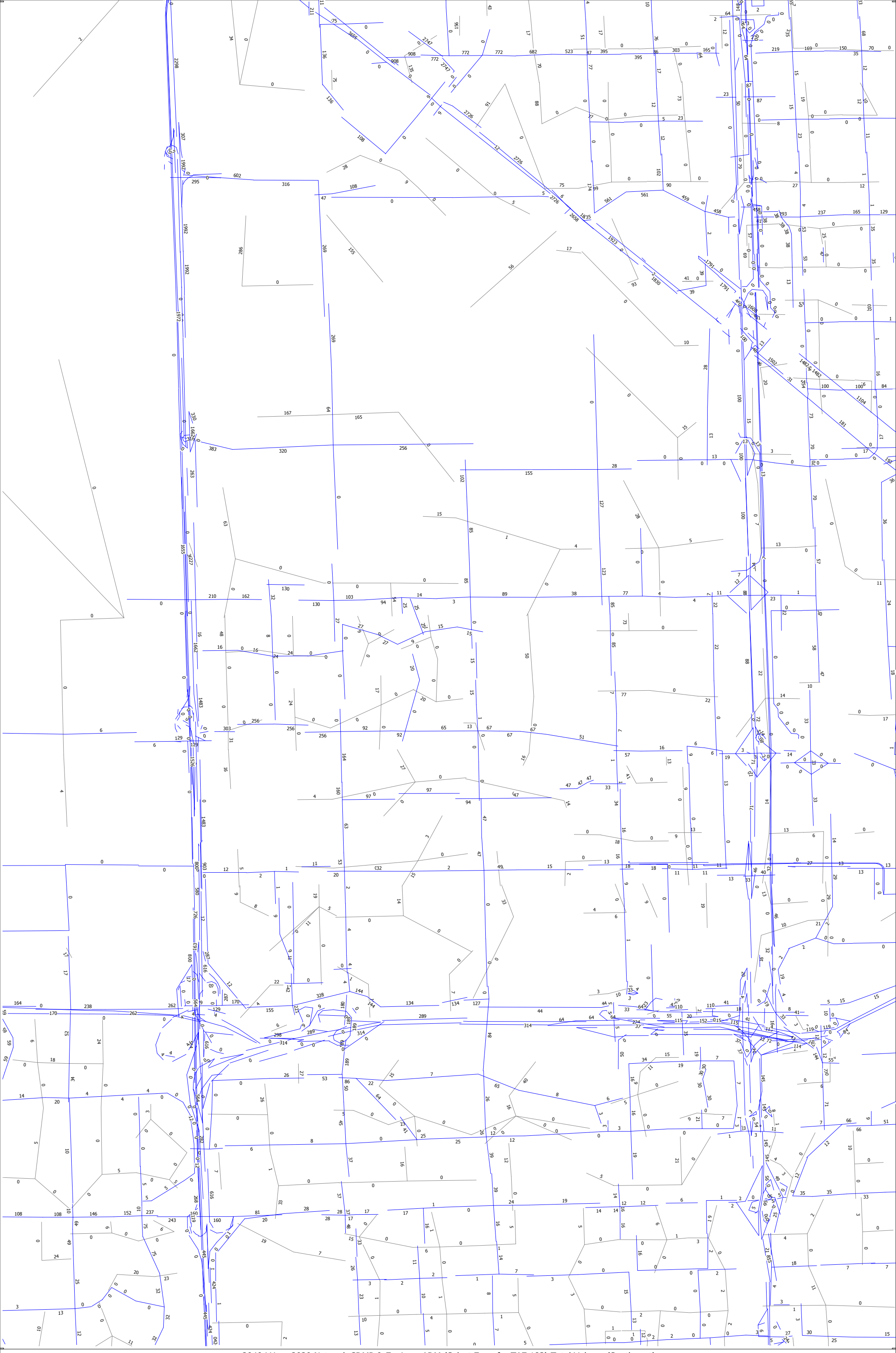
(Licensed to Leftwich Consulting Engineers)



2040 LU on 2020 Network CDMP & Zoning - ADM (Select Zone for TAZ 183) Total Volume (NorthEast)

cube

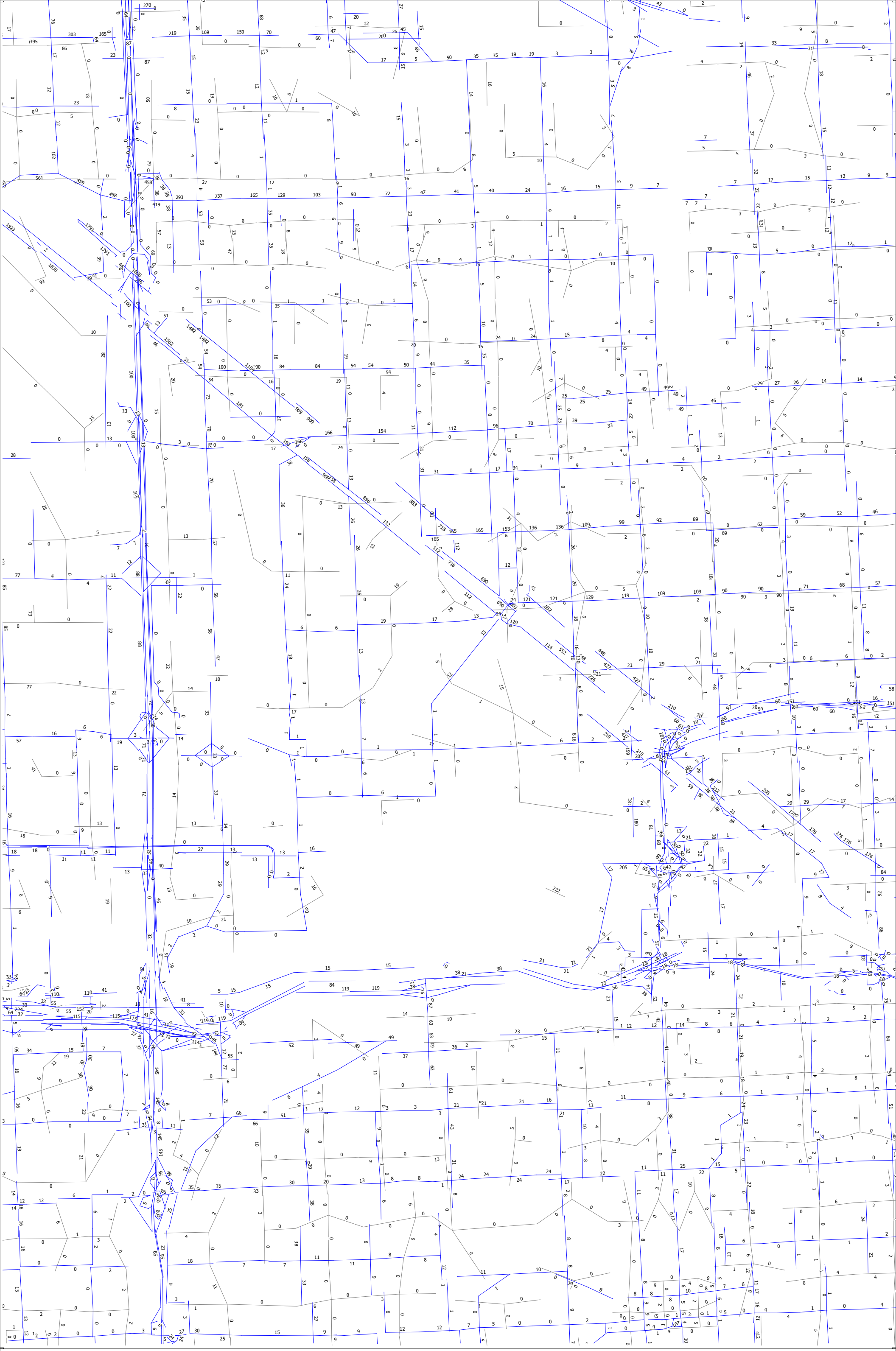
(Licensed to Leftwich Consulting Engineers)



2040 LU on 2020 Network CDMP & Zoning - ADM (Select Zone for TAZ 183) Total Volume (Southwest)

cube

(Licensed to Leftwich Consulting Engineers)



2040 LU on 2020 Network CDMP & Zoning - ADM (Select Zone for TAZ 183) Total Volume (SouthMiddle)

cube

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2040 LU on 2020 Network CDMP & Zoning - ADM (Select Zone for TAZ 183) Total Volume (SouthEast)

cube

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APPENDIX I-M18:
American Dream Miami 2040 Project Land Use on 2040 network for CDMP (Plots with Select Node Volume Distribution for 30% TAZ near HEFT/NW170th)

2040 LU on 2040 Network CDMP - ADM (Select Zone for TAZ 183) Total Volume (Zoom In)

cube
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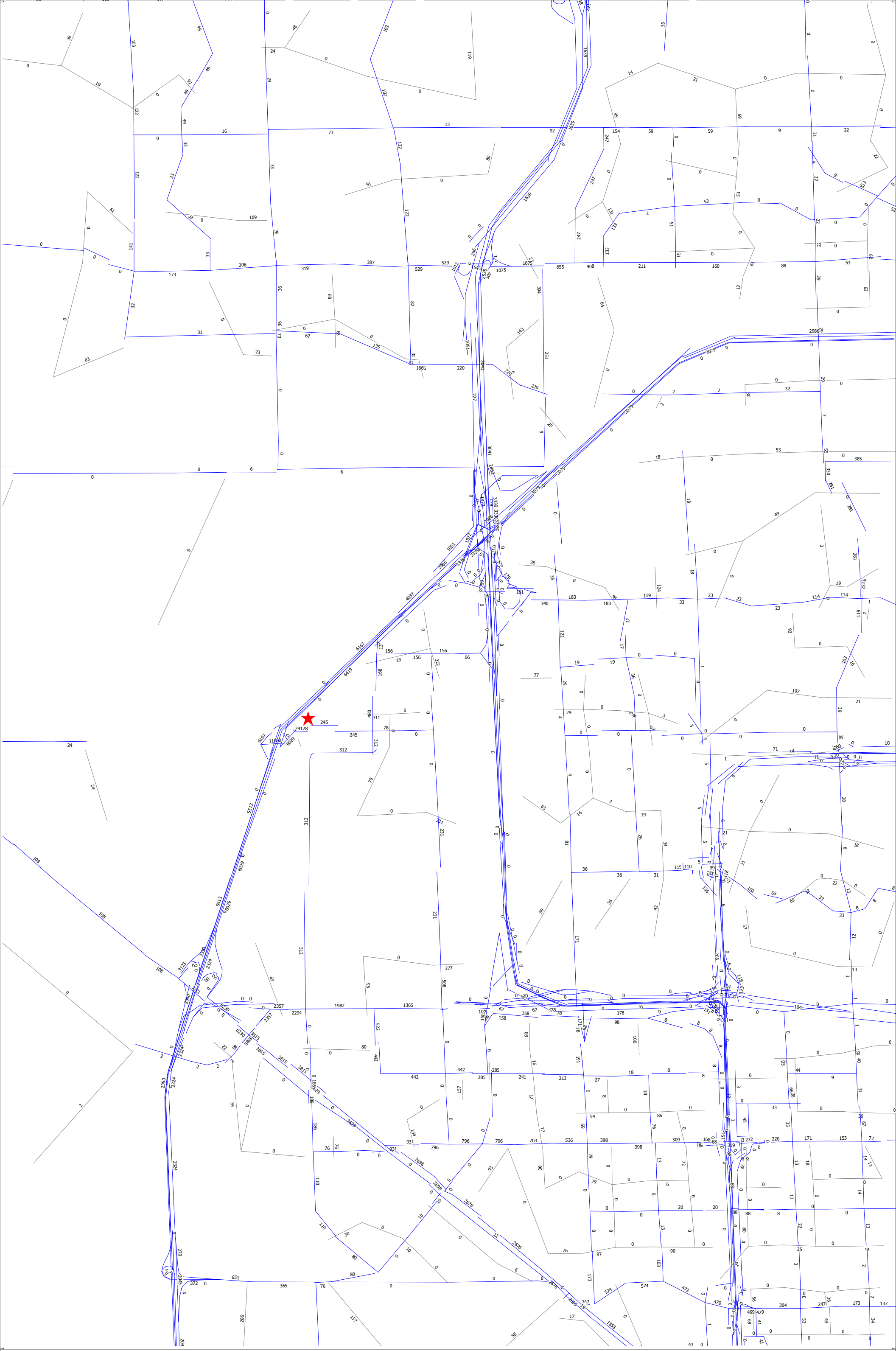
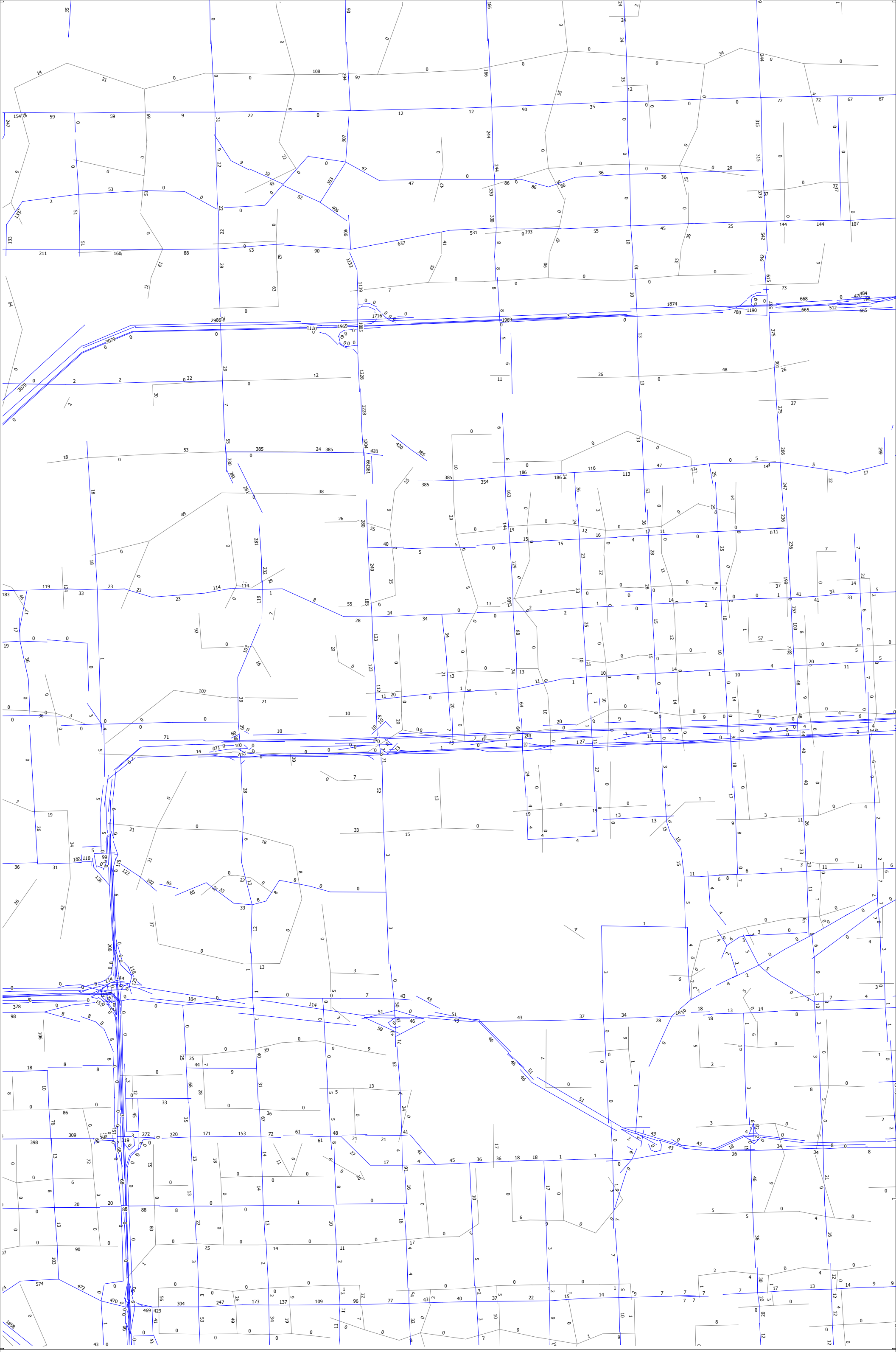


2040 LU on 2040 Network CDMP - ADM (Select Zone for TAZ 183) Total Volume (NorthWest)

cube

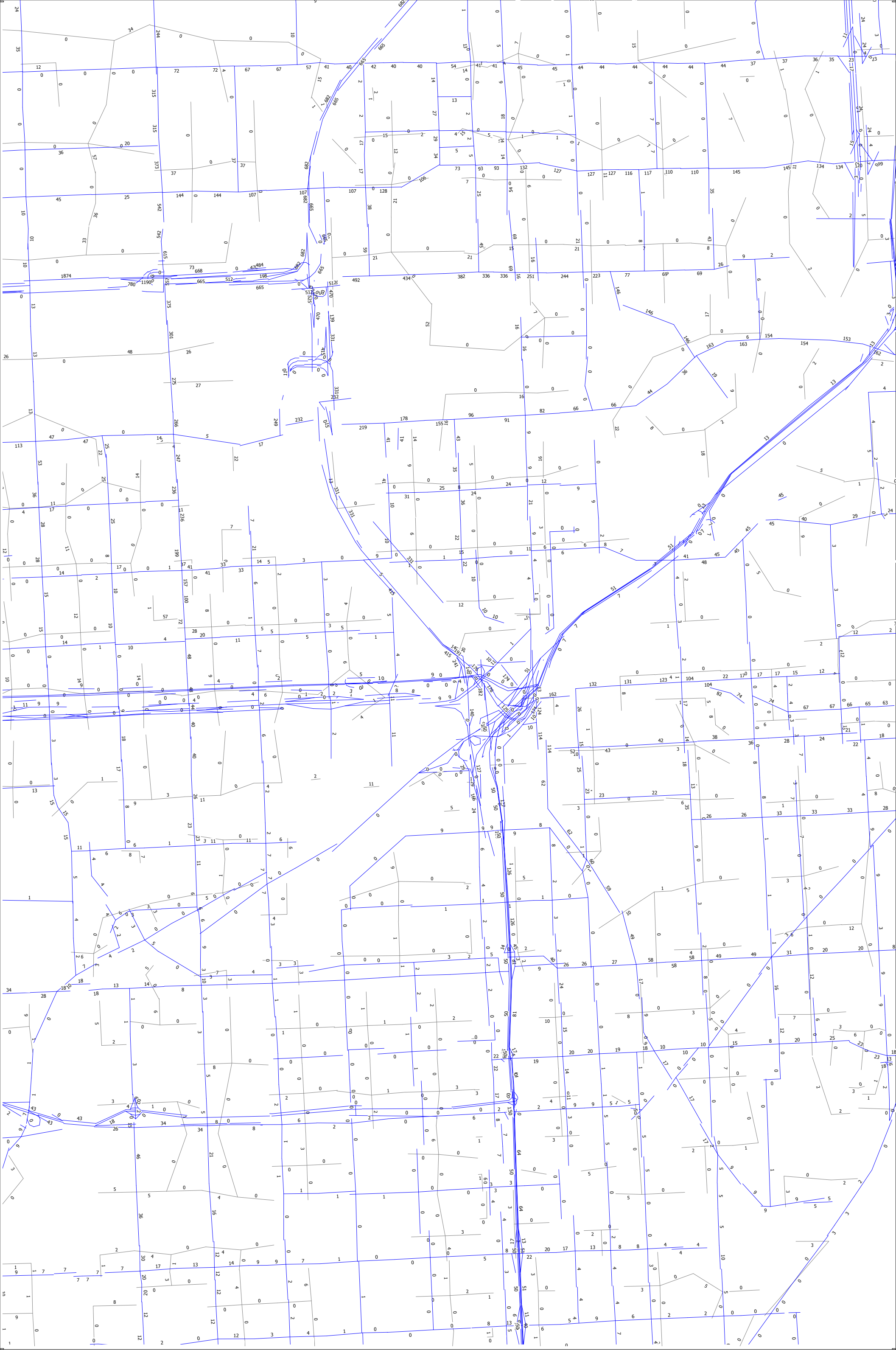
(Licensed to Leftwich Consulting Engineers)



2040 LU on 2040 Network CDMP - ADM (Select Zone for TAZ 183) Total Volume (NorthMiddle)

cube

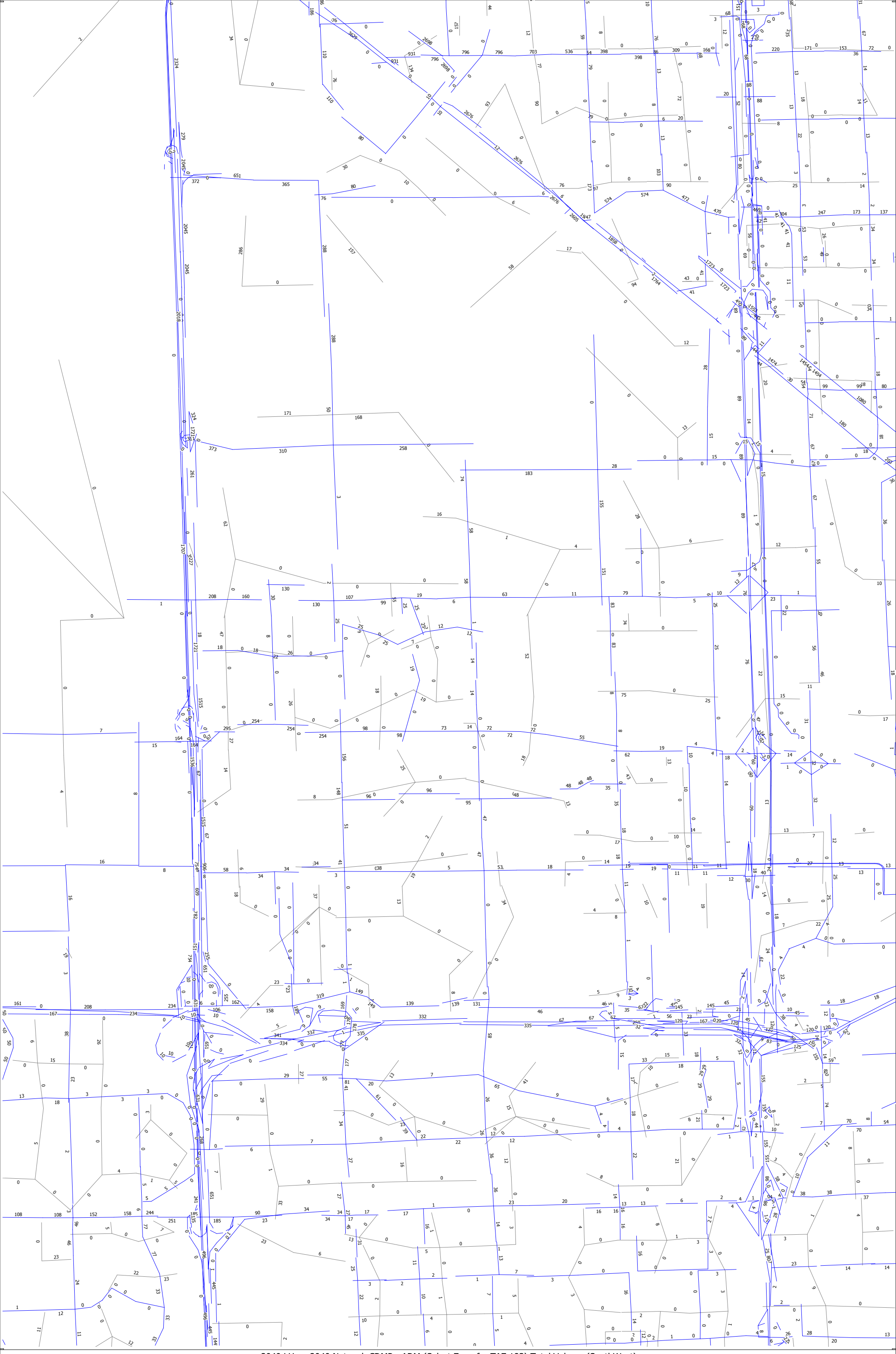
(Licensed to Leftwich Consulting Engineers)



2040 LU on 2040 Network CDMP - ADM (Select Zone for TAZ 183) Total Volume (NorthEast)

cube

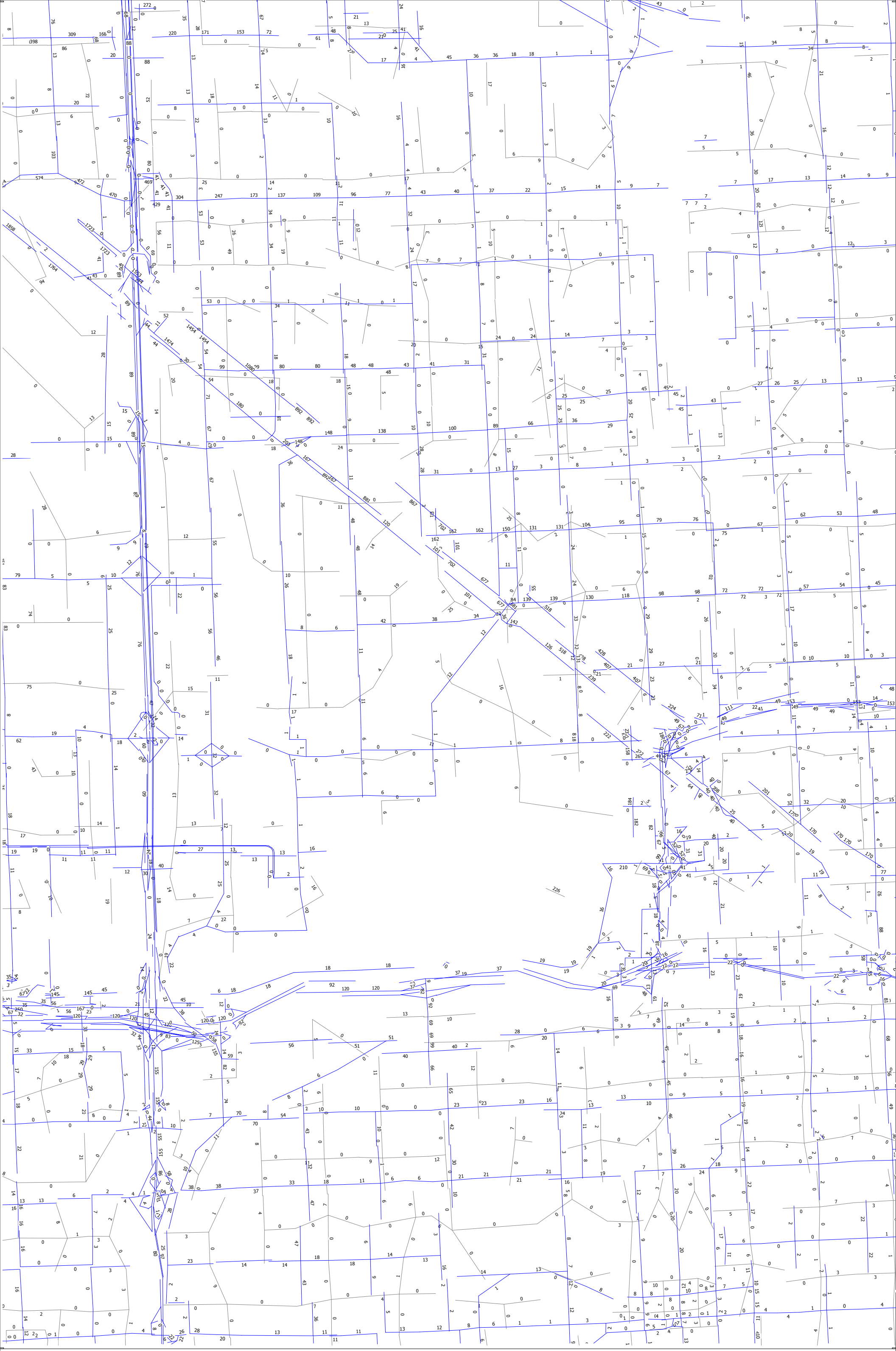
(Licensed to Leftwich Consulting Engineers)



2040 LU on 2040 Network CDMP - ADM (Select Zone for TAZ 183) Total Volume (SouthWest)

cube

(Licensed to Leftwich Consulting Engineers)



2040 LU on 2040 Network CDMP - ADM (Select Zone for TAZ 183) Total Volume (SouthMiddle)

cube

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2040 LU on 2040 Network CDMP - ADM (Select Zone for TAZ 183) Total Volume (SouthEast)

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APPENDIX I-N:
Bridge Analysis 06 22 2016

BRIDGE ANALYSIS SUMMARY FOR
NW 154TH ST AND NW 170TH ST

At the request of MDC, several model runs were completed to evaluate the impact of the ADM and the Graham Projects IF either a NW 154th St and/or a NW 170th St new bridge over I-75 were to be included in the Projects' analyses. The connections would, if implemented, occur between their existing termini east of I-75 near NW 87th Avenue and be extended over I-75 to NW 97th Ave. The following represents the supporting traffic impact analysis for four separate model runs that were completed for the year 2040. Specifically, the four model runs prepared for the review consist of the following:

- Year 2040 Baseline Run (No Bridges)
- Year 2040 with NW 154th Bridge Only
- Year 2040 with NW 170th Bridge Only
- Year 2040 with Both NW 154th and NW 170th Bridges

The results of the travel demand forecasts performed are summarized in the table below:

YEAR 2040 MODEL VOLUMES

Run Name	Road Name	Total	ADM	Graham
Alternative 1 Base Model	Miami Garden Drive	69,000	10,000	10,000
	NW 170th ST	-	-	-
	NW 154th St	-	-	-
Total		**69,000**	**10,000**	**10,000**
Run Name	**Road Name**	**Total**	**ADM**	**Graham**
Alternative 2 NW 170th Only	Miami Garden Drive	65,000	11,000	6,000
	NW 170th ST	22,000	100	9,000
	NW 154th St	-	-	-
Total		**87,000**	**11,100**	**15,000**
Run Name	**Road Name**	**Total**	**ADM**	**Graham**
Alternative 3 NW 154th Only	Miami Garden Drive	68,000	11,000	10,000
	NW 170th ST	-	-	-
	NW 154th St	21,000	500	4,500
Total		**89,000**	**11,500**	**14,500**
Alternative 4 Both	Miami Garden Drive	64,000	11,000	6,000
	NW 170th ST	19,000	200	8,000
	NW 154th St	18,500	900	4,000
Total		**101,500**	**12,100**	**18,000**

The following conclusions can be made based on the forecasted traffic volumes for the four alternatives:

1. Neither of the two bridges carry a significant amount of ADM traffic.
2. Furthermore, neither of the two bridges divert a significant amount of ADM traffic away from Miami Gardens Drive.

3. The bridges attract more Graham traffic than ADM traffic due to their proximity to the Graham Project. Regardless, the amount of traffic associated with the Graham Project does not warrant the need for either of the bridges based on the Graham traffic alone.
4. In fact, the amount of traffic diverted from Miami Gardens Drive by the Graham Project is relatively small in comparison to the Baseline alternative.

In conclusion, should either of the bridges be implemented there would not be significant impact to the findings established for the ADM and Graham traffic impact analyses prepared as part of the updated CDMP and Supporting Studies.

APPENDIX I-O:
2020 Background Intersection LOS

APPENDIX I-O1:
Year 2020 Zoning Intersection Background LOS AM Analysis without Mitigation

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	226	424	361	160	1528	35	492	316	163	97	316	563
Future Volume (veh/h)	226	424	361	160	1528	35	492	316	163	97	316	563
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1743	1743	1900	1743	1743	1743
Adj Flow Rate, veh/h	233	437	372	165	1575	36	507	326	168	100	326	580
Adj No. of Lanes	2	2	1	1	3	0	1	2	0	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	9	9	9	9	9	9
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	133	1240	555	69	1792	41	125	638	322	55	447	380
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.04	0.35	0.35	0.04	0.35	0.35	0.08	0.30	0.30	0.03	0.26	0.26
Ln Grp Delay, s/veh	411.9	23.6	32.5	719.4	38.2	44.6	1431.8	30.9	31.5	479.6	42.0	285.0
Ln Grp LOS	F	C	C	F	D	D	F	C	C	F	D	F
Approach Vol, veh/h		1042			1776			1001			1006	
Approach Delay, s/veh		113.6			103.6			740.6			225.6	
Approach LOS		F			F			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	3.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	10.0	35.0	10.0	39.0	14.0	31.0	10.0	39.0
Change Period (Y+Rc), s	6.9	6.9	6.4	6.4	6.9	6.9	6.4	6.4
Max Green (Gmax), s	3.1	28.1	3.6	32.6	7.1	24.1	3.6	32.6
Max Allow Headway (MAH), s	3.8	4.8	3.7	4.9	3.8	4.8	3.8	4.9
Max Q Clear (g_c+I1), s	5.1	14.2	5.6	20.6	9.1	26.1	5.6	28.9
Green Ext Time (g_e), s	0.0	6.5	0.0	9.7	0.0	0.0	0.0	3.3
Prob of Phs Call (p_c)	0.93	1.00	0.99	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1660		1792		1660		3476	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2133		3574		1743		5166

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1076		1599		1482		118

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	2	0
Grp Vol (v), veh/h	100	0	165	0	507	0	233	0
Grp Sat Flow (s), veh/h/ln	1660	0	1792	0	1660	0	1738	0
Q Serve Time (g_s), s	3.1	0.0	3.6	0.0	7.1	0.0	3.6	0.0
Cycle Q Clear Time (g_c), s	3.1	0.0	3.6	0.0	7.1	0.0	3.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	55	0	69	0	125	0	133	0
V/C Ratio (X)	1.83	0.00	2.40	0.00	4.04	0.00	1.75	0.00
Avail Cap (c_a), veh/h	55	0	69	0	125	0	133	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	45.5	0.0	45.2	0.0	43.5	0.0	45.2	0.0
Incr Delay (d2), s/veh	434.2	0.0	674.2	0.0	1388.3	0.0	366.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	479.6	0.0	719.4	0.0	1431.8	0.0	411.9	0.0
1st-Term Q (Q1), veh/ln	1.4	0.0	1.8	0.0	3.2	0.0	1.7	0.0
2nd-Term Q (Q2), veh/ln	6.6	0.0	12.9	0.0	48.4	0.0	6.8	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	8.0	0.0	14.6	0.0	51.6	0.0	8.5	0.0
%ile Storage Ratio (RQ%)	0.63	0.00	1.54	0.00	4.61	0.00	0.35	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	11.3	0.0	24.1	0.0	95.4	0.0	25.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.5	0.0	0.6	0.0	1.0	0.0	0.4	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	1	0	2
Grp Vol (v), veh/h	0	252	0	437	0	326	0	1044
Grp Sat Flow (s), veh/h/ln	0	1656	0	1787	0	1743	0	1712
Q Serve Time (g_s), s	0.0	11.8	0.0	8.6	0.0	16.1	0.0	26.9
Cycle Q Clear Time (g_c), s	0.0	11.8	0.0	8.6	0.0	16.1	0.0	26.9
Lane Grp Cap (c), veh/h	0	495	0	1240	0	447	0	1187
V/C Ratio (X)	0.00	0.51	0.00	0.35	0.00	0.73	0.00	0.88
Avail Cap (c_a), veh/h	0	495	0	1240	0	447	0	1187
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	27.2	0.0	22.8	0.0	32.0	0.0	28.8
Incr Delay (d2), s/veh	0.0	3.7	0.0	0.8	0.0	10.0	0.0	9.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	30.9	0.0	23.6	0.0	42.0	0.0	38.2
1st-Term Q (Q1), veh/ln	0.0	5.4	0.0	4.2	0.0	7.7	0.0	12.6

2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.1	0.0	1.2	0.0	1.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	5.9	0.0	4.3	0.0	8.9	0.0	14.2
%ile Storage Ratio (RQ%)	0.00	0.21	0.00	0.10	0.00	0.34	0.00	0.65
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	242	0	372	0	580	0	567
Grp Sat Flow (s), veh/h/ln	0	1553	0	1599	0	1482	0	1860
Q Serve Time (g_s), s	0.0	12.2	0.0	18.6	0.0	24.1	0.0	26.9
Cycle Q Clear Time (g_c), s	0.0	12.2	0.0	18.6	0.0	24.1	0.0	26.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.69	0.00	1.00	0.00	1.00	0.00	0.06
Lane Grp Cap (c), veh/h	0	464	0	555	0	380	0	645
V/C Ratio (X)	0.00	0.52	0.00	0.67	0.00	1.53	0.00	0.88
Avail Cap (c_a), veh/h	0	464	0	555	0	380	0	645
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	27.4	0.0	26.1	0.0	35.0	0.0	28.8
Incr Delay (d2), s/veh	0.0	4.2	0.0	6.3	0.0	250.1	0.0	15.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	31.5	0.0	32.5	0.0	285.0	0.0	44.6
1st-Term Q (Q1), veh/ln	0.0	5.2	0.0	8.2	0.0	9.8	0.0	13.7
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	1.0	0.0	26.4	0.0	2.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	5.7	0.0	9.2	0.0	36.2	0.0	16.5
%ile Storage Ratio (RQ%)	0.00	0.21	0.00	0.44	0.00	1.39	0.00	0.76
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		263.3						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	101	577	131	219	1192	255	263	129	159	226	186	192
Future Volume (veh/h)	101	577	131	219	1192	255	263	129	159	226	186	192
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	104	595	135	226	1229	263	271	133	164	233	192	198
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	119	1069	242	221	1251	265	259	120	149	236	272	231
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.07	0.37	0.37	0.12	0.43	0.43	0.15	0.16	0.16	0.13	0.15	0.15
Ln Grp Delay, s/veh	103.7	34.4	34.5	78.5	40.6	43.6	122.4	0.0	138.2	108.7	65.2	83.6
Ln Grp LOS	F	C	C	F	D	D	F		F	F	E	F
Approach Vol, veh/h		834			1718			568			623	
Approach Delay, s/veh		43.0			46.9			130.7			87.3	
Approach LOS		D			D			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	23.4	26.6	22.0	53.0	25.0	25.0	14.8	60.2
Change Period (Y+Rc), s	6.6	6.6	6.4	6.4	6.6	6.6	6.4	6.4
Max Green (Gmax), s	16.8	20.0	15.6	46.6	18.4	18.4	8.4	53.8
Max Allow Headway (MAH), s	3.8	5.0	3.7	5.1	3.8	5.0	3.7	5.1
Max Q Clear (g_c+I1), s	18.5	22.0	17.6	22.6	20.4	17.4	9.3	55.1
Green Ext Time (g_e), s	0.0	0.0	0.0	16.3	0.0	0.4	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	0.97	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1757		1774		1757		1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		753		2868		1845		2908

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		928		649		1568		616

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	233	0	226	0	271	0	104	0
Grp Sat Flow (s), veh/h/ln	1757	0	1774	0	1757	0	1774	0
Q Serve Time (g_s), s	16.5	0.0	15.6	0.0	18.4	0.0	7.3	0.0
Cycle Q Clear Time (g_c), s	16.5	0.0	15.6	0.0	18.4	0.0	7.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	236	0	221	0	259	0	119	0
V/C Ratio (X)	0.99	0.00	1.02	0.00	1.05	0.00	0.87	0.00
Avail Cap (c_a), veh/h	236	0	221	0	259	0	119	0
Upstream Filter (I)	1.00	0.00	0.09	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	54.0	0.0	54.7	0.0	53.3	0.0	57.8	0.0
Incr Delay (d2), s/veh	54.7	0.0	23.6	0.0	69.1	0.0	45.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	108.7	0.0	78.5	0.0	122.4	0.0	103.7	0.0
1st-Term Q (Q1), veh/ln	8.0	0.0	7.6	0.0	8.9	0.0	3.6	0.0
2nd-Term Q (Q2), veh/ln	3.6	0.0	1.5	0.0	5.0	0.0	1.5	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	11.6	0.0	9.1	0.0	13.9	0.0	5.1	0.0
%ile Storage Ratio (RQ%)	2.20	0.00	0.85	0.00	2.63	0.00	0.40	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	1.1	0.0	3.1	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.3	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T		T		T
Lanes in Grp	0	0	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	367	0	192	0	743
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	1845	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	20.5	0.0	12.4	0.0	51.5
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	20.5	0.0	12.4	0.0	51.5
Lane Grp Cap (c), veh/h	0	0	0	660	0	272	0	762
V/C Ratio (X)	0.00	0.00	0.00	0.56	0.00	0.71	0.00	0.98
Avail Cap (c_a), veh/h	0	0	0	660	0	272	0	762
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	0.0	0.0	31.0	0.0	50.7	0.0	35.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	3.4	0.0	14.4	0.0	5.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	34.4	0.0	65.2	0.0	40.6
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	10.0	0.0	6.3	0.0	25.2

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.6	0.0	1.1	0.0	1.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	10.6	0.0	7.4	0.0	26.4
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.14	0.00	0.26	0.00	0.45
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	297	0	363	0	198	0	749
Grp Sat Flow (s), veh/h/ln	0	1681	0	1748	0	1568	0	1754
Q Serve Time (g_s), s	0.0	20.0	0.0	20.6	0.0	15.4	0.0	53.1
Cycle Q Clear Time (g_c), s	0.0	20.0	0.0	20.6	0.0	15.4	0.0	53.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.55	0.00	0.37	0.00	1.00	0.00	0.35
Lane Grp Cap (c), veh/h	0	269	0	652	0	231	0	755
V/C Ratio (X)	0.00	1.10	0.00	0.56	0.00	0.86	0.00	0.99
Avail Cap (c_a), veh/h	0	269	0	652	0	231	0	755
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	52.5	0.0	31.0	0.0	52.0	0.0	35.4
Incr Delay (d2), s/veh	0.0	85.7	0.0	3.4	0.0	31.5	0.0	8.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	138.2	0.0	34.5	0.0	83.6	0.0	43.6
1st-Term Q (Q1), veh/ln	0.0	9.3	0.0	9.9	0.0	6.7	0.0	25.6
2nd-Term Q (Q2), veh/ln	0.0	6.4	0.0	0.6	0.0	2.0	0.0	1.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	15.7	0.0	10.5	0.0	8.7	0.0	27.3
%ile Storage Ratio (RQ%)	0.00	0.52	0.00	0.14	0.00	0.30	0.00	0.46
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	7.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		65.5						
HCM 2010 LOS		E						

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	70	868	1449	415	345	150
Future Volume (veh/h)	70	868	1449	415	345	150
Number	7	4	8	18	1	16
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00			1.00	1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1676	1676	1676	1710	1660	1660
Adj Flow Rate, veh/h	74	923	1541	441	367	160
Adj No. of Lanes	1	2	2	0	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	3	3
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	40	1919	1228	335	370	330
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.60	0.50	0.50	0.23	0.23
Ln Grp Delay, s/veh	471.1	9.4	123.5	164.8	74.8	31.1
Ln Grp LOS	F	A	F	F	E	C
Approach Vol, veh/h		997	1982		527	
Approach Delay, s/veh		43.7	144.7		61.5	
Approach LOS		D	F		E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	6			4			7	8
Case No	9.0			4.0			2.0	8.0
Phs Duration (G+Y+Rc), s	25.0			54.0			8.4	45.6
Change Period (Y+Rc), s	6.5			6.4			6.4	6.4
Max Green (Gmax), s	18.5			46.6			2.0	39.2
Max Allow Headway (MAH), s	3.9			5.1			3.7	5.1
Max Q Clear (g_c+I1), s	20.3			14.8			4.0	41.2
Green Ext Time (g_e), s	0.0			26.8			0.0	0.0
Prob of Phs Call (p_c)	1.00			1.00			0.80	1.00
Prob of Max Out (p_x)	0.00			0.00			1.00	0.00
Left-Turn Movement Data								
Assigned Mvmt	1						7	3
Mvmt Sat Flow, veh/h	1581						1597	0
Through Movement Data								
Assigned Mvmt	6			4				8
Mvmt Sat Flow, veh/h	0			3269				2558
Right-Turn Movement Data								
Assigned Mvmt	16			14				18
Mvmt Sat Flow, veh/h	1411			0				676
Left Lane Group Data								
Assigned Mvmt	1	0	0	0	0	0	7	3
Lane Assignment							(Prot)	

Lanes in Grp	1	0	0	0	0	0	1	0
Grp Vol (v), veh/h	367	0	0	0	0	0	74	0
Grp Sat Flow (s), veh/h/ln	1581	0	0	0	0	0	1597	0
Q Serve Time (g_s), s	18.3	0.0	0.0	0.0	0.0	0.0	2.0	0.0
Cycle Q Clear Time (g_c), s	18.3	0.0	0.0	0.0	0.0	0.0	2.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1581	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.2
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	370	0	0	0	0	0	40	0
V/C Ratio (X)	0.99	0.00	0.00	0.00	0.00	0.00	1.83	0.00
Avail Cap (c_a), veh/h	370	0	0	0	0	0	40	0
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.69	0.00
Uniform Delay (d1), s/veh	30.2	0.0	0.0	0.0	0.0	0.0	38.5	0.0
Incr Delay (d2), s/veh	44.6	0.0	0.0	0.0	0.0	0.0	432.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	74.8	0.0	0.0	0.0	0.0	0.0	471.1	0.0
1st-Term Q (Q1), veh/ln	8.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0
2nd-Term Q (Q2), veh/ln	4.6	0.0	0.0	0.0	0.0	0.0	4.9	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	12.5	0.0	0.0	0.0	0.0	0.0	5.7	0.0
%ile Storage Ratio (RQ%)	0.62	0.00	0.00	0.00	0.00	0.00	0.66	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	8.4	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0
Middle Lane Group Data								
Assigned Mvmt	6	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	1
Grp Vol (v), veh/h	0	0	0	923	0	0	0	966
Grp Sat Flow (s), veh/h/ln	0	0	0	1593	0	0	0	1593
Q Serve Time (g_s), s	0.0	0.0	0.0	12.8	0.0	0.0	0.0	39.2
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	12.8	0.0	0.0	0.0	39.2
Lane Grp Cap (c), veh/h	0	0	0	1919	0	0	0	790
V/C Ratio (X)	0.00	0.00	0.00	0.48	0.00	0.00	0.00	1.22
Avail Cap (c_a), veh/h	0	0	0	1919	0	0	0	790
Upstream Filter (I)	0.00	0.00	0.00	0.69	0.00	0.00	0.00	0.31
Uniform Delay (d1), s/veh	0.0	0.0	0.0	8.8	0.0	0.0	0.0	19.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.6	0.0	0.0	0.0	103.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	9.4	0.0	0.0	0.0	123.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	5.5	0.0	0.0	0.0	17.1

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	22.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	5.7	0.0	0.0	0.0	39.9
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.58
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.8
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	16	0	0	14	0	0	0	18
Lane Assignment	R							T+R
Lanes in Grp	1	0	0	0	0	0	0	1
Grp Vol (v), veh/h	160	0	0	0	0	0	0	1016
Grp Sat Flow (s), veh/h/ln	1411	0	0	0	0	0	0	1557
Q Serve Time (g_s), s	7.7	0.0	0.0	0.0	0.0	0.0	0.0	39.2
Cycle Q Clear Time (g_c), s	7.7	0.0	0.0	0.0	0.0	0.0	0.0	39.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43
Lane Grp Cap (c), veh/h	330	0	0	0	0	0	0	773
V/C Ratio (X)	0.48	0.00	0.00	0.00	0.00	0.00	0.00	1.32
Avail Cap (c_a), veh/h	330	0	0	0	0	0	0	773
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31
Uniform Delay (d1), s/veh	26.1	0.0	0.0	0.0	0.0	0.0	0.0	19.9
Incr Delay (d2), s/veh	5.0	0.0	0.0	0.0	0.0	0.0	0.0	144.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	31.1	0.0	0.0	0.0	0.0	0.0	0.0	164.8
1st-Term Q (Q1), veh/ln	6.2	0.0	0.0	0.0	0.0	0.0	0.0	16.7
2nd-Term Q (Q2), veh/ln	0.5	0.0	0.0	0.0	0.0	0.0	0.0	31.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	6.6	0.0	0.0	0.0	0.0	0.0	0.0	47.8
%ile Storage Ratio (RQ%)	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.69
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.9
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Intersection Summary								
HCM 2010 Ctrl Delay		103.5						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	1005	33	44	1530	27	129	7	14	56	22	44
Future Volume (veh/h)	27	1005	33	44	1530	27	129	7	14	56	22	44
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1845	1845	1900	1845	1845
Adj Flow Rate, veh/h	28	1026	34	45	1561	28	132	7	14	57	22	45
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	33	2168	72	55	2251	40	133	7	125	86	33	105
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.02	0.62	0.62	0.03	0.63	0.63	0.08	0.08	0.08	0.07	0.07	0.07
Ln Grp Delay, s/veh	66.6	7.6	7.6	77.0	10.2	10.1	102.9	0.0	29.2	54.3	0.0	40.8
Ln Grp LOS	E	A	A	E	B	B	F		C	D		D
Approach Vol, veh/h		1088			1634			153			124	
Approach Delay, s/veh		9.1			12.0			96.2			49.4	
Approach LOS		A			B			F			D	

Timer:		1	2	3	4	5	6	7	8			
Assigned Phs		6	2	3	4			7	8			
Case No		11.0	11.0	2.0	4.0			2.0	4.0			
Phs Duration (G+Y+Rc), s		11.0	12.0	8.4	46.7			7.6	47.5			
Change Period (Y+Rc), s		6.7	6.9	6.4	* 6.6			6.4	* 6.6			
Max Green (Gmax), s		4.3	5.1	2.0	* 26			2.0	* 26			
Max Allow Headway (MAH), s		4.9	5.2	3.8	5.2			3.7	5.2			
Max Q Clear (g_c+I1), s		4.8	7.0	3.6	12.1			3.0	20.4			
Green Ext Time (g_e), s		0.0	0.0	0.0	12.4			0.0	5.5			
Prob of Phs Call (p_c)		1.00	1.00	0.55	1.00			0.39	1.00			
Prob of Max Out (p_x)		0.00	0.00	1.00	0.00			1.00	0.00			

Left-Turn Movement Data												
Assigned Mvmt		1	5	3				7				
Mvmt Sat Flow, veh/h		1285	1672	1774				1774				

Through Movement Data												
Assigned Mvmt		6	2		4				8			
Mvmt Sat Flow, veh/h		496	89		3496				3557			

Right-Turn Movement Data												
Assigned Mvmt		16	12		14				18			
Mvmt Sat Flow, veh/h		1568	1568		116				64			

Left Lane Group Data												
Assigned Mvmt		1	5	3	0	0	0	7	0			
Lane Assignment		L+T	L+T	(Prot)				(Prot)				

Lanes in Grp	1	1	1	0	0	0	1	0
Grp Vol (v), veh/h	79	139	45	0	0	0	28	0
Grp Sat Flow (s), veh/h/ln	1780	1761	1774	0	0	0	1774	0
Q Serve Time (g_s), s	2.8	5.0	1.6	0.0	0.0	0.0	1.0	0.0
Cycle Q Clear Time (g_c), s	2.8	5.0	1.6	0.0	0.0	0.0	1.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.72	0.95	1.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	120	140	55	0	0	0	33	0
V/C Ratio (X)	0.66	0.99	0.82	0.00	0.00	0.00	0.86	0.00
Avail Cap (c_a), veh/h	120	140	55	0	0	0	55	0
Upstream Filter (I)	1.00	1.00	0.71	0.00	0.00	0.00	0.74	0.00
Uniform Delay (d1), s/veh	29.1	29.4	30.8	0.0	0.0	0.0	31.3	0.0
Incr Delay (d2), s/veh	25.1	73.5	46.2	0.0	0.0	0.0	35.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	54.3	102.9	77.0	0.0	0.0	0.0	66.6	0.0
1st-Term Q (Q1), veh/ln	1.4	2.4	0.8	0.0	0.0	0.0	0.5	0.0
2nd-Term Q (Q2), veh/ln	0.8	2.9	0.7	0.0	0.0	0.0	0.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	2.2	5.3	1.5	0.0	0.0	0.0	0.8	0.0
%ile Storage Ratio (RQ%)	0.11	0.29	0.11	0.00	0.00	0.00	0.11	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	6	2	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	519	0	0	0	776
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	10.1	0.0	0.0	0.0	18.3
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	10.1	0.0	0.0	0.0	18.3
Lane Grp Cap (c), veh/h	0	0	0	1097	0	0	0	1120
V/C Ratio (X)	0.00	0.00	0.00	0.47	0.00	0.00	0.00	0.69
Avail Cap (c_a), veh/h	0	0	0	1097	0	0	0	1120
Upstream Filter (I)	0.00	0.00	0.00	0.74	0.00	0.00	0.00	0.71
Uniform Delay (d1), s/veh	0.0	0.0	0.0	6.5	0.0	0.0	0.0	7.7
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.1	0.0	0.0	0.0	2.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	7.6	0.0	0.0	0.0	10.2
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	4.9	0.0	0.0	0.0	8.8

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	5.2	0.0	0.0	0.0	9.6
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.57
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	16	12	0	14	0	0	0	18
Lane Assignment	R	R		T+R				T+R
Lanes in Grp	1	1	0	1	0	0	0	1
Grp Vol (v), veh/h	45	14	0	541	0	0	0	813
Grp Sat Flow (s), veh/h/ln	1568	1568	0	1842	0	0	0	1851
Q Serve Time (g_s), s	1.8	0.5	0.0	10.1	0.0	0.0	0.0	18.4
Cycle Q Clear Time (g_c), s	1.8	0.5	0.0	10.1	0.0	0.0	0.0	18.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	1.00	0.00	0.06	0.00	0.00	0.00	0.03
Lane Grp Cap (c), veh/h	105	125	0	1142	0	0	0	1171
V/C Ratio (X)	0.43	0.11	0.00	0.47	0.00	0.00	0.00	0.69
Avail Cap (c_a), veh/h	105	125	0	1142	0	0	0	1171
Upstream Filter (I)	1.00	1.00	0.00	0.74	0.00	0.00	0.00	0.71
Uniform Delay (d1), s/veh	28.7	27.3	0.0	6.5	0.0	0.0	0.0	7.7
Incr Delay (d2), s/veh	12.2	1.8	0.0	1.0	0.0	0.0	0.0	2.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	40.8	29.2	0.0	7.6	0.0	0.0	0.0	10.1
1st-Term Q (Q1), veh/ln	0.8	0.2	0.0	5.1	0.0	0.0	0.0	9.3
2nd-Term Q (Q2), veh/ln	0.4	0.1	0.0	0.3	0.0	0.0	0.0	0.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	1.1	0.3	0.0	5.4	0.0	0.0	0.0	10.1
%ile Storage Ratio (RQ%)	0.71	0.07	0.00	0.08	0.00	0.00	0.00	0.59
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	16.8
HCM 2010 LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	917	137	421	1338	198	299
Future Volume (veh/h)	917	137	421	1338	198	299
Number	4	14	3	8	5	12
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)		1.00	1.00		1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1845	1845
Adj Flow Rate, veh/h	936	140	430	1365	202	305
Adj No. of Lanes	2	0	1	2	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	3	3
Opposing Right Turn Influence			Yes		Yes	
Cap, veh/h	1133	169	196	1978	484	432
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.37	0.37	0.11	0.56	0.28	0.28
Ln Grp Delay, s/veh	30.5	30.5	576.5	12.6	25.8	34.7
Ln Grp LOS	C	C	F	B	C	C
Approach Vol, veh/h	1076			1795	507	
Approach Delay, s/veh	30.5			147.7	31.2	
Approach LOS	C			F	C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Case No		9.0	2.0	8.0				4.0
Phs Duration (G+Y+Rc), s		28.0	15.0	35.0				50.0
Change Period (Y+Rc), s		6.5	6.4	6.4				6.4
Max Green (Gmax), s		21.5	8.6	28.6				43.6
Max Allow Headway (MAH), s		4.0	3.8	5.3				5.3
Max Q Clear (g_c+I1), s		15.6	10.6	23.5				23.6
Green Ext Time (g_e), s		0.9	0.0	4.7				16.2
Prob of Phs Call (p_c)		1.00	1.00	1.00				1.00
Prob of Max Out (p_x)		0.00	1.00	0.00				0.00

Left-Turn Movement Data			
Assigned Mvmt	5	3	7
Mvmt Sat Flow, veh/h	1757	1774	0

Through Movement Data			
Assigned Mvmt	2	4	8
Mvmt Sat Flow, veh/h	0	3182	3632

Right-Turn Movement Data			
Assigned Mvmt	12	14	18
Mvmt Sat Flow, veh/h	1568	462	0

Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	0	0	0
Lane Assignment			(Prot)					

Lanes in Grp	0	1	1	0	0	0	0	0
Grp Vol (v), veh/h	0	202	430	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1757	1774	0	0	0	0	0
Q Serve Time (g_s), s	0.0	7.3	8.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	7.3	8.6	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1757	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	28.6	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	484	196	0	0	0	0	0
V/C Ratio (X)	0.00	0.42	2.20	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	484	196	0	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.15	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	23.1	34.7	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.6	541.8	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	25.8	576.5	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.5	4.2	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	29.4	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	3.9	33.6	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.16	3.71	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	58.6	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	2
Grp Vol (v), veh/h	0	0	0	536	0	0	0	1365
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	21.5	0.0	0.0	0.0	21.6
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	21.5	0.0	0.0	0.0	21.6
Lane Grp Cap (c), veh/h	0	0	0	649	0	0	0	1978
V/C Ratio (X)	0.00	0.00	0.00	0.83	0.00	0.00	0.00	0.69
Avail Cap (c_a), veh/h	0	0	0	649	0	0	0	1978
Upstream Filter (I)	0.00	0.00	0.00	0.68	0.00	0.00	0.00	0.15
Uniform Delay (d1), s/veh	0.0	0.0	0.0	22.4	0.0	0.0	0.0	12.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	8.1	0.0	0.0	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	30.5	0.0	0.0	0.0	12.6
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	10.4	0.0	0.0	0.0	10.4

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	11.9	0.0	0.0	0.0	10.5
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.70	0.00	0.00	0.00	0.27
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	0	0	18
Lane Assignment		R		T+R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	305	0	540	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1568	0	1781	0	0	0	0
Q Serve Time (g_s), s	0.0	13.6	0.0	21.5	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	13.6	0.0	21.5	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.26	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	432	0	653	0	0	0	0
V/C Ratio (X)	0.00	0.71	0.00	0.83	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	432	0	653	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.68	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	25.4	0.0	22.4	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	9.3	0.0	8.1	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	34.7	0.0	30.5	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	5.9	0.0	10.5	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.1	0.0	1.5	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.0	0.0	12.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.29	0.00	0.70	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		92.9						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	1076	172	51	1592	8	268	2	88	7	5	44
Future Volume (veh/h)	28	1076	172	51	1592	8	268	2	88	7	5	44
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1900	1900	1845	1900
Adj Flow Rate, veh/h	29	1109	177	53	1641	8	276	2	91	7	5	45
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	0	1	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	35	1827	291	48	2185	11	509	10	462	83	71	375
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.02	0.60	0.60	0.03	0.60	0.60	0.30	0.30	0.30	0.30	0.30	0.30
Ln Grp Delay, s/veh	74.7	10.9	10.9	176.0	13.8	13.7	26.5	0.0	20.2	19.2	0.0	0.0
Ln Grp LOS	E	B	B	F	B	B	C		C	B		
Approach Vol, veh/h		1315			1702			369			57	
Approach Delay, s/veh		12.3			18.8			24.9			19.2	
Approach LOS		B			B			C			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		6.0	2.0	4.0		8.0	2.0	4.0
Phs Duration (G+Y+Rc), s		29.0	8.4	51.0		29.0	7.8	51.6
Change Period (Y+Rc), s		* 6.8	6.4	6.4		* 6.8	6.4	6.4
Max Green (Gmax), s		* 22	2.0	30.6		* 22	2.0	30.6
Max Allow Headway (MAH), s		4.5	3.8	5.3		4.5	3.8	5.3
Max Q Clear (g_c+I1), s		14.7	4.0	19.0		3.9	3.2	26.4
Green Ext Time (g_e), s		1.1	0.0	10.8		1.7	0.0	4.1
Prob of Phs Call (p_c)		1.00	0.66	1.00		1.00	0.45	1.00
Prob of Max Out (p_x)		0.00	1.00	0.00		0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		1336	1774			96	1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		34		3059		237		3612

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1539		487		1249		18

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0
Lane Assignment			(Prot)			L+T+R	(Prot)	

Lanes in Grp	0	1	1	0	0	1	1	0
Grp Vol (v), veh/h	0	276	53	0	0	57	29	0
Grp Sat Flow (s), veh/h/ln	0	1336	1774	0	0	1582	1774	0
Q Serve Time (g_s), s	0.0	10.8	2.0	0.0	0.0	0.0	1.2	0.0
Cycle Q Clear Time (g_c), s	0.0	12.7	2.0	0.0	0.0	1.9	1.2	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1336	0	0	0	1324	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	1757	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	22.2	0.0	0.0	0.0	22.2	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	20.3	0.0	0.0	0.0	18.9	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	10.8	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	10.9	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	0.00	0.12	1.00	0.00
Lane Grp Cap (c), veh/h	0	509	48	0	0	529	35	0
V/C Ratio (X)	0.00	0.54	1.11	0.00	0.00	0.11	0.84	0.00
Avail Cap (c_a), veh/h	0	509	48	0	0	529	48	0
Upstream Filter (I)	0.00	1.00	0.66	0.00	0.00	1.00	0.57	0.00
Uniform Delay (d1), s/veh	0.0	22.4	36.0	0.0	0.0	18.8	36.2	0.0
Incr Delay (d2), s/veh	0.0	4.1	136.9	0.0	0.0	0.4	38.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	3.1	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	26.5	176.0	0.0	0.0	19.2	74.7	0.0
1st-Term Q (Q1), veh/ln	0.0	4.9	1.0	0.0	0.0	0.8	0.6	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.6	1.8	0.0	0.0	0.1	0.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	5.5	2.8	0.0	0.0	0.9	1.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.64	0.30	0.00	0.00	0.07	0.13	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	640	0	0	0	804
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	16.9	0.0	0.0	0.0	24.3
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	16.9	0.0	0.0	0.0	24.3
Lane Grp Cap (c), veh/h	0	0	0	1057	0	0	0	1070
V/C Ratio (X)	0.00	0.00	0.00	0.61	0.00	0.00	0.00	0.75
Avail Cap (c_a), veh/h	0	0	0	1057	0	0	0	1070
Upstream Filter (I)	0.00	0.00	0.00	0.57	0.00	0.00	0.00	0.66
Uniform Delay (d1), s/veh	0.0	0.0	0.0	9.4	0.0	0.0	0.0	10.6
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.5	0.0	0.0	0.0	3.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	10.9	0.0	0.0	0.0	13.8
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	8.2	0.0	0.0	0.0	11.6

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.4	0.0	0.0	0.0	1.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	8.6	0.0	0.0	0.0	12.6
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.22	0.00	0.00	0.00	0.17
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R				T+R
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	93	0	646	0	0	0	845
Grp Sat Flow (s), veh/h/ln	0	1573	0	1777	0	0	0	1860
Q Serve Time (g_s), s	0.0	3.3	0.0	17.0	0.0	0.0	0.0	24.4
Cycle Q Clear Time (g_c), s	0.0	3.3	0.0	17.0	0.0	0.0	0.0	24.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.98	0.00	0.27	0.00	0.79	0.00	0.01
Lane Grp Cap (c), veh/h	0	472	0	1061	0	0	0	1125
V/C Ratio (X)	0.00	0.20	0.00	0.61	0.00	0.00	0.00	0.75
Avail Cap (c_a), veh/h	0	472	0	1061	0	0	0	1125
Upstream Filter (I)	0.00	1.00	0.00	0.57	0.00	0.00	0.00	0.66
Uniform Delay (d1), s/veh	0.0	19.3	0.0	9.4	0.0	0.0	0.0	10.6
Incr Delay (d2), s/veh	0.0	0.9	0.0	1.5	0.0	0.0	0.0	3.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	20.2	0.0	10.9	0.0	0.0	0.0	13.7
1st-Term Q (Q1), veh/ln	0.0	1.4	0.0	8.3	0.0	0.0	0.0	12.2
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.4	0.0	0.0	0.0	1.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.5	0.0	8.7	0.0	0.0	0.0	13.2
%ile Storage Ratio (RQ%)	0.00	0.13	0.00	0.22	0.00	0.00	0.00	0.18
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	17.0
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	1154	94	184	1270	5	196	0	342	1	1	0
Future Volume (veh/h)	4	1154	94	184	1270	5	196	0	342	1	1	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1845	1900	1845	1900
Adj Flow Rate, veh/h	4	1254	102	200	1380	5	213	0	372	1	1	0
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	187	1488	121	183	1924	7	585	650	553	281	259	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.45	0.45	0.45	0.03	0.53	0.53	0.35	0.00	0.35	0.35	0.35	0.00
Ln Grp Delay, s/veh	22.6	22.8	22.9	79.6	14.2	14.2	21.0	0.0	27.9	16.4	0.0	0.0
Ln Grp LOS	C	C	C	F	B	B	C		C	B		
Approach Vol, veh/h		1360			1585			585			2	
Approach Delay, s/veh		22.8			22.5			25.4			16.4	
Approach LOS		C			C			C			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Case No		5.0	1.2	6.0		8.0		4.0
Phs Duration (G+Y+Rc), s		32.0	6.5	39.5		32.0		46.0
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5		4.5
Max Green (Gmax), s		27.5	2.0	29.5		27.5		41.5
Max Allow Headway (MAH), s		4.0	3.8	5.3		4.0		5.3
Max Q Clear (g_c+I1), s		17.7	4.0	28.2		2.1		24.5
Green Ext Time (g_e), s		1.5	0.0	1.2		2.0		14.8
Prob of Phs Call (p_c)		1.00	0.99	1.00		1.00		1.00
Prob of Max Out (p_x)		0.00	1.00	0.00		0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3	7		1		
Mvmt Sat Flow, veh/h		1397	1774	389		600		

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1845		3316		734		3617

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		269		0		13

Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	1	0	0
Lane Assignment			(Pr/Pm)			L+T		

Lanes in Grp	0	1	1	1	0	1	0	0
Grp Vol (v), veh/h	0	213	200	4	0	2	0	0
Grp Sat Flow (s), veh/h/ln	0	1397	1774	389	0	1334	0	0
Q Serve Time (g_s), s	0.0	9.0	2.0	0.6	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	9.1	2.0	16.6	0.0	0.1	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1397	400	389	0	1026	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	1757	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	27.5	37.0	35.0	0.0	27.5	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	27.4	8.8	19.0	0.0	27.5	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	9.0	8.8	0.6	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	1.00	0.00	0.50	0.00	0.00
Lane Grp Cap (c), veh/h	0	585	183	187	0	540	0	0
V/C Ratio (X)	0.00	0.36	1.09	0.02	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	585	183	187	0	540	0	0
Upstream Filter (I)	0.00	1.00	0.09	0.33	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	19.3	28.5	22.6	0.0	16.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.8	51.1	0.1	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	21.0	79.6	22.6	0.0	16.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.5	0.0	0.1	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	2.6	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	3.8	2.6	0.1	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.69	0.21	0.01	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	4.3	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T				T
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	668	0	0	0	675
Grp Sat Flow (s), veh/h/ln	0	1845	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	26.1	0.0	0.0	0.0	22.5
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	26.1	0.0	0.0	0.0	22.5
Lane Grp Cap (c), veh/h	0	650	0	794	0	0	0	942
V/C Ratio (X)	0.00	0.00	0.00	0.84	0.00	0.00	0.00	0.72
Avail Cap (c_a), veh/h	0	650	0	794	0	0	0	942
Upstream Filter (I)	0.00	0.00	0.00	0.33	0.00	0.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	0.0	0.0	19.0	0.0	0.0	0.0	13.8
Incr Delay (d2), s/veh	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	22.8	0.0	0.0	0.0	14.2
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	12.6	0.0	0.0	0.0	10.9

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	13.5	0.0	0.0	0.0	11.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.18	0.00	0.00	0.00	0.29
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R				T+R
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	372	0	688	0	0	0	710
Grp Sat Flow (s), veh/h/ln	0	1568	0	1815	0	0	0	1860
Q Serve Time (g_s), s	0.0	15.7	0.0	26.2	0.0	0.0	0.0	22.5
Cycle Q Clear Time (g_c), s	0.0	15.7	0.0	26.2	0.0	0.0	0.0	22.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.15	0.00	0.00	0.00	0.01
Lane Grp Cap (c), veh/h	0	553	0	815	0	0	0	990
V/C Ratio (X)	0.00	0.67	0.00	0.84	0.00	0.00	0.00	0.72
Avail Cap (c_a), veh/h	0	553	0	815	0	0	0	990
Upstream Filter (I)	0.00	1.00	0.00	0.33	0.00	0.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	21.4	0.0	19.1	0.0	0.0	0.0	13.8
Incr Delay (d2), s/veh	0.0	6.4	0.0	3.8	0.0	0.0	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	27.9	0.0	22.9	0.0	0.0	0.0	14.2
1st-Term Q (Q1), veh/ln	0.0	6.8	0.0	13.0	0.0	0.0	0.0	11.4
2nd-Term Q (Q2), veh/ln	0.0	1.0	0.0	0.9	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.8	0.0	13.8	0.0	0.0	0.0	11.6
%ile Storage Ratio (RQ%)	0.00	0.63	0.00	0.19	0.00	0.00	0.00	0.30
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		23.1						
HCM 2010 LOS		C						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	1538	0	12	1351	100	12	0	56	173	0	56
Future Volume (veh/h)	25	1538	0	12	1351	100	12	0	56	173	0	56
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	27	1636	0	13	1437	106	13	0	60	184	0	60
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	54	1311	0	29	1192	88	117	37	384	532	0	470
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.37	0.00	0.02	0.36	0.36	0.30	0.00	0.30	0.30	0.00	0.30
Ln Grp Delay, s/veh	32.2	133.7	0.0	39.9	124.5	128.1	15.9	0.0	0.0	18.4	0.0	15.8
Ln Grp LOS	C	F		D	F	F	B			B		B
Approach Vol, veh/h		1663			1556			73			244	
Approach Delay, s/veh		132.1			125.6			15.9			17.8	
Approach LOS		F			F			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		8.0	2.0	4.0		6.0	2.0	4.0
Phs Duration (G+Y+Rc), s		24.0	7.4	28.6		24.0	8.2	27.8
Change Period (Y+Rc), s		6.0	6.4	6.4		6.0	6.4	6.4
Max Green (Gmax), s		18.0	5.0	18.6		18.0	5.0	18.6
Max Allow Headway (MAH), s		4.6	3.8	5.3		4.6	3.8	5.3
Max Q Clear (g_c+I1), s		4.0	2.4	24.2		8.0	2.9	23.4
Green Ext Time (g_e), s		1.1	0.0	0.0		1.0	0.0	0.0
Prob of Phs Call (p_c)		1.00	0.19	1.00		1.00	0.36	1.00
Prob of Max Out (p_x)		0.00	1.00	0.00		0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		155	1774			1324	1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		122		3632		0		3343

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1280		0		1568		246

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0
Lane Assignment		L+T+R	(Prot)				(Prot)	

Lanes in Grp	0	1	1	0	0	1	1	0
Grp Vol (v), veh/h	0	73	13	0	0	184	27	0
Grp Sat Flow (s), veh/h/ln	0	1558	1774	0	0	1324	1774	0
Q Serve Time (g_s), s	0.0	0.0	0.4	0.0	0.0	4.0	0.9	0.0
Cycle Q Clear Time (g_c), s	0.0	2.0	0.4	0.0	0.0	6.0	0.9	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1364	0	0	0	1324	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	1757	0	0
Perm LT Eff Green (g_p), s	0.0	18.0	0.0	0.0	0.0	18.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	16.3	0.0	0.0	0.0	16.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0
Time to First Blk (g_f), s	0.0	7.7	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.18	1.00	0.00	0.00	1.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	538	29	0	0	532	54	0
V/C Ratio (X)	0.00	0.14	0.45	0.00	0.00	0.35	0.50	0.00
Avail Cap (c_a), veh/h	0	538	148	0	0	532	148	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	0.00	1.00	0.49	0.00
Uniform Delay (d1), s/veh	0.0	15.4	29.2	0.0	0.0	16.7	28.7	0.0
Incr Delay (d2), s/veh	0.0	0.5	10.7	0.0	0.0	1.8	3.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	15.9	39.9	0.0	0.0	18.4	32.2	0.0
1st-Term Q (Q1), veh/ln	0.0	0.9	0.2	0.0	0.0	2.4	0.4	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.1	0.0	0.0	0.3	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	1.0	0.3	0.0	0.0	2.7	0.5	0.0
%ile Storage Ratio (RQ%)	0.00	0.06	0.04	0.00	0.00	0.45	0.07	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	1
Grp Vol (v), veh/h	0	0	0	1636	0	0	0	758
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	22.2	0.0	0.0	0.0	21.4
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	22.2	0.0	0.0	0.0	21.4
Lane Grp Cap (c), veh/h	0	0	0	1311	0	0	0	631
V/C Ratio (X)	0.00	0.00	0.00	1.25	0.00	0.00	0.00	1.20
Avail Cap (c_a), veh/h	0	0	0	1311	0	0	0	631
Upstream Filter (I)	0.00	0.00	0.00	0.49	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	18.9	0.0	0.0	0.0	19.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	114.8	0.0	0.0	0.0	105.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	133.7	0.0	0.0	0.0	124.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	10.7	0.0	0.0	0.0	10.3

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	20.9	0.0	0.0	0.0	18.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	31.7	0.0	0.0	0.0	28.8
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.82	0.00	0.00	0.00	2.37
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	81.2	0.0	0.0	0.0	31.7
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment						T+R		T+R
Lanes in Grp	0	0	0	0	0	1	0	1
Grp Vol (v), veh/h	0	0	0	0	0	60	0	785
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	1568	0	1819
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	1.7	0.0	21.4
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	1.7	0.0	21.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.82	0.00	0.00	0.00	1.00	0.00	0.13
Lane Grp Cap (c), veh/h	0	0	0	0	0	470	0	649
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.13	0.00	1.21
Avail Cap (c_a), veh/h	0	0	0	0	0	470	0	649
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	15.3	0.0	19.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.6	0.0	108.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	15.8	0.0	128.1
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.7	0.0	10.6
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	19.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.8	0.0	30.2
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.06	0.00	2.49
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.2
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Intersection Summary								
HCM 2010 Ctrl Delay		118.9						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	408	1051	171	267	736	122	206	683	229	291	887	391
Future Volume (veh/h)	408	1051	171	267	736	122	206	683	229	291	887	391
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	425	1095	178	278	767	127	215	711	239	303	924	407
Adj No. of Lanes	2	3	0	2	3	0	2	3	0	2	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	480	1455	236	340	1273	209	273	967	321	362	975	429
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.14	0.33	0.33	0.10	0.29	0.29	0.08	0.26	0.26	0.11	0.28	0.28
Ln Grp Delay, s/veh	67.1	40.5	44.7	61.7	39.4	42.1	63.6	46.2	52.3	64.6	60.9	73.4
Ln Grp LOS	E	D	D	E	D	D	E	D	D	E	E	E
Approach Vol, veh/h		1698			1172			1165			1634	
Approach Delay, s/veh		48.3			45.4			51.1			64.9	
Approach LOS		D			D			D			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	4.0
Phs Duration (G+Y+Rc), s	18.7	37.0	18.3	46.0	15.6	40.1	23.1	41.1
Change Period (Y+Rc), s	6.0	6.0	6.4	6.4	6.0	6.0	6.4	6.4
Max Green (Gmax), s	15.0	31.0	15.6	33.6	12.0	34.0	17.6	31.6
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.3	3.8	5.3	3.8	5.3
Max Q Clear (g_c+I1), s	12.5	23.2	11.5	28.6	9.4	33.7	16.5	20.2
Green Ext Time (g_e), s	0.3	6.8	0.4	4.4	0.2	0.3	0.2	9.2
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	0.81	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3408		3442		3408		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3742		4410		3428		4402

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1241		716		1508		723

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	303	0	278	0	215	0	425	0
Grp Sat Flow (s), veh/h/ln	1704	0	1721	0	1704	0	1721	0
Q Serve Time (g_s), s	10.5	0.0	9.5	0.0	7.4	0.0	14.5	0.0
Cycle Q Clear Time (g_c), s	10.5	0.0	9.5	0.0	7.4	0.0	14.5	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	362	0	340	0	273	0	480	0
V/C Ratio (X)	0.84	0.00	0.82	0.00	0.79	0.00	0.89	0.00
Avail Cap (c_a), veh/h	426	0	447	0	341	0	505	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	52.6	0.0	53.0	0.0	54.2	0.0	50.7	0.0
Incr Delay (d2), s/veh	12.0	0.0	8.7	0.0	9.4	0.0	16.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	64.6	0.0	61.7	0.0	63.6	0.0	67.1	0.0
1st-Term Q (Q1), veh/ln	4.9	0.0	4.5	0.0	3.5	0.0	6.9	0.0
2nd-Term Q (Q2), veh/ln	0.6	0.0	0.4	0.0	0.4	0.0	1.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	5.5	0.0	4.9	0.0	3.9	0.0	8.0	0.0
%ile Storage Ratio (RQ%)	0.48	0.00	0.37	0.00	0.29	0.00	0.68	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	2	0	2
Grp Vol (v), veh/h	0	637	0	842	0	905	0	589
Grp Sat Flow (s), veh/h/ln	0	1679	0	1695	0	1679	0	1695
Q Serve Time (g_s), s	0.0	20.8	0.0	26.6	0.0	31.7	0.0	17.9
Cycle Q Clear Time (g_c), s	0.0	20.8	0.0	26.6	0.0	31.7	0.0	17.9
Lane Grp Cap (c), veh/h	0	867	0	1118	0	955	0	981
V/C Ratio (X)	0.00	0.73	0.00	0.75	0.00	0.95	0.00	0.60
Avail Cap (c_a), veh/h	0	867	0	1118	0	955	0	981
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	40.7	0.0	35.8	0.0	42.0	0.0	36.7
Incr Delay (d2), s/veh	0.0	5.5	0.0	4.7	0.0	18.9	0.0	2.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	46.2	0.0	40.5	0.0	60.9	0.0	39.4
1st-Term Q (Q1), veh/ln	0.0	9.6	0.0	12.4	0.0	14.7	0.0	8.4

2nd-Term Q (Q2), veh/ln	0.0	0.7	0.0	0.7	0.0	2.5	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	10.3	0.0	13.1	0.0	17.2	0.0	8.8
%ile Storage Ratio (RQ%)	0.00	0.58	0.00	0.53	0.00	0.65	0.00	1.40
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	313	0	431	0	426	0	305
Grp Sat Flow (s), veh/h/ln	0	1626	0	1736	0	1579	0	1735
Q Serve Time (g_s), s	0.0	21.2	0.0	26.6	0.0	31.7	0.0	18.2
Cycle Q Clear Time (g_c), s	0.0	21.2	0.0	26.6	0.0	31.7	0.0	18.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.76	0.00	0.41	0.00	0.96	0.00	0.42
Lane Grp Cap (c), veh/h	0	420	0	573	0	449	0	502
V/C Ratio (X)	0.00	0.75	0.00	0.75	0.00	0.95	0.00	0.61
Avail Cap (c_a), veh/h	0	420	0	573	0	449	0	502
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	40.9	0.0	35.9	0.0	42.1	0.0	36.8
Incr Delay (d2), s/veh	0.0	11.4	0.0	8.9	0.0	31.4	0.0	5.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	52.3	0.0	44.7	0.0	73.4	0.0	42.1
1st-Term Q (Q1), veh/ln	0.0	9.5	0.0	12.7	0.0	13.8	0.0	8.7
2nd-Term Q (Q2), veh/ln	0.0	1.3	0.0	1.4	0.0	3.9	0.0	0.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	10.8	0.0	14.1	0.0	17.8	0.0	9.5
%ile Storage Ratio (RQ%)	0.00	0.60	0.00	0.57	0.00	0.67	0.00	1.50
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		53.0						
HCM 2010 LOS		D						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	1660	15	1	768	98	94	32	0	222	94	245
Future Volume (veh/h)	89	1660	15	1	768	98	94	32	0	222	94	245
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	97	1804	16	1	835	107	102	35	0	241	102	266
Adj No. of Lanes	1	2	0	0	2	0	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	73	2670	24	23	2046	262	36	223	190	36	223	190
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.04	0.74	0.74	0.66	0.66	0.66	0.02	0.12	0.00	0.02	0.12	0.12
Ln Grp Delay, s/veh	295.5	13.5	13.4	13.3	0.0	13.5	974.6	64.9	0.0	2698.0	72.4	279.7
Ln Grp LOS	F	B	B	B		B	F	E		F	E	F
Approach Vol, veh/h		1917			943			137			609	
Approach Delay, s/veh		27.7			13.4			742.2			1202.0	
Approach LOS		C			B			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6	7	8
Case No	2.0	3.0		4.0	2.0	3.0	2.0	8.0
Phs Duration (G+Y+Rc), s	9.0	26.0		126.0	9.0	26.0	13.0	113.0
Change Period (Y+Rc), s	* 5.7	6.5		6.4	* 5.7	6.5	6.4	6.4
Max Green (Gmax), s	* 3.3	19.5		119.6	* 3.3	19.5	6.6	100.6
Max Allow Headway (MAH), s	3.8	4.4		5.3	3.8	4.4	3.8	5.3
Max Q Clear (g_c+I1), s	5.3	4.7		43.8	5.3	21.5	8.6	22.2
Green Ext Time (g_e), s	0.0	1.5		49.7	0.0	0.0	0.0	50.7
Prob of Phs Call (p_c)	1.00	1.00		1.00	0.99	1.00	0.99	1.00
Prob of Max Out (p_x)	0.00	0.00		0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1				5		7	3
Mvmt Sat Flow, veh/h	1757				1757		1774	0

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1845		3595		1845		3090

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		32		1568		395

Left Lane Group Data								
Assigned Mvmt	1	0	0	0	5	0	7	3
Lane Assignment	(Prot)				(Prot)		(Prot)	L+T

Lanes in Grp	1	0	0	0	1	0	1	1
Grp Vol (v), veh/h	241	0	0	0	102	0	97	503
Grp Sat Flow (s), veh/h/ln	1757	0	0	0	1757	0	1774	1860
Q Serve Time (g_s), s	3.3	0.0	0.0	0.0	3.3	0.0	6.6	0.0
Cycle Q Clear Time (g_c), s	3.3	0.0	0.0	0.0	3.3	0.0	6.6	20.1
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	261
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	106.6
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	77.8
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	94.9
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.1
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	36	0	0	0	36	0	73	1254
V/C Ratio (X)	6.69	0.00	0.00	0.00	2.83	0.00	1.33	0.40
Avail Cap (c_a), veh/h	36	0	0	0	36	0	73	1254
Upstream Filter (I)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.74
Uniform Delay (d1), s/veh	78.8	0.0	0.0	0.0	78.8	0.0	77.2	12.6
Incr Delay (d2), s/veh	2619.2	0.0	0.0	0.0	895.8	0.0	218.3	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	2698.0	0.0	0.0	0.0	974.6	0.0	295.5	13.3
1st-Term Q (Q1), veh/ln	1.6	0.0	0.0	0.0	1.6	0.0	3.2	10.3
2nd-Term Q (Q2), veh/ln	26.2	0.0	0.0	0.0	9.0	0.0	4.4	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	27.8	0.0	0.0	0.0	10.6	0.0	7.6	10.6
%ile Storage Ratio (RQ%)	7.12	0.00	0.00	0.00	1.93	0.00	0.46	0.14
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	51.2	0.0	0.0	0.0	16.5	0.0	6.1	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	1.7	0.0	0.0	0.0	0.7	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	35	0	887	0	102	0	0
Grp Sat Flow (s), veh/h/ln	0	1845	0	1770	0	1845	0	0
Q Serve Time (g_s), s	0.0	2.7	0.0	41.6	0.0	8.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	2.7	0.0	41.6	0.0	8.3	0.0	0.0
Lane Grp Cap (c), veh/h	0	223	0	1315	0	223	0	0
V/C Ratio (X)	0.00	0.16	0.00	0.67	0.00	0.46	0.00	0.00
Avail Cap (c_a), veh/h	0	223	0	1315	0	223	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	63.4	0.0	10.7	0.0	65.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.5	0.0	2.8	0.0	6.6	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	64.9	0.0	13.5	0.0	72.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.4	0.0	20.2	0.0	4.2	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	1.0	0.0	0.4	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.5	0.0	21.2	0.0	4.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.16	0.00	0.25	0.00	0.24	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	933	0	266	0	440
Grp Sat Flow (s), veh/h/ln	0	1568	0	1857	0	1568	0	1625
Q Serve Time (g_s), s	0.0	0.0	0.0	41.8	0.0	19.5	0.0	20.2
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	41.8	0.0	19.5	0.0	20.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.02	0.00	1.00	0.00	0.24
Lane Grp Cap (c), veh/h	0	190	0	1380	0	190	0	1076
V/C Ratio (X)	0.00	0.00	0.00	0.68	0.00	1.40	0.00	0.41
Avail Cap (c_a), veh/h	0	190	0	1380	0	190	0	1076
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.74
Uniform Delay (d1), s/veh	0.0	0.0	0.0	10.7	0.0	70.8	0.0	12.6
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.7	0.0	208.9	0.0	0.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	13.4	0.0	279.7	0.0	13.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	21.3	0.0	8.5	0.0	9.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.0	0.0	11.0	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	22.3	0.0	19.5	0.0	9.3
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.26	0.00	1.01	0.00	0.12
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	19.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	249.4
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	397	899	166	139	519	99	215	1030	123	367	1690	209
Future Volume (veh/h)	397	899	166	139	519	99	215	1030	123	367	1690	209
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	409	927	171	143	535	102	222	1062	127	378	1742	215
Adj No. of Lanes	2	3	0	2	3	1	2	3	0	2	3	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	348	798	147	188	702	219	268	2201	263	399	2368	291
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.10	0.18	0.18	0.05	0.14	0.14	0.08	0.48	0.48	0.12	0.52	0.52
Ln Grp Delay, s/veh	155.1	140.9	144.9	82.7	71.1	66.7	83.2	29.6	30.6	103.7	33.3	36.0
Ln Grp LOS	F	F	F	F	E	E	F	C	C	F	C	D
Approach Vol, veh/h		1507			780			1411			2335	
Approach Delay, s/veh		145.7			72.6			38.3			45.4	
Approach LOS		F			E			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	26.0	85.9	15.3	36.7	19.7	92.2	23.0	29.1
Change Period (Y+Rc), s	6.8	6.8	6.4	6.4	6.8	6.8	6.4	6.4
Max Green (Gmax), s	19.2	73.2	16.6	28.6	19.2	73.2	16.6	28.6
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.2	3.8	5.3	3.8	5.2
Max Q Clear (g_c+I1), s	20.1	27.8	8.7	32.3	12.5	51.2	18.6	18.6
Green Ext Time (g_e), s	0.0	37.6	0.2	0.0	0.4	19.9	0.0	4.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	0.02	1.00	0.10	0.00	1.00	0.80

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3408		3442		3408		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		4561		4319		4545		5085

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		545		794		558		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	378	0	143	0	222	0	409	0
Grp Sat Flow (s), veh/h/ln	1704	0	1721	0	1704	0	1721	0
Q Serve Time (g_s), s	18.1	0.0	6.7	0.0	10.5	0.0	16.6	0.0
Cycle Q Clear Time (g_c), s	18.1	0.0	6.7	0.0	10.5	0.0	16.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	399	0	188	0	268	0	348	0
V/C Ratio (X)	0.95	0.00	0.76	0.00	0.83	0.00	1.17	0.00
Avail Cap (c_a), veh/h	399	0	348	0	399	0	348	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	0.09	0.00
Uniform Delay (d1), s/veh	71.9	0.0	76.5	0.0	74.4	0.0	73.7	0.0
Incr Delay (d2), s/veh	31.8	0.0	6.2	0.0	8.8	0.0	81.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	103.7	0.0	82.7	0.0	83.2	0.0	155.1	0.0
1st-Term Q (Q1), veh/ln	8.5	0.0	3.2	0.0	5.0	0.0	7.9	0.0
2nd-Term Q (Q2), veh/ln	1.8	0.0	0.2	0.0	0.3	0.0	3.9	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	10.3	0.0	3.4	0.0	5.3	0.0	11.8	0.0
%ile Storage Ratio (RQ%)	0.46	0.00	0.17	0.00	0.34	0.00	0.60	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	15.2	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	2	0	3
Grp Vol (v), veh/h	0	781	0	727	0	1285	0	535
Grp Sat Flow (s), veh/h/ln	0	1679	0	1695	0	1679	0	1695
Q Serve Time (g_s), s	0.0	25.7	0.0	30.3	0.0	48.7	0.0	16.6
Cycle Q Clear Time (g_c), s	0.0	25.7	0.0	30.3	0.0	48.7	0.0	16.6
Lane Grp Cap (c), veh/h	0	1620	0	626	0	1749	0	702
V/C Ratio (X)	0.00	0.48	0.00	1.16	0.00	0.73	0.00	0.76
Avail Cap (c_a), veh/h	0	1620	0	626	0	1749	0	887
Upstream Filter (I)	0.00	1.00	0.00	0.09	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	28.6	0.0	66.8	0.0	30.5	0.0	68.1
Incr Delay (d2), s/veh	0.0	1.0	0.0	74.0	0.0	2.8	0.0	3.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	29.6	0.0	140.9	0.0	33.3	0.0	71.1
1st-Term Q (Q1), veh/ln	0.0	11.9	0.0	14.2	0.0	22.5	0.0	7.8

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	6.4	0.0	0.7	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	12.2	0.0	20.6	0.0	23.2	0.0	8.0
%ile Storage Ratio (RQ%)	0.00	0.55	0.00	0.27	0.00	0.89	0.00	0.13
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	25.1	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	408	0	371	0	672	0	102
Grp Sat Flow (s), veh/h/ln	0	1749	0	1723	0	1746	0	1583
Q Serve Time (g_s), s	0.0	25.8	0.0	30.3	0.0	49.2	0.0	9.7
Cycle Q Clear Time (g_c), s	0.0	25.8	0.0	30.3	0.0	49.2	0.0	9.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.31	0.00	0.46	0.00	0.32	0.00	1.00
Lane Grp Cap (c), veh/h	0	844	0	318	0	910	0	219
V/C Ratio (X)	0.00	0.48	0.00	1.17	0.00	0.74	0.00	0.47
Avail Cap (c_a), veh/h	0	844	0	318	0	910	0	276
Upstream Filter (I)	0.00	1.00	0.00	0.09	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	28.6	0.0	66.8	0.0	30.6	0.0	65.1
Incr Delay (d2), s/veh	0.0	2.0	0.0	78.0	0.0	5.4	0.0	1.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	30.6	0.0	144.9	0.0	36.0	0.0	66.7
1st-Term Q (Q1), veh/ln	0.0	12.5	0.0	14.4	0.0	23.7	0.0	4.3
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	6.9	0.0	1.4	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	12.9	0.0	21.3	0.0	25.1	0.0	4.4
%ile Storage Ratio (RQ%)	0.00	0.59	0.00	0.28	0.00	0.97	0.00	0.15
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	13.2	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		72.3						
HCM 2010 LOS		E						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	107	567	78	192	1027	105	145	70	264	218	151	145
Future Volume (veh/h)	107	567	78	192	1027	105	145	70	264	218	151	145
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1900	1712	1712	1712	1776	1776	1900	1776	1776	1776
Adj Flow Rate, veh/h	110	585	80	198	1059	108	149	72	272	225	156	149
Adj No. of Lanes	2	3	0	2	3	1	1	2	0	2	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	11	11	11	11	11	11	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	104	1007	136	104	1130	352	185	705	631	313	1362	609
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.24	0.24	0.03	0.24	0.24	0.11	0.42	0.42	0.10	0.40	0.40
Ln Grp Delay, s/veh	148.4	31.5	32.8	482.2	48.1	28.7	47.3	16.4	20.9	43.1	17.1	18.9
Ln Grp LOS	F	C	C	F	D	C	D	B	C	D	B	B
Approach Vol, veh/h		775			1365			493			530	
Approach Delay, s/veh		48.5			109.5			28.2			28.7	
Approach LOS		D			F			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	12.7	43.3	7.0	28.0	14.0	42.0	7.0	28.0
Change Period (Y+Rc), s	4.0	5.3	4.0	* 6	4.0	5.3	4.0	* 6
Max Green (Gmax), s	23.0	23.7	3.0	* 22	32.0	14.7	3.0	* 22
Max Allow Headway (MAH), s	3.8	5.1	3.8	5.2	3.8	5.1	3.8	5.2
Max Q Clear (g_c+I1), s	8.1	13.6	5.0	13.4	9.8	7.9	5.0	22.2
Green Ext Time (g_e), s	0.6	2.7	0.0	6.5	0.4	2.1	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	0.99	1.00	0.98	1.00	0.94	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.87	0.00	0.00	1.00	1.00

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	3281	3163	1691	3163

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	1687	4165	3374	4673

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	1509	562	1509	1455

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	1	0	2	0
Grp Vol (v), veh/h	225	0	198	0	149	0	110	0
Grp Sat Flow (s), veh/h/ln	1640	0	1581	0	1691	0	1581	0
Q Serve Time (g_s), s	6.1	0.0	3.0	0.0	7.8	0.0	3.0	0.0
Cycle Q Clear Time (g_c), s	6.1	0.0	3.0	0.0	7.8	0.0	3.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	313	0	104	0	185	0	104	0
V/C Ratio (X)	0.72	0.00	1.90	0.00	0.80	0.00	1.06	0.00
Avail Cap (c_a), veh/h	829	0	104	0	595	0	104	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.98	0.00	1.00	0.00
Uniform Delay (d1), s/veh	40.0	0.0	44.0	0.0	39.6	0.0	44.0	0.0
Incr Delay (d2), s/veh	3.1	0.0	438.2	0.0	7.7	0.0	103.8	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0
Control Delay (d), s/veh	43.1	0.0	482.2	0.0	47.3	0.0	148.4	0.0
1st-Term Q (Q1), veh/ln	2.7	0.0	1.3	0.0	3.6	0.0	1.3	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	6.3	0.0	0.4	0.0	1.5	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	2.9	0.0	7.6	0.0	4.0	0.0	2.8	0.0
%ile Storage Ratio (RQ%)	0.39	0.00	1.07	0.00	0.67	0.00	0.22	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	23.4	0.0	0.0	0.0	1.4	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.5	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	2	0	3
Grp Vol (v), veh/h	0	72	0	436	0	156	0	1059
Grp Sat Flow (s), veh/h/ln	0	1687	0	1558	0	1687	0	1558
Q Serve Time (g_s), s	0.0	2.4	0.0	11.2	0.0	2.6	0.0	20.2
Cycle Q Clear Time (g_c), s	0.0	2.4	0.0	11.2	0.0	2.6	0.0	20.2
Lane Grp Cap (c), veh/h	0	705	0	753	0	1362	0	1130
V/C Ratio (X)	0.00	0.10	0.00	0.58	0.00	0.11	0.00	0.94
Avail Cap (c_a), veh/h	0	705	0	753	0	1362	0	1130
Upstream Filter (I)	0.00	0.98	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	16.1	0.0	30.4	0.0	17.0	0.0	33.8
Incr Delay (d2), s/veh	0.0	0.3	0.0	1.1	0.0	0.2	0.0	14.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	16.4	0.0	31.5	0.0	17.1	0.0	48.1
1st-Term Q (Q1), veh/ln	0.0	1.1	0.0	4.8	0.0	1.2	0.0	8.6

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.0	0.0	0.0	1.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.2	0.0	5.0	0.0	1.2	0.0	10.1
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.05	0.00	0.01	0.00	0.17
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	272	0	229	0	149	0	108
Grp Sat Flow (s), veh/h/ln	0	1509	0	1612	0	1509	0	1455
Q Serve Time (g_s), s	0.0	11.6	0.0	11.4	0.0	5.9	0.0	5.5
Cycle Q Clear Time (g_c), s	0.0	11.6	0.0	11.4	0.0	5.9	0.0	5.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.35	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	631	0	390	0	609	0	352
V/C Ratio (X)	0.00	0.43	0.00	0.59	0.00	0.24	0.00	0.31
Avail Cap (c_a), veh/h	0	631	0	390	0	609	0	352
Upstream Filter (I)	0.00	0.98	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	18.8	0.0	30.5	0.0	18.0	0.0	28.3
Incr Delay (d2), s/veh	0.0	2.1	0.0	2.3	0.0	1.0	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	20.9	0.0	32.8	0.0	18.9	0.0	28.7
1st-Term Q (Q1), veh/ln	0.0	4.8	0.0	5.1	0.0	2.5	0.0	2.2
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.3	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	5.2	0.0	5.3	0.0	2.6	0.0	2.3
%ile Storage Ratio (RQ%)	0.00	0.05	0.00	0.06	0.00	0.43	0.00	0.04
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	68.4
HCM 2010 LOS	E

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	67	57	104	55	84	45	238	55	53	226	39
Future Volume (veh/h)	53	67	57	104	55	84	45	238	55	53	226	39
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1900	1900	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	55	69	59	107	57	87	46	245	57	55	233	40
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	160	143	95	316	141	327	701	825	192	676	874	150
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.59	0.59	0.59	0.59	0.59	0.59
Ln Grp Delay, s/veh	17.0	0.0	0.0	16.1	0.0	15.4	5.7	0.0	5.3	5.9	0.0	4.5
Ln Grp LOS	B			B		B	A		A	A		A
Approach Vol, veh/h		183			251			348			328	
Approach Delay, s/veh		17.0			15.8			5.4			4.7	
Approach LOS		B			B			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		8.0		6.0		7.0
Phs Duration (G+Y+Rc), s		31.1		13.9		31.1		13.9
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green (Gmax), s		18.0		18.0		18.0		18.0
Max Allow Headway (MAH), s		5.2		5.2		5.2		5.2
Max Q Clear (g_c+I1), s		6.4		7.7		7.2		5.9
Green Ext Time (g_e), s		3.1		1.8		3.0		1.9
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.21		0.00		0.12

Left-Turn Movement Data				
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		1050		270		1023		879

Through Movement Data				
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1394		686		1477		676

Right-Turn Movement Data				
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		324		455		254		1568

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment				L+T+R				L+T

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	46	0	183	0	55	0	164
Grp Sat Flow (s), veh/h/ln	0	1050	0	1411	0	1023	0	1556
Q Serve Time (g_s), s	0.0	1.0	0.0	1.8	0.0	1.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	4.4	0.0	5.7	0.0	5.2	0.0	3.9
Perm LT Sat Flow (s_l), veh/h/ln	0	1050	0	1264	0	1023	0	1282
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	1612
Perm LT Eff Green (g_p), s	0.0	26.6	0.0	9.4	0.0	26.6	0.0	9.4
Perm LT Serve Time (g_u), s	0.0	23.2	0.0	5.5	0.0	22.7	0.0	3.7
Perm LT Q Serve Time (g_ps), s	0.0	1.0	0.0	1.8	0.0	1.3	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	2.8	0.0	0.0	0.0	1.1
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	2.8	0.0	0.0	0.0	1.1
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	0.30	0.00	1.00	0.00	0.65
Lane Grp Cap (c), veh/h	0	701	0	398	0	676	0	457
V/C Ratio (X)	0.00	0.07	0.00	0.46	0.00	0.08	0.00	0.36
Avail Cap (c_a), veh/h	0	701	0	691	0	676	0	725
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	5.5	0.0	16.1	0.0	5.8	0.0	15.6
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.8	0.0	0.0	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	5.7	0.0	17.0	0.0	5.9	0.0	16.1
1st-Term Q (Q1), veh/ln	0.0	0.3	0.0	2.1	0.0	0.4	0.0	1.8
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.3	0.0	2.2	0.0	0.4	0.0	1.8
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.09	0.00	0.00	0.00	0.07
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment								
Lanes in Grp	0	0	0	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R				T+R		R
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	302	0	0	0	273	0	87
Grp Sat Flow (s), veh/h/ln	0	1718	0	0	0	1731	0	1568
Q Serve Time (g_s), s	0.0	3.9	0.0	0.0	0.0	3.4	0.0	2.1
Cycle Q Clear Time (g_c), s	0.0	3.9	0.0	0.0	0.0	3.4	0.0	2.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.19	0.00	0.32	0.00	0.15	0.00	1.00
Lane Grp Cap (c), veh/h	0	1017	0	0	0	1024	0	327
V/C Ratio (X)	0.00	0.30	0.00	0.00	0.00	0.27	0.00	0.27
Avail Cap (c_a), veh/h	0	1017	0	0	0	1024	0	627
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	4.6	0.0	0.0	0.0	4.5	0.0	14.9
Incr Delay (d2), s/veh	0.0	0.7	0.0	0.0	0.0	0.1	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	5.3	0.0	0.0	0.0	4.5	0.0	15.4
1st-Term Q (Q1), veh/ln	0.0	1.8	0.0	0.0	0.0	1.6	0.0	0.9
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.1	0.0	0.0	0.0	1.6	0.0	0.9
%ile Storage Ratio (RQ%)	0.00	0.09	0.00	0.00	0.00	0.02	0.00	0.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		9.5						
HCM 2010 LOS		A						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	751	1232	28	85	593	440	15	15	129	341	27	25
Future Volume (veh/h)	751	1232	28	85	593	440	15	15	129	341	27	25
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1696	1696	1696	1696	1696	1696	1900	1696	1900	1696	1696	1696
Adj Flow Rate, veh/h	782	1283	29	89	618	0	16	16	134	355	28	0
Adj No. of Lanes	1	2	1	1	2	1	0	1	0	2	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	12	12	12	12	12	12	12	12	12	12	12	12
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	801	1884	843	110	506	226	0	15	129	132	320	272
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.50	0.58	0.58	0.07	0.16	0.00	0.00	0.10	0.10	0.04	0.19	0.00
Ln Grp Delay, s/veh	58.0	21.1	11.8	62.4	157.8	0.0	0.0	0.0	146.0	845.3	44.6	0.0
Ln Grp LOS	E	C	B	E	F				F	F	D	
Approach Vol, veh/h		2094			707			150			383	
Approach Delay, s/veh		34.8			145.8			146.0			786.8	
Approach LOS		C			F			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	4.0	2.0	3.0	0.0	3.0
Phs Duration (G+Y+Rc), s	73.0	28.0	12.0	20.0	16.2	84.8	0.0	32.0
Change Period (Y+Rc), s	7.1	7.1	6.4	6.9	7.1	7.1	6.9	* 6.9
Max Green (Gmax), s	67.9	18.9	5.6	13.1	30.9	55.9	13.1	* 5.6
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.5	3.8	5.3	0.0	5.5
Max Q Clear (g_c+I1), s	64.9	22.9	7.6	15.1	9.2	38.5	0.0	3.8
Green Ext Time (g_e), s	1.0	0.0	0.0	0.0	0.2	12.5	0.0	0.2
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.96	1.00	0.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1616		3134		1616		0	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3223		156		3223		1696

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1442		1309		1442		1442

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)			

Lanes in Grp	1	0	2	0	1	0	0	0
Grp Vol (v), veh/h	782	0	355	0	89	0	0	0
Grp Sat Flow (s), veh/h/ln	1616	0	1567	0	1616	0	0	0
Q Serve Time (g_s), s	62.9	0.0	5.6	0.0	7.2	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	62.9	0.0	5.6	0.0	7.2	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	801	0	132	0	110	0	0	0
V/C Ratio (X)	0.98	0.00	2.69	0.00	0.81	0.00	0.00	0.00
Avail Cap (c_a), veh/h	825	0	132	0	375	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.09	0.00	0.00	0.00
Uniform Delay (d1), s/veh	32.8	0.0	63.7	0.0	61.1	0.0	0.0	0.0
Incr Delay (d2), s/veh	25.3	0.0	781.6	0.0	1.3	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	58.0	0.0	845.3	0.0	62.4	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	28.0	0.0	2.4	0.0	3.2	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	5.6	0.0	14.3	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	33.6	0.0	16.7	0.0	3.3	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	1.07	0.00	0.73	0.00	0.26	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	55.8	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	2	0	0	0	2	0	1
Grp Vol (v), veh/h	0	618	0	0	0	1283	0	28
Grp Sat Flow (s), veh/h/ln	0	1612	0	0	0	1612	0	1696
Q Serve Time (g_s), s	0.0	20.9	0.0	0.0	0.0	36.5	0.0	1.8
Cycle Q Clear Time (g_c), s	0.0	20.9	0.0	0.0	0.0	36.5	0.0	1.8
Lane Grp Cap (c), veh/h	0	506	0	0	0	1884	0	320
V/C Ratio (X)	0.00	1.22	0.00	0.00	0.00	0.68	0.00	0.09
Avail Cap (c_a), veh/h	0	506	0	0	0	1884	0	320
Upstream Filter (I)	0.00	0.09	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	56.1	0.0	0.0	0.0	19.1	0.0	44.5
Incr Delay (d2), s/veh	0.0	101.7	0.0	0.0	0.0	2.0	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	157.8	0.0	0.0	0.0	21.1	0.0	44.6
1st-Term Q (Q1), veh/ln	0.0	9.3	0.0	0.0	0.0	16.2	0.0	0.8

2nd-Term Q (Q2), veh/ln	0.0	7.1	0.0	0.0	0.0	0.5	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	16.4	0.0	0.0	0.0	16.7	0.0	0.9
%ile Storage Ratio (RQ%)	0.00	0.23	0.00	0.00	0.00	0.15	0.00	0.04
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	28.1	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	150	0	29	0	0
Grp Sat Flow (s), veh/h/ln	0	1442	0	1465	0	1442	0	1442
Q Serve Time (g_s), s	0.0	0.0	0.0	13.1	0.0	1.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	13.1	0.0	1.1	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.89	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	226	0	144	0	843	0	272
V/C Ratio (X)	0.00	0.00	0.00	1.04	0.00	0.03	0.00	0.00
Avail Cap (c_a), veh/h	0	226	0	144	0	843	0	272
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	60.0	0.0	11.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	85.7	0.0	0.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	146.0	0.0	11.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	5.3	0.0	0.5	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	3.4	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	8.7	0.0	0.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.56	0.00	0.05	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	149.7
HCM 2010 LOS	F

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	239	1515	1183	130	616	104
Future Volume (veh/h)	239	1515	1183	130	616	104
Number	1	6	2	12	3	18
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00			1.00	1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1696	1696	1696	1696	1696	1696
Adj Flow Rate, veh/h	249	1578	1232	0	642	0
Adj No. of Lanes	1	2	2	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	12	12	12	12	12	12
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	160	1925	1320	591	750	345
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.10	0.60	0.41	0.00	0.24	0.00
Ln Grp Delay, s/veh	291.2	13.1	33.3	0.0	35.7	0.0
Ln Grp LOS	F	B	C		D	
Approach Vol, veh/h		1827	1232		642	
Approach Delay, s/veh		51.0	33.3		35.7	
Approach LOS		D	C		D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8			6		
Case No	2.0	7.0	9.0			4.0		
Phs Duration (G+Y+Rc), s	15.0	39.9	25.1			54.9		
Change Period (Y+Rc), s	7.1	7.1	6.0			7.1		
Max Green (Gmax), s	7.9	27.9	24.0			42.9		
Max Allow Headway (MAH), s	3.8	5.3	3.8			5.3		
Max Q Clear (g_c+I1), s	9.9	31.2	17.7			32.9		
Green Ext Time (g_e), s	0.0	0.0	1.5			9.4		
Prob of Phs Call (p_c)	1.00	1.00	1.00			1.00		
Prob of Max Out (p_x)	1.00	0.00	0.39			0.00		

Left-Turn Movement Data			
Assigned Mvmt	1	5	3
Mvmt Sat Flow, veh/h	1616	0	3134

Through Movement Data			
Assigned Mvmt		2	8			6		
Mvmt Sat Flow, veh/h		3308	0			3308		

Right-Turn Movement Data			
Assigned Mvmt		12	18			16		
Mvmt Sat Flow, veh/h		1442	1442			0		

Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	0	0
Lane Assignment	(Prot)							

Lanes in Grp	1	0	2	0	0	0	0	0
Grp Vol (v), veh/h	249	0	642	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1616	0	1567	0	0	0	0	0
Q Serve Time (g_s), s	7.9	0.0	15.7	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	7.9	0.0	15.7	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1567	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	32.8	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	160	0	750	0	0	0	0	0
V/C Ratio (X)	1.56	0.00	0.86	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	160	0	940	0	0	0	0	0
Upstream Filter (I)	0.09	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	36.0	0.0	29.1	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	255.1	0.0	6.5	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	291.2	0.0	35.7	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	3.5	0.0	6.8	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	11.3	0.0	0.7	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	14.8	0.0	7.5	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.86	0.00	0.46	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	22.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1232	0	0	0	1578	0	0
Grp Sat Flow (s), veh/h/ln	0	1612	0	0	0	1612	0	0
Q Serve Time (g_s), s	0.0	29.2	0.0	0.0	0.0	30.9	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	29.2	0.0	0.0	0.0	30.9	0.0	0.0
Lane Grp Cap (c), veh/h	0	1320	0	0	0	1925	0	0
V/C Ratio (X)	0.00	0.93	0.00	0.00	0.00	0.82	0.00	0.00
Avail Cap (c_a), veh/h	0	1320	0	0	0	1925	0	0
Upstream Filter (I)	0.00	0.76	0.00	0.00	0.00	0.09	0.00	0.00
Uniform Delay (d1), s/veh	0.0	22.6	0.0	0.0	0.0	12.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	10.7	0.0	0.0	0.0	0.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	33.3	0.0	0.0	0.0	13.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	12.8	0.0	0.0	0.0	13.6	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	2.0	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	14.8	0.0	0.0	0.0	13.7	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.12	0.00	0.00	0.00	0.19	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lane Assignment		R	R					
Lanes in Grp	0	1	1	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1442	1442	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	591	345	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	591	433	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		42.4						
HCM 2010 LOS		D						

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	308	84	645	1732	1463	626
Future Volume (veh/h)	308	84	645	1732	1463	626
Number	7	14	5	2	6	16
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00	1.00			1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1827	1827	1827	1827
Adj Flow Rate, veh/h	331	0	694	1862	1573	0
Adj No. of Lanes	2	1	2	3	3	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	4	4	4	4
Opposing Right Turn Influence	Yes		Yes			
Cap, veh/h	389	179	784	3991	2622	816
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.11	0.00	0.23	0.80	0.53	0.00
Ln Grp Delay, s/veh	71.1	0.0	56.6	5.0	24.1	0.0
Ln Grp LOS	E		E	A	C	
Approach Vol, veh/h	331			2556	1573	
Approach Delay, s/veh	71.1			19.0	24.1	
Approach LOS	E			B	C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Case No		4.0		9.0	2.0	7.0		
Phs Duration (G+Y+Rc), s		120.4		22.6	39.2	81.2		
Change Period (Y+Rc), s		6.0		6.4	6.0	6.0		
Max Green (Gmax), s		108.0		22.6	84.0	18.0		
Max Allow Headway (MAH), s		5.2		3.8	3.8	5.2		
Max Q Clear (g_c+I1), s		19.0		15.5	30.4	33.2		
Green Ext Time (g_e), s		72.0		0.7	2.8	0.0		
Prob of Phs Call (p_c)		1.00		1.00	1.00	1.00		
Prob of Max Out (p_x)		0.00		0.12	0.00	0.00		
Left-Turn Movement Data								
Assigned Mvmt				7	5	1		
Mvmt Sat Flow, veh/h				3442	3375	0		
Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		5152		0		5152		
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		0		1583		1553		
Left Lane Group Data								
Assigned Mvmt	0	0	0	7	5	1	0	0
Lane Assignment					(Prot)			

Lanes in Grp	0	0	0	2	2	0	0	0
Grp Vol (v), veh/h	0	0	0	331	694	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1721	1688	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	13.5	28.4	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	13.5	28.4	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1721	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	75.2	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	389	784	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.85	0.88	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	544	1983	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	62.2	53.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	8.9	3.6	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	71.1	56.6	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	6.4	13.2	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.5	0.4	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	6.9	13.6	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.54	0.82	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	3	0	0	0	3	0	0
Grp Vol (v), veh/h	0	1862	0	0	0	1573	0	0
Grp Sat Flow (s), veh/h/ln	0	1663	0	0	0	1663	0	0
Q Serve Time (g_s), s	0.0	17.0	0.0	0.0	0.0	31.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	17.0	0.0	0.0	0.0	31.2	0.0	0.0
Lane Grp Cap (c), veh/h	0	3991	0	0	0	2622	0	0
V/C Ratio (X)	0.00	0.47	0.00	0.00	0.00	0.60	0.00	0.00
Avail Cap (c_a), veh/h	0	3991	0	0	0	2622	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.57	0.00	0.00
Uniform Delay (d1), s/veh	0.0	4.6	0.0	0.0	0.0	23.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.0	0.0	0.6	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	5.0	0.0	0.0	0.0	24.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	7.8	0.0	0.0	0.0	14.3	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	7.9	0.0	0.0	0.0	14.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.24	0.00	0.00	0.00	0.23	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment				R		R		
Lanes in Grp	0	0	0	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1583	0	1553	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	179	0	816	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	250	0	816	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		24.6						
HCM 2010 LOS		C						

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	314	1112	1607	269	476	2290
Future Volume (veh/h)	314	1112	1607	269	476	2290
Number	3	18	2	12	1	6
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1845	1845	1845	1845
Adj Flow Rate, veh/h	327	1158	1674	0	496	2385
Adj No. of Lanes	2	2	3	1	2	3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	3	3	3	3
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	881	713	2502	779	608	3839
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.26	0.26	0.50	0.00	0.18	0.76
Ln Grp Delay, s/veh	21.1	312.8	14.3	0.0	33.1	4.5
Ln Grp LOS	C	F	B		C	A
Approach Vol, veh/h	1485		1674			2881
Approach Delay, s/veh	248.6		14.3			9.4
Approach LOS	F		B			A

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8			6		
Case No	2.0	7.0	9.0			4.0		
Phs Duration (G+Y+Rc), s	18.3	40.7	24.4			59.0		
Change Period (Y+Rc), s	6.0	6.0	6.4			6.0		
Max Green (Gmax), s	15.0	18.0	18.0			39.0		
Max Allow Headway (MAH), s	3.8	5.2	4.0			5.2		
Max Q Clear (g_c+I1), s	11.7	19.3	20.0			16.8		
Green Ext Time (g_e), s	0.7	0.0	0.0			21.8		
Prob of Phs Call (p_c)	1.00	1.00	1.00			1.00		
Prob of Max Out (p_x)	1.00	0.00	1.00			0.00		

Left-Turn Movement Data			
Assigned Mvmt	1	5	3
Mvmt Sat Flow, veh/h	3408	0	3375

Through Movement Data			
Assigned Mvmt		2	8			6
Mvmt Sat Flow, veh/h		5202	0			5202

Right-Turn Movement Data			
Assigned Mvmt		12	18			16
Mvmt Sat Flow, veh/h		1568	2733			0

Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	0	0
Lane Assignment	(Prot)							

Lanes in Grp	2	0	2	0	0	0	0	0
Grp Vol (v), veh/h	496	0	327	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1704	0	1688	0	0	0	0	0
Q Serve Time (g_s), s	9.7	0.0	5.5	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	9.7	0.0	5.5	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1688	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	34.3	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	608	0	881	0	0	0	0	0
V/C Ratio (X)	0.82	0.00	0.37	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	741	0	881	0	0	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	27.2	0.0	20.9	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	5.9	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	33.1	0.0	21.1	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	4.5	0.0	2.5	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	5.0	0.0	2.6	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.30	0.00	0.14	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	3	0	0	0	3	0	0
Grp Vol (v), veh/h	0	1674	0	0	0	2385	0	0
Grp Sat Flow (s), veh/h/ln	0	1679	0	0	0	1679	0	0
Q Serve Time (g_s), s	0.0	17.3	0.0	0.0	0.0	14.8	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	17.3	0.0	0.0	0.0	14.8	0.0	0.0
Lane Grp Cap (c), veh/h	0	2502	0	0	0	3839	0	0
V/C Ratio (X)	0.00	0.67	0.00	0.00	0.00	0.62	0.00	0.00
Avail Cap (c_a), veh/h	0	2502	0	0	0	3839	0	0
Upstream Filter (I)	0.00	0.85	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	13.1	0.0	0.0	0.0	3.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.2	0.0	0.0	0.0	0.8	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	14.3	0.0	0.0	0.0	4.5	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	7.9	0.0	0.0	0.0	6.6	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	8.2	0.0	0.0	0.0	6.9	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.13	0.00	0.00	0.00	0.17	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lane Assignment		R	R					
Lanes in Grp	0	1	2	0	0	0	0	0
Grp Vol (v), veh/h	0	0	1158	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1568	1367	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	18.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	18.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	779	713	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	1.62	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	779	713	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	25.5	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	287.3	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	312.8	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	6.7	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	28.4	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	35.2	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	1.40	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	111.3	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		69.6						
HCM 2010 LOS		E						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	566	1025	246	142	345	92	77	89	60	194	216	697
Future Volume (veh/h)	566	1025	246	142	345	92	77	89	60	194	216	697
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1712	1712	1712	1712	1712	1712	1900	1900	1712	1712
Adj Flow Rate, veh/h	590	1068	256	148	359	0	80	93	62	202	225	726
Adj No. of Lanes	1	3	1	1	3	1	1	2	0	0	1	2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	11	11	11	11	11	11	11	11	11	11	11	11
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	433	2229	694	170	1475	459	98	540	334	0	293	439
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.27	0.48	0.48	0.10	0.32	0.00	0.06	0.28	0.28	0.00	0.17	0.17
Ln Grp Delay, s/veh	228.5	28.7	27.2	83.2	41.0	0.0	89.4	43.8	44.0	0.0	74.9	371.3
Ln Grp LOS	F	C	C	F	D		F	D	D		E	F
Approach Vol, veh/h		1914			507			235			951	
Approach Delay, s/veh		90.1			53.3			59.4			301.2	
Approach LOS		F			D			E			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	0.0	4.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	50.0	57.6	0.0	52.4	24.2	83.4	17.3	35.1
Change Period (Y+Rc), s	7.5	7.1	7.6	* 7.7	7.5	7.1	* 7.7	* 7.7
Max Green (Gmax), s	42.5	37.9	27.4	* 22	42.5	37.9	* 22	* 27
Max Allow Headway (MAH), s	3.8	5.1	0.0	4.5	3.8	5.1	3.8	4.5
Max Q Clear (g_c+I1), s	44.5	11.1	0.0	8.3	16.3	26.8	9.8	29.4
Green Ext Time (g_e), s	0.0	13.3	0.0	4.9	0.4	7.5	0.1	0.0
Prob of Phs Call (p_c)	1.00	1.00	0.00	1.00	1.00	1.00	0.97	1.00
Prob of Max Out (p_x)	1.00	0.00	0.00	0.24	0.00	0.00	0.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1630		0		1630		1630	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		4673		1933		4673		1712

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1455		1194		1455		2561

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)				(Prot)		(Prot)	

Lanes in Grp	1	0	0	0	1	0	1	0
Grp Vol (v), veh/h	590	0	0	0	148	0	80	0
Grp Sat Flow (s), veh/h/ln	1630	0	0	0	1630	0	1630	0
Q Serve Time (g_s), s	42.5	0.0	0.0	0.0	14.3	0.0	7.8	0.0
Cycle Q Clear Time (g_c), s	42.5	0.0	0.0	0.0	14.3	0.0	7.8	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	433	0	0	0	170	0	98	0
V/C Ratio (X)	1.36	0.00	0.00	0.00	0.87	0.00	0.82	0.00
Avail Cap (c_a), veh/h	433	0	0	0	433	0	227	0
Upstream Filter (I)	0.44	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	58.8	0.0	0.0	0.0	70.6	0.0	74.3	0.0
Incr Delay (d2), s/veh	169.8	0.0	0.0	0.0	12.6	0.0	15.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	228.5	0.0	0.0	0.0	83.2	0.0	89.4	0.0
1st-Term Q (Q1), veh/ln	19.1	0.0	0.0	0.0	6.5	0.0	3.5	0.0
2nd-Term Q (Q2), veh/ln	20.4	0.0	0.0	0.0	0.6	0.0	0.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	39.5	0.0	0.0	0.0	7.1	0.0	3.9	0.0
%ile Storage Ratio (RQ%)	1.46	0.00	0.00	0.00	0.46	0.00	0.21	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	39.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	1	0	3	0	1
Grp Vol (v), veh/h	0	359	0	77	0	1068	0	225
Grp Sat Flow (s), veh/h/ln	0	1558	0	1626	0	1558	0	1712
Q Serve Time (g_s), s	0.0	9.1	0.0	5.7	0.0	24.8	0.0	20.1
Cycle Q Clear Time (g_c), s	0.0	9.1	0.0	5.7	0.0	24.8	0.0	20.1
Lane Grp Cap (c), veh/h	0	1475	0	454	0	2229	0	293
V/C Ratio (X)	0.00	0.24	0.00	0.17	0.00	0.48	0.00	0.77
Avail Cap (c_a), veh/h	0	1475	0	454	0	2229	0	293
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.44	0.00	1.00
Uniform Delay (d1), s/veh	0.0	40.6	0.0	43.6	0.0	28.4	0.0	63.3
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.2	0.0	0.3	0.0	11.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	41.0	0.0	43.8	0.0	28.7	0.0	74.9
1st-Term Q (Q1), veh/ln	0.0	3.9	0.0	2.6	0.0	10.7	0.0	9.5

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	4.0	0.0	2.6	0.0	10.7	0.0	10.4
%ile Storage Ratio (RQ%)	0.00	0.04	0.00	0.14	0.00	0.08	0.00	0.31
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	2
Grp Vol (v), veh/h	0	0	0	78	0	256	0	726
Grp Sat Flow (s), veh/h/ln	0	1455	0	1501	0	1455	0	1280
Q Serve Time (g_s), s	0.0	0.0	0.0	6.3	0.0	17.9	0.0	27.4
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	6.3	0.0	17.9	0.0	27.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.80	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	459	0	419	0	694	0	439
V/C Ratio (X)	0.00	0.00	0.00	0.19	0.00	0.37	0.00	1.66
Avail Cap (c_a), veh/h	0	459	0	419	0	694	0	439
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.44	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	43.8	0.0	26.6	0.0	66.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.7	0.0	305.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	44.0	0.0	27.2	0.0	371.3
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	2.6	0.0	7.2	0.0	9.7
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	18.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	2.6	0.0	7.3	0.0	28.3
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.14	0.00	0.40	0.00	0.84
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.9
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	138.6
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	165	802	127	414	855	146	105	447	132	538	1215	159
Future Volume (veh/h)	165	802	127	414	855	146	105	447	132	538	1215	159
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1776	1776	1776	1776	1776	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	174	844	134	436	900	154	111	471	139	566	1279	167
Adj No. of Lanes	2	3	1	2	3	2	2	2	0	2	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	7	7	7	7	7	7	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	220	1254	390	213	1243	681	153	955	280	374	1301	169
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.07	0.26	0.26	0.06	0.26	0.26	0.05	0.37	0.37	0.11	0.43	0.43
Ln Grp Delay, s/veh	75.9	53.1	47.9	558.0	54.9	45.1	79.4	37.1	37.2	311.8	70.2	72.5
Ln Grp LOS	E	D	D	F	D	D	E	D	D	F	E	E
Approach Vol, veh/h		1152			1490			721			2012	
Approach Delay, s/veh		56.0			201.1			43.7			139.0	
Approach LOS		E			F			D			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	4.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	17.3	46.0	24.0	63.6	17.0	46.4	14.6	73.0
Change Period (Y+Rc), s	7.2	* 7.3	6.8	* 7.6	7.2	* 7.3	* 7.6	* 7.6
Max Green (Gmax), s	15.8	* 31	17.2	* 59	9.8	* 37	* 9.4	* 65
Max Allow Headway (MAH), s	3.8	5.1	3.8	5.3	3.8	5.1	3.8	5.3
Max Q Clear (g_c+I1), s	9.9	27.6	19.2	23.4	11.8	25.6	7.0	66.1
Green Ext Time (g_e), s	0.3	2.7	0.0	20.8	0.0	8.5	0.1	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00
Prob of Max Out (p_x)	0.15	0.00	1.00	0.50	1.00	0.00	1.00	1.00

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	3281	3281	3281	3281

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	4848	2575	4848	3004

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	2656	755	1509	390

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	174	0	566	0	436	0	111	0
Grp Sat Flow (s), veh/h/ln	1640	0	1640	0	1640	0	1640	0
Q Serve Time (g_s), s	7.9	0.0	17.2	0.0	9.8	0.0	5.0	0.0
Cycle Q Clear Time (g_c), s	7.9	0.0	17.2	0.0	9.8	0.0	5.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	220	0	374	0	213	0	153	0
V/C Ratio (X)	0.79	0.00	1.51	0.00	2.05	0.00	0.73	0.00
Avail Cap (c_a), veh/h	343	0	374	0	213	0	204	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	69.4	0.0	66.9	0.0	70.6	0.0	71.0	0.0
Incr Delay (d2), s/veh	6.5	0.0	244.9	0.0	487.4	0.0	8.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	75.9	0.0	311.8	0.0	558.0	0.0	79.4	0.0
1st-Term Q (Q1), veh/ln	3.6	0.0	7.8	0.0	4.4	0.0	2.3	0.0
2nd-Term Q (Q2), veh/ln	0.2	0.0	12.7	0.0	14.4	0.0	0.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	3.8	0.0	20.5	0.0	18.9	0.0	2.5	0.0
%ile Storage Ratio (RQ%)	0.22	0.00	0.41	0.00	0.96	0.00	0.07	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	48.1	0.0	55.8	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.4	0.0	0.5	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	1	0	3	0	1
Grp Vol (v), veh/h	0	900	0	307	0	844	0	715
Grp Sat Flow (s), veh/h/ln	0	1616	0	1687	0	1616	0	1687
Q Serve Time (g_s), s	0.0	25.6	0.0	21.2	0.0	23.6	0.0	63.0
Cycle Q Clear Time (g_c), s	0.0	25.6	0.0	21.2	0.0	23.6	0.0	63.0
Lane Grp Cap (c), veh/h	0	1243	0	626	0	1254	0	731
V/C Ratio (X)	0.00	0.72	0.00	0.49	0.00	0.67	0.00	0.98
Avail Cap (c_a), veh/h	0	1243	0	661	0	1254	0	731
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	51.3	0.0	36.5	0.0	50.2	0.0	42.1
Incr Delay (d2), s/veh	0.0	3.7	0.0	0.6	0.0	2.9	0.0	28.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	54.9	0.0	37.1	0.0	53.1	0.0	70.2
1st-Term Q (Q1), veh/ln	0.0	11.4	0.0	9.8	0.0	10.5	0.0	29.2

2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.1	0.0	0.3	0.0	5.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	11.8	0.0	9.9	0.0	10.9	0.0	34.9
%ile Storage Ratio (RQ%)	0.00	0.06	0.00	0.26	0.00	0.10	0.00	0.69
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		T+R
Lanes in Grp	0	2	0	1	0	1	0	1
Grp Vol (v), veh/h	0	154	0	303	0	134	0	731
Grp Sat Flow (s), veh/h/ln	0	1328	0	1643	0	1509	0	1707
Q Serve Time (g_s), s	0.0	6.9	0.0	21.4	0.0	10.9	0.0	64.1
Cycle Q Clear Time (g_c), s	0.0	6.9	0.0	21.4	0.0	10.9	0.0	64.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.46	0.00	1.00	0.00	0.23
Lane Grp Cap (c), veh/h	0	681	0	610	0	390	0	739
V/C Ratio (X)	0.00	0.23	0.00	0.50	0.00	0.34	0.00	0.99
Avail Cap (c_a), veh/h	0	681	0	644	0	390	0	739
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	44.3	0.0	36.6	0.0	45.5	0.0	42.4
Incr Delay (d2), s/veh	0.0	0.8	0.0	0.6	0.0	2.4	0.0	30.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	45.1	0.0	37.2	0.0	47.9	0.0	72.5
1st-Term Q (Q1), veh/ln	0.0	2.5	0.0	9.7	0.0	4.5	0.0	30.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.0	0.3	0.0	6.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.6	0.0	9.9	0.0	4.8	0.0	36.2
%ile Storage Ratio (RQ%)	0.00	0.10	0.00	0.26	0.00	0.30	0.00	0.72
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	125.6
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	501	1476	0	0	2038	743	0	0	1036	0	0	0
Future Volume (veh/h)	501	1476	0	0	2038	743	0	0	1036	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q, veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1845	1845	0	0	1845	1845	0	0	1845			
Adj Flow Rate, veh/h	516	1522	0	0	2101	0	0	0	1068			
Adj No. of Lanes	2	3	0	0	3	1	0	0	2			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97			
Percent Heavy Veh, %	3	3	0	0	3	3	0	0	3			
Opposing Right Turn Influence	Yes			No			No					
Cap, veh/h	558	4811	0	0	3761	1171	0	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Prop Arrive On Green	0.16	0.96	0.00	0.00	0.75	0.00	0.00	0.00	0.00			
Ln Grp Delay, s/veh	80.2	0.4	0.0	0.0	8.5	0.0	0.0	0.0	0.0			
Ln Grp LOS	F	A			A							

Approach Vol, veh/h		2038			2101			0				Timer:
Approach Delay, s/veh		20.6			8.5			0.0				Assigned Phs
Approach LOS		C			A							Case No
Phs Duration (G+Y+Rc), s					143.0			29.8	113.2			
Change Period (Y+Rc), s					6.4			6.4	6.4			
Max Green (Gmax), s					76.6			23.6	46.6			
Max Allow Headway (MAH), s					5.2			3.8	5.2			
Max Q Clear (g_c+I1), s					4.8			23.3	27.9			
Green Ext Time (g_e), s					63.0			0.1	18.0			
Prob of Phs Call (p_c)					1.00			1.00	1.00			
Prob of Max Out (p_x)					0.00			1.00	0.00			

Left-Turn Movement Data												
Assigned Mvmt								7	3			
Mvmt Sat Flow, veh/h								3408	0			

Through Movement Data												
Assigned Mvmt					4				8			
Mvmt Sat Flow, veh/h					5202				5202			

Right-Turn Movement Data												
Assigned Mvmt					14				18			
Mvmt Sat Flow, veh/h					0				1568			

Left Lane Group Data												
Assigned Mvmt		0	0	0	0	0	0	7	3			
Lane Assignment								(Prot)				
Lanes in Grp		0	0	0	0	0	0	2	0			
Grp Vol (v), veh/h		0	0	0	0	0	0	516	0			
Grp Sat Flow (s), veh/h/ln		0	0	0	0	0	0	1704	0			

Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	21.3	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	21.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	106.8
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	558	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.93	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	562	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	58.9	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	21.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	80.2	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	11.7	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	3	0	0	0	3
Grp Vol (v), veh/h	0	0	0	1522	0	0	0	2101
Grp Sat Flow (s), veh/h/ln	0	0	0	1679	0	0	0	1679
Q Serve Time (g_s), s	0.0	0.0	0.0	2.8	0.0	0.0	0.0	25.9
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	2.8	0.0	0.0	0.0	25.9
Lane Grp Cap (c), veh/h	0	0	0	4811	0	0	0	3761
V/C Ratio (X)	0.00	0.00	0.00	0.32	0.00	0.00	0.00	0.56
Avail Cap (c_a), veh/h	0	0	0	4811	0	0	0	3761
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	7.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.4	0.0	0.0	0.0	8.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.1	0.0	0.0	0.0	11.9
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00

%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	1.2	0.0	0.0	0.0	12.1
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.89
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	0	0	18
Lane Assignment								R
Lanes in Grp	0	0	0	0	0	0	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	1568
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	1171
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	1171
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		14.4						
HCM 2010 LOS		B						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1282	814	1197	1822	0	0	0	0	0	0	266
Future Volume (veh/h)	0	1282	814	1197	1822	0	0	0	0	0	0	266
Number	7	4	14	3	8	18				1	6	16
Initial Q, veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1845	1845	1845	1845	0				0	0	1845
Adj Flow Rate, veh/h	0	1322	0	1234	1878	0				0	0	274
Adj No. of Lanes	0	3	1	2	3	0				0	0	2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97				0.97	0.97	0.97
Percent Heavy Veh, %	0	3	3	3	3	0				0	0	3
Opposing Right Turn Influence	No			Yes						No		
Cap, veh/h	0	2216	690	1237	4540	0				0	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Prop Arrive On Green	0.00	0.44	0.00	0.36	0.90	0.00				0.00	0.00	0.00
Ln Grp Delay, s/veh	0.0	15.0	0.0	45.5	0.8	0.0				0.0	0.0	0.0
Ln Grp LOS		B		D	A							
Approach Vol, veh/h		1322			3112						0	
Approach Delay, s/veh		15.0			18.5						0.0	
Approach LOS		B			B							

Timer:	1	2	3	4	5	6	7	8
Assigned Phs			3	4				8
Case No			2.0	7.0				4.0
Phs Duration (G+Y+Rc), s			30.0	35.0				65.0
Change Period (Y+Rc), s			6.4	6.4				6.4
Max Green (Gmax), s			23.6	18.0				48.0
Max Allow Headway (MAH), s			3.8	5.2				5.2
Max Q Clear (g_c+I1), s			25.5	15.0				5.8
Green Ext Time (g_e), s			0.0	3.0				36.5
Prob of Phs Call (p_c)			1.00	1.00				1.00
Prob of Max Out (p_x)			1.00	0.00				0.00

Left-Turn Movement Data		
Assigned Mvmt	3	7
Mvmt Sat Flow, veh/h	3408	0

Through Movement Data		
Assigned Mvmt	4	8
Mvmt Sat Flow, veh/h	5202	5202

Right-Turn Movement Data		
Assigned Mvmt	14	18
Mvmt Sat Flow, veh/h	1568	0

Left Lane Group Data								
Assigned Mvmt	0	0	3	7	0	0	0	0
Lane Assignment			(Prot)					

Lanes in Grp	0	0	2	0	0	0	0	0
Grp Vol (v), veh/h	0	0	1234	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1704	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	23.5	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	23.5	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	28.6	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	1237	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	1237	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	20.7	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	24.9	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	45.5	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	11.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	4.3	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	15.2	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.53	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	3	0	0	0	3
Grp Vol (v), veh/h	0	0	0	1322	0	0	0	1878
Grp Sat Flow (s), veh/h/ln	0	0	0	1679	0	0	0	1679
Q Serve Time (g_s), s	0.0	0.0	0.0	13.0	0.0	0.0	0.0	3.8
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	13.0	0.0	0.0	0.0	3.8
Lane Grp Cap (c), veh/h	0	0	0	2216	0	0	0	4540
V/C Ratio (X)	0.00	0.00	0.00	0.60	0.00	0.00	0.00	0.41
Avail Cap (c_a), veh/h	0	0	0	2216	0	0	0	4540
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	13.8	0.0	0.0	0.0	0.5
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	15.0	0.0	0.0	0.0	0.8
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	6.0	0.0	0.0	0.0	1.6

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	6.2	0.0	0.0	0.0	1.7
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.27	0.00	0.00	0.00	0.11
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	0	0	18
Lane Assignment				R				
Lanes in Grp	0	0	0	1	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1568	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	690	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	690	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		17.5						
HCM 2010 LOS		B						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	793	2782	0	0	2337	659	0	0	398	0	0	296
Future Volume (veh/h)	793	2782	0	0	2337	659	0	0	398	0	0	296
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	0	0	1863	0	0	1863
Adj Flow Rate, veh/h	871	3057	0	0	2568	724	0	0	437	0	0	325
Adj No. of Lanes	2	3	0	0	3	2	0	0	3	0	0	3
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	0	0	2	2	0	0	2	0	0	2
Opposing Right Turn Influence	Yes			No			No			No		
Cap, veh/h	817	4795	0	0	3296	1806	0	0	0	0	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.24	0.94	0.00	0.00	0.65	0.65	0.00	0.00	0.00	0.00	0.00	0.00
Ln Grp Delay, s/veh	77.3	0.6	0.0	0.0	15.9	10.0	0.0	0.0	0.0	0.0	0.0	0.0
Ln Grp LOS	F	A			B	B						
Approach Vol, veh/h		3928			3292			0			0	
Approach Delay, s/veh		17.6			14.6			0.0			0.0	
Approach LOS		B			B							

Timer:	1	2	3	4	5	6	7	8
Assigned Phs				4			7	8
Case No				4.0			2.0	7.0
Phs Duration (G+Y+Rc), s				112.0			33.0	79.0
Change Period (Y+Rc), s				6.4			6.4	6.4
Max Green (Gmax), s				81.6			26.6	48.6
Max Allow Headway (MAH), s				5.1			3.8	5.1
Max Q Clear (g_c+I1), s				11.6			28.6	42.2
Green Ext Time (g_e), s				69.5			0.0	6.4
Prob of Phs Call (p_c)				1.00			1.00	1.00
Prob of Max Out (p_x)				0.00			1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt							7	3
Mvmt Sat Flow, veh/h							3442	0

Through Movement Data								
Assigned Mvmt				4				8
Mvmt Sat Flow, veh/h				5253				5253

Right-Turn Movement Data								
Assigned Mvmt				14				18
Mvmt Sat Flow, veh/h				0				2787

Left Lane Group Data								
Assigned Mvmt	0	0	0	0	0	0	7	3
Lane Assignment							(Prot)	

Lanes in Grp	0	0	0	0	0	0	2	0
Grp Vol (v), veh/h	0	0	0	0	0	0	871	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	1721	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	26.6	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	26.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	72.6
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	817	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	1.07	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	817	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	42.7	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	34.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	77.3	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	12.6	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	3.9	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	16.5	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.79	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	13.4	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	3	0	0	0	3
Grp Vol (v), veh/h	0	0	0	3057	0	0	0	2568
Grp Sat Flow (s), veh/h/ln	0	0	0	1695	0	0	0	1695
Q Serve Time (g_s), s	0.0	0.0	0.0	9.6	0.0	0.0	0.0	40.2
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	9.6	0.0	0.0	0.0	40.2
Lane Grp Cap (c), veh/h	0	0	0	4795	0	0	0	3296
V/C Ratio (X)	0.00	0.00	0.00	0.64	0.00	0.00	0.00	0.78
Avail Cap (c_a), veh/h	0	0	0	4795	0	0	0	3296
Upstream Filter (I)	0.00	0.00	0.00	0.17	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.5	0.0	0.0	0.0	14.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.0	0.0	1.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.6	0.0	0.0	0.0	15.9
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	4.0	0.0	0.0	0.0	18.5

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	4.0	0.0	0.0	0.0	19.1
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.31
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	0	0	18
Lane Assignment								R
Lanes in Grp	0	0	0	0	0	0	0	2
Grp Vol (v), veh/h	0	0	0	0	0	0	0	724
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	1393
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.8
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	1806
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	1806
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.4
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.1
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.3
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		16.2						
HCM 2010 LOS		B						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2659	578	988	1598	0	0	0	810	0	0	210
Future Volume (veh/h)	0	2659	578	988	1598	0	0	0	810	0	0	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	0	0	0	1863	0	0	1863
Adj Flow Rate, veh/h	0	2741	596	1019	1647	0	0	0	835	0	0	216
Adj No. of Lanes	0	3	2	2	3	0	0	0	3	0	0	3
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	2	2	2	2	0	0	0	2	0	0	2
Opposing Right Turn Influence	No			Yes			No			No		
Cap, veh/h	0	3320	1819	942	4898	0	0	0	0	0	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.00	0.65	0.65	0.27	0.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ln Grp Delay, s/veh	0.0	25.2	13.8	102.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ln Grp LOS		C	B	F	A							
Approach Vol, veh/h		3337			2666			0			0	
Approach Delay, s/veh		23.2			39.2			0.0			0.0	
Approach LOS		C			D							

Timer:	1	2	3	4	5	6	7	8
Assigned Phs			3	4				8
Case No			2.0	7.0				4.0
Phs Duration (G+Y+Rc), s			54.0	120.0				174.0
Change Period (Y+Rc), s			6.4	6.4				6.4
Max Green (Gmax), s			47.6	93.6				147.6
Max Allow Headway (MAH), s			3.8	5.1				5.1
Max Q Clear (g_c+I1), s			49.6	72.6				5.1
Green Ext Time (g_e), s			0.0	20.8				136.7
Prob of Phs Call (p_c)			1.00	1.00				1.00
Prob of Max Out (p_x)			1.00	0.00				0.00

Left-Turn Movement Data								
Assigned Mvmt			3	7				
Mvmt Sat Flow, veh/h			3442	0				

Through Movement Data								
Assigned Mvmt				4				8
Mvmt Sat Flow, veh/h				5253				5253

Right-Turn Movement Data								
Assigned Mvmt				14				18
Mvmt Sat Flow, veh/h				2787				0

Left Lane Group Data								
Assigned Mvmt	0	0	3	7	0	0	0	0
Lane Assignment			(Prot)					

Lanes in Grp	0	0	2	0	0	0	0	0
Grp Vol (v), veh/h	0	0	1019	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1721	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	47.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	47.6	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	113.6	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	942	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	1.08	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	942	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	63.2	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	39.2	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	102.4	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	22.6	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	5.1	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	27.7	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	1.19	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	19.4	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	3	0	0	0	3
Grp Vol (v), veh/h	0	0	0	2741	0	0	0	1647
Grp Sat Flow (s), veh/h/ln	0	0	0	1695	0	0	0	1695
Q Serve Time (g_s), s	0.0	0.0	0.0	70.6	0.0	0.0	0.0	3.1
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	70.6	0.0	0.0	0.0	3.1
Lane Grp Cap (c), veh/h	0	0	0	3320	0	0	0	4898
V/C Ratio (X)	0.00	0.00	0.00	0.83	0.00	0.00	0.00	0.34
Avail Cap (c_a), veh/h	0	0	0	3320	0	0	0	4898
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	0.0	0.0	22.7	0.0	0.0	0.0	0.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	25.2	0.0	0.0	0.0	0.2
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	32.7	0.0	0.0	0.0	1.2

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	33.5	0.0	0.0	0.0	1.2
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.56	0.00	0.00	0.00	0.02
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	0	0	18
Lane Assignment				R				
Lanes in Grp	0	0	0	2	0	0	0	0
Grp Vol (v), veh/h	0	0	0	596	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1393	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	16.4	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	16.4	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	1819	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.33	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	1819	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	13.3	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	13.8	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	6.3	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	6.4	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		30.3						
HCM 2010 LOS		C						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	273	209	303	303	252	101	601	281	163	1153	10
Future Volume (veh/h)	21	273	209	303	303	252	101	601	281	163	1153	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	24	310	238	344	344	286	115	683	319	185	1310	11
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	31	399	299	72	425	348	90	1085	507	90	1665	14
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.02	0.21	0.21	0.04	0.23	0.23	0.05	0.49	0.49	0.05	0.49	0.49
Ln Grp Delay, s/veh	73.0	40.2	42.7	1761.6	42.4	45.0	229.6	19.9	20.1	556.3	25.7	25.4
Ln Grp LOS	E	D	D	F	D	D	F	B	C	F	C	C
Approach Vol, veh/h		572			974			1117			1506	
Approach Delay, s/veh		42.7			650.4			41.5			90.8	
Approach LOS		D			F			D			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	4.0
Phs Duration (G+Y+Rc), s	9.0	45.8	8.0	22.2	9.0	45.8	6.0	24.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green (Gmax), s	4.5	39.5	3.5	19.5	4.5	39.5	3.5	19.5
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.4	3.8	5.3	3.8	5.4
Max Q Clear (g_c+I1), s	6.5	21.2	5.5	15.4	6.5	29.0	3.2	17.4
Green Ext Time (g_e), s	0.0	14.3	0.0	2.3	0.0	8.9	0.0	1.4
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.93	1.00	0.43	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1691		1757		1691		1757	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2235		1912		3429		1834

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1044		1433		29		1499

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	185	0	344	0	115	0	24	0
Grp Sat Flow (s), veh/h/ln	1691	0	1757	0	1691	0	1757	0
Q Serve Time (g_s), s	4.5	0.0	3.5	0.0	4.5	0.0	1.2	0.0
Cycle Q Clear Time (g_c), s	4.5	0.0	3.5	0.0	4.5	0.0	1.2	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	90	0	72	0	90	0	31	0
V/C Ratio (X)	2.07	0.00	4.76	0.00	1.28	0.00	0.77	0.00
Avail Cap (c_a), veh/h	90	0	72	0	90	0	72	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	40.3	0.0	40.8	0.0	40.3	0.0	41.6	0.0
Incr Delay (d2), s/veh	516.1	0.0	1720.8	0.0	189.4	0.0	31.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	556.3	0.0	1761.6	0.0	229.6	0.0	73.0	0.0
1st-Term Q (Q1), veh/ln	2.1	0.0	1.7	0.0	2.1	0.0	0.6	0.0
2nd-Term Q (Q2), veh/ln	12.8	0.0	34.6	0.0	4.7	0.0	0.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	14.9	0.0	36.3	0.0	6.8	0.0	0.8	0.0
%ile Storage Ratio (RQ%)	1.21	0.00	3.95	0.00	1.09	0.00	0.17	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	23.9	0.0	67.9	0.0	6.4	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.5	0.0	1.2	0.0	0.3	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	516	0	284	0	644	0	328
Grp Sat Flow (s), veh/h/ln	0	1687	0	1752	0	1687	0	1752
Q Serve Time (g_s), s	0.0	19.2	0.0	13.0	0.0	27.0	0.0	15.1
Cycle Q Clear Time (g_c), s	0.0	19.2	0.0	13.0	0.0	27.0	0.0	15.1
Lane Grp Cap (c), veh/h	0	819	0	366	0	819	0	406
V/C Ratio (X)	0.00	0.63	0.00	0.78	0.00	0.79	0.00	0.81
Avail Cap (c_a), veh/h	0	819	0	402	0	819	0	406
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	16.2	0.0	31.8	0.0	18.2	0.0	30.9
Incr Delay (d2), s/veh	0.0	3.7	0.0	8.5	0.0	7.5	0.0	11.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	19.9	0.0	40.2	0.0	25.7	0.0	42.4
1st-Term Q (Q1), veh/ln	0.0	8.9	0.0	6.3	0.0	12.5	0.0	7.3

2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	0.9	0.0	1.7	0.0	1.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	9.7	0.0	7.2	0.0	14.2	0.0	8.6
%ile Storage Ratio (RQ%)	0.00	0.77	0.00	0.17	0.00	1.09	0.00	0.17
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	486	0	264	0	677	0	302
Grp Sat Flow (s), veh/h/ln	0	1592	0	1592	0	1771	0	1580
Q Serve Time (g_s), s	0.0	19.2	0.0	13.4	0.0	27.0	0.0	15.4
Cycle Q Clear Time (g_c), s	0.0	19.2	0.0	13.4	0.0	27.0	0.0	15.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.66	0.00	0.90	0.00	0.02	0.00	0.95
Lane Grp Cap (c), veh/h	0	773	0	332	0	860	0	367
V/C Ratio (X)	0.00	0.63	0.00	0.80	0.00	0.79	0.00	0.82
Avail Cap (c_a), veh/h	0	773	0	365	0	860	0	367
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	16.2	0.0	31.9	0.0	18.2	0.0	31.0
Incr Delay (d2), s/veh	0.0	3.9	0.0	10.8	0.0	7.2	0.0	14.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	20.1	0.0	42.7	0.0	25.4	0.0	45.0
1st-Term Q (Q1), veh/ln	0.0	8.4	0.0	5.9	0.0	13.2	0.0	6.7
2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	1.0	0.0	1.7	0.0	1.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	9.2	0.0	6.9	0.0	14.9	0.0	8.1
%ile Storage Ratio (RQ%)	0.00	0.73	0.00	0.16	0.00	1.14	0.00	0.16
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		201.7						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	176	283	343	63	196	71	424	301	104	451	7
Future Volume (veh/h)	37	176	283	343	63	196	71	424	301	104	451	7
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1900	1712	1712	1712	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	39	185	298	361	66	206	75	446	317	109	475	7
Adj No. of Lanes	1	1	0	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	11	11	11	11	11	11	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	56	152	245	101	488	415	74	699	494	74	1258	19
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.26	0.26	0.06	0.29	0.29	0.04	0.37	0.37	0.04	0.37	0.37
Ln Grp Delay, s/veh	58.5	0.0	151.8	1225.8	24.6	28.3	154.8	28.9	29.5	320.2	23.0	22.9
Ln Grp LOS	E		F	F	C	C	F	C	C	F	C	C
Approach Vol, veh/h		522			633			838			591	
Approach Delay, s/veh		144.8			710.8			40.4			77.8	
Approach LOS		F			F			D			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	10.0	40.0	12.0	30.0	10.0	40.0	9.5	32.5
Change Period (Y+Rc), s	6.0	6.0	* 6.3	* 6.3	6.0	6.0	* 6.3	* 6.3
Max Green (Gmax), s	4.0	34.0	* 5.7	* 24	4.0	34.0	* 5.7	* 24
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.1	3.8	5.3	3.8	5.1
Max Q Clear (g_c+I1), s	6.0	20.0	7.7	25.7	6.0	11.4	4.2	12.8
Green Ext Time (g_e), s	0.0	6.7	0.0	0.0	0.0	8.7	0.0	3.4
Prob of Phs Call (p_c)	0.94	1.00	1.00	1.00	0.85	1.00	0.63	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.37

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1691		1630		1691		1630	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1891		591		3404		1712

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1336		952		50		1455

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	109	0	361	0	75	0	39	0
Grp Sat Flow (s), veh/h/ln	1691	0	1630	0	1691	0	1630	0
Q Serve Time (g_s), s	4.0	0.0	5.7	0.0	4.0	0.0	2.2	0.0
Cycle Q Clear Time (g_c), s	4.0	0.0	5.7	0.0	4.0	0.0	2.2	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	74	0	101	0	74	0	56	0
V/C Ratio (X)	1.48	0.00	3.57	0.00	1.02	0.00	0.70	0.00
Avail Cap (c_a), veh/h	74	0	101	0	74	0	101	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	44.0	0.0	43.2	0.0	44.0	0.0	44.0	0.0
Incr Delay (d2), s/veh	276.2	0.0	1182.6	0.0	110.6	0.0	14.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0
Control Delay (d), s/veh	320.2	0.0	1225.8	0.0	154.8	0.0	58.5	0.0
1st-Term Q (Q1), veh/ln	1.9	0.0	2.6	0.0	1.9	0.0	1.0	0.0
2nd-Term Q (Q2), veh/ln	5.6	0.0	33.2	0.0	2.3	0.0	0.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	7.5	0.0	35.7	0.0	4.1	0.0	1.2	0.0
%ile Storage Ratio (RQ%)	0.87	0.00	6.94	0.00	0.34	0.00	0.22	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	8.9	0.0	65.0	0.0	0.4	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.4	0.0	0.9	0.0	0.3	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	398	0	0	0	235	0	66
Grp Sat Flow (s), veh/h/ln	0	1687	0	0	0	1687	0	1712
Q Serve Time (g_s), s	0.0	17.9	0.0	0.0	0.0	9.4	0.0	2.6
Cycle Q Clear Time (g_c), s	0.0	17.9	0.0	0.0	0.0	9.4	0.0	2.6
Lane Grp Cap (c), veh/h	0	623	0	0	0	623	0	488
V/C Ratio (X)	0.00	0.64	0.00	0.00	0.00	0.38	0.00	0.14
Avail Cap (c_a), veh/h	0	623	0	0	0	623	0	488
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	23.9	0.0	0.0	0.0	21.2	0.0	24.4
Incr Delay (d2), s/veh	0.0	4.9	0.0	0.0	0.0	1.7	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	28.9	0.0	0.0	0.0	23.0	0.0	24.6
1st-Term Q (Q1), veh/ln	0.0	8.3	0.0	0.0	0.0	4.4	0.0	1.2

2nd-Term Q (Q2), veh/ln	0.0	0.9	0.0	0.0	0.0	0.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	9.1	0.0	0.0	0.0	4.7	0.0	1.3
%ile Storage Ratio (RQ%)	0.00	0.30	0.00	0.00	0.00	0.14	0.00	0.04
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	365	0	483	0	247	0	206
Grp Sat Flow (s), veh/h/ln	0	1540	0	1544	0	1767	0	1455
Q Serve Time (g_s), s	0.0	18.0	0.0	23.7	0.0	9.4	0.0	10.8
Cycle Q Clear Time (g_c), s	0.0	18.0	0.0	23.7	0.0	9.4	0.0	10.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.87	0.00	0.62	0.00	0.03	0.00	1.00
Lane Grp Cap (c), veh/h	0	569	0	398	0	653	0	415
V/C Ratio (X)	0.00	0.64	0.00	1.21	0.00	0.38	0.00	0.50
Avail Cap (c_a), veh/h	0	569	0	398	0	653	0	415
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	24.0	0.0	34.2	0.0	21.3	0.0	27.4
Incr Delay (d2), s/veh	0.0	5.5	0.0	117.6	0.0	1.7	0.0	0.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	29.5	0.0	151.8	0.0	22.9	0.0	28.3
1st-Term Q (Q1), veh/ln	0.0	7.6	0.0	10.1	0.0	4.6	0.0	4.3
2nd-Term Q (Q2), veh/ln	0.0	0.9	0.0	13.0	0.0	0.3	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	8.5	0.0	23.0	0.0	4.9	0.0	4.4
%ile Storage Ratio (RQ%)	0.00	0.27	0.00	0.56	0.00	0.14	0.00	0.78
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	21.3	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		234.3						
HCM 2010 LOS		F						

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	118	246	48	206	160	152	74	655	145	273	1003	46
Future Volume (veh/h)	118	246	48	206	160	152	74	655	145	273	1003	46
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	120	251	49	210	163	155	76	668	148	279	1023	47
Adj No. of Lanes	1	1	0	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	61	309	60	61	380	323	39	1255	278	39	1501	69
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.21	0.21	0.03	0.21	0.21	0.02	0.46	0.46	0.02	0.46	0.46
Ln Grp Delay, s/veh	526.0	0.0	40.5	1173.5	30.5	31.2	541.3	19.4	19.4	2821.4	21.9	21.7
Ln Grp LOS	F		D	F	C	C	F	B	B	F	C	C
Approach Vol, veh/h		420			528			892			1349	
Approach Delay, s/veh		179.3			485.3			63.9			600.8	
Approach LOS		F			F			E			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	8.0	45.3	9.0	23.7	8.0	45.3	9.0	23.7
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green (Gmax), s	2.0	34.0	3.0	23.0	2.0	34.0	3.0	23.0
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.0	3.8	5.3	3.8	5.0
Max Q Clear (g_c+I1), s	4.0	17.0	5.0	15.7	4.0	23.1	5.0	9.5
Green Ext Time (g_e), s	0.0	11.3	0.0	2.0	0.0	8.0	0.0	2.8
Prob of Phs Call (p_c)	1.00	1.00	0.99	1.00	0.84	1.00	0.94	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.59	1.00	0.00	1.00	0.14

Left-Turn Movement Data								
Assigned Mvmt		1		3		5		7
Mvmt Sat Flow, veh/h		1691		1757		1691		1757

Through Movement Data								
Assigned Mvmt			2		4		6		8
Mvmt Sat Flow, veh/h			2747		1500		3285		1845

Right-Turn Movement Data								
Assigned Mvmt			12		14		16		18
Mvmt Sat Flow, veh/h			608		293		151		1568

Left Lane Group Data								
Assigned Mvmt		1	0	3	0	5	0	7	0
Lane Assignment		(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	279	0	210	0	76	0	120	0
Grp Sat Flow (s), veh/h/ln	1691	0	1757	0	1691	0	1757	0
Q Serve Time (g_s), s	2.0	0.0	3.0	0.0	2.0	0.0	3.0	0.0
Cycle Q Clear Time (g_c), s	2.0	0.0	3.0	0.0	2.0	0.0	3.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	39	0	61	0	39	0	61	0
V/C Ratio (X)	7.09	0.00	3.43	0.00	1.93	0.00	1.96	0.00
Avail Cap (c_a), veh/h	39	0	61	0	39	0	61	0
Upstream Filter (I)	0.71	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	42.0	0.0	41.5	0.0	42.0	0.0	41.5	0.0
Incr Delay (d2), s/veh	2779.4	0.0	1132.0	0.0	499.3	0.0	484.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	2821.4	0.0	1173.5	0.0	541.3	0.0	526.0	0.0
1st-Term Q (Q1), veh/ln	0.9	0.0	1.4	0.0	0.9	0.0	1.4	0.0
2nd-Term Q (Q2), veh/ln	30.4	0.0	19.3	0.0	5.5	0.0	8.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	31.3	0.0	20.7	0.0	6.4	0.0	9.7	0.0
%ile Storage Ratio (RQ%)	3.30	0.00	3.93	0.00	0.78	0.00	1.50	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	59.9	0.0	37.2	0.0	9.2	0.0	14.7	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	1.8	0.0	0.9	0.0	0.5	0.0	0.5	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	410	0	0	0	525	0	163
Grp Sat Flow (s), veh/h/ln	0	1687	0	0	0	1687	0	1845
Q Serve Time (g_s), s	0.0	15.0	0.0	0.0	0.0	21.1	0.0	6.6
Cycle Q Clear Time (g_c), s	0.0	15.0	0.0	0.0	0.0	21.1	0.0	6.6
Lane Grp Cap (c), veh/h	0	771	0	0	0	771	0	380
V/C Ratio (X)	0.00	0.53	0.00	0.00	0.00	0.68	0.00	0.43
Avail Cap (c_a), veh/h	0	771	0	0	0	771	0	493
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.71	0.00	1.00
Uniform Delay (d1), s/veh	0.0	16.8	0.0	0.0	0.0	18.4	0.0	29.7
Incr Delay (d2), s/veh	0.0	2.6	0.0	0.0	0.0	3.4	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	19.4	0.0	0.0	0.0	21.9	0.0	30.5
1st-Term Q (Q1), veh/ln	0.0	6.9	0.0	0.0	0.0	9.8	0.0	3.4

2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.0	0.0	0.7	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.5	0.0	0.0	0.0	10.5	0.0	3.4
%ile Storage Ratio (RQ%)	0.00	0.38	0.00	0.00	0.00	0.22	0.00	0.10
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	406	0	300	0	545	0	155
Grp Sat Flow (s), veh/h/ln	0	1668	0	1793	0	1749	0	1568
Q Serve Time (g_s), s	0.0	15.0	0.0	13.7	0.0	21.1	0.0	7.5
Cycle Q Clear Time (g_c), s	0.0	15.0	0.0	13.7	0.0	21.1	0.0	7.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.36	0.00	0.16	0.00	0.09	0.00	1.00
Lane Grp Cap (c), veh/h	0	762	0	369	0	799	0	323
V/C Ratio (X)	0.00	0.53	0.00	0.81	0.00	0.68	0.00	0.48
Avail Cap (c_a), veh/h	0	762	0	480	0	799	0	419
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.71	0.00	1.00
Uniform Delay (d1), s/veh	0.0	16.8	0.0	32.6	0.0	18.4	0.0	30.1
Incr Delay (d2), s/veh	0.0	2.7	0.0	8.0	0.0	3.3	0.0	1.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	19.4	0.0	40.5	0.0	21.7	0.0	31.2
1st-Term Q (Q1), veh/ln	0.0	6.9	0.0	6.7	0.0	10.1	0.0	3.2
2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.8	0.0	0.7	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.4	0.0	7.6	0.0	10.9	0.0	3.3
%ile Storage Ratio (RQ%)	0.00	0.38	0.00	0.21	0.00	0.23	0.00	0.09
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		376.0						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	260	44	67	204	169	65	815	49	225	1159	50
Future Volume (veh/h)	105	260	44	67	204	169	65	815	49	225	1159	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	113	280	47	72	219	182	70	876	53	242	1246	54
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	230	473	402	207	473	402	89	1560	94	193	1792	78
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.05	0.48	0.48	0.11	0.54	0.54
Ln Grp Delay, s/veh	38.7	31.4	26.3	39.0	29.5	29.6	52.2	18.6	18.6	172.9	17.3	17.3
Ln Grp LOS	D	C	C	D	C	C	D	B	B	F	B	B
Approach Vol, veh/h		440			473			999			1542	
Approach Delay, s/veh		32.7			31.0			21.0			41.7	
Approach LOS		C			C			C			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Case No	2.0	4.0		5.0	2.0	4.0		5.0
Phs Duration (G+Y+Rc), s	15.0	48.9		28.1	9.3	54.6		28.1
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green (Gmax), s	10.5	41.5		26.5	10.5	41.5		26.5
Max Allow Headway (MAH), s	3.8	5.3		4.9	3.8	5.3		4.9
Max Q Clear (g_c+I1), s	12.5	19.7		21.4	5.8	27.5		20.2
Green Ext Time (g_e), s	0.0	15.8		2.2	0.0	11.1		2.5
Prob of Phs Call (p_c)	1.00	1.00		1.00	0.83	1.00		1.00
Prob of Max Out (p_x)	1.00	0.00		0.97	0.34	0.00		0.80

Left-Turn Movement Data								
Assigned Mvmt	1			7	5			3
Mvmt Sat Flow, veh/h	1691			970	1691			1038

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3233		1845		3295		1845

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		196		1568		143		1568

Left Lane Group Data								
Assigned Mvmt	1	0	0	7	5	0	0	3
Lane Assignment	(Prot)				(Prot)			

Lanes in Grp	1	0	0	1	1	0	0	1
Grp Vol (v), veh/h	242	0	0	113	70	0	0	72
Grp Sat Flow (s), veh/h/ln	1691	0	0	970	1691	0	0	1038
Q Serve Time (g_s), s	10.5	0.0	0.0	10.2	3.8	0.0	0.0	6.0
Cycle Q Clear Time (g_c), s	10.5	0.0	0.0	19.4	3.8	0.0	0.0	18.2
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	970	0	0	0	1038
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	23.6	0.0	0.0	0.0	23.6
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	14.4	0.0	0.0	0.0	11.4
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	10.2	0.0	0.0	0.0	6.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	193	0	0	230	89	0	0	207
V/C Ratio (X)	1.25	0.00	0.00	0.49	0.79	0.00	0.00	0.35
Avail Cap (c_a), veh/h	193	0	0	261	193	0	0	239
Upstream Filter (I)	0.45	0.00	0.00	1.00	0.62	0.00	0.00	1.00
Uniform Delay (d1), s/veh	40.8	0.0	0.0	37.0	43.1	0.0	0.0	38.0
Incr Delay (d2), s/veh	132.1	0.0	0.0	1.6	9.1	0.0	0.0	1.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	172.9	0.0	0.0	38.7	52.2	0.0	0.0	39.0
1st-Term Q (Q1), veh/ln	4.9	0.0	0.0	2.7	1.7	0.0	0.0	1.7
2nd-Term Q (Q2), veh/ln	7.1	0.0	0.0	0.1	0.2	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	12.0	0.0	0.0	2.8	2.0	0.0	0.0	1.8
%ile Storage Ratio (RQ%)	1.17	0.00	0.00	0.43	0.27	0.00	0.00	0.25
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	12.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	457	0	280	0	637	0	219
Grp Sat Flow (s), veh/h/ln	0	1687	0	1845	0	1687	0	1845
Q Serve Time (g_s), s	0.0	17.7	0.0	12.2	0.0	25.5	0.0	9.2
Cycle Q Clear Time (g_c), s	0.0	17.7	0.0	12.2	0.0	25.5	0.0	9.2
Lane Grp Cap (c), veh/h	0	814	0	473	0	918	0	473
V/C Ratio (X)	0.00	0.56	0.00	0.59	0.00	0.69	0.00	0.46
Avail Cap (c_a), veh/h	0	814	0	531	0	918	0	531
Upstream Filter (I)	0.00	0.62	0.00	1.00	0.00	0.45	0.00	1.00
Uniform Delay (d1), s/veh	0.0	16.9	0.0	30.0	0.0	15.4	0.0	28.8
Incr Delay (d2), s/veh	0.0	1.7	0.0	1.4	0.0	2.0	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	18.6	0.0	31.4	0.0	17.3	0.0	29.5
1st-Term Q (Q1), veh/ln	0.0	8.3	0.0	6.2	0.0	11.7	0.0	4.7

2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.2	0.0	0.5	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	8.6	0.0	6.4	0.0	12.2	0.0	4.8
%ile Storage Ratio (RQ%)	0.00	0.18	0.00	0.19	0.00	0.53	0.00	0.11
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	472	0	47	0	663	0	182
Grp Sat Flow (s), veh/h/ln	0	1741	0	1568	0	1751	0	1568
Q Serve Time (g_s), s	0.0	17.7	0.0	2.1	0.0	25.5	0.0	9.0
Cycle Q Clear Time (g_c), s	0.0	17.7	0.0	2.1	0.0	25.5	0.0	9.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.11	0.00	1.00	0.00	0.08	0.00	1.00
Lane Grp Cap (c), veh/h	0	840	0	402	0	952	0	402
V/C Ratio (X)	0.00	0.56	0.00	0.12	0.00	0.70	0.00	0.45
Avail Cap (c_a), veh/h	0	840	0	452	0	952	0	452
Upstream Filter (I)	0.00	0.62	0.00	1.00	0.00	0.45	0.00	1.00
Uniform Delay (d1), s/veh	0.0	16.9	0.0	26.2	0.0	15.4	0.0	28.8
Incr Delay (d2), s/veh	0.0	1.7	0.0	0.1	0.0	1.9	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	18.6	0.0	26.3	0.0	17.3	0.0	29.6
1st-Term Q (Q1), veh/ln	0.0	8.5	0.0	0.9	0.0	12.1	0.0	3.9
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.0	0.5	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	8.9	0.0	0.9	0.0	12.7	0.0	4.0
%ile Storage Ratio (RQ%)	0.00	0.19	0.00	0.16	0.00	0.55	0.00	0.56
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		33.1						
HCM 2010 LOS		C						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	126	44	23	80	13	515	17	1107	32	484	1362	51
Future Volume (veh/h)	126	44	23	80	13	515	17	1107	32	484	1362	51
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	131	46	24	83	14	536	18	1153	33	504	1419	53
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	83	269	141	106	14	548	128	957	27	293	1726	64
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.24	0.24	0.24	0.06	0.36	0.36	0.29	0.29	0.29	0.17	0.52	0.52
Ln Grp Delay, s/veh	354.8	0.0	30.0	63.2	0.0	63.5	38.2	141.9	141.5	364.9	20.5	20.5
Ln Grp LOS	F		C	E		E	D	F	F	F	C	C
Approach Vol, veh/h		201			633			1204			1976	
Approach Delay, s/veh		241.7			63.5			140.1			108.4	
Approach LOS		F			E			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4		6		8
Case No	2.0	6.0	2.0	6.0		4.0		4.0
Phs Duration (G+Y+Rc), s	23.0	34.0	11.9	29.1		57.0		41.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0		6.0		6.0
Max Green (Gmax), s	17.0	28.0	8.0	15.0		51.0		35.0
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.5		5.3		5.5
Max Q Clear (g_c+I1), s	19.0	30.0	6.6	25.1		37.2		35.8
Green Ext Time (g_e), s	0.0	0.0	0.0	0.0		12.2		0.0
Prob of Phs Call (p_c)	1.00	1.00	0.90	1.00		1.00		1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00		0.00		1.00

Left-Turn Movement Data				
Assigned Mvmt	1	5	3	7
Mvmt Sat Flow, veh/h	1691	341	1757	846

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	3350	1143	3317	40

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	96	596	124	1534

Left Lane Group Data								
Assigned Mvmt	1	5	3	7	0	0	0	0
Lane Assignment	(Prot)		(Prot)					

Lanes in Grp	1	1	1	1	0	0	0	0
Grp Vol (v), veh/h	504	18	83	131	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1691	341	1757	846	0	0	0	0
Q Serve Time (g_s), s	17.0	4.6	4.6	1.2	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	17.0	16.8	4.6	23.1	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	341	0	846	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	28.0	0.0	23.1	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	15.8	0.0	1.2	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	4.6	0.0	1.2	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	293	128	106	83	0	0	0	0
V/C Ratio (X)	1.72	0.14	0.78	1.57	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	293	128	143	83	0	0	0	0
Upstream Filter (I)	0.09	0.79	1.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	40.5	36.4	45.4	48.9	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	324.4	1.8	17.8	305.8	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	364.9	38.2	63.2	354.8	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	7.9	0.4	2.2	2.2	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	26.4	0.1	0.5	7.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	34.3	0.5	2.7	9.3	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	3.63	0.06	0.31	2.99	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	52.7	0.0	0.0	11.9	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.4	0.0	0.0	0.4	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	580	0	0	0	720	0	0
Grp Sat Flow (s), veh/h/ln	0	1687	0	0	0	1687	0	0
Q Serve Time (g_s), s	0.0	28.0	0.0	0.0	0.0	35.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	28.0	0.0	0.0	0.0	35.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	482	0	0	0	878	0	0
V/C Ratio (X)	0.00	1.20	0.00	0.00	0.00	0.82	0.00	0.00
Avail Cap (c_a), veh/h	0	482	0	0	0	878	0	0
Upstream Filter (I)	0.00	0.79	0.00	0.00	0.00	0.09	0.00	0.00
Uniform Delay (d1), s/veh	0.0	35.0	0.0	0.0	0.0	19.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	106.9	0.0	0.0	0.0	0.8	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	141.9	0.0	0.0	0.0	20.5	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	13.0	0.0	0.0	0.0	16.2	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	14.3	0.0	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	27.3	0.0	0.0	0.0	16.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.20	0.00	0.00	0.00	0.84	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	24.6	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data

Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	606	0	70	0	752	0	550
Grp Sat Flow (s), veh/h/ln	0	1759	0	1739	0	1754	0	1574
Q Serve Time (g_s), s	0.0	28.0	0.0	3.1	0.0	35.2	0.0	33.8
Cycle Q Clear Time (g_c), s	0.0	28.0	0.0	3.1	0.0	35.2	0.0	33.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.05	0.00	0.34	0.00	0.07	0.00	0.97
Lane Grp Cap (c), veh/h	0	503	0	410	0	913	0	562
V/C Ratio (X)	0.00	1.20	0.00	0.17	0.00	0.82	0.00	0.98
Avail Cap (c_a), veh/h	0	503	0	410	0	913	0	562
Upstream Filter (I)	0.00	0.79	0.00	1.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	35.0	0.0	29.8	0.0	19.7	0.0	31.1
Incr Delay (d2), s/veh	0.0	106.5	0.0	0.2	0.0	0.8	0.0	32.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	141.5	0.0	30.0	0.0	20.5	0.0	63.5
1st-Term Q (Q1), veh/ln	0.0	13.5	0.0	1.5	0.0	16.9	0.0	14.7
2nd-Term Q (Q2), veh/ln	0.0	14.9	0.0	0.0	0.0	0.2	0.0	5.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	28.4	0.0	1.5	0.0	17.1	0.0	19.7
%ile Storage Ratio (RQ%)	0.00	1.25	0.00	0.20	0.00	0.88	0.00	2.10
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	25.7	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary

HCM 2010 Ctrl Delay	117.5
HCM 2010 LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	270	516	242	510	671	0	203	932	2	2	1064	326
Future Volume (veh/h)	270	516	242	510	671	0	203	932	2	2	1064	326
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1759	1759	1759	1900	1776	1776	1776	1900	1776	1776
Adj Flow Rate, veh/h	278	532	249	526	692	0	209	961	0	2	1097	0
Adj No. of Lanes	2	2	1	2	2	0	1	2	1	0	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	8	8	8	8	8	8	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	362	495	221	633	773	0	165	1536	687	40	966	441
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.11	0.15	0.15	0.19	0.23	0.00	0.10	0.46	0.00	0.29	0.29	0.00
Ln Grp Delay, s/veh	43.1	101.4	137.4	39.2	46.2	0.0	164.5	19.3	0.0	87.6	118.1	0.0
Ln Grp LOS	D	F	F	D	D		F	B		F	F	
Approach Vol, veh/h		1059			1218			1170			1099	
Approach Delay, s/veh		94.6			43.2			45.2			101.7	
Approach LOS		F			D			D			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Case No		3.0	2.0	3.0	2.0	7.0	2.0	4.0
Phs Duration (G+Y+Rc), s		48.2	23.9	19.9	15.0	33.2	16.3	27.6
Change Period (Y+Rc), s		6.3	6.0	6.3	6.0	6.3	6.0	6.3
Max Green (Gmax), s		32.7	28.0	12.7	9.0	17.7	18.0	22.7
Max Allow Headway (MAH), s		5.3	3.8	5.1	3.8	5.3	3.8	5.1
Max Q Clear (g_c+I1), s		22.0	16.3	15.6	11.0	28.9	9.6	20.5
Green Ext Time (g_e), s		8.6	1.6	0.0	0.0	0.0	0.6	0.8
Prob of Phs Call (p_c)		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)		0.00	0.03	1.00	1.00	0.00	0.04	1.00

Left-Turn Movement Data								
Assigned Mvmt			3		5	1	7	
Mvmt Sat Flow, veh/h			3250		1691	1	3250	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3374		3343		3307		3431

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1509		1495		1509		0

Left Lane Group Data								
Assigned Mvmt	0	0	3	0	5	1	7	0
Lane Assignment			(Prot)		(Prot)	L+T	(Prot)	

Lanes in Grp	0	0	2	0	1	1	2	0
Grp Vol (v), veh/h	0	0	526	0	209	589	278	0
Grp Sat Flow (s), veh/h/ln	0	0	1625	0	1691	1773	1625	0
Q Serve Time (g_s), s	0.0	0.0	14.3	0.0	9.0	4.7	7.6	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	14.3	0.0	9.0	26.9	7.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	594	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	26.9	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	21.9	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	4.7	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	22.2	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	22.2	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	633	0	165	557	362	0
V/C Ratio (X)	0.00	0.00	0.83	0.00	1.26	1.06	0.77	0.00
Avail Cap (c_a), veh/h	0	0	989	0	165	557	636	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.09	1.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	35.6	0.0	41.5	33.5	39.7	0.0
Incr Delay (d2), s/veh	0.0	0.0	3.6	0.0	123.0	54.1	3.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	39.2	0.0	164.5	87.6	43.1	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	6.4	0.0	4.2	14.1	3.4	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.3	0.0	5.7	8.4	0.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	6.7	0.0	9.8	22.5	3.6	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.45	0.00	1.10	0.75	0.34	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	10.9	7.9	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	1	0	2
Grp Vol (v), veh/h	0	961	0	532	0	510	0	692
Grp Sat Flow (s), veh/h/ln	0	1687	0	1671	0	1535	0	1671
Q Serve Time (g_s), s	0.0	20.0	0.0	13.6	0.0	26.9	0.0	18.5
Cycle Q Clear Time (g_c), s	0.0	20.0	0.0	13.6	0.0	26.9	0.0	18.5
Lane Grp Cap (c), veh/h	0	1536	0	495	0	448	0	773
V/C Ratio (X)	0.00	0.63	0.00	1.08	0.00	1.14	0.00	0.90
Avail Cap (c_a), veh/h	0	1536	0	495	0	448	0	825
Upstream Filter (I)	0.00	0.09	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	19.1	0.0	39.2	0.0	32.6	0.0	34.3
Incr Delay (d2), s/veh	0.0	0.2	0.0	62.2	0.0	85.6	0.0	11.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	19.3	0.0	101.4	0.0	118.1	0.0	46.2
1st-Term Q (Q1), veh/ln	0.0	9.2	0.0	6.3	0.0	11.3	0.0	8.6

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	4.3	0.0	10.7	0.0	1.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	9.2	0.0	10.5	0.0	22.0	0.0	9.8
%ile Storage Ratio (RQ%)	0.00	0.47	0.00	0.36	0.00	0.74	0.00	0.30
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	9.3	0.0	15.3	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.3	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	249	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1509	0	1495	0	1509	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	13.6	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	13.6	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	687	0	221	0	441	0	0
V/C Ratio (X)	0.00	0.00	0.00	1.13	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	687	0	221	0	441	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	39.2	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	98.2	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	137.4	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	5.6	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	11.7	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.40	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	6.9	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	69.8
HCM 2010 LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

APPENDIX I-O2:
Year 2020 Zoning Intersection Background LOS AM Analysis with Mitigation

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	226	424	361	160	1528	35	492	316	163	97	316	563
Future Volume (veh/h)	226	424	361	160	1528	35	492	316	163	97	316	563
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1743	1743	1900	1743	1743	1743
Adj Flow Rate, veh/h	233	437	372	165	1575	36	507	326	168	100	326	580
Adj No. of Lanes	2	2	1	2	3	0	2	2	0	2	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	9	9	9	9	9	9
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	133	1240	555	133	1792	41	243	638	322	106	849	380
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.04	0.35	0.35	0.04	0.35	0.35	0.08	0.30	0.30	0.03	0.26	0.26
Ln Grp Delay, s/veh	411.9	23.6	32.5	201.3	38.2	44.6	545.2	30.9	31.5	114.0	30.1	285.0
Ln Grp LOS	F	C	C	F	D	D	F	C	C	F	C	F
Approach Vol, veh/h		1042			1776			1001			1006	
Approach Delay, s/veh		113.6			55.4			291.5			185.4	
Approach LOS		F			E			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	3.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	10.0	35.0	10.0	39.0	14.0	31.0	10.0	39.0
Change Period (Y+Rc), s	6.9	6.9	6.4	6.4	6.9	6.9	6.4	6.4
Max Green (Gmax), s	3.1	28.1	3.6	32.6	7.1	24.1	3.6	32.6
Max Allow Headway (MAH), s	3.8	4.8	3.7	4.9	3.8	4.8	3.8	4.9
Max Q Clear (g_c+I1), s	4.9	14.2	5.6	20.6	9.1	26.1	5.6	28.9
Green Ext Time (g_e), s	0.0	6.6	0.0	9.7	0.0	0.0	0.0	3.3
Prob of Phs Call (p_c)	0.93	1.00	0.99	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	3221	3476	3221	3476

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	2133	3574	3312	5166

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	1076	1599	1482	118

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	100	0	165	0	507	0	233	0
Grp Sat Flow (s), veh/h/ln	1610	0	1738	0	1610	0	1738	0
Q Serve Time (g_s), s	2.9	0.0	3.6	0.0	7.1	0.0	3.6	0.0
Cycle Q Clear Time (g_c), s	2.9	0.0	3.6	0.0	7.1	0.0	3.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	106	0	133	0	243	0	133	0
V/C Ratio (X)	0.94	0.00	1.24	0.00	2.08	0.00	1.75	0.00
Avail Cap (c_a), veh/h	106	0	133	0	243	0	133	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	45.4	0.0	45.2	0.0	43.5	0.0	45.2	0.0
Incr Delay (d2), s/veh	68.7	0.0	156.1	0.0	501.7	0.0	366.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	114.0	0.0	201.3	0.0	545.2	0.0	411.9	0.0
1st-Term Q (Q1), veh/ln	1.3	0.0	1.7	0.0	3.1	0.0	1.7	0.0
2nd-Term Q (Q2), veh/ln	1.0	0.0	2.9	0.0	17.0	0.0	6.8	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	2.3	0.0	4.6	0.0	20.1	0.0	8.5	0.0
%ile Storage Ratio (RQ%)	0.18	0.00	0.48	0.00	1.79	0.00	0.35	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	8.0	0.0	65.9	0.0	25.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.5	0.0	0.4	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	2	0	2
Grp Vol (v), veh/h	0	252	0	437	0	326	0	1044
Grp Sat Flow (s), veh/h/ln	0	1656	0	1787	0	1656	0	1712
Q Serve Time (g_s), s	0.0	11.8	0.0	8.6	0.0	7.6	0.0	26.9
Cycle Q Clear Time (g_c), s	0.0	11.8	0.0	8.6	0.0	7.6	0.0	26.9
Lane Grp Cap (c), veh/h	0	495	0	1240	0	849	0	1187
V/C Ratio (X)	0.00	0.51	0.00	0.35	0.00	0.38	0.00	0.88
Avail Cap (c_a), veh/h	0	495	0	1240	0	849	0	1187
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	27.2	0.0	22.8	0.0	28.8	0.0	28.8
Incr Delay (d2), s/veh	0.0	3.7	0.0	0.8	0.0	1.3	0.0	9.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	30.9	0.0	23.6	0.0	30.1	0.0	38.2
1st-Term Q (Q1), veh/ln	0.0	5.4	0.0	4.2	0.0	3.5	0.0	12.6

2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.1	0.0	0.2	0.0	1.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	5.9	0.0	4.3	0.0	3.6	0.0	14.2
%ile Storage Ratio (RQ%)	0.00	0.21	0.00	0.10	0.00	0.14	0.00	0.66
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	242	0	372	0	580	0	567
Grp Sat Flow (s), veh/h/ln	0	1553	0	1599	0	1482	0	1860
Q Serve Time (g_s), s	0.0	12.2	0.0	18.6	0.0	24.1	0.0	26.9
Cycle Q Clear Time (g_c), s	0.0	12.2	0.0	18.6	0.0	24.1	0.0	26.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.69	0.00	1.00	0.00	1.00	0.00	0.06
Lane Grp Cap (c), veh/h	0	464	0	555	0	380	0	645
V/C Ratio (X)	0.00	0.52	0.00	0.67	0.00	1.53	0.00	0.88
Avail Cap (c_a), veh/h	0	464	0	555	0	380	0	645
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	27.4	0.0	26.1	0.0	35.0	0.0	28.8
Incr Delay (d2), s/veh	0.0	4.2	0.0	6.3	0.0	250.1	0.0	15.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	31.5	0.0	32.5	0.0	285.0	0.0	44.6
1st-Term Q (Q1), veh/ln	0.0	5.2	0.0	8.2	0.0	9.8	0.0	13.7
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	1.0	0.0	26.4	0.0	2.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	5.7	0.0	9.2	0.0	36.2	0.0	16.5
%ile Storage Ratio (RQ%)	0.00	0.21	0.00	0.44	0.00	1.39	0.00	0.77
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	144.1
HCM 2010 LOS	F

Notes

User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	101	577	131	219	1192	255	263	129	159	226	186	192
Future Volume (veh/h)	101	577	131	219	1192	255	263	129	159	226	186	192
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	104	595	135	226	1229	263	271	133	164	233	192	198
Adj No. of Lanes	2	2	0	1	2	1	2	1	1	2	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	155	1207	273	221	1772	793	334	295	251	294	274	233
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.04	0.42	0.42	0.12	0.50	0.50	0.10	0.16	0.16	0.09	0.15	0.15
Ln Grp Delay, s/veh	63.8	28.8	28.8	93.8	24.6	19.0	61.3	52.4	61.8	61.1	64.6	82.4
Ln Grp LOS	E	C	C	F	C	B	E	D	E	E	E	F
Approach Vol, veh/h		834			1718			568			623	
Approach Delay, s/veh		33.1			32.8			59.4			69.0	
Approach LOS		C			C			E			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	4.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	17.4	26.6	22.0	59.0	18.8	25.1	12.0	69.0
Change Period (Y+Rc), s	6.6	6.6	6.4	6.4	6.6	6.6	6.4	6.4
Max Green (Gmax), s	16.8	20.0	15.6	46.6	18.4	18.4	8.4	53.8
Max Allow Headway (MAH), s	3.8	4.6	3.7	4.9	3.8	4.6	3.7	4.9
Max Q Clear (g_c+I1), s	10.4	14.3	17.6	21.0	11.7	17.4	5.7	35.2
Green Ext Time (g_e), s	0.4	1.7	0.0	16.3	0.5	0.4	0.1	13.1
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	0.97	1.00
Prob of Max Out (p_x)	0.13	0.00	1.00	0.00	0.13	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3408		1774		3408		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1845		2868		1845		3539

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		649		1568		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	1	0	2	0	2	0
Grp Vol (v), veh/h	233	0	226	0	271	0	104	0
Grp Sat Flow (s), veh/h/ln	1704	0	1774	0	1704	0	1721	0
Q Serve Time (g_s), s	8.4	0.0	15.6	0.0	9.7	0.0	3.7	0.0
Cycle Q Clear Time (g_c), s	8.4	0.0	15.6	0.0	9.7	0.0	3.7	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	294	0	221	0	334	0	155	0
V/C Ratio (X)	0.79	0.00	1.02	0.00	0.81	0.00	0.67	0.00
Avail Cap (c_a), veh/h	458	0	221	0	502	0	231	0
Upstream Filter (I)	1.00	0.00	0.31	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	56.0	0.0	54.7	0.0	55.2	0.0	58.8	0.0
Incr Delay (d2), s/veh	5.1	0.0	39.0	0.0	6.0	0.0	5.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	61.1	0.0	93.8	0.0	61.3	0.0	63.8	0.0
1st-Term Q (Q1), veh/ln	3.9	0.0	7.6	0.0	4.6	0.0	1.8	0.0
2nd-Term Q (Q2), veh/ln	0.2	0.0	2.4	0.0	0.3	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	4.2	0.0	10.0	0.0	4.9	0.0	1.9	0.0
%ile Storage Ratio (RQ%)	0.79	0.00	0.94	0.00	0.92	0.00	0.15	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	2
Grp Vol (v), veh/h	0	133	0	367	0	192	0	1229
Grp Sat Flow (s), veh/h/ln	0	1845	0	1770	0	1845	0	1770
Q Serve Time (g_s), s	0.0	8.2	0.0	18.9	0.0	12.4	0.0	33.2
Cycle Q Clear Time (g_c), s	0.0	8.2	0.0	18.9	0.0	12.4	0.0	33.2
Lane Grp Cap (c), veh/h	0	295	0	745	0	274	0	1772
V/C Ratio (X)	0.00	0.45	0.00	0.49	0.00	0.70	0.00	0.69
Avail Cap (c_a), veh/h	0	295	0	745	0	274	0	1772
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.31
Uniform Delay (d1), s/veh	0.0	47.5	0.0	26.4	0.0	50.6	0.0	23.9
Incr Delay (d2), s/veh	0.0	4.9	0.0	2.3	0.0	14.0	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	52.4	0.0	28.8	0.0	64.6	0.0	24.6
1st-Term Q (Q1), veh/ln	0.0	4.2	0.0	9.3	0.0	6.3	0.0	16.2

2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.5	0.0	1.1	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	4.6	0.0	9.7	0.0	7.4	0.0	16.4
%ile Storage Ratio (RQ%)	0.00	0.15	0.00	0.13	0.00	0.26	0.00	0.28
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	164	0	363	0	198	0	263
Grp Sat Flow (s), veh/h/ln	0	1568	0	1748	0	1568	0	1583
Q Serve Time (g_s), s	0.0	12.3	0.0	19.0	0.0	15.4	0.0	12.4
Cycle Q Clear Time (g_c), s	0.0	12.3	0.0	19.0	0.0	15.4	0.0	12.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.37	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	251	0	736	0	233	0	793
V/C Ratio (X)	0.00	0.65	0.00	0.49	0.00	0.85	0.00	0.33
Avail Cap (c_a), veh/h	0	251	0	736	0	233	0	793
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.31
Uniform Delay (d1), s/veh	0.0	49.3	0.0	26.5	0.0	51.9	0.0	18.7
Incr Delay (d2), s/veh	0.0	12.5	0.0	2.4	0.0	30.5	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	61.8	0.0	28.8	0.0	82.4	0.0	19.0
1st-Term Q (Q1), veh/ln	0.0	5.3	0.0	9.2	0.0	6.7	0.0	5.4
2nd-Term Q (Q2), veh/ln	0.0	0.9	0.0	0.5	0.0	2.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	6.2	0.0	9.7	0.0	8.7	0.0	5.5
%ile Storage Ratio (RQ%)	0.00	0.21	0.00	0.13	0.00	0.31	0.00	0.10
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		42.9						
HCM 2010 LOS		D						

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	70	868	1449	415	345	150
Future Volume (veh/h)	70	868	1449	415	345	150
Number	7	4	8	18	1	16
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00			1.00	1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1676	1676	1676	1676	1660	1660
Adj Flow Rate, veh/h	74	923	1541	441	367	160
Adj No. of Lanes	1	2	2	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	3	3
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	91	1966	1535	687	692	318
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.62	0.48	0.48	0.23	0.23
Ln Grp Delay, s/veh	69.7	9.1	42.0	19.4	30.8	33.3
Ln Grp LOS	E	A	F	B	C	C
Approach Vol, veh/h		997	1982		527	
Approach Delay, s/veh		13.6	36.9		31.6	
Approach LOS		B	D		C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	6			4			7	8
Case No	9.0			4.0			2.0	7.0
Phs Duration (G+Y+Rc), s	25.0			57.0			11.1	45.9
Change Period (Y+Rc), s	6.5			6.4			6.4	6.4
Max Green (Gmax), s	18.5			46.6			5.0	39.2
Max Allow Headway (MAH), s	3.9			4.8			3.7	4.8
Max Q Clear (g_c+I1), s	10.6			14.8			5.8	41.5
Green Ext Time (g_e), s	1.3			25.0			0.0	0.0
Prob of Phs Call (p_c)	1.00			1.00			0.81	1.00
Prob of Max Out (p_x)	0.00			0.00			1.00	0.00
Left-Turn Movement Data								
Assigned Mvmt	1						7	3
Mvmt Sat Flow, veh/h	3067						1597	0
Through Movement Data								
Assigned Mvmt	6			4				8
Mvmt Sat Flow, veh/h	0			3269				3269
Right-Turn Movement Data								
Assigned Mvmt	16			14				18
Mvmt Sat Flow, veh/h	1411			0				1425
Left Lane Group Data								
Assigned Mvmt	1	0	0	0	0	0	7	3
Lane Assignment							(Prot)	

Lanes in Grp	2	0	0	0	0	0	1	0
Grp Vol (v), veh/h	367	0	0	0	0	0	74	0
Grp Sat Flow (s), veh/h/ln	1534	0	0	0	0	0	1597	0
Q Serve Time (g_s), s	8.6	0.0	0.0	0.0	0.0	0.0	3.8	0.0
Cycle Q Clear Time (g_c), s	8.6	0.0	0.0	0.0	0.0	0.0	3.8	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1534	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.5
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	692	0	0	0	0	0	91	0
V/C Ratio (X)	0.53	0.00	0.00	0.00	0.00	0.00	0.81	0.00
Avail Cap (c_a), veh/h	692	0	0	0	0	0	97	0
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.82	0.00
Uniform Delay (d1), s/veh	27.9	0.0	0.0	0.0	0.0	0.0	38.2	0.0
Incr Delay (d2), s/veh	2.9	0.0	0.0	0.0	0.0	0.0	31.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	30.8	0.0	0.0	0.0	0.0	0.0	69.7	0.0
1st-Term Q (Q1), veh/ln	3.6	0.0	0.0	0.0	0.0	0.0	1.7	0.0
2nd-Term Q (Q2), veh/ln	0.3	0.0	0.0	0.0	0.0	0.0	0.8	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	3.9	0.0	0.0	0.0	0.0	0.0	2.5	0.0
%ile Storage Ratio (RQ%)	0.20	0.00	0.00	0.00	0.00	0.00	0.28	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	6	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	2
Grp Vol (v), veh/h	0	0	0	923	0	0	0	1541
Grp Sat Flow (s), veh/h/ln	0	0	0	1593	0	0	0	1593
Q Serve Time (g_s), s	0.0	0.0	0.0	12.8	0.0	0.0	0.0	39.5
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	12.8	0.0	0.0	0.0	39.5
Lane Grp Cap (c), veh/h	0	0	0	1966	0	0	0	1535
V/C Ratio (X)	0.00	0.00	0.00	0.47	0.00	0.00	0.00	1.00
Avail Cap (c_a), veh/h	0	0	0	1966	0	0	0	1535
Upstream Filter (I)	0.00	0.00	0.00	0.82	0.00	0.00	0.00	0.74
Uniform Delay (d1), s/veh	0.0	0.0	0.0	8.5	0.0	0.0	0.0	21.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.7	0.0	0.0	0.0	20.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	9.1	0.0	0.0	0.0	42.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	5.5	0.0	0.0	0.0	17.3

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	4.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	5.7	0.0	0.0	0.0	21.7
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.31
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	16	0	0	14	0	0	0	18
Lane Assignment	R							R
Lanes in Grp	1	0	0	0	0	0	0	1
Grp Vol (v), veh/h	160	0	0	0	0	0	0	441
Grp Sat Flow (s), veh/h/ln	1411	0	0	0	0	0	0	1425
Q Serve Time (g_s), s	8.1	0.0	0.0	0.0	0.0	0.0	0.0	19.0
Cycle Q Clear Time (g_c), s	8.1	0.0	0.0	0.0	0.0	0.0	0.0	19.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	318	0	0	0	0	0	0	687
V/C Ratio (X)	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.64
Avail Cap (c_a), veh/h	318	0	0	0	0	0	0	687
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.74
Uniform Delay (d1), s/veh	27.7	0.0	0.0	0.0	0.0	0.0	0.0	15.9
Incr Delay (d2), s/veh	5.6	0.0	0.0	0.0	0.0	0.0	0.0	3.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	33.3	0.0	0.0	0.0	0.0	0.0	0.0	19.4
1st-Term Q (Q1), veh/ln	6.4	0.0	0.0	0.0	0.0	0.0	0.0	7.5
2nd-Term Q (Q2), veh/ln	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	6.9	0.0	0.0	0.0	0.0	0.0	0.0	8.1
%ile Storage Ratio (RQ%)	0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.12
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		29.5						
HCM 2010 LOS		C						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	1005	33	44	1530	27	129	7	14	56	22	44
Future Volume (veh/h)	27	1005	33	44	1530	27	129	7	14	56	22	44
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1845	1845	1900	1845	1845
Adj Flow Rate, veh/h	28	1026	34	45	1561	28	132	7	14	57	22	45
Adj No. of Lanes	1	2	0	1	3	0	0	1	1	0	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	33	2168	72	55	3255	58	133	7	125	86	33	105
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.02	0.62	0.62	0.03	0.63	0.63	0.08	0.08	0.08	0.07	0.07	0.07
Ln Grp Delay, s/veh	70.9	7.8	7.8	77.0	6.7	7.2	102.9	0.0	29.2	54.3	0.0	40.8
Ln Grp LOS	E	A	A	E	A	A	F		C	D		D
Approach Vol, veh/h		1088			1634			153			124	
Approach Delay, s/veh		9.4			8.8			96.2			49.4	
Approach LOS		A			A			F			D	

Timer:		1	2	3	4	5	6	7	8			
Assigned Phs		6	2	3	4			7	8			
Case No		11.0	11.0	2.0	4.0			2.0	4.0			
Phs Duration (G+Y+Rc), s		11.0	12.0	8.4	46.7			7.6	47.5			
Change Period (Y+Rc), s		6.7	6.9	6.4	* 6.6			6.4	* 6.6			
Max Green (Gmax), s		4.3	5.1	2.0	* 26			2.0	* 26			
Max Allow Headway (MAH), s		4.9	5.2	3.8	5.2			3.7	5.2			
Max Q Clear (g_c+I1), s		4.8	7.0	3.6	12.1			3.0	12.2			
Green Ext Time (g_e), s		0.0	0.0	0.0	12.3			0.0	12.1			
Prob of Phs Call (p_c)		1.00	1.00	0.55	1.00			0.39	1.00			
Prob of Max Out (p_x)		0.00	0.00	1.00	0.00			1.00	0.00			

Left-Turn Movement Data												
Assigned Mvmt		1	5	3				7				
Mvmt Sat Flow, veh/h		1285	1672	1774				1774				

Through Movement Data												
Assigned Mvmt		6	2		4				8			
Mvmt Sat Flow, veh/h		496	89		3496				5144			

Right-Turn Movement Data												
Assigned Mvmt		16	12		14				18			
Mvmt Sat Flow, veh/h		1568	1568		116				92			

Left Lane Group Data												
Assigned Mvmt		1	5	3	0	0	0	7	0			
Lane Assignment		L+T	L+T	(Prot)				(Prot)				

Lanes in Grp	1	1	1	0	0	0	1	0
Grp Vol (v), veh/h	79	139	45	0	0	0	28	0
Grp Sat Flow (s), veh/h/ln	1780	1761	1774	0	0	0	1774	0
Q Serve Time (g_s), s	2.8	5.0	1.6	0.0	0.0	0.0	1.0	0.0
Cycle Q Clear Time (g_c), s	2.8	5.0	1.6	0.0	0.0	0.0	1.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.72	0.95	1.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	120	140	55	0	0	0	33	0
V/C Ratio (X)	0.66	0.99	0.82	0.00	0.00	0.00	0.86	0.00
Avail Cap (c_a), veh/h	120	140	55	0	0	0	55	0
Upstream Filter (I)	1.00	1.00	0.71	0.00	0.00	0.00	0.87	0.00
Uniform Delay (d1), s/veh	29.1	29.4	30.8	0.0	0.0	0.0	31.3	0.0
Incr Delay (d2), s/veh	25.1	73.5	46.2	0.0	0.0	0.0	39.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	54.3	102.9	77.0	0.0	0.0	0.0	70.9	0.0
1st-Term Q (Q1), veh/ln	1.4	2.4	0.8	0.0	0.0	0.0	0.5	0.0
2nd-Term Q (Q2), veh/ln	0.8	2.9	0.7	0.0	0.0	0.0	0.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	2.2	5.3	1.5	0.0	0.0	0.0	0.8	0.0
%ile Storage Ratio (RQ%)	0.11	0.29	0.11	0.00	0.00	0.00	0.12	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	6	2	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	2
Grp Vol (v), veh/h	0	0	0	519	0	0	0	1029
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1695
Q Serve Time (g_s), s	0.0	0.0	0.0	10.1	0.0	0.0	0.0	10.2
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	10.1	0.0	0.0	0.0	10.2
Lane Grp Cap (c), veh/h	0	0	0	1097	0	0	0	2145
V/C Ratio (X)	0.00	0.00	0.00	0.47	0.00	0.00	0.00	0.48
Avail Cap (c_a), veh/h	0	0	0	1097	0	0	0	2145
Upstream Filter (I)	0.00	0.00	0.00	0.87	0.00	0.00	0.00	0.71
Uniform Delay (d1), s/veh	0.0	0.0	0.0	6.5	0.0	0.0	0.0	6.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	7.8	0.0	0.0	0.0	6.7
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	4.9	0.0	0.0	0.0	4.7

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	5.3	0.0	0.0	0.0	4.9
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.30
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	16	12	0	14	0	0	0	18
Lane Assignment	R	R		T+R				T+R
Lanes in Grp	1	1	0	1	0	0	0	1
Grp Vol (v), veh/h	45	14	0	541	0	0	0	560
Grp Sat Flow (s), veh/h/ln	1568	1568	0	1842	0	0	0	1846
Q Serve Time (g_s), s	1.8	0.5	0.0	10.1	0.0	0.0	0.0	10.2
Cycle Q Clear Time (g_c), s	1.8	0.5	0.0	10.1	0.0	0.0	0.0	10.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	1.00	0.00	0.06	0.00	0.00	0.00	0.05
Lane Grp Cap (c), veh/h	105	125	0	1142	0	0	0	1168
V/C Ratio (X)	0.43	0.11	0.00	0.47	0.00	0.00	0.00	0.48
Avail Cap (c_a), veh/h	105	125	0	1142	0	0	0	1168
Upstream Filter (I)	1.00	1.00	0.00	0.87	0.00	0.00	0.00	0.71
Uniform Delay (d1), s/veh	28.7	27.3	0.0	6.5	0.0	0.0	0.0	6.2
Incr Delay (d2), s/veh	12.2	1.8	0.0	1.2	0.0	0.0	0.0	1.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	40.8	29.2	0.0	7.8	0.0	0.0	0.0	7.2
1st-Term Q (Q1), veh/ln	0.8	0.2	0.0	5.1	0.0	0.0	0.0	5.1
2nd-Term Q (Q2), veh/ln	0.4	0.1	0.0	0.4	0.0	0.0	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	1.1	0.3	0.0	5.5	0.0	0.0	0.0	5.5
%ile Storage Ratio (RQ%)	0.71	0.07	0.00	0.08	0.00	0.00	0.00	0.33
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	15.2
HCM 2010 LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	917	137	421	1338	198	299
Future Volume (veh/h)	917	137	421	1338	198	299
Number	4	14	3	8	5	12
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)		1.00	1.00		1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1845	1845
Adj Flow Rate, veh/h	936	140	430	1365	202	305
Adj No. of Lanes	2	0	2	2	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	3	3
Opposing Right Turn Influence			Yes		Yes	
Cap, veh/h	1133	169	379	1978	484	432
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.37	0.37	0.11	0.56	0.28	0.28
Ln Grp Delay, s/veh	30.5	30.5	100.2	12.6	25.8	34.7
Ln Grp LOS	C	C	F	B	C	C
Approach Vol, veh/h	1076			1795	507	
Approach Delay, s/veh	30.5			33.6	31.2	
Approach LOS	C			C	C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Case No		9.0	2.0	8.0				4.0
Phs Duration (G+Y+Rc), s		28.0	15.0	35.0				50.0
Change Period (Y+Rc), s		6.5	6.4	6.4				6.4
Max Green (Gmax), s		21.5	8.6	28.6				43.6
Max Allow Headway (MAH), s		4.0	3.8	5.3				5.3
Max Q Clear (g_c+I1), s		15.6	10.6	23.5				23.6
Green Ext Time (g_e), s		0.9	0.0	4.7				16.2
Prob of Phs Call (p_c)		1.00	1.00	1.00				1.00
Prob of Max Out (p_x)		0.00	1.00	0.00				0.00

Left-Turn Movement Data			
Assigned Mvmt	5	3	7
Mvmt Sat Flow, veh/h	1757	3442	0

Through Movement Data			
Assigned Mvmt	2	4	8
Mvmt Sat Flow, veh/h	0	3182	3632

Right-Turn Movement Data			
Assigned Mvmt	12	14	18
Mvmt Sat Flow, veh/h	1568	462	0

Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	0	0	0
Lane Assignment			(Prot)					

Lanes in Grp	0	1	2	0	0	0	0	0
Grp Vol (v), veh/h	0	202	430	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1757	1721	0	0	0	0	0
Q Serve Time (g_s), s	0.0	7.3	8.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	7.3	8.6	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1757	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	28.6	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	484	379	0	0	0	0	0
V/C Ratio (X)	0.00	0.42	1.13	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	484	379	0	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.15	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	23.1	34.7	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.6	65.5	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	25.8	100.2	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.5	4.1	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	3.4	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	3.9	7.5	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.16	0.83	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	12.6	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	2
Grp Vol (v), veh/h	0	0	0	536	0	0	0	1365
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	21.5	0.0	0.0	0.0	21.6
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	21.5	0.0	0.0	0.0	21.6
Lane Grp Cap (c), veh/h	0	0	0	649	0	0	0	1978
V/C Ratio (X)	0.00	0.00	0.00	0.83	0.00	0.00	0.00	0.69
Avail Cap (c_a), veh/h	0	0	0	649	0	0	0	1978
Upstream Filter (I)	0.00	0.00	0.00	0.68	0.00	0.00	0.00	0.15
Uniform Delay (d1), s/veh	0.0	0.0	0.0	22.4	0.0	0.0	0.0	12.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	8.1	0.0	0.0	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	30.5	0.0	0.0	0.0	12.6
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	10.4	0.0	0.0	0.0	10.4

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	11.9	0.0	0.0	0.0	10.5
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.72	0.00	0.00	0.00	0.27
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	0	0	18
Lane Assignment		R		T+R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	305	0	540	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1568	0	1781	0	0	0	0
Q Serve Time (g_s), s	0.0	13.6	0.0	21.5	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	13.6	0.0	21.5	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.26	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	432	0	653	0	0	0	0
V/C Ratio (X)	0.00	0.71	0.00	0.83	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	432	0	653	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.68	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	25.4	0.0	22.4	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	9.3	0.0	8.1	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	34.7	0.0	30.5	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	5.9	0.0	10.5	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.1	0.0	1.5	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.0	0.0	12.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.29	0.00	0.72	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		32.3						
HCM 2010 LOS		C						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	1076	172	51	1592	8	268	2	88	7	5	44
Future Volume (veh/h)	28	1076	172	51	1592	8	268	2	88	7	5	44
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1900	1900	1845	1900
Adj Flow Rate, veh/h	29	1109	177	53	1641	8	276	2	91	7	5	45
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	0	1	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	35	1827	291	48	2185	11	509	10	462	83	71	375
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.02	0.60	0.60	0.03	0.60	0.60	0.30	0.30	0.30	0.30	0.30	0.30
Ln Grp Delay, s/veh	74.7	10.9	10.9	176.0	13.8	13.7	26.5	0.0	20.2	19.2	0.0	0.0
Ln Grp LOS	E	B	B	F	B	B	C		C	B		
Approach Vol, veh/h		1315			1702			369			57	
Approach Delay, s/veh		12.3			18.8			24.9			19.2	
Approach LOS		B			B			C			B	

Timer:		1	2	3	4	5	6	7	8			
Assigned Phs			2	3	4		6	7	8			
Case No			6.0	2.0	4.0		8.0	2.0	4.0			
Phs Duration (G+Y+Rc), s			29.0	8.4	51.0		29.0	7.8	51.6			
Change Period (Y+Rc), s			* 6.8	6.4	6.4		* 6.8	6.4	6.4			
Max Green (Gmax), s			* 22	2.0	30.6		* 22	2.0	30.6			
Max Allow Headway (MAH), s			4.5	3.8	5.3		4.5	3.8	5.3			
Max Q Clear (g_c+I1), s			14.7	4.0	19.0		3.9	3.2	26.4			
Green Ext Time (g_e), s			1.1	0.0	10.8		1.7	0.0	4.1			
Prob of Phs Call (p_c)			1.00	0.66	1.00		1.00	0.45	1.00			
Prob of Max Out (p_x)			0.00	1.00	0.00		0.00	1.00	0.00			
Left-Turn Movement Data												
Assigned Mvmt			5	3			1	7				
Mvmt Sat Flow, veh/h			1336	1774			96	1774				
Through Movement Data												
Assigned Mvmt			2		4		6		8			
Mvmt Sat Flow, veh/h			34		3059		237		3612			
Right-Turn Movement Data												
Assigned Mvmt			12		14		16		18			
Mvmt Sat Flow, veh/h			1539		487		1249		18			
Left Lane Group Data												
Assigned Mvmt		0	5	3	0	0	1	7	0			
Lane Assignment				(Prot)			L+T+R	(Prot)				

Lanes in Grp	0	1	1	0	0	1	1	0
Grp Vol (v), veh/h	0	276	53	0	0	57	29	0
Grp Sat Flow (s), veh/h/ln	0	1336	1774	0	0	1582	1774	0
Q Serve Time (g_s), s	0.0	10.8	2.0	0.0	0.0	0.0	1.2	0.0
Cycle Q Clear Time (g_c), s	0.0	12.7	2.0	0.0	0.0	1.9	1.2	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1336	0	0	0	1324	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	1757	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	22.2	0.0	0.0	0.0	22.2	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	20.3	0.0	0.0	0.0	18.9	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	10.8	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	10.9	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	0.00	0.12	1.00	0.00
Lane Grp Cap (c), veh/h	0	509	48	0	0	529	35	0
V/C Ratio (X)	0.00	0.54	1.11	0.00	0.00	0.11	0.84	0.00
Avail Cap (c_a), veh/h	0	509	48	0	0	529	48	0
Upstream Filter (I)	0.00	1.00	0.66	0.00	0.00	1.00	0.57	0.00
Uniform Delay (d1), s/veh	0.0	22.4	36.0	0.0	0.0	18.8	36.2	0.0
Incr Delay (d2), s/veh	0.0	4.1	136.9	0.0	0.0	0.4	38.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	3.1	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	26.5	176.0	0.0	0.0	19.2	74.7	0.0
1st-Term Q (Q1), veh/ln	0.0	4.9	1.0	0.0	0.0	0.8	0.6	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.6	1.8	0.0	0.0	0.1	0.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	5.5	2.8	0.0	0.0	0.9	1.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.64	0.30	0.00	0.00	0.08	0.13	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	640	0	0	0	804
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	16.9	0.0	0.0	0.0	24.3
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	16.9	0.0	0.0	0.0	24.3
Lane Grp Cap (c), veh/h	0	0	0	1057	0	0	0	1070
V/C Ratio (X)	0.00	0.00	0.00	0.61	0.00	0.00	0.00	0.75
Avail Cap (c_a), veh/h	0	0	0	1057	0	0	0	1070
Upstream Filter (I)	0.00	0.00	0.00	0.57	0.00	0.00	0.00	0.66
Uniform Delay (d1), s/veh	0.0	0.0	0.0	9.4	0.0	0.0	0.0	10.6
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.5	0.0	0.0	0.0	3.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	10.9	0.0	0.0	0.0	13.8
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	8.2	0.0	0.0	0.0	11.6

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.4	0.0	0.0	0.0	1.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	8.6	0.0	0.0	0.0	12.6
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.22	0.00	0.00	0.00	0.17
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R				T+R
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	93	0	646	0	0	0	845
Grp Sat Flow (s), veh/h/ln	0	1573	0	1777	0	0	0	1860
Q Serve Time (g_s), s	0.0	3.3	0.0	17.0	0.0	0.0	0.0	24.4
Cycle Q Clear Time (g_c), s	0.0	3.3	0.0	17.0	0.0	0.0	0.0	24.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.98	0.00	0.27	0.00	0.79	0.00	0.01
Lane Grp Cap (c), veh/h	0	472	0	1061	0	0	0	1125
V/C Ratio (X)	0.00	0.20	0.00	0.61	0.00	0.00	0.00	0.75
Avail Cap (c_a), veh/h	0	472	0	1061	0	0	0	1125
Upstream Filter (I)	0.00	1.00	0.00	0.57	0.00	0.00	0.00	0.66
Uniform Delay (d1), s/veh	0.0	19.3	0.0	9.4	0.0	0.0	0.0	10.6
Incr Delay (d2), s/veh	0.0	0.9	0.0	1.5	0.0	0.0	0.0	3.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	20.2	0.0	10.9	0.0	0.0	0.0	13.7
1st-Term Q (Q1), veh/ln	0.0	1.4	0.0	8.3	0.0	0.0	0.0	12.2
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.4	0.0	0.0	0.0	1.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.5	0.0	8.7	0.0	0.0	0.0	13.2
%ile Storage Ratio (RQ%)	0.00	0.14	0.00	0.22	0.00	0.00	0.00	0.18
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		17.0						
HCM 2010 LOS		B						

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	1154	94	184	1270	5	196	0	342	1	1	0
Future Volume (veh/h)	4	1154	94	184	1270	5	196	0	342	1	1	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1845	1900	1845	1900
Adj Flow Rate, veh/h	4	1254	102	200	1380	5	213	0	372	1	1	0
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	187	1280	104	254	1924	7	585	650	553	281	259	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.39	0.39	0.39	0.09	0.53	0.53	0.35	0.00	0.35	0.35	0.35	0.00
Ln Grp Delay, s/veh	22.6	38.9	39.4	19.0	14.2	14.2	21.0	0.0	27.9	16.4	0.0	0.0
Ln Grp LOS	C	D	D	B	B	B	C		C	B		
Approach Vol, veh/h		1360			1585			585			2	
Approach Delay, s/veh		39.1			14.8			25.4			16.4	
Approach LOS		D			B			C			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Case No		5.0	1.2	6.0		8.0		4.0
Phs Duration (G+Y+Rc), s		32.0	11.4	34.6		32.0		46.0
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5		4.5
Max Green (Gmax), s		27.5	7.5	29.5		27.5		41.5
Max Allow Headway (MAH), s		4.0	3.8	5.3		4.0		5.3
Max Q Clear (g_c+I1), s		17.7	7.0	31.2		2.1		24.5
Green Ext Time (g_e), s		1.5	0.0	0.0		2.0		14.8
Prob of Phs Call (p_c)		1.00	0.99	1.00		1.00		1.00
Prob of Max Out (p_x)		0.00	1.00	0.00		0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3	7		1		
Mvmt Sat Flow, veh/h		1397	1774	389		600		

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1845		3316		734		3617

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		269		0		13

Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	1	0	0
Lane Assignment			(Pr/Pm)			L+T		

Lanes in Grp	0	1	1	1	0	1	0	0
Grp Vol (v), veh/h	0	213	200	4	0	2	0	0
Grp Sat Flow (s), veh/h/ln	0	1397	1774	389	0	1334	0	0
Q Serve Time (g_s), s	0.0	9.0	5.0	0.6	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	9.1	5.0	11.7	0.0	0.1	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1397	400	389	0	1026	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	1757	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	27.5	32.1	30.1	0.0	27.5	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	27.4	0.9	19.0	0.0	27.5	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	9.0	0.9	0.6	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	1.00	0.00	0.50	0.00	0.00
Lane Grp Cap (c), veh/h	0	585	254	187	0	540	0	0
V/C Ratio (X)	0.00	0.36	0.79	0.02	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	585	267	187	0	540	0	0
Upstream Filter (I)	0.00	1.00	0.09	0.33	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	19.3	17.6	22.6	0.0	16.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.8	1.4	0.1	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	21.0	19.0	22.6	0.0	16.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.5	2.4	0.1	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.1	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	3.8	2.5	0.1	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.69	0.20	0.01	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T				T
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	668	0	0	0	675
Grp Sat Flow (s), veh/h/ln	0	1845	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	29.0	0.0	0.0	0.0	22.5
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	29.0	0.0	0.0	0.0	22.5
Lane Grp Cap (c), veh/h	0	650	0	683	0	0	0	942
V/C Ratio (X)	0.00	0.00	0.00	0.98	0.00	0.00	0.00	0.72
Avail Cap (c_a), veh/h	0	650	0	683	0	0	0	942
Upstream Filter (I)	0.00	0.00	0.00	0.33	0.00	0.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	0.0	0.0	23.6	0.0	0.0	0.0	13.8
Incr Delay (d2), s/veh	0.0	0.0	0.0	15.3	0.0	0.0	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	38.9	0.0	0.0	0.0	14.2
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	14.1	0.0	0.0	0.0	10.9

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	2.9	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	17.0	0.0	0.0	0.0	11.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.29
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R				T+R
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	372	0	688	0	0	0	710
Grp Sat Flow (s), veh/h/ln	0	1568	0	1815	0	0	0	1860
Q Serve Time (g_s), s	0.0	15.7	0.0	29.2	0.0	0.0	0.0	22.5
Cycle Q Clear Time (g_c), s	0.0	15.7	0.0	29.2	0.0	0.0	0.0	22.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.15	0.00	0.00	0.00	0.01
Lane Grp Cap (c), veh/h	0	553	0	701	0	0	0	990
V/C Ratio (X)	0.00	0.67	0.00	0.98	0.00	0.00	0.00	0.72
Avail Cap (c_a), veh/h	0	553	0	701	0	0	0	990
Upstream Filter (I)	0.00	1.00	0.00	0.33	0.00	0.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	21.4	0.0	23.7	0.0	0.0	0.0	13.8
Incr Delay (d2), s/veh	0.0	6.4	0.0	15.7	0.0	0.0	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	27.9	0.0	39.4	0.0	0.0	0.0	14.2
1st-Term Q (Q1), veh/ln	0.0	6.8	0.0	14.5	0.0	0.0	0.0	11.4
2nd-Term Q (Q2), veh/ln	0.0	1.0	0.0	3.1	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.8	0.0	17.6	0.0	0.0	0.0	11.6
%ile Storage Ratio (RQ%)	0.00	0.63	0.00	0.24	0.00	0.00	0.00	0.30
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		25.9						
HCM 2010 LOS		C						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	1538	0	12	1351	100	12	0	56	173	0	56
Future Volume (veh/h)	25	1538	0	12	1351	100	12	0	56	173	0	56
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	27	1636	0	13	1437	106	13	0	60	184	0	60
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	54	1311	0	29	1192	88	117	37	384	532	0	470
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.37	0.00	0.02	0.36	0.36	0.30	0.00	0.30	0.30	0.00	0.30
Ln Grp Delay, s/veh	30.7	132.4	0.0	39.9	124.5	128.1	15.9	0.0	0.0	18.4	0.0	15.8
Ln Grp LOS	C	F		D	F	F	B			B		B
Approach Vol, veh/h		1663			1556			73			244	
Approach Delay, s/veh		130.7			125.6			15.9			17.8	
Approach LOS		F			F			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		8.0	2.0	4.0		6.0	2.0	4.0
Phs Duration (G+Y+Rc), s		24.0	7.4	28.6		24.0	8.2	27.8
Change Period (Y+Rc), s		6.0	6.4	6.4		6.0	6.4	6.4
Max Green (Gmax), s		18.0	5.0	18.6		18.0	5.0	18.6
Max Allow Headway (MAH), s		4.6	3.8	5.3		4.6	3.8	5.3
Max Q Clear (g_c+I1), s		4.0	2.4	24.2		8.0	2.9	23.4
Green Ext Time (g_e), s		1.1	0.0	0.0		1.0	0.0	0.0
Prob of Phs Call (p_c)		1.00	0.19	1.00		1.00	0.36	1.00
Prob of Max Out (p_x)		0.00	1.00	0.00		0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		155	1774			1324	1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		122		3632		0		3343

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1280		0		1568		246

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0
Lane Assignment		L+T+R	(Prot)				(Prot)	

Lanes in Grp	0	1	1	0	0	1	1	0
Grp Vol (v), veh/h	0	73	13	0	0	184	27	0
Grp Sat Flow (s), veh/h/ln	0	1558	1774	0	0	1324	1774	0
Q Serve Time (g_s), s	0.0	0.0	0.4	0.0	0.0	4.0	0.9	0.0
Cycle Q Clear Time (g_c), s	0.0	2.0	0.4	0.0	0.0	6.0	0.9	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1364	0	0	0	1324	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	1757	0	0
Perm LT Eff Green (g_p), s	0.0	18.0	0.0	0.0	0.0	18.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	16.3	0.0	0.0	0.0	16.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0
Time to First Blk (g_f), s	0.0	7.7	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.18	1.00	0.00	0.00	1.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	538	29	0	0	532	54	0
V/C Ratio (X)	0.00	0.14	0.45	0.00	0.00	0.35	0.50	0.00
Avail Cap (c_a), veh/h	0	538	148	0	0	532	148	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	0.00	1.00	0.29	0.00
Uniform Delay (d1), s/veh	0.0	15.4	29.2	0.0	0.0	16.7	28.7	0.0
Incr Delay (d2), s/veh	0.0	0.5	10.7	0.0	0.0	1.8	2.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	15.9	39.9	0.0	0.0	18.4	30.7	0.0
1st-Term Q (Q1), veh/ln	0.0	0.9	0.2	0.0	0.0	2.4	0.4	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.1	0.0	0.0	0.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	1.0	0.3	0.0	0.0	2.7	0.5	0.0
%ile Storage Ratio (RQ%)	0.00	0.06	0.04	0.00	0.00	0.45	0.07	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	1
Grp Vol (v), veh/h	0	0	0	1636	0	0	0	758
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	22.2	0.0	0.0	0.0	21.4
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	22.2	0.0	0.0	0.0	21.4
Lane Grp Cap (c), veh/h	0	0	0	1311	0	0	0	631
V/C Ratio (X)	0.00	0.00	0.00	1.25	0.00	0.00	0.00	1.20
Avail Cap (c_a), veh/h	0	0	0	1311	0	0	0	631
Upstream Filter (I)	0.00	0.00	0.00	0.29	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	18.9	0.0	0.0	0.0	19.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	113.5	0.0	0.0	0.0	105.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	132.4	0.0	0.0	0.0	124.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	10.7	0.0	0.0	0.0	10.3

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	20.7	0.0	0.0	0.0	18.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	31.4	0.0	0.0	0.0	28.8
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.82	0.00	0.00	0.00	2.37
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	81.2	0.0	0.0	0.0	31.7
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment						T+R		T+R
Lanes in Grp	0	0	0	0	0	1	0	1
Grp Vol (v), veh/h	0	0	0	0	0	60	0	785
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	1568	0	1819
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	1.7	0.0	21.4
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	1.7	0.0	21.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.82	0.00	0.00	0.00	1.00	0.00	0.13
Lane Grp Cap (c), veh/h	0	0	0	0	0	470	0	649
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.13	0.00	1.21
Avail Cap (c_a), veh/h	0	0	0	0	0	470	0	649
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	15.3	0.0	19.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.6	0.0	108.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	15.8	0.0	128.1
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.7	0.0	10.6
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	19.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.8	0.0	30.2
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.06	0.00	2.49
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.2
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Intersection Summary								
HCM 2010 Ctrl Delay		118.3						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	408	1051	171	267	736	122	206	683	229	291	887	391
Future Volume (veh/h)	408	1051	171	267	736	122	206	683	229	291	887	391
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	425	1095	178	278	767	127	215	711	239	303	924	407
Adj No. of Lanes	2	3	0	2	3	0	2	3	0	2	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	480	1455	236	340	1273	209	273	967	321	362	975	429
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.14	0.33	0.33	0.10	0.29	0.29	0.08	0.26	0.26	0.11	0.28	0.28
Ln Grp Delay, s/veh	67.1	40.5	44.7	61.7	39.4	42.1	63.6	46.2	52.3	64.6	60.9	73.4
Ln Grp LOS	E	D	D	E	D	D	E	D	D	E	E	E
Approach Vol, veh/h		1698			1172			1165			1634	
Approach Delay, s/veh		48.3			45.4			51.1			64.9	
Approach LOS		D			D			D			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	4.0
Phs Duration (G+Y+Rc), s	18.7	37.0	18.3	46.0	15.6	40.1	23.1	41.1
Change Period (Y+Rc), s	6.0	6.0	6.4	6.4	6.0	6.0	6.4	6.4
Max Green (Gmax), s	15.0	31.0	15.6	33.6	12.0	34.0	17.6	31.6
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.3	3.8	5.3	3.8	5.3
Max Q Clear (g_c+I1), s	12.5	23.2	11.5	28.6	9.4	33.7	16.5	20.2
Green Ext Time (g_e), s	0.3	6.8	0.4	4.4	0.2	0.3	0.2	9.2
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	0.81	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3408		3442		3408		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3742		4410		3428		4402

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1241		716		1508		723

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	303	0	278	0	215	0	425	0
Grp Sat Flow (s), veh/h/ln	1704	0	1721	0	1704	0	1721	0
Q Serve Time (g_s), s	10.5	0.0	9.5	0.0	7.4	0.0	14.5	0.0
Cycle Q Clear Time (g_c), s	10.5	0.0	9.5	0.0	7.4	0.0	14.5	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	362	0	340	0	273	0	480	0
V/C Ratio (X)	0.84	0.00	0.82	0.00	0.79	0.00	0.89	0.00
Avail Cap (c_a), veh/h	426	0	447	0	341	0	505	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	52.6	0.0	53.0	0.0	54.2	0.0	50.7	0.0
Incr Delay (d2), s/veh	12.0	0.0	8.7	0.0	9.4	0.0	16.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	64.6	0.0	61.7	0.0	63.6	0.0	67.1	0.0
1st-Term Q (Q1), veh/ln	4.9	0.0	4.5	0.0	3.5	0.0	6.9	0.0
2nd-Term Q (Q2), veh/ln	0.6	0.0	0.4	0.0	0.4	0.0	1.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	5.5	0.0	4.9	0.0	3.9	0.0	8.0	0.0
%ile Storage Ratio (RQ%)	0.48	0.00	0.37	0.00	0.29	0.00	0.68	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	2	0	2
Grp Vol (v), veh/h	0	637	0	842	0	905	0	589
Grp Sat Flow (s), veh/h/ln	0	1679	0	1695	0	1679	0	1695
Q Serve Time (g_s), s	0.0	20.8	0.0	26.6	0.0	31.7	0.0	17.9
Cycle Q Clear Time (g_c), s	0.0	20.8	0.0	26.6	0.0	31.7	0.0	17.9
Lane Grp Cap (c), veh/h	0	867	0	1118	0	955	0	981
V/C Ratio (X)	0.00	0.73	0.00	0.75	0.00	0.95	0.00	0.60
Avail Cap (c_a), veh/h	0	867	0	1118	0	955	0	981
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	40.7	0.0	35.8	0.0	42.0	0.0	36.7
Incr Delay (d2), s/veh	0.0	5.5	0.0	4.7	0.0	18.9	0.0	2.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	46.2	0.0	40.5	0.0	60.9	0.0	39.4
1st-Term Q (Q1), veh/ln	0.0	9.6	0.0	12.4	0.0	14.7	0.0	8.4

2nd-Term Q (Q2), veh/ln	0.0	0.7	0.0	0.7	0.0	2.5	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	10.3	0.0	13.1	0.0	17.2	0.0	8.8
%ile Storage Ratio (RQ%)	0.00	0.58	0.00	0.53	0.00	0.65	0.00	1.40
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	313	0	431	0	426	0	305
Grp Sat Flow (s), veh/h/ln	0	1626	0	1736	0	1579	0	1735
Q Serve Time (g_s), s	0.0	21.2	0.0	26.6	0.0	31.7	0.0	18.2
Cycle Q Clear Time (g_c), s	0.0	21.2	0.0	26.6	0.0	31.7	0.0	18.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.76	0.00	0.41	0.00	0.96	0.00	0.42
Lane Grp Cap (c), veh/h	0	420	0	573	0	449	0	502
V/C Ratio (X)	0.00	0.75	0.00	0.75	0.00	0.95	0.00	0.61
Avail Cap (c_a), veh/h	0	420	0	573	0	449	0	502
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	40.9	0.0	35.9	0.0	42.1	0.0	36.8
Incr Delay (d2), s/veh	0.0	11.4	0.0	8.9	0.0	31.4	0.0	5.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	52.3	0.0	44.7	0.0	73.4	0.0	42.1
1st-Term Q (Q1), veh/ln	0.0	9.5	0.0	12.7	0.0	13.8	0.0	8.7
2nd-Term Q (Q2), veh/ln	0.0	1.3	0.0	1.4	0.0	3.9	0.0	0.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	10.8	0.0	14.1	0.0	17.8	0.0	9.5
%ile Storage Ratio (RQ%)	0.00	0.60	0.00	0.57	0.00	0.67	0.00	1.50
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		53.0						
HCM 2010 LOS		D						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	1660	15	0	768	98	94	32	0	222	94	245
Future Volume (veh/h)	89	1660	15	0	768	98	94	32	0	222	94	245
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	0	1863	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	97	1804	16	0	835	107	102	35	0	241	102	266
Adj No. of Lanes	1	2	0	0	2	0	1	1	1	2	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	0	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			No			Yes			Yes		
Cap, veh/h	73	2670	24	0	2090	268	36	223	190	70	223	190
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.04	0.74	0.74	0.00	0.66	0.66	0.02	0.12	0.00	0.02	0.12	0.12
Ln Grp Delay, s/veh	295.5	13.5	13.4	0.0	13.3	13.3	974.6	64.9	0.0	1216.4	72.4	279.7
Ln Grp LOS	F	B	B		B	B	F	E		F	E	F
Approach Vol, veh/h		1917			942			137			609	
Approach Delay, s/veh		27.7			13.3			742.2			615.7	
Approach LOS		C			B			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6	7	8
Case No	2.0	3.0		4.0	2.0	3.0	2.0	8.0
Phs Duration (G+Y+Rc), s	9.0	26.0		126.0	9.0	26.0	13.0	113.0
Change Period (Y+Rc), s	* 5.7	6.5		6.4	* 5.7	6.5	6.4	6.4
Max Green (Gmax), s	* 3.3	19.5		119.6	* 3.3	19.5	6.6	100.6
Max Allow Headway (MAH), s	3.8	4.4		5.3	3.8	4.4	3.8	5.3
Max Q Clear (g_c+I1), s	5.3	4.7		43.8	5.3	21.5	8.6	21.6
Green Ext Time (g_e), s	0.0	1.5		49.6	0.0	0.0	0.0	50.9
Prob of Phs Call (p_c)	1.00	1.00		1.00	0.99	1.00	0.99	1.00
Prob of Max Out (p_x)	0.00	0.00		0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1				5		7	3
Mvmt Sat Flow, veh/h	3408				1757		1774	0

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1845		3595		1845		3250

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		32		1568		404

Left Lane Group Data								
Assigned Mvmt	1	0	0	0	5	0	7	3
Lane Assignment	(Prot)				(Prot)		(Prot)	

Lanes in Grp	2	0	0	0	1	0	1	0
Grp Vol (v), veh/h	241	0	0	0	102	0	97	0
Grp Sat Flow (s), veh/h/ln	1704	0	0	0	1757	0	1774	0
Q Serve Time (g_s), s	3.3	0.0	0.0	0.0	3.3	0.0	6.6	0.0
Cycle Q Clear Time (g_c), s	3.3	0.0	0.0	0.0	3.3	0.0	6.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	106.6
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	70	0	0	0	36	0	73	0
V/C Ratio (X)	3.45	0.00	0.00	0.00	2.83	0.00	1.33	0.00
Avail Cap (c_a), veh/h	70	0	0	0	36	0	73	0
Upstream Filter (I)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	78.8	0.0	0.0	0.0	78.8	0.0	77.2	0.0
Incr Delay (d2), s/veh	1137.6	0.0	0.0	0.0	895.8	0.0	218.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	1216.4	0.0	0.0	0.0	974.6	0.0	295.5	0.0
1st-Term Q (Q1), veh/ln	1.6	0.0	0.0	0.0	1.6	0.0	3.2	0.0
2nd-Term Q (Q2), veh/ln	11.0	0.0	0.0	0.0	9.0	0.0	4.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	12.6	0.0	0.0	0.0	10.6	0.0	7.6	0.0
%ile Storage Ratio (RQ%)	3.22	0.00	0.00	0.00	1.93	0.00	0.46	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	42.8	0.0	0.0	0.0	16.5	0.0	6.1	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.9	0.0	0.0	0.0	0.7	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	35	0	887	0	102	0	468
Grp Sat Flow (s), veh/h/ln	0	1845	0	1770	0	1845	0	1770
Q Serve Time (g_s), s	0.0	2.7	0.0	41.6	0.0	8.3	0.0	19.6
Cycle Q Clear Time (g_c), s	0.0	2.7	0.0	41.6	0.0	8.3	0.0	19.6
Lane Grp Cap (c), veh/h	0	223	0	1315	0	223	0	1172
V/C Ratio (X)	0.00	0.16	0.00	0.67	0.00	0.46	0.00	0.40
Avail Cap (c_a), veh/h	0	223	0	1315	0	223	0	1172
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.82
Uniform Delay (d1), s/veh	0.0	63.4	0.0	10.7	0.0	65.8	0.0	12.5
Incr Delay (d2), s/veh	0.0	1.5	0.0	2.8	0.0	6.6	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	64.9	0.0	13.5	0.0	72.4	0.0	13.3
1st-Term Q (Q1), veh/ln	0.0	1.4	0.0	20.2	0.0	4.2	0.0	9.5

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	1.0	0.0	0.4	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.5	0.0	21.2	0.0	4.6	0.0	9.8
%ile Storage Ratio (RQ%)	0.00	0.17	0.00	0.25	0.00	0.24	0.00	0.13
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	933	0	266	0	474
Grp Sat Flow (s), veh/h/ln	0	1568	0	1857	0	1568	0	1791
Q Serve Time (g_s), s	0.0	0.0	0.0	41.8	0.0	19.5	0.0	19.6
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	41.8	0.0	19.5	0.0	19.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.02	0.00	1.00	0.00	0.23
Lane Grp Cap (c), veh/h	0	190	0	1380	0	190	0	1186
V/C Ratio (X)	0.00	0.00	0.00	0.68	0.00	1.40	0.00	0.40
Avail Cap (c_a), veh/h	0	190	0	1380	0	190	0	1186
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.82
Uniform Delay (d1), s/veh	0.0	0.0	0.0	10.7	0.0	70.8	0.0	12.5
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.7	0.0	208.9	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	13.4	0.0	279.7	0.0	13.3
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	21.3	0.0	15.9	0.0	9.6
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.0	0.0	11.0	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	22.3	0.0	26.9	0.0	9.9
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.26	0.00	1.40	0.00	0.13
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	19.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	150.4
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	397	899	166	139	519	99	215	1030	123	367	1690	209
Future Volume (veh/h)	397	899	166	139	519	99	215	1030	123	367	1690	209
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	409	927	171	143	535	102	222	1062	127	378	1742	215
Adj No. of Lanes	2	3	1	2	3	1	2	2	1	2	3	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	348	939	292	188	702	219	268	1692	757	399	2624	817
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.10	0.18	0.18	0.05	0.14	0.14	0.08	0.48	0.48	0.12	0.52	0.52
Ln Grp Delay, s/veh	155.1	72.9	61.4	82.7	71.1	66.7	83.2	33.3	24.4	103.7	30.1	22.6
Ln Grp LOS	F	E	E	F	E	E	F	C	C	F	C	C
Approach Vol, veh/h		1507			780			1411			2335	
Approach Delay, s/veh		93.9			72.7			40.3			41.3	
Approach LOS		F			E			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	26.0	86.0	15.3	36.7	19.7	92.2	23.0	29.0
Change Period (Y+Rc), s	6.8	6.8	6.4	6.4	6.8	6.8	6.4	6.4
Max Green (Gmax), s	19.2	73.2	16.6	28.6	19.2	73.2	16.6	28.6
Max Allow Headway (MAH), s	3.8	5.1	3.8	5.1	3.8	5.1	3.8	5.1
Max Q Clear (g_c+I1), s	20.1	38.9	8.7	31.8	12.5	43.5	18.6	18.6
Green Ext Time (g_e), s	0.0	29.3	0.2	0.0	0.4	25.8	0.0	4.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	0.02	1.00	0.10	0.00	1.00	0.77

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3408		3442		3408		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3505		5085		5036		5085

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		1583		1568		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	378	0	143	0	222	0	409	0
Grp Sat Flow (s), veh/h/ln	1704	0	1721	0	1704	0	1721	0
Q Serve Time (g_s), s	18.1	0.0	6.7	0.0	10.5	0.0	16.6	0.0
Cycle Q Clear Time (g_c), s	18.1	0.0	6.7	0.0	10.5	0.0	16.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	399	0	188	0	268	0	348	0
V/C Ratio (X)	0.95	0.00	0.76	0.00	0.83	0.00	1.17	0.00
Avail Cap (c_a), veh/h	399	0	348	0	399	0	348	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	0.09	0.00
Uniform Delay (d1), s/veh	71.9	0.0	76.5	0.0	74.4	0.0	73.7	0.0
Incr Delay (d2), s/veh	31.8	0.0	6.2	0.0	8.8	0.0	81.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	103.7	0.0	82.7	0.0	83.2	0.0	155.1	0.0
1st-Term Q (Q1), veh/ln	8.5	0.0	3.2	0.0	5.0	0.0	7.9	0.0
2nd-Term Q (Q2), veh/ln	1.8	0.0	0.2	0.0	0.3	0.0	3.9	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	10.3	0.0	3.4	0.0	5.3	0.0	11.8	0.0
%ile Storage Ratio (RQ%)	0.46	0.00	0.17	0.00	0.34	0.00	0.60	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	15.2	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	3	0	3	0	3
Grp Vol (v), veh/h	0	1062	0	927	0	1742	0	535
Grp Sat Flow (s), veh/h/ln	0	1752	0	1695	0	1679	0	1695
Q Serve Time (g_s), s	0.0	36.9	0.0	29.8	0.0	41.5	0.0	16.6
Cycle Q Clear Time (g_c), s	0.0	36.9	0.0	29.8	0.0	41.5	0.0	16.6
Lane Grp Cap (c), veh/h	0	1692	0	939	0	2624	0	702
V/C Ratio (X)	0.00	0.63	0.00	0.99	0.00	0.66	0.00	0.76
Avail Cap (c_a), veh/h	0	1692	0	939	0	2624	0	887
Upstream Filter (I)	0.00	1.00	0.00	0.09	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	31.5	0.0	66.7	0.0	28.8	0.0	68.1
Incr Delay (d2), s/veh	0.0	1.8	0.0	6.2	0.0	1.3	0.0	3.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	33.3	0.0	72.9	0.0	30.1	0.0	71.1
1st-Term Q (Q1), veh/ln	0.0	17.8	0.0	14.0	0.0	19.2	0.0	7.8

2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.5	0.0	0.3	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	18.3	0.0	14.5	0.0	19.5	0.0	8.0
%ile Storage Ratio (RQ%)	0.00	0.85	0.00	0.20	0.00	0.75	0.00	0.13
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	127	0	171	0	215	0	102
Grp Sat Flow (s), veh/h/ln	0	1568	0	1583	0	1568	0	1583
Q Serve Time (g_s), s	0.0	7.5	0.0	16.2	0.0	12.5	0.0	9.7
Cycle Q Clear Time (g_c), s	0.0	7.5	0.0	16.2	0.0	12.5	0.0	9.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	757	0	292	0	817	0	219
V/C Ratio (X)	0.00	0.17	0.00	0.58	0.00	0.26	0.00	0.47
Avail Cap (c_a), veh/h	0	757	0	292	0	817	0	276
Upstream Filter (I)	0.00	1.00	0.00	0.09	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	23.9	0.0	61.1	0.0	21.8	0.0	65.1
Incr Delay (d2), s/veh	0.0	0.5	0.0	0.3	0.0	0.8	0.0	1.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	24.4	0.0	61.4	0.0	22.6	0.0	66.7
1st-Term Q (Q1), veh/ln	0.0	3.2	0.0	7.1	0.0	5.4	0.0	4.3
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.2	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	3.3	0.0	7.1	0.0	5.6	0.0	4.4
%ile Storage Ratio (RQ%)	0.00	0.16	0.00	0.10	0.00	0.22	0.00	0.15
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		58.3						
HCM 2010 LOS		E						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	751	1232	28	85	593	440	15	15	129	341	27	25
Future Volume (veh/h)	751	1232	28	85	593	440	15	15	129	341	27	25
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1696	1696	1696	1696	1696	1696	1900	1696	1900	1696	1696	1696
Adj Flow Rate, veh/h	782	1283	29	89	618	0	16	16	134	355	28	0
Adj No. of Lanes	2	2	1	1	2	1	0	1	0	2	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	12	12	12	12	12	12	12	12	12	12	12	12
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	875	1884	843	110	1203	538	0	15	129	132	320	272
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.28	0.58	0.58	0.07	0.37	0.00	0.00	0.10	0.10	0.04	0.19	0.00
Ln Grp Delay, s/veh	49.5	21.1	11.8	70.6	33.4	0.0	0.0	0.0	146.0	845.3	44.6	0.0
Ln Grp LOS	D	C	B	E	C				F	F	D	
Approach Vol, veh/h		2094			707			150			383	
Approach Delay, s/veh		31.6			38.1			146.0			786.8	
Approach LOS		C			D			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	4.0	2.0	3.0	0.0	3.0
Phs Duration (G+Y+Rc), s	44.2	56.8	12.0	20.0	16.2	84.8	0.0	32.0
Change Period (Y+Rc), s	7.1	7.1	6.4	6.9	7.1	7.1	6.9	* 6.9
Max Green (Gmax), s	67.9	18.9	5.6	13.1	30.9	55.9	13.1	* 5.6
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.5	3.8	5.3	0.0	5.5
Max Q Clear (g_c+I1), s	33.9	21.8	7.6	15.1	9.2	38.5	0.0	3.8
Green Ext Time (g_e), s	3.3	0.0	0.0	0.0	0.2	12.5	0.0	0.2
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.96	1.00	0.00	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3134		3134		1616		0	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3223		156		3223		1696

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1442		1309		1442		1442

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)			

Lanes in Grp	2	0	2	0	1	0	0	0
Grp Vol (v), veh/h	782	0	355	0	89	0	0	0
Grp Sat Flow (s), veh/h/ln	1567	0	1567	0	1616	0	0	0
Q Serve Time (g_s), s	31.9	0.0	5.6	0.0	7.2	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	31.9	0.0	5.6	0.0	7.2	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	875	0	132	0	110	0	0	0
V/C Ratio (X)	0.89	0.00	2.69	0.00	0.81	0.00	0.00	0.00
Avail Cap (c_a), veh/h	1600	0	132	0	375	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.71	0.00	0.00	0.00
Uniform Delay (d1), s/veh	46.0	0.0	63.7	0.0	61.1	0.0	0.0	0.0
Incr Delay (d2), s/veh	3.5	0.0	781.6	0.0	9.5	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	49.5	0.0	845.3	0.0	70.6	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	13.8	0.0	2.4	0.0	3.2	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.4	0.0	14.3	0.0	0.3	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	14.2	0.0	16.7	0.0	3.5	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.45	0.00	0.74	0.00	0.28	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	55.8	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	2	0	0	0	2	0	1
Grp Vol (v), veh/h	0	618	0	0	0	1283	0	28
Grp Sat Flow (s), veh/h/ln	0	1612	0	0	0	1612	0	1696
Q Serve Time (g_s), s	0.0	19.8	0.0	0.0	0.0	36.5	0.0	1.8
Cycle Q Clear Time (g_c), s	0.0	19.8	0.0	0.0	0.0	36.5	0.0	1.8
Lane Grp Cap (c), veh/h	0	1203	0	0	0	1884	0	320
V/C Ratio (X)	0.00	0.51	0.00	0.00	0.00	0.68	0.00	0.09
Avail Cap (c_a), veh/h	0	1203	0	0	0	1884	0	320
Upstream Filter (I)	0.00	0.71	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	32.3	0.0	0.0	0.0	19.1	0.0	44.5
Incr Delay (d2), s/veh	0.0	1.1	0.0	0.0	0.0	2.0	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	33.4	0.0	0.0	0.0	21.1	0.0	44.6
1st-Term Q (Q1), veh/ln	0.0	8.8	0.0	0.0	0.0	16.2	0.0	0.8

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.5	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	8.9	0.0	0.0	0.0	16.7	0.0	0.9
%ile Storage Ratio (RQ%)	0.00	0.12	0.00	0.00	0.00	0.15	0.00	0.04
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	150	0	29	0	0
Grp Sat Flow (s), veh/h/ln	0	1442	0	1465	0	1442	0	1442
Q Serve Time (g_s), s	0.0	0.0	0.0	13.1	0.0	1.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	13.1	0.0	1.1	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.89	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	538	0	144	0	843	0	272
V/C Ratio (X)	0.00	0.00	0.00	1.04	0.00	0.03	0.00	0.00
Avail Cap (c_a), veh/h	0	538	0	144	0	843	0	272
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	60.0	0.0	11.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	85.7	0.0	0.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	146.0	0.0	11.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	5.3	0.0	0.5	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	3.4	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	8.7	0.0	0.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.57	0.00	0.05	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	124.9
HCM 2010 LOS	F

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	239	1515	1183	130	616	104
Future Volume (veh/h)	239	1515	1183	130	616	104
Number	1	6	2	12	3	18
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00			1.00	1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1696	1696	1696	1696	1696	1696
Adj Flow Rate, veh/h	249	1578	1232	0	642	0
Adj No. of Lanes	1	2	3	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	12	12	12	12	12	12
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	258	1925	1615	503	750	345
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.16	0.60	0.35	0.00	0.24	0.00
Ln Grp Delay, s/veh	43.5	13.1	26.0	0.0	35.7	0.0
Ln Grp LOS	D	B	C		D	
Approach Vol, veh/h		1827	1232		642	
Approach Delay, s/veh		17.2	26.0		35.7	
Approach LOS		B	C		D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	2	1	8			6		
Case No	7.0	2.0	9.0			4.0		
Phs Duration (G+Y+Rc), s	35.0	19.9	25.1			54.9		
Change Period (Y+Rc), s	7.1	7.1	6.0			7.1		
Max Green (Gmax), s	27.9	7.9	24.0			27.9		
Max Allow Headway (MAH), s	5.3	5.1	3.8			5.1		
Max Q Clear (g_c+I1), s	20.9	14.2	17.7			32.9		
Green Ext Time (g_e), s	4.5	0.0	1.5			0.0		
Prob of Phs Call (p_c)	1.00	1.00	1.00			1.00		
Prob of Max Out (p_x)	0.00	1.00	0.39			0.00		

Left-Turn Movement Data			
Assigned Mvmt	5	1	3
Mvmt Sat Flow, veh/h	0	1616	3134

Through Movement Data			
Assigned Mvmt	2	8	6
Mvmt Sat Flow, veh/h	4784	0	3308

Right-Turn Movement Data			
Assigned Mvmt	12	18	16
Mvmt Sat Flow, veh/h	1442	1442	0

Left Lane Group Data								
Assigned Mvmt	5	1	3	0	0	0	0	0
Lane Assignment		(Prot)						

Lanes in Grp	0	1	2	0	0	0	0	0
Grp Vol (v), veh/h	0	249	642	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1616	1567	0	0	0	0	0
Q Serve Time (g_s), s	0.0	12.2	15.7	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	12.2	15.7	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1567	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	27.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	258	750	0	0	0	0	0
V/C Ratio (X)	0.00	0.97	0.86	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	258	940	0	0	0	0	0
Upstream Filter (I)	0.00	0.09	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	33.4	29.1	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	10.1	6.5	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	43.5	35.7	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	5.5	6.8	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.7	0.7	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	6.2	7.5	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.36	0.46	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	2	0	8	0	0	6	0	0
Lane Assignment	T					T		
Lanes in Grp	3	0	0	0	0	2	0	0
Grp Vol (v), veh/h	1232	0	0	0	0	1578	0	0
Grp Sat Flow (s), veh/h/ln	1544	0	0	0	0	1612	0	0
Q Serve Time (g_s), s	18.9	0.0	0.0	0.0	0.0	30.9	0.0	0.0
Cycle Q Clear Time (g_c), s	18.9	0.0	0.0	0.0	0.0	30.9	0.0	0.0
Lane Grp Cap (c), veh/h	1615	0	0	0	0	1925	0	0
V/C Ratio (X)	0.76	0.00	0.00	0.00	0.00	0.82	0.00	0.00
Avail Cap (c_a), veh/h	1615	0	0	0	0	1925	0	0
Upstream Filter (I)	0.84	0.00	0.00	0.00	0.00	0.09	0.00	0.00
Uniform Delay (d1), s/veh	23.1	0.0	0.0	0.0	0.0	12.7	0.0	0.0
Incr Delay (d2), s/veh	2.9	0.0	0.0	0.0	0.0	0.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	26.0	0.0	0.0	0.0	0.0	13.1	0.0	0.0
1st-Term Q (Q1), veh/ln	8.0	0.0	0.0	0.0	0.0	13.6	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.4	0.0	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	8.4	0.0	0.0	0.0	0.0	13.7	0.0	0.0
%ile Storage Ratio (RQ%)	0.07	0.00	0.00	0.00	0.00	0.19	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	12	0	18	0	0	16	0	0
Lane Assignment	R		R					
Lanes in Grp	1	0	1	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1442	0	1442	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	503	0	345	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	503	0	433	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		23.4						
HCM 2010 LOS		C						

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	314	1112	1607	269	476	2290
Future Volume (veh/h)	314	1112	1607	269	476	2290
Number	3	18	2	12	1	6
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1845	1845	1845	1845
Adj Flow Rate, veh/h	327	1158	1674	0	496	2385
Adj No. of Lanes	2	2	3	1	2	3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	3	3	3	3
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	881	713	2502	779	608	3839
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.26	0.26	0.50	0.00	0.18	0.76
Ln Grp Delay, s/veh	21.1	312.8	14.3	0.0	33.1	4.5
Ln Grp LOS	C	F	B		C	A
Approach Vol, veh/h	1485		1674			2881
Approach Delay, s/veh	248.6		14.3			9.4
Approach LOS	F		B			A

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8			6		
Case No	2.0	7.0	9.0			4.0		
Phs Duration (G+Y+Rc), s	18.3	40.7	24.4			59.0		
Change Period (Y+Rc), s	6.0	6.0	6.4			6.0		
Max Green (Gmax), s	15.0	18.0	18.0			39.0		
Max Allow Headway (MAH), s	3.8	5.2	4.0			5.2		
Max Q Clear (g_c+I1), s	11.7	19.3	20.0			16.8		
Green Ext Time (g_e), s	0.7	0.0	0.0			21.8		
Prob of Phs Call (p_c)	1.00	1.00	1.00			1.00		
Prob of Max Out (p_x)	1.00	0.00	1.00			0.00		

Left-Turn Movement Data			
Assigned Mvmt	1	5	3
Mvmt Sat Flow, veh/h	3408	0	3375

Through Movement Data			
Assigned Mvmt		2	8		6
Mvmt Sat Flow, veh/h		5202	0		5202

Right-Turn Movement Data			
Assigned Mvmt		12	18		16
Mvmt Sat Flow, veh/h		1568	2733		0

Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	0	0
Lane Assignment	(Prot)							

Lanes in Grp	2	0	2	0	0	0	0	0
Grp Vol (v), veh/h	496	0	327	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1704	0	1688	0	0	0	0	0
Q Serve Time (g_s), s	9.7	0.0	5.5	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	9.7	0.0	5.5	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1688	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	34.3	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	608	0	881	0	0	0	0	0
V/C Ratio (X)	0.82	0.00	0.37	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	741	0	881	0	0	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	27.2	0.0	20.9	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	5.9	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	33.1	0.0	21.1	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	4.5	0.0	2.5	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	5.0	0.0	2.6	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.30	0.00	0.14	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	3	0	0	0	3	0	0
Grp Vol (v), veh/h	0	1674	0	0	0	2385	0	0
Grp Sat Flow (s), veh/h/ln	0	1679	0	0	0	1679	0	0
Q Serve Time (g_s), s	0.0	17.3	0.0	0.0	0.0	14.8	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	17.3	0.0	0.0	0.0	14.8	0.0	0.0
Lane Grp Cap (c), veh/h	0	2502	0	0	0	3839	0	0
V/C Ratio (X)	0.00	0.67	0.00	0.00	0.00	0.62	0.00	0.00
Avail Cap (c_a), veh/h	0	2502	0	0	0	3839	0	0
Upstream Filter (I)	0.00	0.85	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	13.1	0.0	0.0	0.0	3.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.2	0.0	0.0	0.0	0.8	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	14.3	0.0	0.0	0.0	4.5	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	7.9	0.0	0.0	0.0	6.6	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	8.2	0.0	0.0	0.0	6.9	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.13	0.00	0.00	0.00	0.17	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lane Assignment		R	R					
Lanes in Grp	0	1	2	0	0	0	0	0
Grp Vol (v), veh/h	0	0	1158	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1568	1367	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	18.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	18.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	779	713	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	1.62	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	779	713	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	25.5	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	287.3	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	312.8	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	6.7	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	28.4	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	35.2	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	1.40	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	111.3	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		69.6						
HCM 2010 LOS		E						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	566	1025	246	142	345	92	77	89	60	194	216	697
Future Volume (veh/h)	566	1025	246	142	345	92	77	89	60	194	216	697
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1712	1712	1712	1712	1712	1712	1900	1712	1712	1712
Adj Flow Rate, veh/h	590	1068	256	148	359	0	80	93	62	202	225	726
Adj No. of Lanes	2	3	1	1	3	1	2	2	0	1	1	2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	11	11	11	11	11	11	11	11	11	11	11	11
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	651	2322	723	170	1847	575	119	146	90	222	297	445
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.21	0.50	0.50	0.10	0.40	0.00	0.04	0.08	0.08	0.14	0.17	0.17
Ln Grp Delay, s/veh	67.5	26.5	25.2	83.2	31.9	0.0	82.6	77.0	79.3	95.5	73.5	360.5
Ln Grp LOS	E	C	C	F	C		F	E	E	F	E	F
Approach Vol, veh/h		1914			507			235			1153	
Approach Delay, s/veh		39.0			46.9			79.6			258.0	
Approach LOS		D			D			E			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	4.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	40.5	70.4	29.4	19.8	24.2	86.6	13.7	35.5
Change Period (Y+Rc), s	7.5	7.1	7.6	* 7.7	7.5	7.1	* 7.7	* 7.7
Max Green (Gmax), s	42.5	37.9	27.4	* 22	42.5	37.9	* 22	* 27
Max Allow Headway (MAH), s	3.8	5.1	3.8	4.5	3.8	5.1	3.8	4.5
Max Q Clear (g_c+I1), s	31.1	10.1	21.5	10.1	16.3	25.8	6.0	29.8
Green Ext Time (g_e), s	1.8	13.6	0.3	2.0	0.4	8.0	0.2	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	0.97	1.00
Prob of Max Out (p_x)	0.04	0.00	0.21	0.31	0.00	0.00	0.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3163		1630		1630		3163	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		4673		1933		4673		1712

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1455		1194		1455		2561

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	1	0	1	0	2	0
Grp Vol (v), veh/h	590	0	202	0	148	0	80	0
Grp Sat Flow (s), veh/h/ln	1581	0	1630	0	1630	0	1581	0
Q Serve Time (g_s), s	29.1	0.0	19.5	0.0	14.3	0.0	4.0	0.0
Cycle Q Clear Time (g_c), s	29.1	0.0	19.5	0.0	14.3	0.0	4.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	651	0	222	0	170	0	119	0
V/C Ratio (X)	0.91	0.00	0.91	0.00	0.87	0.00	0.68	0.00
Avail Cap (c_a), veh/h	840	0	279	0	433	0	441	0
Upstream Filter (I)	0.44	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	62.0	0.0	68.1	0.0	70.6	0.0	76.0	0.0
Incr Delay (d2), s/veh	5.5	0.0	27.4	0.0	12.6	0.0	6.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	67.5	0.0	95.5	0.0	83.2	0.0	82.6	0.0
1st-Term Q (Q1), veh/ln	12.8	0.0	8.8	0.0	6.5	0.0	1.8	0.0
2nd-Term Q (Q2), veh/ln	0.5	0.0	1.7	0.0	0.6	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	13.3	0.0	10.5	0.0	7.1	0.0	1.9	0.0
%ile Storage Ratio (RQ%)	0.49	0.00	2.60	0.00	0.46	0.00	0.10	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	1	0	3	0	1
Grp Vol (v), veh/h	0	359	0	77	0	1068	0	225
Grp Sat Flow (s), veh/h/ln	0	1558	0	1626	0	1558	0	1712
Q Serve Time (g_s), s	0.0	8.1	0.0	7.4	0.0	23.8	0.0	20.0
Cycle Q Clear Time (g_c), s	0.0	8.1	0.0	7.4	0.0	23.8	0.0	20.0
Lane Grp Cap (c), veh/h	0	1847	0	123	0	2322	0	297
V/C Ratio (X)	0.00	0.19	0.00	0.63	0.00	0.46	0.00	0.76
Avail Cap (c_a), veh/h	0	1847	0	227	0	2322	0	297
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.44	0.00	1.00
Uniform Delay (d1), s/veh	0.0	31.7	0.0	71.8	0.0	26.2	0.0	62.9
Incr Delay (d2), s/veh	0.0	0.2	0.0	5.2	0.0	0.3	0.0	10.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	31.9	0.0	77.0	0.0	26.5	0.0	73.5
1st-Term Q (Q1), veh/ln	0.0	3.5	0.0	3.3	0.0	10.3	0.0	9.5

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.1	0.0	0.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	3.5	0.0	3.5	0.0	10.3	0.0	10.4
%ile Storage Ratio (RQ%)	0.00	0.04	0.00	0.19	0.00	0.08	0.00	0.32
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	2
Grp Vol (v), veh/h	0	0	0	78	0	256	0	726
Grp Sat Flow (s), veh/h/ln	0	1455	0	1501	0	1455	0	1280
Q Serve Time (g_s), s	0.0	0.0	0.0	8.1	0.0	17.2	0.0	27.8
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	8.1	0.0	17.2	0.0	27.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.80	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	575	0	113	0	723	0	445
V/C Ratio (X)	0.00	0.00	0.00	0.69	0.00	0.35	0.00	1.63
Avail Cap (c_a), veh/h	0	575	0	209	0	723	0	445
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.44	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	72.1	0.0	24.6	0.0	66.1
Incr Delay (d2), s/veh	0.0	0.0	0.0	7.2	0.0	0.6	0.0	294.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	79.3	0.0	25.2	0.0	360.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.4	0.0	6.9	0.0	9.8
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.1	0.0	18.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	3.6	0.0	7.0	0.0	28.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.20	0.00	0.39	0.00	0.85
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	70.3
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	108.9
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	165	802	127	414	855	146	105	447	132	538	1215	159
Future Volume (veh/h)	165	802	127	414	855	146	105	447	132	538	1215	159
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1776	1776	1776	1776	1776	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	174	844	134	436	900	154	111	471	139	566	1279	167
Adj No. of Lanes	2	3	1	2	3	2	2	2	0	2	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	7	7	7	7	7	7	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	220	1519	473	213	1508	826	153	815	239	374	1643	215
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.07	0.31	0.31	0.06	0.31	0.31	0.05	0.32	0.32	0.11	0.38	0.38
Ln Grp Delay, s/veh	75.9	44.6	40.6	558.0	45.8	38.5	79.4	44.1	44.3	311.8	43.9	46.1
Ln Grp LOS	E	D	D	F	D	D	E	D	D	F	D	D
Approach Vol, veh/h		1152			1490			721			2012	
Approach Delay, s/veh		48.8			194.9			49.6			119.8	
Approach LOS		D			F			D			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	4.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	17.3	54.3	24.0	55.4	17.0	54.6	14.6	64.8
Change Period (Y+Rc), s	7.2	* 7.3	6.8	* 7.6	7.2	* 7.3	* 7.6	* 7.6
Max Green (Gmax), s	15.8	* 31	17.2	* 59	9.8	* 37	* 9.4	* 65
Max Allow Headway (MAH), s	3.8	5.1	3.8	5.3	3.8	5.1	3.8	5.3
Max Q Clear (g_c+I1), s	9.9	25.7	19.2	25.3	11.8	23.9	7.0	41.2
Green Ext Time (g_e), s	0.3	4.2	0.0	19.7	0.0	9.6	0.1	16.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00
Prob of Max Out (p_x)	0.15	0.00	1.00	0.46	1.00	0.00	1.00	0.60

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3281		3281		3281		3281	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		4848		2575		4848		4341

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		2656		755		1509		567

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	174	0	566	0	436	0	111	0
Grp Sat Flow (s), veh/h/ln	1640	0	1640	0	1640	0	1640	0
Q Serve Time (g_s), s	7.9	0.0	17.2	0.0	9.8	0.0	5.0	0.0
Cycle Q Clear Time (g_c), s	7.9	0.0	17.2	0.0	9.8	0.0	5.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	220	0	374	0	213	0	153	0
V/C Ratio (X)	0.79	0.00	1.51	0.00	2.05	0.00	0.73	0.00
Avail Cap (c_a), veh/h	343	0	374	0	213	0	204	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	69.4	0.0	66.9	0.0	70.6	0.0	71.0	0.0
Incr Delay (d2), s/veh	6.5	0.0	244.9	0.0	487.4	0.0	8.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	75.9	0.0	311.8	0.0	558.0	0.0	79.4	0.0
1st-Term Q (Q1), veh/ln	3.6	0.0	7.8	0.0	4.4	0.0	2.3	0.0
2nd-Term Q (Q2), veh/ln	0.2	0.0	12.7	0.0	14.4	0.0	0.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	3.8	0.0	20.5	0.0	18.9	0.0	2.5	0.0
%ile Storage Ratio (RQ%)	0.22	0.00	0.41	0.00	0.96	0.00	0.07	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	48.1	0.0	55.8	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.4	0.0	0.5	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	1	0	3	0	2
Grp Vol (v), veh/h	0	900	0	307	0	844	0	952
Grp Sat Flow (s), veh/h/ln	0	1616	0	1687	0	1616	0	1616
Q Serve Time (g_s), s	0.0	23.7	0.0	23.0	0.0	21.9	0.0	39.2
Cycle Q Clear Time (g_c), s	0.0	23.7	0.0	23.0	0.0	21.9	0.0	39.2
Lane Grp Cap (c), veh/h	0	1508	0	534	0	1519	0	1223
V/C Ratio (X)	0.00	0.60	0.00	0.58	0.00	0.56	0.00	0.78
Avail Cap (c_a), veh/h	0	1508	0	661	0	1519	0	1400
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	44.0	0.0	43.1	0.0	43.1	0.0	41.3
Incr Delay (d2), s/veh	0.0	1.8	0.0	1.0	0.0	1.5	0.0	2.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	45.8	0.0	44.1	0.0	44.6	0.0	43.9
1st-Term Q (Q1), veh/ln	0.0	10.6	0.0	10.8	0.0	9.8	0.0	17.5

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.1	0.0	0.2	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	10.8	0.0	10.9	0.0	10.0	0.0	17.9
%ile Storage Ratio (RQ%)	0.00	0.06	0.00	0.29	0.00	0.09	0.00	0.36
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		T+R
Lanes in Grp	0	2	0	1	0	1	0	1
Grp Vol (v), veh/h	0	154	0	303	0	134	0	494
Grp Sat Flow (s), veh/h/ln	0	1328	0	1643	0	1509	0	1676
Q Serve Time (g_s), s	0.0	6.4	0.0	23.3	0.0	10.1	0.0	39.2
Cycle Q Clear Time (g_c), s	0.0	6.4	0.0	23.3	0.0	10.1	0.0	39.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.46	0.00	1.00	0.00	0.34
Lane Grp Cap (c), veh/h	0	826	0	520	0	473	0	634
V/C Ratio (X)	0.00	0.19	0.00	0.58	0.00	0.28	0.00	0.78
Avail Cap (c_a), veh/h	0	826	0	644	0	473	0	726
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	38.0	0.0	43.2	0.0	39.1	0.0	41.3
Incr Delay (d2), s/veh	0.0	0.5	0.0	1.0	0.0	1.5	0.0	4.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	38.5	0.0	44.3	0.0	40.6	0.0	46.1
1st-Term Q (Q1), veh/ln	0.0	2.4	0.0	10.6	0.0	4.2	0.0	18.1
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.0	0.2	0.0	0.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.4	0.0	10.7	0.0	4.4	0.0	18.9
%ile Storage Ratio (RQ%)	0.00	0.09	0.00	0.29	0.00	0.28	0.00	0.38
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	116.0
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	273	209	303	303	252	101	601	281	163	1153	10
Future Volume (veh/h)	21	273	209	303	303	252	101	601	281	163	1153	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	24	310	238	344	344	286	115	683	319	185	1310	11
Adj No. of Lanes	1	2	0	2	2	0	1	2	0	1	2	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	31	399	299	140	425	348	90	1085	507	90	1665	14
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.02	0.21	0.21	0.04	0.23	0.23	0.05	0.49	0.49	0.05	0.49	0.49
Ln Grp Delay, s/veh	73.0	40.2	42.7	714.8	42.4	45.0	229.6	19.9	20.1	556.3	25.7	25.4
Ln Grp LOS	E	D	D	F	D	D	F	B	C	F	C	C
Approach Vol, veh/h		572			974			1117			1506	
Approach Delay, s/veh		42.7			280.7			41.5			90.8	
Approach LOS		D			F			D			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	4.0
Phs Duration (G+Y+Rc), s	9.0	45.8	8.0	22.2	9.0	45.8	6.0	24.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green (Gmax), s	4.5	39.5	3.5	19.5	4.5	39.5	3.5	19.5
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.4	3.8	5.3	3.8	5.4
Max Q Clear (g_c+I1), s	6.5	21.2	5.5	15.4	6.5	29.0	3.2	17.4
Green Ext Time (g_e), s	0.0	14.3	0.0	2.3	0.0	8.9	0.0	1.4
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.93	1.00	0.43	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1691		3408		1691		1757	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2235		1912		3429		1834

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1044		1433		29		1499

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	2	0	1	0	1	0
Grp Vol (v), veh/h	185	0	344	0	115	0	24	0
Grp Sat Flow (s), veh/h/ln	1691	0	1704	0	1691	0	1757	0
Q Serve Time (g_s), s	4.5	0.0	3.5	0.0	4.5	0.0	1.2	0.0
Cycle Q Clear Time (g_c), s	4.5	0.0	3.5	0.0	4.5	0.0	1.2	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	90	0	140	0	90	0	31	0
V/C Ratio (X)	2.07	0.00	2.45	0.00	1.28	0.00	0.77	0.00
Avail Cap (c_a), veh/h	90	0	140	0	90	0	72	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	40.3	0.0	40.8	0.0	40.3	0.0	41.6	0.0
Incr Delay (d2), s/veh	516.1	0.0	674.0	0.0	189.4	0.0	31.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	556.3	0.0	714.8	0.0	229.6	0.0	73.0	0.0
1st-Term Q (Q1), veh/ln	2.1	0.0	1.6	0.0	2.1	0.0	0.6	0.0
2nd-Term Q (Q2), veh/ln	12.8	0.0	13.1	0.0	4.7	0.0	0.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	14.9	0.0	14.8	0.0	6.8	0.0	0.8	0.0
%ile Storage Ratio (RQ%)	1.21	0.00	1.61	0.00	1.09	0.00	0.17	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	23.9	0.0	50.9	0.0	6.4	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.5	0.0	0.6	0.0	0.3	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	516	0	284	0	644	0	328
Grp Sat Flow (s), veh/h/ln	0	1687	0	1752	0	1687	0	1752
Q Serve Time (g_s), s	0.0	19.2	0.0	13.0	0.0	27.0	0.0	15.1
Cycle Q Clear Time (g_c), s	0.0	19.2	0.0	13.0	0.0	27.0	0.0	15.1
Lane Grp Cap (c), veh/h	0	819	0	366	0	819	0	406
V/C Ratio (X)	0.00	0.63	0.00	0.78	0.00	0.79	0.00	0.81
Avail Cap (c_a), veh/h	0	819	0	402	0	819	0	406
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	16.2	0.0	31.8	0.0	18.2	0.0	30.9
Incr Delay (d2), s/veh	0.0	3.7	0.0	8.5	0.0	7.5	0.0	11.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	19.9	0.0	40.2	0.0	25.7	0.0	42.4
1st-Term Q (Q1), veh/ln	0.0	8.9	0.0	6.3	0.0	12.5	0.0	7.3

2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	0.9	0.0	1.7	0.0	1.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	9.7	0.0	7.2	0.0	14.2	0.0	8.6
%ile Storage Ratio (RQ%)	0.00	0.78	0.00	0.17	0.00	1.12	0.00	0.20
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	486	0	264	0	677	0	302
Grp Sat Flow (s), veh/h/ln	0	1592	0	1592	0	1771	0	1580
Q Serve Time (g_s), s	0.0	19.2	0.0	13.4	0.0	27.0	0.0	15.4
Cycle Q Clear Time (g_c), s	0.0	19.2	0.0	13.4	0.0	27.0	0.0	15.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.66	0.00	0.90	0.00	0.02	0.00	0.95
Lane Grp Cap (c), veh/h	0	773	0	332	0	860	0	367
V/C Ratio (X)	0.00	0.63	0.00	0.80	0.00	0.79	0.00	0.82
Avail Cap (c_a), veh/h	0	773	0	365	0	860	0	367
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	16.2	0.0	31.9	0.0	18.2	0.0	31.0
Incr Delay (d2), s/veh	0.0	3.9	0.0	10.8	0.0	7.2	0.0	14.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	20.1	0.0	42.7	0.0	25.4	0.0	45.0
1st-Term Q (Q1), veh/ln	0.0	8.4	0.0	5.9	0.0	13.2	0.0	6.7
2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	1.0	0.0	1.7	0.0	1.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	9.2	0.0	6.9	0.0	14.9	0.0	8.1
%ile Storage Ratio (RQ%)	0.00	0.74	0.00	0.16	0.00	1.17	0.00	0.18
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		115.3						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	176	283	343	63	196	71	424	301	104	451	7
Future Volume (veh/h)	37	176	283	343	63	196	71	424	301	104	451	7
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1900	1712	1712	1712	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	39	185	298	361	66	206	75	446	317	109	475	7
Adj No. of Lanes	1	1	0	2	1	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	11	11	11	11	11	11	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	56	152	245	196	488	415	74	699	494	74	1258	19
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.26	0.26	0.06	0.29	0.29	0.04	0.37	0.37	0.04	0.37	0.37
Ln Grp Delay, s/veh	58.5	0.0	151.8	441.3	24.6	28.3	154.8	28.9	29.5	320.2	23.0	22.9
Ln Grp LOS	E		F	F	C	C	F	C	C	F	C	C
Approach Vol, veh/h		522			633			838			591	
Approach Delay, s/veh		144.8			263.5			40.4			77.8	
Approach LOS		F			F			D			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	10.0	40.0	12.0	30.0	10.0	40.0	9.5	32.5
Change Period (Y+Rc), s	6.0	6.0	* 6.3	* 6.3	6.0	6.0	* 6.3	* 6.3
Max Green (Gmax), s	4.0	34.0	* 5.7	* 24	4.0	34.0	* 5.7	* 24
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.1	3.8	5.3	3.8	5.1
Max Q Clear (g_c+I1), s	6.0	20.0	7.7	25.7	6.0	11.4	4.2	12.8
Green Ext Time (g_e), s	0.0	6.7	0.0	0.0	0.0	8.7	0.0	3.4
Prob of Phs Call (p_c)	0.94	1.00	1.00	1.00	0.85	1.00	0.63	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.37

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1691		3163		1691		1630	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1891		591		3404		1712

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1336		952		50		1455

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	2	0	1	0	1	0
Grp Vol (v), veh/h	109	0	361	0	75	0	39	0
Grp Sat Flow (s), veh/h/ln	1691	0	1581	0	1691	0	1630	0
Q Serve Time (g_s), s	4.0	0.0	5.7	0.0	4.0	0.0	2.2	0.0
Cycle Q Clear Time (g_c), s	4.0	0.0	5.7	0.0	4.0	0.0	2.2	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	74	0	196	0	74	0	56	0
V/C Ratio (X)	1.48	0.00	1.84	0.00	1.02	0.00	0.70	0.00
Avail Cap (c_a), veh/h	74	0	196	0	74	0	101	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	44.0	0.0	43.2	0.0	44.0	0.0	44.0	0.0
Incr Delay (d2), s/veh	276.2	0.0	398.2	0.0	110.6	0.0	14.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0
Control Delay (d), s/veh	320.2	0.0	441.3	0.0	154.8	0.0	58.5	0.0
1st-Term Q (Q1), veh/ln	1.9	0.0	2.5	0.0	1.9	0.0	1.0	0.0
2nd-Term Q (Q2), veh/ln	5.6	0.0	10.8	0.0	2.3	0.0	0.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	7.5	0.0	13.3	0.0	4.1	0.0	1.2	0.0
%ile Storage Ratio (RQ%)	0.87	0.00	2.59	0.00	0.34	0.00	0.22	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	8.9	0.0	41.3	0.0	0.4	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.4	0.0	0.5	0.0	0.3	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	398	0	0	0	235	0	66
Grp Sat Flow (s), veh/h/ln	0	1687	0	0	0	1687	0	1712
Q Serve Time (g_s), s	0.0	17.9	0.0	0.0	0.0	9.4	0.0	2.6
Cycle Q Clear Time (g_c), s	0.0	17.9	0.0	0.0	0.0	9.4	0.0	2.6
Lane Grp Cap (c), veh/h	0	623	0	0	0	623	0	488
V/C Ratio (X)	0.00	0.64	0.00	0.00	0.00	0.38	0.00	0.14
Avail Cap (c_a), veh/h	0	623	0	0	0	623	0	488
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	23.9	0.0	0.0	0.0	21.2	0.0	24.4
Incr Delay (d2), s/veh	0.0	4.9	0.0	0.0	0.0	1.7	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	28.9	0.0	0.0	0.0	23.0	0.0	24.6
1st-Term Q (Q1), veh/ln	0.0	8.3	0.0	0.0	0.0	4.4	0.0	1.2

2nd-Term Q (Q2), veh/ln	0.0	0.9	0.0	0.0	0.0	0.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	9.1	0.0	0.0	0.0	4.7	0.0	1.3
%ile Storage Ratio (RQ%)	0.00	0.30	0.00	0.00	0.00	0.14	0.00	0.04
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	365	0	483	0	247	0	206
Grp Sat Flow (s), veh/h/ln	0	1540	0	1544	0	1767	0	1455
Q Serve Time (g_s), s	0.0	18.0	0.0	23.7	0.0	9.4	0.0	10.8
Cycle Q Clear Time (g_c), s	0.0	18.0	0.0	23.7	0.0	9.4	0.0	10.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.87	0.00	0.62	0.00	0.03	0.00	1.00
Lane Grp Cap (c), veh/h	0	569	0	398	0	653	0	415
V/C Ratio (X)	0.00	0.64	0.00	1.21	0.00	0.38	0.00	0.50
Avail Cap (c_a), veh/h	0	569	0	398	0	653	0	415
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	24.0	0.0	34.2	0.0	21.3	0.0	27.4
Incr Delay (d2), s/veh	0.0	5.5	0.0	117.6	0.0	1.7	0.0	0.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	29.5	0.0	151.8	0.0	22.9	0.0	28.3
1st-Term Q (Q1), veh/ln	0.0	7.6	0.0	10.1	0.0	4.6	0.0	4.3
2nd-Term Q (Q2), veh/ln	0.0	0.9	0.0	13.0	0.0	0.3	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	8.5	0.0	23.0	0.0	4.9	0.0	4.4
%ile Storage Ratio (RQ%)	0.00	0.28	0.00	0.56	0.00	0.14	0.00	0.78
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	21.3	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	124.7
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	118	246	48	206	160	152	74	655	145	273	1003	46
Future Volume (veh/h)	118	246	48	206	160	152	74	655	145	273	1003	46
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	120	251	49	210	163	155	76	668	148	279	1023	47
Adj No. of Lanes	1	1	0	2	1	1	1	2	0	2	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	61	309	60	119	380	323	39	1255	278	76	1501	69
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.21	0.21	0.03	0.21	0.21	0.02	0.46	0.46	0.02	0.46	0.46
Ln Grp Delay, s/veh	526.0	0.0	40.5	418.3	30.5	31.2	541.3	19.4	19.4	1260.0	21.9	21.7
Ln Grp LOS	F		D	F	C	C	F	B	B	F	C	C
Approach Vol, veh/h		420			528			892			1349	
Approach Delay, s/veh		179.3			184.9			63.9			277.9	
Approach LOS		F			F			E			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	8.0	45.3	9.0	23.7	8.0	45.3	9.0	23.7
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green (Gmax), s	2.0	34.0	3.0	23.0	2.0	34.0	3.0	23.0
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.0	3.8	5.3	3.8	5.0
Max Q Clear (g_c+I1), s	4.0	17.0	5.0	15.7	4.0	23.1	5.0	9.5
Green Ext Time (g_e), s	0.0	11.3	0.0	2.0	0.0	8.0	0.0	2.8
Prob of Phs Call (p_c)	1.00	1.00	0.99	1.00	0.84	1.00	0.94	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.59	1.00	0.00	1.00	0.14

Left-Turn Movement Data								
Assigned Mvmt		1		3		5		7
Mvmt Sat Flow, veh/h		3281		3408		1691		1757

Through Movement Data								
Assigned Mvmt			2		4		6		8
Mvmt Sat Flow, veh/h			2747		1500		3285		1845

Right-Turn Movement Data								
Assigned Mvmt			12		14		16		18
Mvmt Sat Flow, veh/h			608		293		151		1568

Left Lane Group Data								
Assigned Mvmt		1	0	3	0	5	0	7	0
Lane Assignment		(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	1	0	1	0
Grp Vol (v), veh/h	279	0	210	0	76	0	120	0
Grp Sat Flow (s), veh/h/ln	1640	0	1704	0	1691	0	1757	0
Q Serve Time (g_s), s	2.0	0.0	3.0	0.0	2.0	0.0	3.0	0.0
Cycle Q Clear Time (g_c), s	2.0	0.0	3.0	0.0	2.0	0.0	3.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	76	0	119	0	39	0	61	0
V/C Ratio (X)	3.66	0.00	1.77	0.00	1.93	0.00	1.96	0.00
Avail Cap (c_a), veh/h	76	0	119	0	39	0	61	0
Upstream Filter (I)	0.71	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	42.0	0.0	41.5	0.0	42.0	0.0	41.5	0.0
Incr Delay (d2), s/veh	1218.0	0.0	376.8	0.0	499.3	0.0	484.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	1260.0	0.0	418.3	0.0	541.3	0.0	526.0	0.0
1st-Term Q (Q1), veh/ln	0.9	0.0	1.4	0.0	0.9	0.0	1.4	0.0
2nd-Term Q (Q2), veh/ln	12.9	0.0	6.2	0.0	5.5	0.0	8.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	13.8	0.0	7.6	0.0	6.4	0.0	9.7	0.0
%ile Storage Ratio (RQ%)	1.46	0.00	1.45	0.00	0.78	0.00	1.50	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	50.7	0.0	22.8	0.0	9.2	0.0	14.7	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.9	0.0	0.4	0.0	0.5	0.0	0.5	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	410	0	0	0	525	0	163
Grp Sat Flow (s), veh/h/ln	0	1687	0	0	0	1687	0	1845
Q Serve Time (g_s), s	0.0	15.0	0.0	0.0	0.0	21.1	0.0	6.6
Cycle Q Clear Time (g_c), s	0.0	15.0	0.0	0.0	0.0	21.1	0.0	6.6
Lane Grp Cap (c), veh/h	0	771	0	0	0	771	0	380
V/C Ratio (X)	0.00	0.53	0.00	0.00	0.00	0.68	0.00	0.43
Avail Cap (c_a), veh/h	0	771	0	0	0	771	0	493
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.71	0.00	1.00
Uniform Delay (d1), s/veh	0.0	16.8	0.0	0.0	0.0	18.4	0.0	29.7
Incr Delay (d2), s/veh	0.0	2.6	0.0	0.0	0.0	3.4	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	19.4	0.0	0.0	0.0	21.9	0.0	30.5
1st-Term Q (Q1), veh/ln	0.0	6.9	0.0	0.0	0.0	9.8	0.0	3.4

2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.0	0.0	0.7	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.5	0.0	0.0	0.0	10.5	0.0	3.4
%ile Storage Ratio (RQ%)	0.00	0.38	0.00	0.00	0.00	0.22	0.00	0.10
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	406	0	300	0	545	0	155
Grp Sat Flow (s), veh/h/ln	0	1668	0	1793	0	1749	0	1568
Q Serve Time (g_s), s	0.0	15.0	0.0	13.7	0.0	21.1	0.0	7.5
Cycle Q Clear Time (g_c), s	0.0	15.0	0.0	13.7	0.0	21.1	0.0	7.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.36	0.00	0.16	0.00	0.09	0.00	1.00
Lane Grp Cap (c), veh/h	0	762	0	369	0	799	0	323
V/C Ratio (X)	0.00	0.53	0.00	0.81	0.00	0.68	0.00	0.48
Avail Cap (c_a), veh/h	0	762	0	480	0	799	0	419
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.71	0.00	1.00
Uniform Delay (d1), s/veh	0.0	16.8	0.0	32.6	0.0	18.4	0.0	30.1
Incr Delay (d2), s/veh	0.0	2.7	0.0	8.0	0.0	3.3	0.0	1.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	19.4	0.0	40.5	0.0	21.7	0.0	31.2
1st-Term Q (Q1), veh/ln	0.0	6.9	0.0	6.7	0.0	10.1	0.0	3.2
2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.8	0.0	0.7	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.4	0.0	7.6	0.0	10.9	0.0	3.3
%ile Storage Ratio (RQ%)	0.00	0.38	0.00	0.21	0.00	0.23	0.00	0.09
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		189.6						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	260	44	67	204	169	65	815	49	225	1159	50
Future Volume (veh/h)	105	260	44	67	204	169	65	815	49	225	1159	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	113	280	47	72	219	182	70	876	53	242	1246	54
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	230	473	402	207	473	402	89	1560	94	193	1792	78
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.05	0.48	0.48	0.11	0.54	0.54
Ln Grp Delay, s/veh	38.7	31.4	26.3	39.0	29.5	29.6	52.2	18.6	18.6	172.9	17.3	17.3
Ln Grp LOS	D	C	C	D	C	C	D	B	B	F	B	B
Approach Vol, veh/h		440			473			999			1542	
Approach Delay, s/veh		32.7			31.0			21.0			41.7	
Approach LOS		C			C			C			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Case No	2.0	4.0		5.0	2.0	4.0		5.0
Phs Duration (G+Y+Rc), s	15.0	48.9		28.1	9.3	54.6		28.1
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green (Gmax), s	10.5	41.5		26.5	10.5	41.5		26.5
Max Allow Headway (MAH), s	3.8	5.3		4.9	3.8	5.3		4.9
Max Q Clear (g_c+I1), s	12.5	19.7		21.4	5.8	27.5		20.2
Green Ext Time (g_e), s	0.0	15.8		2.2	0.0	11.1		2.5
Prob of Phs Call (p_c)	1.00	1.00		1.00	0.83	1.00		1.00
Prob of Max Out (p_x)	1.00	0.00		0.97	0.34	0.00		0.80

Left-Turn Movement Data								
Assigned Mvmt	1			7	5			3
Mvmt Sat Flow, veh/h	1691			970	1691			1038

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3233		1845		3295		1845

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		196		1568		143		1568

Left Lane Group Data								
Assigned Mvmt	1	0	0	7	5	0	0	3
Lane Assignment	(Prot)				(Prot)			

Lanes in Grp	1	0	0	1	1	0	0	1
Grp Vol (v), veh/h	242	0	0	113	70	0	0	72
Grp Sat Flow (s), veh/h/ln	1691	0	0	970	1691	0	0	1038
Q Serve Time (g_s), s	10.5	0.0	0.0	10.2	3.8	0.0	0.0	6.0
Cycle Q Clear Time (g_c), s	10.5	0.0	0.0	19.4	3.8	0.0	0.0	18.2
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	970	0	0	0	1038
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	23.6	0.0	0.0	0.0	23.6
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	14.4	0.0	0.0	0.0	11.4
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	10.2	0.0	0.0	0.0	6.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	193	0	0	230	89	0	0	207
V/C Ratio (X)	1.25	0.00	0.00	0.49	0.79	0.00	0.00	0.35
Avail Cap (c_a), veh/h	193	0	0	261	193	0	0	239
Upstream Filter (I)	0.45	0.00	0.00	1.00	0.62	0.00	0.00	1.00
Uniform Delay (d1), s/veh	40.8	0.0	0.0	37.0	43.1	0.0	0.0	38.0
Incr Delay (d2), s/veh	132.1	0.0	0.0	1.6	9.1	0.0	0.0	1.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	172.9	0.0	0.0	38.7	52.2	0.0	0.0	39.0
1st-Term Q (Q1), veh/ln	4.9	0.0	0.0	2.7	1.7	0.0	0.0	1.7
2nd-Term Q (Q2), veh/ln	7.1	0.0	0.0	0.1	0.2	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	12.0	0.0	0.0	2.8	2.0	0.0	0.0	1.8
%ile Storage Ratio (RQ%)	1.17	0.00	0.00	0.43	0.27	0.00	0.00	0.25
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	12.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	457	0	280	0	637	0	219
Grp Sat Flow (s), veh/h/ln	0	1687	0	1845	0	1687	0	1845
Q Serve Time (g_s), s	0.0	17.7	0.0	12.2	0.0	25.5	0.0	9.2
Cycle Q Clear Time (g_c), s	0.0	17.7	0.0	12.2	0.0	25.5	0.0	9.2
Lane Grp Cap (c), veh/h	0	814	0	473	0	918	0	473
V/C Ratio (X)	0.00	0.56	0.00	0.59	0.00	0.69	0.00	0.46
Avail Cap (c_a), veh/h	0	814	0	531	0	918	0	531
Upstream Filter (I)	0.00	0.62	0.00	1.00	0.00	0.45	0.00	1.00
Uniform Delay (d1), s/veh	0.0	16.9	0.0	30.0	0.0	15.4	0.0	28.8
Incr Delay (d2), s/veh	0.0	1.7	0.0	1.4	0.0	2.0	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	18.6	0.0	31.4	0.0	17.3	0.0	29.5
1st-Term Q (Q1), veh/ln	0.0	8.3	0.0	6.2	0.0	11.7	0.0	4.7

2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.2	0.0	0.5	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	8.6	0.0	6.4	0.0	12.2	0.0	4.8
%ile Storage Ratio (RQ%)	0.00	0.18	0.00	0.19	0.00	0.53	0.00	0.11
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	472	0	47	0	663	0	182
Grp Sat Flow (s), veh/h/ln	0	1741	0	1568	0	1751	0	1568
Q Serve Time (g_s), s	0.0	17.7	0.0	2.1	0.0	25.5	0.0	9.0
Cycle Q Clear Time (g_c), s	0.0	17.7	0.0	2.1	0.0	25.5	0.0	9.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.11	0.00	1.00	0.00	0.08	0.00	1.00
Lane Grp Cap (c), veh/h	0	840	0	402	0	952	0	402
V/C Ratio (X)	0.00	0.56	0.00	0.12	0.00	0.70	0.00	0.45
Avail Cap (c_a), veh/h	0	840	0	452	0	952	0	452
Upstream Filter (I)	0.00	0.62	0.00	1.00	0.00	0.45	0.00	1.00
Uniform Delay (d1), s/veh	0.0	16.9	0.0	26.2	0.0	15.4	0.0	28.8
Incr Delay (d2), s/veh	0.0	1.7	0.0	0.1	0.0	1.9	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	18.6	0.0	26.3	0.0	17.3	0.0	29.6
1st-Term Q (Q1), veh/ln	0.0	8.5	0.0	0.9	0.0	12.1	0.0	3.9
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.0	0.5	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	8.9	0.0	0.9	0.0	12.7	0.0	4.0
%ile Storage Ratio (RQ%)	0.00	0.19	0.00	0.16	0.00	0.55	0.00	0.56
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		33.1						
HCM 2010 LOS		C						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	126	44	23	80	13	515	17	1107	32	484	1362	51
Future Volume (veh/h)	126	44	23	80	13	515	17	1107	32	484	1362	51
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	131	46	24	83	14	536	18	1153	33	504	1419	53
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	83	269	141	106	14	548	128	957	27	293	1726	64
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.24	0.24	0.24	0.06	0.36	0.36	0.29	0.29	0.29	0.17	0.52	0.52
Ln Grp Delay, s/veh	354.8	0.0	30.0	63.2	0.0	63.5	38.2	141.9	141.5	366.3	21.4	21.4
Ln Grp LOS	F		C	E		E	D	F	F	F	C	C
Approach Vol, veh/h		201			633			1204			1976	
Approach Delay, s/veh		241.7			63.5			140.1			109.4	
Approach LOS		F			E			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4		6		8
Case No	2.0	6.0	2.0	6.0		4.0		4.0
Phs Duration (G+Y+Rc), s	23.0	34.0	11.9	29.1		57.0		41.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0		6.0		6.0
Max Green (Gmax), s	17.0	28.0	8.0	15.0		51.0		35.0
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.5		5.3		5.5
Max Q Clear (g_c+I1), s	19.0	30.0	6.6	25.1		37.2		35.8
Green Ext Time (g_e), s	0.0	0.0	0.0	0.0		12.2		0.0
Prob of Phs Call (p_c)	1.00	1.00	0.90	1.00		1.00		1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00		0.00		1.00

Left-Turn Movement Data				
Assigned Mvmt	1	5	3	7
Mvmt Sat Flow, veh/h	1691	341	1757	846

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	3350	1143	3317	40

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	96	596	124	1534

Left Lane Group Data								
Assigned Mvmt	1	5	3	7	0	0	0	0
Lane Assignment	(Prot)		(Prot)					

Lanes in Grp	1	1	1	1	0	0	0	0
Grp Vol (v), veh/h	504	18	83	131	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1691	341	1757	846	0	0	0	0
Q Serve Time (g_s), s	17.0	4.6	4.6	1.2	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	17.0	16.8	4.6	23.1	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	341	0	846	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	28.0	0.0	23.1	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	15.8	0.0	1.2	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	4.6	0.0	1.2	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	293	128	106	83	0	0	0	0
V/C Ratio (X)	1.72	0.14	0.78	1.57	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	293	128	143	83	0	0	0	0
Upstream Filter (I)	0.19	0.79	1.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	40.5	36.4	45.4	48.9	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	325.8	1.8	17.8	305.8	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	366.3	38.2	63.2	354.8	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	7.9	0.4	2.2	2.2	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	26.6	0.1	0.5	7.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	34.5	0.5	2.7	9.3	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	3.64	0.06	0.31	2.99	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	52.7	0.0	0.0	11.9	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.4	0.0	0.0	0.4	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	580	0	0	0	720	0	0
Grp Sat Flow (s), veh/h/ln	0	1687	0	0	0	1687	0	0
Q Serve Time (g_s), s	0.0	28.0	0.0	0.0	0.0	35.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	28.0	0.0	0.0	0.0	35.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	482	0	0	0	878	0	0
V/C Ratio (X)	0.00	1.20	0.00	0.00	0.00	0.82	0.00	0.00
Avail Cap (c_a), veh/h	0	482	0	0	0	878	0	0
Upstream Filter (I)	0.00	0.79	0.00	0.00	0.00	0.19	0.00	0.00
Uniform Delay (d1), s/veh	0.0	35.0	0.0	0.0	0.0	19.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	106.9	0.0	0.0	0.0	1.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	141.9	0.0	0.0	0.0	21.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	13.0	0.0	0.0	0.0	16.2	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	14.3	0.0	0.0	0.0	0.4	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	27.3	0.0	0.0	0.0	16.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.20	0.00	0.00	0.00	0.85	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	24.6	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	606	0	70	0	752	0	550
Grp Sat Flow (s), veh/h/ln	0	1759	0	1739	0	1754	0	1574
Q Serve Time (g_s), s	0.0	28.0	0.0	3.1	0.0	35.2	0.0	33.8
Cycle Q Clear Time (g_c), s	0.0	28.0	0.0	3.1	0.0	35.2	0.0	33.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.05	0.00	0.34	0.00	0.07	0.00	0.97
Lane Grp Cap (c), veh/h	0	503	0	410	0	913	0	562
V/C Ratio (X)	0.00	1.20	0.00	0.17	0.00	0.82	0.00	0.98
Avail Cap (c_a), veh/h	0	503	0	410	0	913	0	562
Upstream Filter (I)	0.00	0.79	0.00	1.00	0.00	0.19	0.00	1.00
Uniform Delay (d1), s/veh	0.0	35.0	0.0	29.8	0.0	19.7	0.0	31.1
Incr Delay (d2), s/veh	0.0	106.5	0.0	0.2	0.0	1.7	0.0	32.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	141.5	0.0	30.0	0.0	21.4	0.0	63.5
1st-Term Q (Q1), veh/ln	0.0	13.5	0.0	1.5	0.0	16.9	0.0	14.7
2nd-Term Q (Q2), veh/ln	0.0	14.9	0.0	0.0	0.0	0.4	0.0	5.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	28.4	0.0	1.5	0.0	17.3	0.0	19.7
%ile Storage Ratio (RQ%)	0.00	1.25	0.00	0.20	0.00	0.89	0.00	2.10
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	25.7	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	118.0
HCM 2010 LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	270	516	242	510	671	0	203	932	2	0	1064	326
Future Volume (veh/h)	270	516	242	510	671	0	203	932	2	0	1064	326
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1759	1759	1759	1900	1776	1776	1776	0	1776	1776
Adj Flow Rate, veh/h	278	532	249	526	692	0	209	961	0	0	1097	0
Adj No. of Lanes	2	2	1	2	2	0	1	2	1	0	3	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	8	8	8	8	8	8	7	7	7	0	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			No		
Cap, veh/h	362	495	221	633	773	0	165	1536	687	0	1416	441
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.11	0.15	0.15	0.19	0.23	0.00	0.10	0.46	0.00	0.00	0.29	0.00
Ln Grp Delay, s/veh	43.1	101.4	137.4	39.2	46.2	0.0	164.5	19.3	0.0	0.0	34.0	0.0
Ln Grp LOS	D	F	F	D	D		F	B			C	
Approach Vol, veh/h		1059			1218			1170			1097	
Approach Delay, s/veh		94.6			43.2			45.2			34.0	
Approach LOS		F			D			D			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Case No		3.0	2.0	3.0	2.0	7.0	2.0	4.0
Phs Duration (G+Y+Rc), s		48.2	23.9	19.9	15.0	33.2	16.3	27.6
Change Period (Y+Rc), s		6.3	6.0	6.3	6.0	6.3	6.0	6.3
Max Green (Gmax), s		32.7	28.0	12.7	9.0	17.7	18.0	22.7
Max Allow Headway (MAH), s		5.3	3.8	5.1	3.8	5.3	3.8	5.1
Max Q Clear (g_c+I1), s		22.0	16.3	15.6	11.0	21.0	9.6	20.5
Green Ext Time (g_e), s		8.7	1.6	0.0	0.0	0.0	0.6	0.8
Prob of Phs Call (p_c)		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)		0.00	0.03	1.00	1.00	0.00	0.04	1.00

Left-Turn Movement Data								
Assigned Mvmt			3		5	1	7	
Mvmt Sat Flow, veh/h			3250		1691	0	3250	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3374		3343		5007		3431

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1509		1495		1509		0

Left Lane Group Data								
Assigned Mvmt	0	0	3	0	5	1	7	0
Lane Assignment			(Prot)		(Prot)		(Prot)	

Lanes in Grp	0	0	2	0	1	0	2	0
Grp Vol (v), veh/h	0	0	526	0	209	0	278	0
Grp Sat Flow (s), veh/h/ln	0	0	1625	0	1691	0	1625	0
Q Serve Time (g_s), s	0.0	0.0	14.3	0.0	9.0	0.0	7.6	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	14.3	0.0	9.0	0.0	7.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	26.9	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	633	0	165	0	362	0
V/C Ratio (X)	0.00	0.00	0.83	0.00	1.26	0.00	0.77	0.00
Avail Cap (c_a), veh/h	0	0	989	0	165	0	636	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.09	0.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	35.6	0.0	41.5	0.0	39.7	0.0
Incr Delay (d2), s/veh	0.0	0.0	3.6	0.0	123.0	0.0	3.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	39.2	0.0	164.5	0.0	43.1	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	6.4	0.0	4.2	0.0	3.4	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.3	0.0	5.7	0.0	0.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	6.7	0.0	9.8	0.0	3.6	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.45	0.00	1.10	0.00	0.34	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	10.9	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	3	0	2
Grp Vol (v), veh/h	0	961	0	532	0	1097	0	692
Grp Sat Flow (s), veh/h/ln	0	1687	0	1671	0	1616	0	1671
Q Serve Time (g_s), s	0.0	20.0	0.0	13.6	0.0	19.0	0.0	18.5
Cycle Q Clear Time (g_c), s	0.0	20.0	0.0	13.6	0.0	19.0	0.0	18.5
Lane Grp Cap (c), veh/h	0	1536	0	495	0	1416	0	773
V/C Ratio (X)	0.00	0.63	0.00	1.08	0.00	0.77	0.00	0.90
Avail Cap (c_a), veh/h	0	1536	0	495	0	1416	0	825
Upstream Filter (I)	0.00	0.09	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	19.1	0.0	39.2	0.0	29.8	0.0	34.3
Incr Delay (d2), s/veh	0.0	0.2	0.0	62.2	0.0	4.2	0.0	11.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	19.3	0.0	101.4	0.0	34.0	0.0	46.2
1st-Term Q (Q1), veh/ln	0.0	9.2	0.0	6.3	0.0	8.4	0.0	8.6

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	4.3	0.0	0.5	0.0	1.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	9.2	0.0	10.5	0.0	9.0	0.0	9.8
%ile Storage Ratio (RQ%)	0.00	0.47	0.00	0.37	0.00	0.30	0.00	0.30
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	9.3	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	249	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1509	0	1495	0	1509	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	13.6	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	13.6	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	687	0	221	0	441	0	0
V/C Ratio (X)	0.00	0.00	0.00	1.13	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	687	0	221	0	441	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	39.2	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	98.2	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	137.4	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	5.6	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	11.7	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.41	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	6.9	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	53.5
HCM 2010 LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

APPENDIX I-O3:
Year 2020 Zoning Intersection Background LOS PM Analysis without Mitigation

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	617	1126	659	198	629	77	305	281	192	156	188	201
Future Volume (veh/h)	617	1126	659	198	629	77	305	281	192	156	188	201
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1743	1743	1900	1743	1743	1743
Adj Flow Rate, veh/h	656	1198	701	211	669	82	324	299	204	166	200	214
Adj No. of Lanes	2	2	1	1	3	0	1	2	0	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	9	9	9	9	9	9
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	721	1615	723	193	1635	199	109	472	314	33	352	299
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.21	0.45	0.45	0.11	0.35	0.35	0.07	0.25	0.25	0.02	0.20	0.20
Ln Grp Delay, s/veh	72.0	37.9	68.1	160.4	38.8	39.8	985.3	58.9	60.4	1925.8	61.9	71.0
Ln Grp LOS	E	D	E	F	D	D	F	E	E	F	E	E
Approach Vol, veh/h		2555			962			827			580	
Approach Delay, s/veh		54.9			65.7			422.3			598.7	
Approach LOS		D			E			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	3.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	10.0	45.0	23.0	76.0	17.0	38.0	38.4	60.6
Change Period (Y+Rc), s	6.9	6.9	6.4	6.4	6.9	6.9	6.4	6.4
Max Green (Gmax), s	3.1	38.1	16.6	69.6	10.1	31.1	37.6	48.6
Max Allow Headway (MAH), s	3.8	5.1	3.7	4.8	3.8	5.1	3.8	4.8
Max Q Clear (g_c+I1), s	5.1	24.2	18.6	67.9	12.1	22.7	30.4	19.0
Green Ext Time (g_e), s	0.0	4.4	0.0	1.6	0.0	3.3	1.6	20.9
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	0.26	0.00

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	1660	1792	1660	3476

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	1908	3574	1743	4642

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	1268	1599	1482	564

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	2	0
Grp Vol (v), veh/h	166	0	211	0	324	0	656	0
Grp Sat Flow (s), veh/h/ln	1660	0	1792	0	1660	0	1738	0
Q Serve Time (g_s), s	3.1	0.0	16.6	0.0	10.1	0.0	28.4	0.0
Cycle Q Clear Time (g_c), s	3.1	0.0	16.6	0.0	10.1	0.0	28.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	33	0	193	0	109	0	721	0
V/C Ratio (X)	4.97	0.00	1.09	0.00	2.98	0.00	0.91	0.00
Avail Cap (c_a), veh/h	33	0	193	0	109	0	849	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	75.4	0.0	68.7	0.0	72.0	0.0	59.6	0.0
Incr Delay (d2), s/veh	1850.4	0.0	91.7	0.0	913.4	0.0	12.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	1925.8	0.0	160.4	0.0	985.3	0.0	72.0	0.0
1st-Term Q (Q1), veh/ln	1.4	0.0	8.2	0.0	4.6	0.0	13.7	0.0
2nd-Term Q (Q2), veh/ln	17.2	0.0	4.9	0.0	27.6	0.0	1.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	18.6	0.0	13.1	0.0	32.3	0.0	14.9	0.0
%ile Storage Ratio (RQ%)	1.56	0.00	1.03	0.00	2.70	0.00	0.61	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	33.1	0.0	4.5	0.0	53.8	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	1.2	0.0	0.3	0.0	0.7	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	1	0	2
Grp Vol (v), veh/h	0	258	0	1198	0	200	0	492
Grp Sat Flow (s), veh/h/ln	0	1656	0	1787	0	1743	0	1712
Q Serve Time (g_s), s	0.0	21.4	0.0	42.6	0.0	15.9	0.0	16.7
Cycle Q Clear Time (g_c), s	0.0	21.4	0.0	42.6	0.0	15.9	0.0	16.7
Lane Grp Cap (c), veh/h	0	410	0	1615	0	352	0	1206
V/C Ratio (X)	0.00	0.63	0.00	0.74	0.00	0.57	0.00	0.41
Avail Cap (c_a), veh/h	0	410	0	1615	0	352	0	1206
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	51.7	0.0	34.8	0.0	55.4	0.0	37.7
Incr Delay (d2), s/veh	0.0	7.2	0.0	3.1	0.0	6.5	0.0	1.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	58.9	0.0	37.9	0.0	61.9	0.0	38.8
1st-Term Q (Q1), veh/ln	0.0	9.8	0.0	21.0	0.0	7.7	0.0	7.9

2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	0.7	0.0	0.6	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	10.7	0.0	21.7	0.0	8.3	0.0	8.1
%ile Storage Ratio (RQ%)	0.00	0.38	0.00	0.48	0.00	0.32	0.00	0.37
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	245	0	701	0	214	0	259
Grp Sat Flow (s), veh/h/ln	0	1519	0	1599	0	1482	0	1782
Q Serve Time (g_s), s	0.0	22.2	0.0	65.9	0.0	20.7	0.0	17.0
Cycle Q Clear Time (g_c), s	0.0	22.2	0.0	65.9	0.0	20.7	0.0	17.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.83	0.00	1.00	0.00	1.00	0.00	0.32
Lane Grp Cap (c), veh/h	0	376	0	723	0	299	0	628
V/C Ratio (X)	0.00	0.65	0.00	0.97	0.00	0.72	0.00	0.41
Avail Cap (c_a), veh/h	0	376	0	723	0	299	0	628
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	52.0	0.0	41.2	0.0	57.3	0.0	37.8
Incr Delay (d2), s/veh	0.0	8.5	0.0	26.9	0.0	13.7	0.0	2.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	60.4	0.0	68.1	0.0	71.0	0.0	39.8
1st-Term Q (Q1), veh/ln	0.0	9.3	0.0	29.1	0.0	8.5	0.0	8.4
2nd-Term Q (Q2), veh/ln	0.0	0.9	0.0	5.4	0.0	1.1	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	10.2	0.0	34.5	0.0	9.6	0.0	8.7
%ile Storage Ratio (RQ%)	0.00	0.37	0.00	3.62	0.00	1.08	0.00	0.40
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		182.8						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	139	1283	158	130	763	125	181	114	177	137	61	59
Future Volume (veh/h)	139	1283	158	130	763	125	181	114	177	137	61	59
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	148	1365	168	138	812	133	193	121	188	146	65	63
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	99	1566	191	99	1501	246	218	121	188	170	292	248
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.49	0.49	0.06	0.49	0.49	0.12	0.19	0.19	0.10	0.16	0.16
Ln Grp Delay, s/veh	340.6	45.9	46.9	288.6	28.8	28.8	79.4	0.0	114.0	80.2	58.3	59.3
Ln Grp LOS	F	D	D	F	C	C	E		F	F	E	E
Approach Vol, veh/h		1681			1083			502			274	
Approach Delay, s/veh		72.3			61.9			100.7			70.2	
Approach LOS		E			E			F			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	21.5	35.2	15.0	82.3	25.7	31.0	15.0	82.3
Change Period (Y+Rc), s	6.6	6.6	6.4	6.4	6.6	6.6	6.4	6.4
Max Green (Gmax), s	32.4	24.4	8.6	62.6	32.4	24.4	8.6	62.6
Max Allow Headway (MAH), s	3.8	5.2	3.7	5.0	3.8	5.2	3.7	5.0
Max Q Clear (g_c+I1), s	14.6	30.6	10.6	61.6	18.7	7.4	10.6	30.4
Green Ext Time (g_e), s	0.3	0.0	0.0	1.0	0.4	2.3	0.0	22.2
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1757		1774		1757		1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		652		3176		1845		3046

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1014		388		1568		499

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	146	0	138	0	193	0	148	0
Grp Sat Flow (s), veh/h/ln	1757	0	1774	0	1757	0	1774	0
Q Serve Time (g_s), s	12.6	0.0	8.6	0.0	16.7	0.0	8.6	0.0
Cycle Q Clear Time (g_c), s	12.6	0.0	8.6	0.0	16.7	0.0	8.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	170	0	99	0	218	0	99	0
V/C Ratio (X)	0.86	0.00	1.39	0.00	0.89	0.00	1.49	0.00
Avail Cap (c_a), veh/h	370	0	99	0	370	0	99	0
Upstream Filter (I)	1.00	0.00	0.74	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	68.5	0.0	72.7	0.0	66.4	0.0	72.7	0.0
Incr Delay (d2), s/veh	11.7	0.0	215.9	0.0	13.0	0.0	267.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	80.2	0.0	288.6	0.0	79.4	0.0	340.6	0.0
1st-Term Q (Q1), veh/ln	6.1	0.0	4.2	0.0	8.1	0.0	4.2	0.0
2nd-Term Q (Q2), veh/ln	0.6	0.0	5.9	0.0	0.8	0.0	7.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	6.7	0.0	10.2	0.0	8.9	0.0	11.6	0.0
%ile Storage Ratio (RQ%)	1.27	0.00	0.95	0.00	1.68	0.00	0.92	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	9.7	0.0	0.0	0.0	12.2	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.4	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T		T		T
Lanes in Grp	0	0	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	757	0	65	0	472
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	1845	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	58.3	0.0	4.7	0.0	28.4
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	58.3	0.0	4.7	0.0	28.4
Lane Grp Cap (c), veh/h	0	0	0	872	0	292	0	872
V/C Ratio (X)	0.00	0.00	0.00	0.87	0.00	0.22	0.00	0.54
Avail Cap (c_a), veh/h	0	0	0	872	0	292	0	872
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.74
Uniform Delay (d1), s/veh	0.0	0.0	0.0	34.6	0.0	56.5	0.0	27.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	11.3	0.0	1.8	0.0	1.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	45.9	0.0	58.3	0.0	28.8
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	28.4	0.0	2.4	0.0	13.9

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	2.7	0.0	0.1	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	31.1	0.0	2.6	0.0	14.3
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.32	0.00	0.09	0.00	0.26
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	309	0	776	0	63	0	473
Grp Sat Flow (s), veh/h/ln	0	1666	0	1794	0	1568	0	1775
Q Serve Time (g_s), s	0.0	28.6	0.0	59.6	0.0	5.4	0.0	28.4
Cycle Q Clear Time (g_c), s	0.0	28.6	0.0	59.6	0.0	5.4	0.0	28.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.61	0.00	0.22	0.00	1.00	0.00	0.28
Lane Grp Cap (c), veh/h	0	309	0	885	0	248	0	875
V/C Ratio (X)	0.00	1.00	0.00	0.88	0.00	0.25	0.00	0.54
Avail Cap (c_a), veh/h	0	309	0	885	0	248	0	875
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.74
Uniform Delay (d1), s/veh	0.0	62.7	0.0	34.9	0.0	56.8	0.0	27.0
Incr Delay (d2), s/veh	0.0	51.2	0.0	12.0	0.0	2.4	0.0	1.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	114.0	0.0	46.9	0.0	59.3	0.0	28.8
1st-Term Q (Q1), veh/ln	0.0	13.1	0.0	29.3	0.0	2.4	0.0	13.9
2nd-Term Q (Q2), veh/ln	0.0	4.4	0.0	2.9	0.0	0.2	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	17.5	0.0	32.3	0.0	2.5	0.0	14.4
%ile Storage Ratio (RQ%)	0.00	0.58	0.00	0.34	0.00	0.09	0.00	0.26
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		73.0						
HCM 2010 LOS		E						

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	165	1413	906	272	214	102
Future Volume (veh/h)	165	1413	906	272	214	102
Number	7	4	8	18	1	16
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00			1.00	1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1676	1676	1676	1710	1660	1660
Adj Flow Rate, veh/h	170	1457	934	280	221	105
Adj No. of Lanes	1	2	2	0	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	3	3
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	140	2300	1443	431	317	283
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.09	0.72	0.60	0.60	0.20	0.20
Ln Grp Delay, s/veh	180.4	12.0	25.1	25.3	74.0	61.4
Ln Grp LOS	F	B	C	C	E	E
Approach Vol, veh/h		1627	1214		326	
Approach Delay, s/veh		29.6	25.2		69.9	
Approach LOS		C	C		E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	6			4			7	8
Case No	9.0			4.0			2.0	8.0
Phs Duration (G+Y+Rc), s	40.0			127.0			21.0	106.0
Change Period (Y+Rc), s	6.5			6.4			6.4	6.4
Max Green (Gmax), s	33.5			120.6			14.6	99.6
Max Allow Headway (MAH), s	3.9			5.0			3.7	5.0
Max Q Clear (g_c+I1), s	23.7			41.1			16.6	44.6
Green Ext Time (g_e), s	0.7			43.8			0.0	35.6
Prob of Phs Call (p_c)	1.00			1.00			1.00	1.00
Prob of Max Out (p_x)	0.00			0.00			1.00	0.00
Left-Turn Movement Data								
Assigned Mvmt	1						7	3
Mvmt Sat Flow, veh/h	1581						1597	0
Through Movement Data								
Assigned Mvmt	6			4				8
Mvmt Sat Flow, veh/h	0			3269				2503
Right-Turn Movement Data								
Assigned Mvmt	16			14				18
Mvmt Sat Flow, veh/h	1411			0				723
Left Lane Group Data								
Assigned Mvmt	1	0	0	0	0	0	7	3
Lane Assignment							(Prot)	

Lanes in Grp	1	0	0	0	0	0	1	0
Grp Vol (v), veh/h	221	0	0	0	0	0	170	0
Grp Sat Flow (s), veh/h/ln	1581	0	0	0	0	0	1597	0
Q Serve Time (g_s), s	21.7	0.0	0.0	0.0	0.0	0.0	14.6	0.0
Cycle Q Clear Time (g_c), s	21.7	0.0	0.0	0.0	0.0	0.0	14.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1581	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	99.6
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	317	0	0	0	0	0	140	0
V/C Ratio (X)	0.70	0.00	0.00	0.00	0.00	0.00	1.22	0.00
Avail Cap (c_a), veh/h	317	0	0	0	0	0	140	0
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00
Uniform Delay (d1), s/veh	62.0	0.0	0.0	0.0	0.0	0.0	76.2	0.0
Incr Delay (d2), s/veh	12.0	0.0	0.0	0.0	0.0	0.0	104.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	74.0	0.0	0.0	0.0	0.0	0.0	180.4	0.0
1st-Term Q (Q1), veh/ln	9.5	0.0	0.0	0.0	0.0	0.0	6.4	0.0
2nd-Term Q (Q2), veh/ln	1.1	0.0	0.0	0.0	0.0	0.0	4.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	10.6	0.0	0.0	0.0	0.0	0.0	10.5	0.0
%ile Storage Ratio (RQ%)	0.52	0.00	0.00	0.00	0.00	0.00	1.21	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	7.6	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	6	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	1
Grp Vol (v), veh/h	0	0	0	1457	0	0	0	614
Grp Sat Flow (s), veh/h/ln	0	0	0	1593	0	0	0	1593
Q Serve Time (g_s), s	0.0	0.0	0.0	39.1	0.0	0.0	0.0	42.3
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	39.1	0.0	0.0	0.0	42.3
Lane Grp Cap (c), veh/h	0	0	0	2300	0	0	0	950
V/C Ratio (X)	0.00	0.00	0.00	0.63	0.00	0.00	0.00	0.65
Avail Cap (c_a), veh/h	0	0	0	2300	0	0	0	950
Upstream Filter (I)	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.88
Uniform Delay (d1), s/veh	0.0	0.0	0.0	11.9	0.0	0.0	0.0	22.1
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.0	0.0	3.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	12.0	0.0	0.0	0.0	25.1
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	17.0	0.0	0.0	0.0	18.6

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	17.0	0.0	0.0	0.0	19.4
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.31	0.00	0.00	0.00	0.29
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	16	0	0	14	0	0	0	18
Lane Assignment	R							T+R
Lanes in Grp	1	0	0	0	0	0	0	1
Grp Vol (v), veh/h	105	0	0	0	0	0	0	600
Grp Sat Flow (s), veh/h/ln	1411	0	0	0	0	0	0	1549
Q Serve Time (g_s), s	10.7	0.0	0.0	0.0	0.0	0.0	0.0	42.6
Cycle Q Clear Time (g_c), s	10.7	0.0	0.0	0.0	0.0	0.0	0.0	42.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.47
Lane Grp Cap (c), veh/h	283	0	0	0	0	0	0	924
V/C Ratio (X)	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.65
Avail Cap (c_a), veh/h	283	0	0	0	0	0	0	924
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.88
Uniform Delay (d1), s/veh	57.6	0.0	0.0	0.0	0.0	0.0	0.0	22.2
Incr Delay (d2), s/veh	3.7	0.0	0.0	0.0	0.0	0.0	0.0	3.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	61.4	0.0	0.0	0.0	0.0	0.0	0.0	25.3
1st-Term Q (Q1), veh/ln	8.7	0.0	0.0	0.0	0.0	0.0	0.0	18.2
2nd-Term Q (Q2), veh/ln	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	9.0	0.0	0.0	0.0	0.0	0.0	0.0	19.0
%ile Storage Ratio (RQ%)	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.29
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		32.1						
HCM 2010 LOS		C						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	1453	44	73	1093	88	66	17	68	60	6	30
Future Volume (veh/h)	35	1453	44	73	1093	88	66	17	68	60	6	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1845	1845	1900	1845	1845
Adj Flow Rate, veh/h	36	1483	48	74	1115	90	67	17	69	61	6	31
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.98	0.98	0.92	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	46	2479	80	77	2407	194	47	12	52	66	7	65
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.71	0.71	0.04	0.73	0.73	0.03	0.03	0.03	0.04	0.04	0.04
Ln Grp Delay, s/veh	92.1	12.8	12.8	158.1	9.7	9.7	337.1	0.0	306.1	158.5	0.0	95.2
Ln Grp LOS	F	B	B	F	A	A	F		F	F		F
Approach Vol, veh/h		1567			1279			153			98	
Approach Delay, s/veh		14.6			18.3			323.2			138.5	
Approach LOS		B			B			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	6	2	3	4			7	8
Case No	11.0	11.0	2.0	4.0			2.0	4.0
Phs Duration (G+Y+Rc), s	13.0	12.0	13.0	115.0			10.4	117.6
Change Period (Y+Rc), s	6.7	6.9	6.4	* 6.6			6.4	* 6.6
Max Green (Gmax), s	6.3	5.1	6.6	* 1.1E2			6.6	* 1.1E2
Max Allow Headway (MAH), s	4.9	4.7	3.8	5.1			3.7	5.1
Max Q Clear (g_c+I1), s	7.8	7.1	8.4	34.9			5.1	23.3
Green Ext Time (g_e), s	0.0	0.0	0.0	43.4			0.0	46.9
Prob of Phs Call (p_c)	1.00	1.00	0.96	1.00			0.78	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.00			1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1	5	3				7	
Mvmt Sat Flow, veh/h	1606	1415	1774				1774	

Through Movement Data								
Assigned Mvmt	6	2		4				8
Mvmt Sat Flow, veh/h	158	359		3499				3318

Right-Turn Movement Data								
Assigned Mvmt	16	12		14				18
Mvmt Sat Flow, veh/h	1568	1568		113				268

Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	7	0
Lane Assignment	L+T	L+T	(Prot)				(Prot)	

Lanes in Grp	1	1	1	0	0	0	1	0
Grp Vol (v), veh/h	67	84	74	0	0	0	36	0
Grp Sat Flow (s), veh/h/ln	1764	1774	1774	0	0	0	1774	0
Q Serve Time (g_s), s	5.8	5.1	6.4	0.0	0.0	0.0	3.1	0.0
Cycle Q Clear Time (g_c), s	5.8	5.1	6.4	0.0	0.0	0.0	3.1	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.91	0.80	1.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	73	59	77	0	0	0	46	0
V/C Ratio (X)	0.92	1.42	0.97	0.00	0.00	0.00	0.78	0.00
Avail Cap (c_a), veh/h	73	59	77	0	0	0	77	0
Upstream Filter (I)	1.00	1.00	0.88	0.00	0.00	0.00	0.72	0.00
Uniform Delay (d1), s/veh	73.1	74.0	73.1	0.0	0.0	0.0	74.1	0.0
Incr Delay (d2), s/veh	85.4	263.2	85.0	0.0	0.0	0.0	18.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	158.5	337.1	158.1	0.0	0.0	0.0	92.1	0.0
1st-Term Q (Q1), veh/ln	2.8	2.5	3.1	0.0	0.0	0.0	1.5	0.0
2nd-Term Q (Q2), veh/ln	1.7	4.3	1.8	0.0	0.0	0.0	0.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	4.6	6.8	4.9	0.0	0.0	0.0	1.8	0.0
%ile Storage Ratio (RQ%)	0.23	0.38	0.37	0.00	0.00	0.00	0.25	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	6.2	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	6	2	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	749	0	0	0	594
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	32.7	0.0	0.0	0.0	21.2
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	32.7	0.0	0.0	0.0	21.2
Lane Grp Cap (c), veh/h	0	0	0	1254	0	0	0	1284
V/C Ratio (X)	0.00	0.00	0.00	0.60	0.00	0.00	0.00	0.46
Avail Cap (c_a), veh/h	0	0	0	1254	0	0	0	1284
Upstream Filter (I)	0.00	0.00	0.00	0.72	0.00	0.00	0.00	0.88
Uniform Delay (d1), s/veh	0.0	0.0	0.0	11.3	0.0	0.0	0.0	8.7
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.5	0.0	0.0	0.0	1.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	12.8	0.0	0.0	0.0	9.7
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	15.8	0.0	0.0	0.0	10.2

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	16.3	0.0	0.0	0.0	10.6
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.62
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	16	12	0	14	0	0	0	18
Lane Assignment	R	R		T+R				T+R
Lanes in Grp	1	1	0	1	0	0	0	1
Grp Vol (v), veh/h	31	69	0	782	0	0	0	611
Grp Sat Flow (s), veh/h/ln	1568	1568	0	1843	0	0	0	1816
Q Serve Time (g_s), s	3.0	5.1	0.0	32.9	0.0	0.0	0.0	21.3
Cycle Q Clear Time (g_c), s	3.0	5.1	0.0	32.9	0.0	0.0	0.0	21.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	1.00	0.00	0.06	0.00	0.00	0.00	0.15
Lane Grp Cap (c), veh/h	65	52	0	1306	0	0	0	1317
V/C Ratio (X)	0.48	1.32	0.00	0.60	0.00	0.00	0.00	0.46
Avail Cap (c_a), veh/h	65	52	0	1306	0	0	0	1317
Upstream Filter (I)	1.00	1.00	0.00	0.72	0.00	0.00	0.00	0.88
Uniform Delay (d1), s/veh	71.7	73.9	0.0	11.3	0.0	0.0	0.0	8.7
Incr Delay (d2), s/veh	23.4	232.2	0.0	1.5	0.0	0.0	0.0	1.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	95.2	306.1	0.0	12.8	0.0	0.0	0.0	9.7
1st-Term Q (Q1), veh/ln	1.3	2.2	0.0	16.5	0.0	0.0	0.0	10.5
2nd-Term Q (Q2), veh/ln	0.4	3.4	0.0	0.5	0.0	0.0	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	1.7	5.6	0.0	17.1	0.0	0.0	0.0	10.9
%ile Storage Ratio (RQ%)	1.09	1.30	0.00	0.25	0.00	0.00	0.00	0.64
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	35.3
HCM 2010 LOS	D

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1358	208	258	998	242	322
Future Volume (veh/h)	1358	208	258	998	242	322
Number	4	14	3	8	5	12
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)		1.00	1.00		1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1845	1845
Adj Flow Rate, veh/h	1415	217	269	1040	252	335
Adj No. of Lanes	2	0	1	2	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	3	3
Opposing Right Turn Influence			Yes		Yes	
Cap, veh/h	1802	273	219	2641	310	277
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.58	0.58	0.12	0.75	0.18	0.18
Ln Grp Delay, s/veh	30.9	31.8	205.2	8.0	86.3	191.8
Ln Grp LOS	C	C	F	A	F	F
Approach Vol, veh/h	1632			1309	587	
Approach Delay, s/veh	31.4			48.5	146.5	
Approach LOS	C			D	F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Case No		9.0	2.0	8.0				4.0
Phs Duration (G+Y+Rc), s		36.0	27.0	104.0				131.0
Change Period (Y+Rc), s		6.5	6.4	6.4				6.4
Max Green (Gmax), s		29.5	20.6	97.6				124.6
Max Allow Headway (MAH), s		4.0	3.8	5.3				5.3
Max Q Clear (g_c+I1), s		31.5	22.6	62.2				19.6
Green Ext Time (g_e), s		0.0	0.0	27.9				56.9
Prob of Phs Call (p_c)		1.00	1.00	1.00				1.00
Prob of Max Out (p_x)		0.00	1.00	0.00				0.00

Left-Turn Movement Data			
Assigned Mvmt	5	3	7
Mvmt Sat Flow, veh/h	1757	1774	0

Through Movement Data			
Assigned Mvmt	2	4	8
Mvmt Sat Flow, veh/h	0	3176	3632

Right-Turn Movement Data			
Assigned Mvmt	12	14	18
Mvmt Sat Flow, veh/h	1568	467	0

Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	0	0	0
Lane Assignment			(Prot)					

Lanes in Grp	0	1	1	0	0	0	0	0
Grp Vol (v), veh/h	0	252	269	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1757	1774	0	0	0	0	0
Q Serve Time (g_s), s	0.0	23.0	20.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	23.0	20.6	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1757	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	97.6	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	310	219	0	0	0	0	0
V/C Ratio (X)	0.00	0.81	1.23	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	310	219	0	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.84	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	66.1	73.2	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	20.2	132.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	86.3	205.2	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	11.2	10.1	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.7	8.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	12.9	18.1	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.54	2.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	12.5	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	2
Grp Vol (v), veh/h	0	0	0	805	0	0	0	1040
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	57.9	0.0	0.0	0.0	17.6
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	57.9	0.0	0.0	0.0	17.6
Lane Grp Cap (c), veh/h	0	0	0	1034	0	0	0	2641
V/C Ratio (X)	0.00	0.00	0.00	0.78	0.00	0.00	0.00	0.39
Avail Cap (c_a), veh/h	0	0	0	1034	0	0	0	2641
Upstream Filter (I)	0.00	0.00	0.00	0.76	0.00	0.00	0.00	0.84
Uniform Delay (d1), s/veh	0.0	0.0	0.0	26.5	0.0	0.0	0.0	7.6
Incr Delay (d2), s/veh	0.0	0.0	0.0	4.5	0.0	0.0	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	30.9	0.0	0.0	0.0	8.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	28.2	0.0	0.0	0.0	8.5

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	29.5	0.0	0.0	0.0	8.7
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	1.73	0.00	0.00	0.00	0.22
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	0	0	18
Lane Assignment		R		T+R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	335	0	827	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1568	0	1780	0	0	0	0
Q Serve Time (g_s), s	0.0	29.5	0.0	60.2	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	29.5	0.0	60.2	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.26	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	277	0	1040	0	0	0	0
V/C Ratio (X)	0.00	1.21	0.00	0.79	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	277	0	1040	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.76	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	68.8	0.0	26.9	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	123.0	0.0	4.9	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	191.8	0.0	31.8	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	12.8	0.0	29.4	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	9.5	0.0	1.4	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	22.3	0.0	30.8	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.93	0.00	1.81	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	14.5	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		56.9						
HCM 2010 LOS		E						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	1437	265	87	1176	19	105	3	71	11	3	21
Future Volume (veh/h)	41	1437	265	87	1176	19	105	3	71	11	3	21
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1900	1900	1845	1900
Adj Flow Rate, veh/h	43	1513	279	92	1238	20	111	3	75	12	3	22
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	55	2200	397	55	2617	42	309	12	303	106	37	166
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.73	0.73	0.03	0.73	0.73	0.20	0.20	0.20	0.20	0.20	0.20
Ln Grp Delay, s/veh	107.6	12.8	13.4	438.2	9.8	9.7	60.0	0.0	56.1	53.5	0.0	0.0
Ln Grp LOS	F	B	B	F	A	A	E		E	D		
Approach Vol, veh/h		1835			1350			189			37	
Approach Delay, s/veh		15.3			39.0			58.4			53.5	
Approach LOS		B			D			E			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		6.0	2.0	4.0		8.0	2.0	4.0
Phs Duration (G+Y+Rc), s		39.0	11.4	125.0		39.0	11.4	125.0
Change Period (Y+Rc), s		* 6.8	6.4	6.4		* 6.8	6.4	6.4
Max Green (Gmax), s		* 32	5.0	104.6		* 32	5.0	104.6
Max Allow Headway (MAH), s		4.7	3.8	5.3		4.7	3.8	5.3
Max Q Clear (g_c+I1), s		14.6	7.0	47.6		8.8	5.9	24.8
Green Ext Time (g_e), s		0.9	0.0	45.3		1.0	0.0	58.5
Prob of Phs Call (p_c)		1.00	0.98	1.00		1.00	0.85	1.00
Prob of Max Out (p_x)		0.00	1.00	0.00		0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		1367	1774			382	1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		61		2996		183		3565

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1516		541		829		58

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0
Lane Assignment			(Prot)			L+T+R	(Prot)	

Lanes in Grp	0	1	1	0	0	1	1	0
Grp Vol (v), veh/h	0	111	92	0	0	37	43	0
Grp Sat Flow (s), veh/h/ln	0	1367	1774	0	0	1394	1774	0
Q Serve Time (g_s), s	0.0	5.8	5.0	0.0	0.0	0.1	3.9	0.0
Cycle Q Clear Time (g_c), s	0.0	12.6	5.0	0.0	0.0	6.8	3.9	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1367	0	0	0	1342	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	1147	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	32.2	0.0	0.0	0.0	32.2	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	25.4	0.0	0.0	0.0	25.5	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	5.8	0.0	0.0	0.0	0.1	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	4.2	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	2.9	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	0.00	0.32	1.00	0.00
Lane Grp Cap (c), veh/h	0	309	55	0	0	308	55	0
V/C Ratio (X)	0.00	0.36	1.67	0.00	0.00	0.12	0.78	0.00
Avail Cap (c_a), veh/h	0	309	55	0	0	308	55	0
Upstream Filter (I)	0.00	1.00	0.86	0.00	0.00	1.00	0.52	0.00
Uniform Delay (d1), s/veh	0.0	56.8	78.0	0.0	0.0	52.7	77.5	0.0
Incr Delay (d2), s/veh	0.0	3.2	360.2	0.0	0.0	0.8	30.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	60.0	438.2	0.0	0.0	53.5	107.6	0.0
1st-Term Q (Q1), veh/ln	0.0	4.3	2.4	0.0	0.0	1.3	1.9	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	5.5	0.0	0.0	0.1	0.5	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	4.6	8.0	0.0	0.0	1.4	2.4	0.0
%ile Storage Ratio (RQ%)	0.00	0.54	0.84	0.00	0.00	0.12	0.32	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	9.2	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	880	0	0	0	614
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	42.3	0.0	0.0	0.0	22.8
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	42.3	0.0	0.0	0.0	22.8
Lane Grp Cap (c), veh/h	0	0	0	1299	0	0	0	1299
V/C Ratio (X)	0.00	0.00	0.00	0.68	0.00	0.00	0.00	0.47
Avail Cap (c_a), veh/h	0	0	0	1299	0	0	0	1299
Upstream Filter (I)	0.00	0.00	0.00	0.52	0.00	0.00	0.00	0.86
Uniform Delay (d1), s/veh	0.0	0.0	0.0	11.3	0.0	0.0	0.0	8.7
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.5	0.0	0.0	0.0	1.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	12.8	0.0	0.0	0.0	9.8
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	20.5	0.0	0.0	0.0	11.1

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	21.1	0.0	0.0	0.0	11.5
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.68	0.00	0.00	0.00	0.16
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R				T+R
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	78	0	912	0	0	0	644
Grp Sat Flow (s), veh/h/ln	0	1577	0	1767	0	0	0	1853
Q Serve Time (g_s), s	0.0	6.7	0.0	45.6	0.0	0.0	0.0	22.8
Cycle Q Clear Time (g_c), s	0.0	6.7	0.0	45.6	0.0	0.0	0.0	22.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.96	0.00	0.31	0.00	0.59	0.00	0.03
Lane Grp Cap (c), veh/h	0	315	0	1298	0	0	0	1360
V/C Ratio (X)	0.00	0.25	0.00	0.70	0.00	0.00	0.00	0.47
Avail Cap (c_a), veh/h	0	315	0	1298	0	0	0	1360
Upstream Filter (I)	0.00	1.00	0.00	0.52	0.00	0.00	0.00	0.86
Uniform Delay (d1), s/veh	0.0	54.2	0.0	11.8	0.0	0.0	0.0	8.7
Incr Delay (d2), s/veh	0.0	1.9	0.0	1.7	0.0	0.0	0.0	1.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	56.1	0.0	13.4	0.0	0.0	0.0	9.7
1st-Term Q (Q1), veh/ln	0.0	2.9	0.0	22.0	0.0	0.0	0.0	11.6
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.6	0.0	0.0	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	3.1	0.0	22.6	0.0	0.0	0.0	12.0
%ile Storage Ratio (RQ%)	0.00	0.27	0.00	0.73	0.00	0.00	0.00	0.17
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	27.5
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	1319	225	257	1199	5	171	0	250	3	4	4
Future Volume (veh/h)	6	1319	225	257	1199	5	171	0	250	3	4	4
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1845	1900	1845	1900
Adj Flow Rate, veh/h	6	1374	234	268	1249	5	178	0	260	3	4	4
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	0	1	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	329	2042	344	290	2782	11	290	326	277	86	113	98
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.67	0.67	0.67	0.07	0.77	0.77	0.18	0.00	0.18	0.18	0.18	0.18
Ln Grp Delay, s/veh	10.6	17.7	18.1	36.3	6.9	6.9	74.1	0.0	108.2	57.2	0.0	0.0
Ln Grp LOS	B	B	B	D	A	A	E		F	E		
Approach Vol, veh/h		1614			1522			438			11	
Approach Delay, s/veh		17.8			12.0			94.4			57.2	
Approach LOS		B			B			F			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Case No		5.0	1.2	6.0		8.0		4.0
Phs Duration (G+Y+Rc), s		34.0	16.0	117.0		34.0		133.0
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5		4.5
Max Green (Gmax), s		29.5	18.5	105.5		29.5		128.5
Max Allow Headway (MAH), s		4.0	3.8	5.3		4.0		5.3
Max Q Clear (g_c+I1), s		29.3	11.1	48.2		2.9		22.3
Green Ext Time (g_e), s		0.0	0.5	42.0		1.5		62.3
Prob of Phs Call (p_c)		1.00	1.00	1.00		1.00		1.00
Prob of Max Out (p_x)		0.00	0.09	0.00		0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3	7		1		
Mvmt Sat Flow, veh/h		1388	1774	441		331		

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1845		3032		639		3615

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		510		554		14

Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	1	0	0
Lane Assignment			(Pr/Pm)			L+T+R		

Lanes in Grp	0	1	1	1	0	1	0	0
Grp Vol (v), veh/h	0	178	268	6	0	11	0	0
Grp Sat Flow (s), veh/h/ln	0	1388	1774	441	0	1525	0	0
Q Serve Time (g_s), s	0.0	19.1	9.1	0.8	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	20.0	9.1	5.1	0.0	0.9	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1388	314	441	0	1137	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	1757	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	29.5	114.5	112.5	0.0	29.5	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	28.6	66.3	108.2	0.0	29.5	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	19.1	66.3	0.8	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	5.3	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	1.00	0.00	0.27	0.00	0.00
Lane Grp Cap (c), veh/h	0	290	290	329	0	297	0	0
V/C Ratio (X)	0.00	0.61	0.92	0.02	0.00	0.04	0.00	0.00
Avail Cap (c_a), veh/h	0	290	364	329	0	297	0	0
Upstream Filter (I)	0.00	1.00	0.09	0.51	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	64.7	32.7	10.5	0.0	57.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	9.3	3.6	0.1	0.0	0.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	74.1	36.3	10.6	0.0	57.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	7.8	12.2	0.1	0.0	0.4	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.8	0.3	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	8.5	12.5	0.1	0.0	0.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.56	0.99	0.01	0.00	0.04	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T				T
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	795	0	0	0	611
Grp Sat Flow (s), veh/h/ln	0	1845	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	44.5	0.0	0.0	0.0	20.3
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	44.5	0.0	0.0	0.0	20.3
Lane Grp Cap (c), veh/h	0	326	0	1192	0	0	0	1362
V/C Ratio (X)	0.00	0.00	0.00	0.67	0.00	0.00	0.00	0.45
Avail Cap (c_a), veh/h	0	326	0	1192	0	0	0	1362
Upstream Filter (I)	0.00	0.00	0.00	0.51	0.00	0.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	0.0	0.0	16.2	0.0	0.0	0.0	6.8
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	17.7	0.0	0.0	0.0	6.9
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	21.6	0.0	0.0	0.0	9.8

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	22.1	0.0	0.0	0.0	9.9
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.32	0.00	0.00	0.00	0.26
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R				T+R
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	260	0	813	0	0	0	643
Grp Sat Flow (s), veh/h/ln	0	1568	0	1773	0	0	0	1860
Q Serve Time (g_s), s	0.0	27.3	0.0	46.2	0.0	0.0	0.0	20.3
Cycle Q Clear Time (g_c), s	0.0	27.3	0.0	46.2	0.0	0.0	0.0	20.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.29	0.00	0.36	0.00	0.01
Lane Grp Cap (c), veh/h	0	277	0	1194	0	0	0	1431
V/C Ratio (X)	0.00	0.94	0.00	0.68	0.00	0.00	0.00	0.45
Avail Cap (c_a), veh/h	0	277	0	1194	0	0	0	1431
Upstream Filter (I)	0.00	1.00	0.00	0.51	0.00	0.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	67.9	0.0	16.5	0.0	0.0	0.0	6.8
Incr Delay (d2), s/veh	0.0	40.4	0.0	1.6	0.0	0.0	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	108.2	0.0	18.1	0.0	0.0	0.0	6.9
1st-Term Q (Q1), veh/ln	0.0	11.9	0.0	22.6	0.0	0.0	0.0	10.4
2nd-Term Q (Q2), veh/ln	0.0	3.1	0.0	0.5	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	15.0	0.0	23.1	0.0	0.0	0.0	10.4
%ile Storage Ratio (RQ%)	0.00	1.21	0.00	0.33	0.00	0.00	0.00	0.27
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		24.9						
HCM 2010 LOS		C						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	1530	0	23	1510	153	0	0	28	106	0	33
Future Volume (veh/h)	52	1530	0	23	1510	153	0	0	28	106	0	33
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	0	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	53	1561	0	23	1541	156	0	0	29	108	0	34
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	1	1	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	0	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			No			Yes		
Cap, veh/h	87	1275	0	47	1097	110	0	0	470	511	0	470
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.36	0.00	0.03	0.34	0.34	0.00	0.00	0.30	0.30	0.00	0.30
Ln Grp Delay, s/veh	32.4	125.0	0.0	36.4	206.9	217.2	0.0	0.0	15.2	17.5	0.0	15.3
Ln Grp LOS	C	F		D	F	F			B	B		B
Approach Vol, veh/h		1614			1720			29			142	
Approach Delay, s/veh		122.0			209.8			15.2			17.0	
Approach LOS		F			F			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		8.0	2.0	4.0		6.0	2.0	4.0
Phs Duration (G+Y+Rc), s		24.0	8.0	28.0		24.0	9.3	26.7
Change Period (Y+Rc), s		6.0	6.4	6.4		6.0	6.4	6.4
Max Green (Gmax), s		18.0	5.0	18.6		18.0	5.0	18.6
Max Allow Headway (MAH), s		4.5	3.8	5.3		4.5	3.8	5.3
Max Q Clear (g_c+I1), s		2.8	2.8	23.6		6.5	3.8	22.3
Green Ext Time (g_e), s		0.5	0.0	0.0		0.5	0.0	0.0
Prob of Phs Call (p_c)		1.00	0.32	1.00		1.00	0.59	1.00
Prob of Max Out (p_x)		0.00	1.00	0.00		0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		0	1774			1362	1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		0		3632		0		3249

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		0		1568		326

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0
Lane Assignment			(Prot)				(Prot)	

Lanes in Grp	0	0	1	0	0	1	1	0
Grp Vol (v), veh/h	0	0	23	0	0	108	53	0
Grp Sat Flow (s), veh/h/ln	0	0	1774	0	0	1362	1774	0
Q Serve Time (g_s), s	0.0	0.0	0.8	0.0	0.0	3.7	1.8	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.8	0.0	0.0	4.5	1.8	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	1362	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	18.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	17.2	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	3.7	0.0	0.0
Time to First Blk (g_f), s	0.0	18.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	47	0	0	511	87	0
V/C Ratio (X)	0.00	0.00	0.49	0.00	0.00	0.21	0.61	0.00
Avail Cap (c_a), veh/h	0	0	148	0	0	511	148	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	1.00	0.64	0.00
Uniform Delay (d1), s/veh	0.0	0.0	28.8	0.0	0.0	16.6	28.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	7.6	0.0	0.0	0.9	4.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	36.4	0.0	0.0	17.5	32.4	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.4	0.0	0.0	1.4	0.9	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.5	0.0	0.0	1.5	1.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.06	0.00	0.00	0.26	0.14	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	1
Grp Vol (v), veh/h	0	0	0	1561	0	0	0	833
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	21.6	0.0	0.0	0.0	20.3
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	21.6	0.0	0.0	0.0	20.3
Lane Grp Cap (c), veh/h	0	0	0	1275	0	0	0	598
V/C Ratio (X)	0.00	0.00	0.00	1.22	0.00	0.00	0.00	1.39
Avail Cap (c_a), veh/h	0	0	0	1275	0	0	0	598
Upstream Filter (I)	0.00	0.00	0.00	0.64	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	19.2	0.0	0.0	0.0	19.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	105.8	0.0	0.0	0.0	187.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	125.0	0.0	0.0	0.0	206.9
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	10.4	0.0	0.0	0.0	9.8

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	18.7	0.0	0.0	0.0	31.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	29.2	0.0	0.0	0.0	40.8
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.76	0.00	0.00	0.00	3.37
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	71.6	0.0	0.0	0.0	58.7
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R				T+R		T+R
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	29	0	0	0	34	0	864
Grp Sat Flow (s), veh/h/ln	0	1568	0	0	0	1568	0	1805
Q Serve Time (g_s), s	0.0	0.8	0.0	0.0	0.0	0.9	0.0	20.3
Cycle Q Clear Time (g_c), s	0.0	0.8	0.0	0.0	0.0	0.9	0.0	20.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.18
Lane Grp Cap (c), veh/h	0	470	0	0	0	470	0	610
V/C Ratio (X)	0.00	0.06	0.00	0.00	0.00	0.07	0.00	1.42
Avail Cap (c_a), veh/h	0	470	0	0	0	470	0	610
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	15.0	0.0	0.0	0.0	15.0	0.0	19.9
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.0	0.0	0.3	0.0	197.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	15.2	0.0	0.0	0.0	15.3	0.0	217.2
1st-Term Q (Q1), veh/ln	0.0	0.3	0.0	0.0	0.0	0.4	0.0	10.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.4	0.0	0.0	0.0	0.4	0.0	43.4
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.00	0.00	0.03	0.00	3.58
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	63.6
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
Intersection Summary								
HCM 2010 Ctrl Delay		159.9						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	463	935	216	346	812	114	314	1004	306	245	961	460
Future Volume (veh/h)	463	935	216	346	812	114	314	1004	306	245	961	460
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	493	995	230	368	864	121	334	1068	326	261	1022	489
Adj No. of Lanes	2	3	0	2	3	0	2	3	0	2	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	522	1133	261	427	1113	155	353	1122	342	323	955	446
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.15	0.27	0.27	0.12	0.25	0.25	0.10	0.29	0.29	0.09	0.28	0.28
Ln Grp Delay, s/veh	74.8	51.7	60.8	64.4	47.7	53.8	86.1	59.3	70.9	60.6	91.3	112.8
Ln Grp LOS	E	D	E	E	D	D	F	E	E	E	F	F
Approach Vol, veh/h		1718			1353			1728			1772	
Approach Delay, s/veh		60.5			53.7			67.5			92.7	
Approach LOS		E			D			E			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	4.0
Phs Duration (G+Y+Rc), s	17.0	40.0	20.8	38.2	18.0	39.0	24.0	35.0
Change Period (Y+Rc), s	6.0	6.0	6.4	6.4	6.0	6.0	6.4	6.4
Max Green (Gmax), s	14.0	31.0	15.6	30.6	12.0	33.0	17.6	28.6
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.3	3.8	5.3	3.8	5.3
Max Q Clear (g_c+I1), s	10.7	33.7	14.2	28.8	13.3	35.0	18.5	22.8
Green Ext Time (g_e), s	0.3	0.0	0.2	1.7	0.0	0.0	0.0	5.1
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		1		3		5		7
Mvmt Sat Flow, veh/h		3408		3442		3408		3442

Through Movement Data								
Assigned Mvmt			2		4		6		8
Mvmt Sat Flow, veh/h			3828		4132		3357		4513

Right-Turn Movement Data								
Assigned Mvmt			12		14		16		18
Mvmt Sat Flow, veh/h			1168		953		1568		629

Left Lane Group Data								
Assigned Mvmt		1	0	3	0	5	0	7	0
Lane Assignment		(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	261	0	368	0	334	0	493	0
Grp Sat Flow (s), veh/h/ln	1704	0	1721	0	1704	0	1721	0
Q Serve Time (g_s), s	8.7	0.0	12.2	0.0	11.3	0.0	16.5	0.0
Cycle Q Clear Time (g_c), s	8.7	0.0	12.2	0.0	11.3	0.0	16.5	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	323	0	427	0	353	0	522	0
V/C Ratio (X)	0.81	0.00	0.86	0.00	0.95	0.00	0.94	0.00
Avail Cap (c_a), veh/h	411	0	463	0	353	0	522	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	51.5	0.0	49.8	0.0	51.7	0.0	48.7	0.0
Incr Delay (d2), s/veh	9.1	0.0	14.5	0.0	34.4	0.0	26.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	60.6	0.0	64.4	0.0	86.1	0.0	74.8	0.0
1st-Term Q (Q1), veh/ln	4.1	0.0	5.8	0.0	5.3	0.0	7.8	0.0
2nd-Term Q (Q2), veh/ln	0.4	0.0	0.9	0.0	1.7	0.0	1.9	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	4.5	0.0	6.6	0.0	7.0	0.0	9.7	0.0
%ile Storage Ratio (RQ%)	0.36	0.00	0.99	0.00	0.56	0.00	0.82	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	2	0	2
Grp Vol (v), veh/h	0	937	0	816	0	1022	0	648
Grp Sat Flow (s), veh/h/ln	0	1679	0	1695	0	1679	0	1695
Q Serve Time (g_s), s	0.0	31.7	0.0	26.7	0.0	33.0	0.0	20.7
Cycle Q Clear Time (g_c), s	0.0	31.7	0.0	26.7	0.0	33.0	0.0	20.7
Lane Grp Cap (c), veh/h	0	984	0	930	0	955	0	836
V/C Ratio (X)	0.00	0.95	0.00	0.88	0.00	1.07	0.00	0.78
Avail Cap (c_a), veh/h	0	984	0	930	0	955	0	836
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	40.2	0.0	40.2	0.0	41.5	0.0	40.7
Incr Delay (d2), s/veh	0.0	19.1	0.0	11.5	0.0	49.8	0.0	7.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	59.3	0.0	51.7	0.0	91.3	0.0	47.7
1st-Term Q (Q1), veh/ln	0.0	14.7	0.0	12.5	0.0	15.3	0.0	9.6

2nd-Term Q (Q2), veh/ln	0.0	2.6	0.0	1.5	0.0	6.6	0.0	0.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	17.3	0.0	14.0	0.0	21.9	0.0	10.4
%ile Storage Ratio (RQ%)	0.00	0.97	0.00	0.56	0.00	0.84	0.00	1.66
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	16.7	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	457	0	409	0	489	0	337
Grp Sat Flow (s), veh/h/ln	0	1639	0	1695	0	1568	0	1752
Q Serve Time (g_s), s	0.0	31.7	0.0	26.8	0.0	33.0	0.0	20.8
Cycle Q Clear Time (g_c), s	0.0	31.7	0.0	26.8	0.0	33.0	0.0	20.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.71	0.00	0.56	0.00	1.00	0.00	0.36
Lane Grp Cap (c), veh/h	0	480	0	465	0	446	0	432
V/C Ratio (X)	0.00	0.95	0.00	0.88	0.00	1.10	0.00	0.78
Avail Cap (c_a), veh/h	0	480	0	465	0	446	0	432
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	40.2	0.0	40.3	0.0	41.5	0.0	40.8
Incr Delay (d2), s/veh	0.0	30.7	0.0	20.5	0.0	71.3	0.0	13.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	70.9	0.0	60.8	0.0	112.8	0.0	53.8
1st-Term Q (Q1), veh/ln	0.0	14.4	0.0	12.5	0.0	14.2	0.0	10.0
2nd-Term Q (Q2), veh/ln	0.0	4.1	0.0	2.7	0.0	8.8	0.0	1.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	18.4	0.0	15.1	0.0	23.1	0.0	11.6
%ile Storage Ratio (RQ%)	0.00	1.03	0.00	0.61	0.00	0.88	0.00	1.84
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	10.7	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		69.6						
HCM 2010 LOS		E						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	161	1258	43	0	1164	133	124	47	3	92	35	120
Future Volume (veh/h)	161	1258	43	0	1164	133	124	47	3	92	35	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	0	1863	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	166	1297	44	0	1200	137	128	48	3	95	36	124
Adj No. of Lanes	1	2	0	0	2	0	1	1	1	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	0	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			No			Yes			Yes		
Cap, veh/h	96	2392	81	0	1906	217	49	337	286	49	337	286
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.68	0.68	0.00	0.59	0.59	0.03	0.18	0.18	0.03	0.18	0.18
Ln Grp Delay, s/veh	454.6	15.8	15.7	0.0	26.2	26.2	858.8	61.9	59.6	568.4	61.3	69.3
Ln Grp LOS	F	B	B		C	C	F	E	E	F	E	E
Approach Vol, veh/h		1507			1337			179			255	
Approach Delay, s/veh		64.1			26.2			631.7			254.1	
Approach LOS		E			C			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6	7	8
Case No	2.0	3.0		4.0	2.0	3.0	2.0	8.0
Phs Duration (G+Y+Rc), s	10.7	39.0		128.3	10.7	39.0	16.0	112.3
Change Period (Y+Rc), s	* 5.7	6.5		6.4	* 5.7	6.5	6.4	6.4
Max Green (Gmax), s	* 5	32.5		121.6	* 5	32.5	9.6	105.6
Max Allow Headway (MAH), s	3.8	4.5		5.3	3.8	4.5	3.8	5.3
Max Q Clear (g_c+I1), s	7.0	5.9		35.2	7.0	14.5	11.6	45.4
Green Ext Time (g_e), s	0.0	0.8		48.0	0.0	0.8	0.0	39.1
Prob of Phs Call (p_c)	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	0.00	0.00		0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1				5		7	3
Mvmt Sat Flow, veh/h	1757				1757		1774	0

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1845		3493		1845		3296

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		118		1568		365

Left Lane Group Data								
Assigned Mvmt	1	0	0	0	5	0	7	3
Lane Assignment	(Prot)				(Prot)		(Prot)	

Lanes in Grp	1	0	0	0	1	0	1	0
Grp Vol (v), veh/h	95	0	0	0	128	0	166	0
Grp Sat Flow (s), veh/h/ln	1757	0	0	0	1757	0	1774	0
Q Serve Time (g_s), s	5.0	0.0	0.0	0.0	5.0	0.0	9.6	0.0
Cycle Q Clear Time (g_c), s	5.0	0.0	0.0	0.0	5.0	0.0	9.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	105.9
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	49	0	0	0	49	0	96	0
V/C Ratio (X)	1.93	0.00	0.00	0.00	2.59	0.00	1.73	0.00
Avail Cap (c_a), veh/h	49	0	0	0	49	0	96	0
Upstream Filter (I)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	86.5	0.0	0.0	0.0	86.5	0.0	84.2	0.0
Incr Delay (d2), s/veh	481.9	0.0	0.0	0.0	772.3	0.0	370.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	568.4	0.0	0.0	0.0	858.8	0.0	454.6	0.0
1st-Term Q (Q1), veh/ln	2.4	0.0	0.0	0.0	2.4	0.0	4.7	0.0
2nd-Term Q (Q2), veh/ln	6.6	0.0	0.0	0.0	10.6	0.0	9.8	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	9.0	0.0	0.0	0.0	13.0	0.0	14.5	0.0
%ile Storage Ratio (RQ%)	2.31	0.00	0.00	0.00	2.38	0.00	0.88	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	11.4	0.0	0.0	0.0	19.7	0.0	17.6	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.5	0.0	0.0	0.0	0.6	0.0	0.4	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	48	0	657	0	36	0	661
Grp Sat Flow (s), veh/h/ln	0	1845	0	1770	0	1845	0	1770
Q Serve Time (g_s), s	0.0	3.9	0.0	33.1	0.0	2.9	0.0	43.0
Cycle Q Clear Time (g_c), s	0.0	3.9	0.0	33.1	0.0	2.9	0.0	43.0
Lane Grp Cap (c), veh/h	0	337	0	1212	0	337	0	1053
V/C Ratio (X)	0.00	0.14	0.00	0.54	0.00	0.11	0.00	0.63
Avail Cap (c_a), veh/h	0	337	0	1212	0	337	0	1053
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	61.1	0.0	14.1	0.0	60.7	0.0	23.3
Incr Delay (d2), s/veh	0.0	0.9	0.0	1.7	0.0	0.6	0.0	2.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	61.9	0.0	15.8	0.0	61.3	0.0	26.2
1st-Term Q (Q1), veh/ln	0.0	2.0	0.0	16.0	0.0	1.5	0.0	20.9

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.6	0.0	0.1	0.0	0.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.1	0.0	16.6	0.0	1.5	0.0	21.8
%ile Storage Ratio (RQ%)	0.00	0.21	0.00	0.20	0.00	0.08	0.00	0.43
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	3	0	684	0	124	0	676
Grp Sat Flow (s), veh/h/ln	0	1568	0	1842	0	1568	0	1798
Q Serve Time (g_s), s	0.0	0.3	0.0	33.2	0.0	12.5	0.0	43.4
Cycle Q Clear Time (g_c), s	0.0	0.3	0.0	33.2	0.0	12.5	0.0	43.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.06	0.00	1.00	0.00	0.20
Lane Grp Cap (c), veh/h	0	286	0	1261	0	286	0	1070
V/C Ratio (X)	0.00	0.01	0.00	0.54	0.00	0.43	0.00	0.63
Avail Cap (c_a), veh/h	0	286	0	1261	0	286	0	1070
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	59.6	0.0	14.1	0.0	64.6	0.0	23.4
Incr Delay (d2), s/veh	0.0	0.1	0.0	1.7	0.0	4.7	0.0	2.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	59.6	0.0	15.7	0.0	69.3	0.0	26.2
1st-Term Q (Q1), veh/ln	0.0	0.1	0.0	16.7	0.0	11.1	0.0	21.4
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.6	0.0	0.4	0.0	0.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.1	0.0	17.3	0.0	11.5	0.0	22.2
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.20	0.00	0.61	0.00	0.44
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	94.4
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	399	784	211	237	669	288	407	1638	217	364	1020	213
Future Volume (veh/h)	399	784	211	237	669	288	407	1638	217	364	1020	213
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	407	800	215	242	683	294	415	1671	221	371	1041	217
Adj No. of Lanes	2	3	0	2	3	1	2	3	0	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	327	890	237	159	883	275	464	2010	265	422	1814	378
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.10	0.22	0.22	0.05	0.17	0.17	0.14	0.45	0.45	0.12	0.43	0.43
Ln Grp Delay, s/veh	206.8	77.6	90.2	340.4	71.2	141.6	85.3	45.4	50.3	83.2	36.6	38.2
Ln Grp LOS	F	E	F	F	E	F	F	D	D	F	D	D
Approach Vol, veh/h		1422			1219			2307			1629	
Approach Delay, s/veh		117.6			141.6			54.0			47.6	
Approach LOS		F			F			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	27.1	80.0	14.0	42.9	29.1	78.0	22.0	34.9
Change Period (Y+Rc), s	6.8	6.8	6.4	6.4	6.8	6.8	6.4	6.4
Max Green (Gmax), s	26.2	71.2	7.6	32.6	26.2	71.2	15.6	24.6
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.1	3.8	5.3	3.8	5.1
Max Q Clear (g_c+I1), s	19.6	55.9	9.6	34.2	21.6	32.8	17.6	30.5
Green Ext Time (g_e), s	0.8	14.2	0.0	0.0	0.7	32.7	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	0.18	0.00	1.00	0.00	0.66	0.00	1.00	0.00

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	3408	3442	3408	3442

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	4504	3999	4179	5085

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	593	1066	870	1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	371	0	242	0	415	0	407	0
Grp Sat Flow (s), veh/h/ln	1704	0	1721	0	1704	0	1721	0
Q Serve Time (g_s), s	17.6	0.0	7.6	0.0	19.6	0.0	15.6	0.0
Cycle Q Clear Time (g_c), s	17.6	0.0	7.6	0.0	19.6	0.0	15.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	422	0	159	0	464	0	327	0
V/C Ratio (X)	0.88	0.00	1.52	0.00	0.89	0.00	1.24	0.00
Avail Cap (c_a), veh/h	544	0	159	0	544	0	327	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	70.6	0.0	78.2	0.0	69.7	0.0	74.2	0.0
Incr Delay (d2), s/veh	12.6	0.0	262.2	0.0	15.6	0.0	132.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	83.2	0.0	340.4	0.0	85.3	0.0	206.8	0.0
1st-Term Q (Q1), veh/ln	8.3	0.0	3.6	0.0	9.3	0.0	7.4	0.0
2nd-Term Q (Q2), veh/ln	0.7	0.0	5.8	0.0	1.0	0.0	6.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	9.0	0.0	9.4	0.0	10.3	0.0	13.4	0.0
%ile Storage Ratio (RQ%)	0.40	0.00	0.49	0.00	0.66	0.00	0.68	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	20.6	0.0	0.0	0.0	19.9	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.4	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	2	0	3
Grp Vol (v), veh/h	0	1244	0	677	0	836	0	683
Grp Sat Flow (s), veh/h/ln	0	1679	0	1695	0	1679	0	1695
Q Serve Time (g_s), s	0.0	53.5	0.0	31.8	0.0	30.8	0.0	21.0
Cycle Q Clear Time (g_c), s	0.0	53.5	0.0	31.8	0.0	30.8	0.0	21.0
Lane Grp Cap (c), veh/h	0	1499	0	754	0	1458	0	883
V/C Ratio (X)	0.00	0.83	0.00	0.90	0.00	0.57	0.00	0.77
Avail Cap (c_a), veh/h	0	1499	0	754	0	1458	0	883
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	39.9	0.0	62.0	0.0	35.0	0.0	64.7
Incr Delay (d2), s/veh	0.0	5.5	0.0	15.7	0.0	1.6	0.0	6.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	45.4	0.0	77.6	0.0	36.6	0.0	71.2
1st-Term Q (Q1), veh/ln	0.0	24.7	0.0	15.0	0.0	14.3	0.0	9.9

2nd-Term Q (Q2), veh/ln	0.0	1.1	0.0	1.6	0.0	0.3	0.0	0.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	25.8	0.0	16.6	0.0	14.6	0.0	10.4
%ile Storage Ratio (RQ%)	0.00	1.18	0.00	0.79	0.00	0.56	0.00	0.17
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	648	0	338	0	422	0	294
Grp Sat Flow (s), veh/h/ln	0	1740	0	1675	0	1691	0	1583
Q Serve Time (g_s), s	0.0	53.9	0.0	32.2	0.0	30.8	0.0	28.5
Cycle Q Clear Time (g_c), s	0.0	53.9	0.0	32.2	0.0	30.8	0.0	28.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.34	0.00	0.64	0.00	0.51	0.00	1.00
Lane Grp Cap (c), veh/h	0	777	0	373	0	734	0	275
V/C Ratio (X)	0.00	0.83	0.00	0.91	0.00	0.57	0.00	1.07
Avail Cap (c_a), veh/h	0	777	0	373	0	734	0	275
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	40.0	0.0	62.1	0.0	35.0	0.0	67.8
Incr Delay (d2), s/veh	0.0	10.3	0.0	28.1	0.0	3.3	0.0	73.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	50.3	0.0	90.2	0.0	38.2	0.0	141.6
1st-Term Q (Q1), veh/ln	0.0	25.9	0.0	14.9	0.0	14.4	0.0	12.5
2nd-Term Q (Q2), veh/ln	0.0	2.2	0.0	2.9	0.0	0.7	0.0	5.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	28.1	0.0	17.8	0.0	15.1	0.0	18.1
%ile Storage Ratio (RQ%)	0.00	1.28	0.00	0.84	0.00	0.58	0.00	0.64
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Intersection Summary								
HCM 2010 Ctrl Delay		82.4						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	1010	186	267	832	166	61	49	120	134	57	48
Future Volume (veh/h)	45	1010	186	267	832	166	61	49	120	134	57	48
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1900	1712	1712	1712	1776	1776	1900	1776	1776	1776
Adj Flow Rate, veh/h	47	1063	196	281	876	175	64	52	126	141	60	51
Adj No. of Lanes	2	3	0	2	3	1	1	2	0	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	11	11	11	11	11	11	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	77	1350	249	90	1609	501	82	734	656	195	1505	673
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.02	0.34	0.34	0.03	0.34	0.34	0.05	0.43	0.43	0.06	0.45	0.45
Ln Grp Delay, s/veh	77.0	45.5	48.8	1056.5	37.6	34.9	81.0	23.4	25.2	70.1	22.1	22.6
Ln Grp LOS	E	D	D	F	D	C	F	C	C	E	C	C
Approach Vol, veh/h		1306			1332			242			252	
Approach Delay, s/veh		47.7			252.2			39.6			49.1	
Approach LOS		D			F			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	12.4	66.6	8.0	54.0	10.8	68.2	7.4	54.6
Change Period (Y+Rc), s	4.0	5.3	4.0	* 6	4.0	5.3	4.0	* 6
Max Green (Gmax), s	42.0	24.7	4.0	* 51	42.0	24.7	4.0	* 51
Max Allow Headway (MAH), s	3.8	5.2	3.8	5.2	3.8	5.2	3.8	5.2
Max Q Clear (g_c+I1), s	8.0	9.3	6.0	36.1	7.3	4.7	4.1	23.3
Green Ext Time (g_e), s	0.5	1.4	0.0	11.9	0.2	1.5	0.0	19.2
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.92	1.00	0.84	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.81	0.00	0.00	1.00	0.61

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	3281	3163	1691	3163

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	1687	3967	3374	4673

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	1509	731	1509	1455

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	1	0	2	0
Grp Vol (v), veh/h	141	0	281	0	64	0	47	0
Grp Sat Flow (s), veh/h/ln	1640	0	1581	0	1691	0	1581	0
Q Serve Time (g_s), s	6.0	0.0	4.0	0.0	5.3	0.0	2.1	0.0
Cycle Q Clear Time (g_c), s	6.0	0.0	4.0	0.0	5.3	0.0	2.1	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	195	0	90	0	82	0	77	0
V/C Ratio (X)	0.72	0.00	3.13	0.00	0.78	0.00	0.61	0.00
Avail Cap (c_a), veh/h	977	0	90	0	504	0	90	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.99	0.00	1.00	0.00
Uniform Delay (d1), s/veh	65.2	0.0	68.5	0.0	66.3	0.0	68.1	0.0
Incr Delay (d2), s/veh	5.0	0.0	988.0	0.0	14.7	0.0	8.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	70.1	0.0	1056.5	0.0	81.0	0.0	77.0	0.0
1st-Term Q (Q1), veh/ln	2.7	0.0	1.7	0.0	2.5	0.0	0.9	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	12.3	0.0	0.3	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	2.8	0.0	14.1	0.0	2.8	0.0	1.0	0.0
%ile Storage Ratio (RQ%)	0.38	0.00	1.96	0.00	0.46	0.00	0.08	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	47.8	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	2	0	3
Grp Vol (v), veh/h	0	52	0	834	0	60	0	876
Grp Sat Flow (s), veh/h/ln	0	1687	0	1558	0	1687	0	1558
Q Serve Time (g_s), s	0.0	2.5	0.0	34.0	0.0	1.4	0.0	21.3
Cycle Q Clear Time (g_c), s	0.0	2.5	0.0	34.0	0.0	1.4	0.0	21.3
Lane Grp Cap (c), veh/h	0	734	0	1060	0	1505	0	1609
V/C Ratio (X)	0.00	0.07	0.00	0.79	0.00	0.04	0.00	0.54
Avail Cap (c_a), veh/h	0	734	0	1127	0	1505	0	1690
Upstream Filter (I)	0.00	0.99	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	23.2	0.0	41.9	0.0	22.0	0.0	37.3
Incr Delay (d2), s/veh	0.0	0.2	0.0	3.6	0.0	0.0	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	23.4	0.0	45.5	0.0	22.1	0.0	37.6
1st-Term Q (Q1), veh/ln	0.0	1.2	0.0	14.6	0.0	0.7	0.0	9.2

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.2	0.0	15.1	0.0	0.7	0.0	9.2
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.16	0.00	0.01	0.00	0.16
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	126	0	425	0	51	0	175
Grp Sat Flow (s), veh/h/ln	0	1509	0	1583	0	1509	0	1455
Q Serve Time (g_s), s	0.0	7.3	0.0	34.1	0.0	2.7	0.0	12.6
Cycle Q Clear Time (g_c), s	0.0	7.3	0.0	34.1	0.0	2.7	0.0	12.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.46	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	656	0	539	0	673	0	501
V/C Ratio (X)	0.00	0.19	0.00	0.79	0.00	0.08	0.00	0.35
Avail Cap (c_a), veh/h	0	656	0	572	0	673	0	526
Upstream Filter (I)	0.00	0.99	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	24.6	0.0	41.9	0.0	22.4	0.0	34.4
Incr Delay (d2), s/veh	0.0	0.6	0.0	6.9	0.0	0.2	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	25.2	0.0	48.8	0.0	22.6	0.0	34.9
1st-Term Q (Q1), veh/ln	0.0	3.0	0.0	14.9	0.0	1.1	0.0	5.1
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	1.0	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	3.1	0.0	15.9	0.0	1.2	0.0	5.1
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.17	0.00	0.19	0.00	0.09
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	134.2
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	74	314	45	40	297	131	31	72	21	126	67	84
Future Volume (veh/h)	74	314	45	40	297	131	31	72	21	126	67	84
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1900	1900	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	79	334	48	43	316	139	33	77	22	134	71	89
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	152	432	57	132	617	583	585	569	163	643	307	385
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.37	0.37	0.37	0.37	0.37	0.37	0.43	0.43	0.43	0.43	0.43	0.43
Ln Grp Delay, s/veh	16.2	0.0	0.0	11.5	0.0	9.9	9.5	0.0	8.2	9.4	0.0	8.2
Ln Grp LOS	B			B		A	A		A	A		A
Approach Vol, veh/h		461			498			132			294	
Approach Delay, s/veh		16.2			11.1			8.5			8.8	
Approach LOS		B			B			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		8.0		6.0		7.0
Phs Duration (G+Y+Rc), s		23.8		21.2		23.8		21.2
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green (Gmax), s		18.0		18.0		18.0		18.0
Max Allow Headway (MAH), s		4.9		5.3		4.9		5.3
Max Q Clear (g_c+I1), s		5.7		15.1		6.9		8.8
Green Ext Time (g_e), s		1.7		1.6		1.6		4.0
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		1.00		0.00		0.63

Left-Turn Movement Data				
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		1164		157		1230		113

Through Movement Data				
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1329		1163		718		1660

Right-Turn Movement Data				
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		380		153		899		1568

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment				L+T+R				L+T

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	33	0	461	0	134	0	359
Grp Sat Flow (s), veh/h/ln	0	1164	0	1473	0	1230	0	1773
Q Serve Time (g_s), s	0.0	0.8	0.0	6.3	0.0	3.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	3.7	0.0	13.1	0.0	4.9	0.0	6.8
Perm LT Sat Flow (s_l), veh/h/ln	0	1164	0	951	0	1230	0	1017
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	1743
Perm LT Eff Green (g_p), s	0.0	19.3	0.0	16.7	0.0	19.3	0.0	16.7
Perm LT Serve Time (g_u), s	0.0	16.4	0.0	9.9	0.0	17.7	0.0	3.6
Perm LT Q Serve Time (g_ps), s	0.0	0.8	0.0	6.3	0.0	3.3	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	5.1	0.0	0.0	0.0	7.5
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	5.1	0.0	0.0	0.0	6.8
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	0.17	0.00	1.00	0.00	0.12
Lane Grp Cap (c), veh/h	0	585	0	642	0	643	0	749
V/C Ratio (X)	0.00	0.06	0.00	0.72	0.00	0.21	0.00	0.48
Avail Cap (c_a), veh/h	0	585	0	685	0	643	0	796
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	9.3	0.0	12.8	0.0	9.3	0.0	11.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	3.4	0.0	0.1	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.5	0.0	16.2	0.0	9.4	0.0	11.5
1st-Term Q (Q1), veh/ln	0.0	0.3	0.0	5.3	0.0	1.1	0.0	3.4
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.3	0.0	5.9	0.0	1.1	0.0	3.5
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.25	0.00	0.01	0.00	0.13
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment								
Lanes in Grp	0	0	0	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R				T+R		R
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	99	0	0	0	160	0	139
Grp Sat Flow (s), veh/h/ln	0	1709	0	0	0	1617	0	1568
Q Serve Time (g_s), s	0.0	1.6	0.0	0.0	0.0	2.8	0.0	2.7
Cycle Q Clear Time (g_c), s	0.0	1.6	0.0	0.0	0.0	2.8	0.0	2.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.22	0.00	0.10	0.00	0.56	0.00	1.00
Lane Grp Cap (c), veh/h	0	731	0	0	0	692	0	583
V/C Ratio (X)	0.00	0.14	0.00	0.00	0.00	0.23	0.00	0.24
Avail Cap (c_a), veh/h	0	731	0	0	0	692	0	627
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	7.8	0.0	0.0	0.0	8.2	0.0	9.7
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.2	0.0	0.0	0.0	8.2	0.0	9.9
1st-Term Q (Q1), veh/ln	0.0	0.7	0.0	0.0	0.0	1.2	0.0	1.2
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.8	0.0	0.0	0.0	1.3	0.0	1.2
%ile Storage Ratio (RQ%)	0.00	0.04	0.00	0.00	0.00	0.01	0.00	0.04
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		12.0						
HCM 2010 LOS		B						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	149	660	3	18	1337	818	2	13	23	216	1	152
Future Volume (veh/h)	149	660	3	18	1337	818	2	13	23	216	1	152
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1696	1696	1696	1696	1696	1696	1900	1696	1900	1696	1696	1696
Adj Flow Rate, veh/h	157	695	3	19	1407	0	2	14	24	227	1	0
Adj No. of Lanes	1	2	1	1	2	1	0	1	0	2	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	12	12	12	12	12	12	12	12	12	12	12	12
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	184	2276	1018	22	1954	874	0	18	30	132	206	175
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.11	0.71	0.71	0.01	0.61	0.00	0.00	0.03	0.03	0.04	0.12	0.00
Ln Grp Delay, s/veh	68.6	7.7	5.8	74.4	18.5	0.0	0.0	0.0	88.7	417.6	51.4	0.0
Ln Grp LOS	E	A	A	E	B				F	F	D	
Approach Vol, veh/h		855			1426			38			228	
Approach Delay, s/veh		18.8			19.3			88.7			416.0	
Approach LOS		B			B			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	4.0	2.0	3.0	0.0	3.0
Phs Duration (G+Y+Rc), s	22.2	87.7	12.0	11.1	8.9	101.0	0.0	23.1
Change Period (Y+Rc), s	7.1	7.1	6.4	6.9	7.1	7.1	6.9	* 6.9
Max Green (Gmax), s	67.9	18.9	5.6	13.1	30.9	55.9	13.1	* 5.6
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.5	3.8	5.3	0.0	5.5
Max Q Clear (g_c+I1), s	14.7	42.6	7.6	5.3	3.6	12.7	0.0	2.1
Green Ext Time (g_e), s	0.5	0.0	0.0	0.1	0.0	25.4	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	0.78	0.50	1.00	0.00	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.11	0.00	0.00	0.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1616		3134		1616		0	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3223		562		3223		1696

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1442		964		1442		1442

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)			

Lanes in Grp	1	0	2	0	1	0	0	0
Grp Vol (v), veh/h	157	0	227	0	19	0	0	0
Grp Sat Flow (s), veh/h/ln	1616	0	1567	0	1616	0	0	0
Q Serve Time (g_s), s	12.7	0.0	5.6	0.0	1.6	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	12.7	0.0	5.6	0.0	1.6	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	184	0	132	0	22	0	0	0
V/C Ratio (X)	0.85	0.00	1.72	0.00	0.86	0.00	0.00	0.00
Avail Cap (c_a), veh/h	825	0	132	0	375	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.09	0.00	0.00	0.00
Uniform Delay (d1), s/veh	57.9	0.0	63.7	0.0	65.5	0.0	0.0	0.0
Incr Delay (d2), s/veh	10.7	0.0	353.9	0.0	8.9	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	68.6	0.0	417.6	0.0	74.4	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	5.7	0.0	2.4	0.0	0.7	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.5	0.0	6.5	0.0	0.1	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	6.2	0.0	8.9	0.0	0.8	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.20	0.00	0.39	0.00	0.06	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	23.8	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	2	0	0	0	2	0	1
Grp Vol (v), veh/h	0	1407	0	0	0	695	0	1
Grp Sat Flow (s), veh/h/ln	0	1612	0	0	0	1612	0	1696
Q Serve Time (g_s), s	0.0	40.6	0.0	0.0	0.0	10.7	0.0	0.1
Cycle Q Clear Time (g_c), s	0.0	40.6	0.0	0.0	0.0	10.7	0.0	0.1
Lane Grp Cap (c), veh/h	0	1954	0	0	0	2276	0	206
V/C Ratio (X)	0.00	0.72	0.00	0.00	0.00	0.31	0.00	0.00
Avail Cap (c_a), veh/h	0	1954	0	0	0	2276	0	206
Upstream Filter (I)	0.00	0.09	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	18.3	0.0	0.0	0.0	7.3	0.0	51.3
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.0	0.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	18.5	0.0	0.0	0.0	7.7	0.0	51.4
1st-Term Q (Q1), veh/ln	0.0	18.0	0.0	0.0	0.0	4.7	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	18.0	0.0	0.0	0.0	4.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.25	0.00	0.00	0.00	0.04	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	38	0	3	0	0
Grp Sat Flow (s), veh/h/ln	0	1442	0	1526	0	1442	0	1442
Q Serve Time (g_s), s	0.0	0.0	0.0	3.3	0.0	0.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	3.3	0.0	0.1	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.63	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	874	0	48	0	1018	0	175
V/C Ratio (X)	0.00	0.00	0.00	0.79	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	874	0	150	0	1018	0	175
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	64.0	0.0	5.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	24.7	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	88.7	0.0	5.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	55.7
HCM 2010 LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	103	812	1706	502	491	468
Future Volume (veh/h)	103	812	1706	502	491	468
Number	1	6	2	12	3	18
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00			1.00	1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1696	1696	1696	1696	1696	1696
Adj Flow Rate, veh/h	108	855	1796	0	517	0
Adj No. of Lanes	1	2	2	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	12	12	12	12	12	12
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	134	2049	1496	669	629	289
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.64	0.46	0.00	0.20	0.00
Ln Grp Delay, s/veh	52.6	7.7	114.4	0.0	34.3	0.0
Ln Grp LOS	D	A	F		C	
Approach Vol, veh/h		963	1796		517	
Approach Delay, s/veh		12.7	114.4		34.3	
Approach LOS		B	F		C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8			6		
Case No	2.0	7.0	9.0			4.0		
Phs Duration (G+Y+Rc), s	13.7	44.2	22.1			57.9		
Change Period (Y+Rc), s	7.1	7.1	6.0			7.1		
Max Green (Gmax), s	7.9	27.9	24.0			42.9		
Max Allow Headway (MAH), s	3.8	5.3	3.8			5.3		
Max Q Clear (g_c+I1), s	7.3	39.1	14.6			12.5		
Green Ext Time (g_e), s	0.0	0.0	1.4			25.2		
Prob of Phs Call (p_c)	0.91	1.00	1.00			1.00		
Prob of Max Out (p_x)	1.00	0.00	0.08			0.00		

Left-Turn Movement Data			
Assigned Mvmt	1	5	3
Mvmt Sat Flow, veh/h	1616	0	3134

Through Movement Data			
Assigned Mvmt		2	8	6
Mvmt Sat Flow, veh/h		3308	0	3308

Right-Turn Movement Data			
Assigned Mvmt		12	18	16
Mvmt Sat Flow, veh/h		1442	1442	0

Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	0	0
Lane Assignment	(Prot)							

Lanes in Grp	1	0	2	0	0	0	0	0
Grp Vol (v), veh/h	108	0	517	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1616	0	1567	0	0	0	0	0
Q Serve Time (g_s), s	5.3	0.0	12.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	5.3	0.0	12.6	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1567	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	37.1	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	134	0	629	0	0	0	0	0
V/C Ratio (X)	0.81	0.00	0.82	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	160	0	940	0	0	0	0	0
Upstream Filter (I)	0.70	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	36.1	0.0	30.6	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	16.6	0.0	3.7	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	52.6	0.0	34.3	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	2.3	0.0	5.5	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.6	0.0	0.3	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	3.0	0.0	5.8	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.17	0.00	0.36	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1796	0	0	0	855	0	0
Grp Sat Flow (s), veh/h/ln	0	1612	0	0	0	1612	0	0
Q Serve Time (g_s), s	0.0	37.1	0.0	0.0	0.0	10.5	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	37.1	0.0	0.0	0.0	10.5	0.0	0.0
Lane Grp Cap (c), veh/h	0	1496	0	0	0	2049	0	0
V/C Ratio (X)	0.00	1.20	0.00	0.00	0.00	0.42	0.00	0.00
Avail Cap (c_a), veh/h	0	1496	0	0	0	2049	0	0
Upstream Filter (I)	0.00	0.41	0.00	0.00	0.00	0.70	0.00	0.00
Uniform Delay (d1), s/veh	0.0	21.4	0.0	0.0	0.0	7.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	93.0	0.0	0.0	0.0	0.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	114.4	0.0	0.0	0.0	7.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	16.4	0.0	0.0	0.0	4.6	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	19.3	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	35.7	0.0	0.0	0.0	4.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.28	0.00	0.00	0.00	0.07	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	74.9	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lane Assignment		R	R					
Lanes in Grp	0	1	1	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1442	1442	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	669	289	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	669	433	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		71.9						
HCM 2010 LOS		E						

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	388	394	255	1337	1871	1079
Future Volume (veh/h)	388	394	255	1337	1871	1079
Number	7	14	5	2	6	16
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00	1.00			1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1827	1827	1827	1827
Adj Flow Rate, veh/h	426	0	280	1469	2056	0
Adj No. of Lanes	2	1	2	3	3	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	4	4	4	4
Opposing Right Turn Influence	Yes		Yes			
Cap, veh/h	479	221	346	3860	3140	978
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.14	0.00	0.10	0.77	0.63	0.00
Ln Grp Delay, s/veh	75.6	0.0	67.4	5.5	17.1	0.0
Ln Grp LOS	E		E	A	B	
Approach Vol, veh/h	426			1749	2056	
Approach Delay, s/veh	75.6			15.4	17.1	
Approach LOS	E			B	B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Case No		4.0		9.0	2.0	7.0		
Phs Duration (G+Y+Rc), s		116.7		26.3	20.6	96.0		
Change Period (Y+Rc), s		6.0		6.4	6.0	6.0		
Max Green (Gmax), s		108.0		22.6	84.0	18.0		
Max Allow Headway (MAH), s		5.2		3.8	3.8	5.2		
Max Q Clear (g_c+I1), s		15.5		19.4	13.6	39.1		
Green Ext Time (g_e), s		76.5		0.5	1.0	0.0		
Prob of Phs Call (p_c)		1.00		1.00	1.00	1.00		
Prob of Max Out (p_x)		0.00		1.00	0.00	0.00		
Left-Turn Movement Data								
Assigned Mvmt				7	5	1		
Mvmt Sat Flow, veh/h				3442	3375	0		
Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		5152		0		5152		
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		0		1583		1553		
Left Lane Group Data								
Assigned Mvmt	0	0	0	7	5	1	0	0
Lane Assignment					(Prot)			

Lanes in Grp	0	0	0	2	2	0	0	0
Grp Vol (v), veh/h	0	0	0	426	280	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1721	1688	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	17.4	11.6	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	17.4	11.6	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1721	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	90.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	479	346	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.89	0.81	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	544	1983	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	60.5	62.8	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	15.2	4.6	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	75.6	67.4	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	8.3	5.4	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.0	0.2	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	9.3	5.6	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.72	0.34	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	3	0	0	0	3	0	0
Grp Vol (v), veh/h	0	1469	0	0	0	2056	0	0
Grp Sat Flow (s), veh/h/ln	0	1663	0	0	0	1663	0	0
Q Serve Time (g_s), s	0.0	13.5	0.0	0.0	0.0	37.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	13.5	0.0	0.0	0.0	37.1	0.0	0.0
Lane Grp Cap (c), veh/h	0	3860	0	0	0	3140	0	0
V/C Ratio (X)	0.00	0.38	0.00	0.00	0.00	0.65	0.00	0.00
Avail Cap (c_a), veh/h	0	3860	0	0	0	3140	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.43	0.00	0.00
Uniform Delay (d1), s/veh	0.0	5.2	0.0	0.0	0.0	16.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.0	0.0	0.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	5.5	0.0	0.0	0.0	17.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	6.1	0.0	0.0	0.0	16.9	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	6.2	0.0	0.0	0.0	17.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.19	0.00	0.00	0.00	0.30	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment				R		R		
Lanes in Grp	0	0	0	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1583	0	1553	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	221	0	978	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	250	0	978	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		22.3						
HCM 2010 LOS		C						

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	566	1177	1594	112	397	2384
Future Volume (veh/h)	566	1177	1594	112	397	2384
Number	3	18	2	12	1	6
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1845	1845	1845	1845
Adj Flow Rate, veh/h	596	1239	1678	0	418	2509
Adj No. of Lanes	2	2	3	1	2	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	4	3	3	3	3
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	881	713	2610	813	535	3839
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.26	0.26	0.52	0.00	0.16	0.76
Ln Grp Delay, s/veh	25.0	363.3	13.1	0.0	31.6	4.8
Ln Grp LOS	C	F	B		C	A
Approach Vol, veh/h	1835		1678			2927
Approach Delay, s/veh	253.4		13.1			8.6
Approach LOS	F		B			A

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8			6		
Case No	2.0	7.0	9.0			4.0		
Phs Duration (G+Y+Rc), s	16.8	42.2	24.4			59.0		
Change Period (Y+Rc), s	6.0	6.0	6.4			6.0		
Max Green (Gmax), s	15.0	18.0	18.0			39.0		
Max Allow Headway (MAH), s	3.8	5.2	4.0			5.2		
Max Q Clear (g_c+I1), s	10.1	18.6	20.0			18.3		
Green Ext Time (g_e), s	0.7	0.0	0.0			20.4		
Prob of Phs Call (p_c)	1.00	1.00	1.00			1.00		
Prob of Max Out (p_x)	0.56	0.00	1.00			0.00		

Left-Turn Movement Data			
Assigned Mvmt	1	5	3
Mvmt Sat Flow, veh/h	3408	0	3375

Through Movement Data			
Assigned Mvmt		2	8			6
Mvmt Sat Flow, veh/h		5202	0			5202

Right-Turn Movement Data			
Assigned Mvmt		12	18			16
Mvmt Sat Flow, veh/h		1568	2733			0

Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	0	0
Lane Assignment	(Prot)							

Lanes in Grp	2	0	2	0	0	0	0	0
Grp Vol (v), veh/h	418	0	596	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1704	0	1688	0	0	0	0	0
Q Serve Time (g_s), s	8.1	0.0	10.9	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	8.1	0.0	10.9	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1688	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	35.8	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	535	0	881	0	0	0	0	0
V/C Ratio (X)	0.78	0.00	0.68	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	741	0	881	0	0	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	27.9	0.0	22.9	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	3.7	0.0	2.1	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	31.6	0.0	25.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	3.8	0.0	5.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	4.1	0.0	5.3	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.33	0.00	0.28	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	3	0	0	0	3	0	0
Grp Vol (v), veh/h	0	1678	0	0	0	2509	0	0
Grp Sat Flow (s), veh/h/ln	0	1679	0	0	0	1679	0	0
Q Serve Time (g_s), s	0.0	16.6	0.0	0.0	0.0	16.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	16.6	0.0	0.0	0.0	16.3	0.0	0.0
Lane Grp Cap (c), veh/h	0	2610	0	0	0	3839	0	0
V/C Ratio (X)	0.00	0.64	0.00	0.00	0.00	0.65	0.00	0.00
Avail Cap (c_a), veh/h	0	2610	0	0	0	3839	0	0
Upstream Filter (I)	0.00	0.87	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	12.0	0.0	0.0	0.0	3.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.1	0.0	0.0	0.0	0.9	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	13.1	0.0	0.0	0.0	4.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	7.6	0.0	0.0	0.0	7.2	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	7.9	0.0	0.0	0.0	7.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.12	0.00	0.00	0.00	0.18	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lane Assignment		R	R					
Lanes in Grp	0	1	2	0	0	0	0	0
Grp Vol (v), veh/h	0	0	1239	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1568	1367	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	18.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	18.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	813	713	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	1.74	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	813	713	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	25.5	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	337.8	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	363.3	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	6.7	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	33.5	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	40.2	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	4.32	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	131.5	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		79.5						
HCM 2010 LOS		E						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	600	561	107	40	809	306	326	293	186	139	59	768
Future Volume (veh/h)	600	561	107	40	809	306	326	293	186	139	59	768
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1712	1712	1712	1712	1712	1712	1900	1900	1712	1712
Adj Flow Rate, veh/h	606	567	108	40	817	0	329	296	188	140	60	776
Adj No. of Lanes	1	3	1	1	3	1	1	2	0	0	1	2
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	11	11	11	11	11	11	11	11	11	11	11	11
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	433	2299	716	51	1203	375	227	693	429	0	293	439
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.27	0.49	0.49	0.03	0.26	0.00	0.14	0.36	0.36	0.00	0.17	0.17
Ln Grp Delay, s/veh	250.0	23.7	22.7	100.1	56.5	0.0	293.4	39.3	39.6	0.0	57.3	421.8
Ln Grp LOS	F	C	C	F	E		F	D	D		E	F
Approach Vol, veh/h		1281			857			813			836	
Approach Delay, s/veh		130.7			58.6			142.2			395.6	
Approach LOS		F			E			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	0.0	4.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	50.0	48.4	0.0	65.1	12.5	85.9	30.0	35.1
Change Period (Y+Rc), s	7.5	7.1	7.6	* 7.7	7.5	7.1	* 7.7	* 7.7
Max Green (Gmax), s	42.5	37.9	27.4	* 22	42.5	37.9	* 22	* 27
Max Allow Headway (MAH), s	3.8	5.2	0.0	4.6	3.8	5.2	3.8	4.6
Max Q Clear (g_c+I1), s	44.5	27.2	0.0	21.2	5.9	13.2	24.3	29.4
Green Ext Time (g_e), s	0.0	6.8	0.0	0.8	0.1	11.5	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	0.00	1.00	0.83	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1630		0		1630		1630	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		4673		1932		4673		1712

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1455		1195		1455		2561

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)				(Prot)		(Prot)	

Lanes in Grp	1	0	0	0	1	0	1	0
Grp Vol (v), veh/h	606	0	0	0	40	0	329	0
Grp Sat Flow (s), veh/h/ln	1630	0	0	0	1630	0	1630	0
Q Serve Time (g_s), s	42.5	0.0	0.0	0.0	3.9	0.0	22.3	0.0
Cycle Q Clear Time (g_c), s	42.5	0.0	0.0	0.0	3.9	0.0	22.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	433	0	0	0	51	0	227	0
V/C Ratio (X)	1.40	0.00	0.00	0.00	0.79	0.00	1.45	0.00
Avail Cap (c_a), veh/h	433	0	0	0	433	0	227	0
Upstream Filter (I)	0.84	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	58.8	0.0	0.0	0.0	77.0	0.0	68.8	0.0
Incr Delay (d2), s/veh	191.2	0.0	0.0	0.0	23.1	0.0	224.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	250.0	0.0	0.0	0.0	100.1	0.0	293.4	0.0
1st-Term Q (Q1), veh/ln	19.1	0.0	0.0	0.0	1.8	0.0	10.0	0.0
2nd-Term Q (Q2), veh/ln	23.0	0.0	0.0	0.0	0.3	0.0	14.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	42.1	0.0	0.0	0.0	2.1	0.0	24.2	0.0
%ile Storage Ratio (RQ%)	1.56	0.00	0.00	0.00	0.13	0.00	1.32	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	43.2	0.0	0.0	0.0	0.0	0.0	25.4	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.0	0.0	0.0	0.0	0.4	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	1	0	3	0	1
Grp Vol (v), veh/h	0	817	0	248	0	567	0	60
Grp Sat Flow (s), veh/h/ln	0	1558	0	1626	0	1558	0	1712
Q Serve Time (g_s), s	0.0	25.2	0.0	18.5	0.0	11.2	0.0	4.8
Cycle Q Clear Time (g_c), s	0.0	25.2	0.0	18.5	0.0	11.2	0.0	4.8
Lane Grp Cap (c), veh/h	0	1203	0	583	0	2299	0	293
V/C Ratio (X)	0.00	0.68	0.00	0.42	0.00	0.25	0.00	0.20
Avail Cap (c_a), veh/h	0	1203	0	583	0	2299	0	293
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.84	0.00	1.00
Uniform Delay (d1), s/veh	0.0	53.4	0.0	38.8	0.0	23.5	0.0	56.9
Incr Delay (d2), s/veh	0.0	3.1	0.0	0.5	0.0	0.2	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	56.5	0.0	39.3	0.0	23.7	0.0	57.3
1st-Term Q (Q1), veh/ln	0.0	10.8	0.0	8.3	0.0	4.8	0.0	2.3

2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	11.2	0.0	8.3	0.0	4.9	0.0	2.3
%ile Storage Ratio (RQ%)	0.00	0.12	0.00	0.46	0.00	0.04	0.00	0.07
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	2
Grp Vol (v), veh/h	0	0	0	236	0	108	0	776
Grp Sat Flow (s), veh/h/ln	0	1455	0	1501	0	1455	0	1280
Q Serve Time (g_s), s	0.0	0.0	0.0	19.2	0.0	6.5	0.0	27.4
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	19.2	0.0	6.5	0.0	27.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.80	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	375	0	538	0	716	0	439
V/C Ratio (X)	0.00	0.00	0.00	0.44	0.00	0.15	0.00	1.77
Avail Cap (c_a), veh/h	0	375	0	538	0	716	0	439
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.84	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	39.0	0.0	22.3	0.0	66.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.6	0.0	0.4	0.0	355.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	39.6	0.0	22.7	0.0	421.8
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	7.9	0.0	2.6	0.0	9.7
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.1	0.0	21.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	8.0	0.0	2.7	0.0	31.4
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.44	0.00	0.15	0.00	0.94
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	84.4
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	175.3
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	421	812	113	204	697	761	142	1099	235	231	616	180
Future Volume (veh/h)	421	812	113	204	697	761	142	1099	235	231	616	180
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1776	1776	1776	1776	1776	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	425	820	114	206	704	769	143	1110	237	233	622	182
Adj No. of Lanes	2	3	1	2	3	2	2	2	0	2	2	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	7	7	7	7	7	7	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	80	1482	462	80	1482	812	214	615	131	313	625	182
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.02	0.31	0.31	0.02	0.31	0.31	0.07	0.22	0.22	0.10	0.24	0.24
Ln Grp Delay, s/veh	2007.4	25.3	22.6	783.5	24.2	48.8	41.0	402.0	409.0	41.3	74.2	75.4
Ln Grp LOS	F	C	C	F	C	D	D	F	F	D	E	E
Approach Vol, veh/h		1359			1679			1490			1037	
Approach Delay, s/veh		644.9			128.6			370.5			67.3	
Approach LOS		F			F			F			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	4.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	9.2	32.4	14.6	25.8	9.2	32.4	13.0	27.5
Change Period (Y+Rc), s	7.2	* 7.3	6.8	* 7.6	7.2	* 7.3	* 7.6	* 7.6
Max Green (Gmax), s	2.0	* 24	10.2	* 18	2.0	* 24	* 7.4	* 19
Max Allow Headway (MAH), s	3.8	4.8	3.8	5.3	3.8	4.8	3.8	5.3
Max Q Clear (g_c+I1), s	4.0	25.2	7.7	20.2	4.0	13.6	5.5	21.8
Green Ext Time (g_e), s	0.0	0.0	0.2	0.0	0.0	8.3	0.1	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.99	1.00	0.96	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	3281	3281	3281	3281

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	4848	2770	4848	2577

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	2656	588	1509	753

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	425	0	233	0	206	0	143	0
Grp Sat Flow (s), veh/h/ln	1640	0	1640	0	1640	0	1640	0
Q Serve Time (g_s), s	2.0	0.0	5.7	0.0	2.0	0.0	3.5	0.0
Cycle Q Clear Time (g_c), s	2.0	0.0	5.7	0.0	2.0	0.0	3.5	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	80	0	313	0	80	0	214	0
V/C Ratio (X)	5.31	0.00	0.74	0.00	2.57	0.00	0.67	0.00
Avail Cap (c_a), veh/h	80	0	408	0	80	0	296	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	40.0	0.0	36.1	0.0	40.0	0.0	37.5	0.0
Incr Delay (d2), s/veh	1967.4	0.0	5.2	0.0	743.5	0.0	3.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	2007.4	0.0	41.3	0.0	783.5	0.0	41.0	0.0
1st-Term Q (Q1), veh/ln	0.9	0.0	2.6	0.0	0.9	0.0	1.6	0.0
2nd-Term Q (Q2), veh/ln	21.9	0.0	0.2	0.0	8.3	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	22.8	0.0	2.8	0.0	9.2	0.0	1.7	0.0
%ile Storage Ratio (RQ%)	1.31	0.00	0.06	0.00	0.47	0.00	0.05	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	86.2	0.0	0.0	0.0	31.5	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	1.3	0.0	0.0	0.0	0.6	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	1	0	3	0	1
Grp Vol (v), veh/h	0	704	0	674	0	820	0	407
Grp Sat Flow (s), veh/h/ln	0	1616	0	1687	0	1616	0	1687
Q Serve Time (g_s), s	0.0	9.7	0.0	18.2	0.0	11.6	0.0	19.7
Cycle Q Clear Time (g_c), s	0.0	9.7	0.0	18.2	0.0	11.6	0.0	19.7
Lane Grp Cap (c), veh/h	0	1482	0	374	0	1482	0	409
V/C Ratio (X)	0.00	0.47	0.00	1.80	0.00	0.55	0.00	1.00
Avail Cap (c_a), veh/h	0	1482	0	374	0	1482	0	409
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	23.1	0.0	31.9	0.0	23.8	0.0	31.0
Incr Delay (d2), s/veh	0.0	1.1	0.0	370.1	0.0	1.5	0.0	43.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	24.2	0.0	402.0	0.0	25.3	0.0	74.2
1st-Term Q (Q1), veh/ln	0.0	4.3	0.0	8.4	0.0	5.2	0.0	9.2

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	38.5	0.0	0.2	0.0	4.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	4.5	0.0	46.9	0.0	5.4	0.0	14.1
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	1.25	0.00	0.06	0.00	0.28
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	74.8	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		T+R
Lanes in Grp	0	2	0	1	0	1	0	1
Grp Vol (v), veh/h	0	769	0	673	0	114	0	397
Grp Sat Flow (s), veh/h/ln	0	1328	0	1672	0	1509	0	1643
Q Serve Time (g_s), s	0.0	23.2	0.0	18.2	0.0	4.7	0.0	19.8
Cycle Q Clear Time (g_c), s	0.0	23.2	0.0	18.2	0.0	4.7	0.0	19.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.35	0.00	1.00	0.00	0.46
Lane Grp Cap (c), veh/h	0	812	0	371	0	462	0	398
V/C Ratio (X)	0.00	0.95	0.00	1.81	0.00	0.25	0.00	1.00
Avail Cap (c_a), veh/h	0	812	0	371	0	462	0	398
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	27.8	0.0	31.9	0.0	21.4	0.0	31.0
Incr Delay (d2), s/veh	0.0	21.0	0.0	377.1	0.0	1.3	0.0	44.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	48.8	0.0	409.0	0.0	22.6	0.0	75.4
1st-Term Q (Q1), veh/ln	0.0	8.4	0.0	8.3	0.0	1.9	0.0	8.9
2nd-Term Q (Q2), veh/ln	0.0	2.4	0.0	38.9	0.0	0.2	0.0	4.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	10.8	0.0	47.2	0.0	2.1	0.0	13.8
%ile Storage Ratio (RQ%)	0.00	0.42	0.00	1.26	0.00	0.13	0.00	0.27
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	75.6	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	308.0
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	462	1606	0	0	2143	1003	0	0	1171	0	0	0
Future Volume (veh/h)	462	1606	0	0	2143	1003	0	0	1171	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q, veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1845	1845	0	0	1845	1845	0	0	1845			
Adj Flow Rate, veh/h	471	1639	0	0	2187	0	0	0	1195			
Adj No. of Lanes	2	3	0	0	3	1	0	0	2			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98			
Percent Heavy Veh, %	3	3	0	0	3	3	0	0	3			
Opposing Right Turn Influence	Yes			No			No					
Cap, veh/h	521	4811	0	0	3815	1188	0	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Prop Arrive On Green	0.15	0.96	0.00	0.00	0.76	0.00	0.00	0.00	0.00			
Ln Grp Delay, s/veh	76.9	0.4	0.0	0.0	8.1	0.0	0.0	0.0	0.0			
Ln Grp LOS	E	A			A							

Approach Vol, veh/h		2110			2187			0				Timer:
Approach Delay, s/veh		17.5			8.1			0.0				Assigned Phs
Approach LOS		B			A							Case No
Phs Duration (G+Y+Rc), s					143.0			28.3	114.7			
Change Period (Y+Rc), s					6.4			6.4	6.4			
Max Green (Gmax), s					76.6			23.6	46.6			
Max Allow Headway (MAH), s					5.2			3.8	5.2			
Max Q Clear (g_c+I1), s					5.1			21.4	28.6			
Green Ext Time (g_e), s					64.9			0.4	17.5			
Prob of Phs Call (p_c)					1.00			1.00	1.00			
Prob of Max Out (p_x)					0.00			1.00	0.00			

Left-Turn Movement Data												
Assigned Mvmt								7	3			
Mvmt Sat Flow, veh/h								3408	0			

Through Movement Data												
Assigned Mvmt					4				8			
Mvmt Sat Flow, veh/h					5202				5202			

Right-Turn Movement Data												
Assigned Mvmt					14				18			
Mvmt Sat Flow, veh/h					0				1568			

Left Lane Group Data												
Assigned Mvmt		0	0	0	0	0	0	7	3			
Lane Assignment								(Prot)				
Lanes in Grp		0	0	0	0	0	0	2	0			
Grp Vol (v), veh/h		0	0	0	0	0	0	471	0			
Grp Sat Flow (s), veh/h/ln		0	0	0	0	0	0	1704	0			

Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	19.4	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	19.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	108.3
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	521	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.90	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	562	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	59.5	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	17.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	76.9	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	9.2	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	10.4	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	1.78	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	3	0	0	0	3
Grp Vol (v), veh/h	0	0	0	1639	0	0	0	2187
Grp Sat Flow (s), veh/h/ln	0	0	0	1679	0	0	0	1679
Q Serve Time (g_s), s	0.0	0.0	0.0	3.1	0.0	0.0	0.0	26.6
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	3.1	0.0	0.0	0.0	26.6
Lane Grp Cap (c), veh/h	0	0	0	4811	0	0	0	3815
V/C Ratio (X)	0.00	0.00	0.00	0.34	0.00	0.00	0.00	0.57
Avail Cap (c_a), veh/h	0	0	0	4811	0	0	0	3815
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	7.4
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.4	0.0	0.0	0.0	8.1
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.4	0.0	0.0	0.0	12.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00

%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	1.5	0.0	0.0	0.0	12.4
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.92
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	0	0	18
Lane Assignment								R
Lanes in Grp	0	0	0	0	0	0	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	1568
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	1188
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	1188
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	12.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1392	887	877	2419	0	0	0	0	0	0	785
Future Volume (veh/h)	0	1392	887	877	2419	0	0	0	0	0	0	785
Number	7	4	14	3	8	18				1	6	16
Initial Q, veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1845	1845	1845	1845	0				0	0	1845
Adj Flow Rate, veh/h	0	1420	0	895	2468	0				0	0	801
Adj No. of Lanes	0	3	1	2	3	0				0	0	2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98				0.98	0.98	0.98
Percent Heavy Veh, %	0	3	3	3	3	0				0	0	3
Opposing Right Turn Influence	No			Yes						No		
Cap, veh/h	0	2498	778	1046	4540	0				0	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Prop Arrive On Green	0.00	0.50	0.00	0.31	0.90	0.00				0.00	0.00	0.00
Ln Grp Delay, s/veh	0.0	12.4	0.0	26.5	1.1	0.0				0.0	0.0	0.0
Ln Grp LOS		B		C	A							
Approach Vol, veh/h		1420			3363						0	
Approach Delay, s/veh		12.4			7.9						0.0	
Approach LOS		B			A							

Timer:	1	2	3	4	5	6	7	8
Assigned Phs			3	4				8
Case No			2.0	7.0				4.0
Phs Duration (G+Y+Rc), s			26.4	38.6				65.0
Change Period (Y+Rc), s			6.4	6.4				6.4
Max Green (Gmax), s			23.6	18.0				48.0
Max Allow Headway (MAH), s			3.8	5.2				5.2
Max Q Clear (g_c+I1), s			18.0	14.9				8.2
Green Ext Time (g_e), s			1.9	3.1				38.0
Prob of Phs Call (p_c)			1.00	1.00				1.00
Prob of Max Out (p_x)			0.62	0.00				0.00

Left-Turn Movement Data								
Assigned Mvmt			3	7				
Mvmt Sat Flow, veh/h			3408	0				

Through Movement Data								
Assigned Mvmt				4				8
Mvmt Sat Flow, veh/h				5202				5202

Right-Turn Movement Data								
Assigned Mvmt				14				18
Mvmt Sat Flow, veh/h				1568				0

Left Lane Group Data								
Assigned Mvmt	0	0	3	7	0	0	0	0
Lane Assignment			(Prot)					

Lanes in Grp	0	0	2	0	0	0	0	0
Grp Vol (v), veh/h	0	0	895	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1704	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	16.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	16.0	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	32.2	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	1046	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.86	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	1237	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	21.2	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	5.3	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	26.5	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	7.5	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	8.2	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.66	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	3	0	0	0	3
Grp Vol (v), veh/h	0	0	0	1420	0	0	0	2468
Grp Sat Flow (s), veh/h/ln	0	0	0	1679	0	0	0	1679
Q Serve Time (g_s), s	0.0	0.0	0.0	12.9	0.0	0.0	0.0	6.2
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	12.9	0.0	0.0	0.0	6.2
Lane Grp Cap (c), veh/h	0	0	0	2498	0	0	0	4540
V/C Ratio (X)	0.00	0.00	0.00	0.57	0.00	0.00	0.00	0.54
Avail Cap (c_a), veh/h	0	0	0	2498	0	0	0	4540
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	11.5	0.0	0.0	0.0	0.6
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	12.4	0.0	0.0	0.0	1.1
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	5.9	0.0	0.0	0.0	2.5

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	6.1	0.0	0.0	0.0	2.7
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.27	0.00	0.00	0.00	0.17
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	0	0	18
Lane Assignment				R				
Lanes in Grp	0	0	0	1	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1568	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	778	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	778	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		9.2						
HCM 2010 LOS		A						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	458	2599	0	0	2408	1096	0	0	976	0	0	995
Future Volume (veh/h)	458	2599	0	0	2408	1096	0	0	976	0	0	995
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	0	0	1863	0	0	1863
Adj Flow Rate, veh/h	477	2707	0	0	2508	1142	0	0	1017	0	0	1036
Adj No. of Lanes	2	3	0	0	3	2	0	0	3	0	0	3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	0	0	2	2	0	0	2	0	0	2
Opposing Right Turn Influence	Yes			No			No			No		
Cap, veh/h	564	4795	0	0	3671	2012	0	0	0	0	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.16	0.94	0.00	0.00	0.72	0.72	0.00	0.00	0.00	0.00	0.00	0.00
Ln Grp Delay, s/veh	48.0	0.6	0.0	0.0	9.6	8.5	0.0	0.0	0.0	0.0	0.0	0.0
Ln Grp LOS	D	A			A	A						
Approach Vol, veh/h		3184			3650			0			0	
Approach Delay, s/veh		7.7			9.3			0.0			0.0	
Approach LOS		A			A							

Timer:	1	2	3	4	5	6	7	8
Assigned Phs				4			7	8
Case No				4.0			2.0	7.0
Phs Duration (G+Y+Rc), s				112.0			24.7	87.3
Change Period (Y+Rc), s				6.4			6.4	6.4
Max Green (Gmax), s				81.6			26.6	48.6
Max Allow Headway (MAH), s				5.0			3.8	5.0
Max Q Clear (g_c+I1), s				9.3			17.1	32.3
Green Ext Time (g_e), s				71.8			1.3	16.3
Prob of Phs Call (p_c)				1.00			1.00	1.00
Prob of Max Out (p_x)				0.00			0.06	0.00

Left-Turn Movement Data								
Assigned Mvmt							7	3
Mvmt Sat Flow, veh/h							3442	0

Through Movement Data								
Assigned Mvmt				4				8
Mvmt Sat Flow, veh/h				5253				5253

Right-Turn Movement Data								
Assigned Mvmt				14				18
Mvmt Sat Flow, veh/h				0				2787

Left Lane Group Data								
Assigned Mvmt	0	0	0	0	0	0	7	3
Lane Assignment							(Prot)	

Lanes in Grp	0	0	0	0	0	0	2	0
Grp Vol (v), veh/h	0	0	0	0	0	0	477	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	1721	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	15.1	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	15.1	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.9
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	564	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.85	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	817	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.43	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	45.5	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	2.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	48.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	7.2	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	7.4	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	3	0	0	0	3
Grp Vol (v), veh/h	0	0	0	2707	0	0	0	2508
Grp Sat Flow (s), veh/h/ln	0	0	0	1695	0	0	0	1695
Q Serve Time (g_s), s	0.0	0.0	0.0	7.3	0.0	0.0	0.0	30.3
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	7.3	0.0	0.0	0.0	30.3
Lane Grp Cap (c), veh/h	0	0	0	4795	0	0	0	3671
V/C Ratio (X)	0.00	0.00	0.00	0.56	0.00	0.00	0.00	0.68
Avail Cap (c_a), veh/h	0	0	0	4795	0	0	0	3671
Upstream Filter (I)	0.00	0.00	0.00	0.43	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.4	0.0	0.0	0.0	8.5
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	1.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.6	0.0	0.0	0.0	9.6
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.0	0.0	0.0	0.0	13.9

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	3.1	0.0	0.0	0.0	14.3
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.23
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	0	0	18
Lane Assignment								R
Lanes in Grp	0	0	0	0	0	0	0	2
Grp Vol (v), veh/h	0	0	0	0	0	0	0	1142
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	1393
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.6
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	2012
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.57
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	2012
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.5
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.9
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.86
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		8.5						
HCM 2010 LOS		A						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2098	500	577	2526	11	0	0	1035	0	0	632
Future Volume (veh/h)	0	2098	500	577	2526	11	0	0	1035	0	0	632
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	1900	0	0	1863	0	0	1863
Adj Flow Rate, veh/h	0	2256	538	620	2716	12	0	0	1113	0	0	680
Adj No. of Lanes	0	3	2	2	3	0	0	0	3	0	0	3
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	2	2	2	2	2	0	0	2	0	0	2
Opposing Right Turn Influence	No			Yes			No			No		
Cap, veh/h	0	3697	2026	687	5034	22	0	0	0	0	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.00	0.73	0.73	0.20	0.96	0.96	0.00	0.00	0.00	0.00	0.00	0.00
Ln Grp Delay, s/veh	0.0	12.4	8.4	70.3	0.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0
Ln Grp LOS		B	A	E	A	A						
Approach Vol, veh/h		2794			3348			0			0	
Approach Delay, s/veh		11.6			13.4			0.0			0.0	
Approach LOS		B			B							

Timer:	1	2	3	4	5	6	7	8
Assigned Phs			3	4				8
Case No			2.0	7.0				4.0
Phs Duration (G+Y+Rc), s			41.1	132.9				174.0
Change Period (Y+Rc), s			6.4	6.4				6.4
Max Green (Gmax), s			47.6	93.6				147.6
Max Allow Headway (MAH), s			3.8	5.1				5.1
Max Q Clear (g_c+I1), s			32.6	39.9				8.9
Green Ext Time (g_e), s			2.1	53.3				136.0
Prob of Phs Call (p_c)			1.00	1.00				1.00
Prob of Max Out (p_x)			0.01	0.00				0.00

Left-Turn Movement Data		
Assigned Mvmt	3	7
Mvmt Sat Flow, veh/h	3442	0

Through Movement Data		
Assigned Mvmt	4	8
Mvmt Sat Flow, veh/h	5253	5226

Right-Turn Movement Data		
Assigned Mvmt	14	18
Mvmt Sat Flow, veh/h	2787	23

Left Lane Group Data								
Assigned Mvmt	0	0	3	7	0	0	0	0
Lane Assignment			(Prot)					

Lanes in Grp	0	0	2	0	0	0	0	0
Grp Vol (v), veh/h	0	0	620	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1721	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	30.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	30.6	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	126.5	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	687	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.90	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	942	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.21	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	68.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	70.3	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	14.6	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	14.8	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	1.17	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	3	0	0	0	2
Grp Vol (v), veh/h	0	0	0	2256	0	0	0	1761
Grp Sat Flow (s), veh/h/ln	0	0	0	1695	0	0	0	1695
Q Serve Time (g_s), s	0.0	0.0	0.0	37.9	0.0	0.0	0.0	6.9
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	37.9	0.0	0.0	0.0	6.9
Lane Grp Cap (c), veh/h	0	0	0	3697	0	0	0	3265
V/C Ratio (X)	0.00	0.00	0.00	0.61	0.00	0.00	0.00	0.54
Avail Cap (c_a), veh/h	0	0	0	3697	0	0	0	3265
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.21
Uniform Delay (d1), s/veh	0.0	0.0	0.0	11.7	0.0	0.0	0.0	0.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	12.4	0.0	0.0	0.0	0.4
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	17.5	0.0	0.0	0.0	2.9

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	17.8	0.0	0.0	0.0	3.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.30	0.00	0.00	0.00	0.06
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	0	0	18
Lane Assignment				R				T+R
Lanes in Grp	0	0	0	2	0	0	0	1
Grp Vol (v), veh/h	0	0	0	538	0	0	0	967
Grp Sat Flow (s), veh/h/ln	0	0	0	1393	0	0	0	1859
Q Serve Time (g_s), s	0.0	0.0	0.0	11.4	0.0	0.0	0.0	6.9
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	11.4	0.0	0.0	0.0	6.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.01
Lane Grp Cap (c), veh/h	0	0	0	2026	0	0	0	1790
V/C Ratio (X)	0.00	0.00	0.00	0.27	0.00	0.00	0.00	0.54
Avail Cap (c_a), veh/h	0	0	0	2026	0	0	0	1790
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.21
Uniform Delay (d1), s/veh	0.0	0.0	0.0	8.0	0.0	0.0	0.0	0.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	8.4	0.0	0.0	0.0	0.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	4.4	0.0	0.0	0.0	3.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	4.5	0.0	0.0	0.0	3.3
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.47	0.00	0.00	0.00	0.06
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		12.6						
HCM 2010 LOS		B						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	371	130	250	340	220	173	1096	346	320	794	47
Future Volume (veh/h)	44	371	130	250	340	220	173	1096	346	320	794	47
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	45	382	134	258	351	227	178	1130	357	330	819	48
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	58	322	111	187	410	261	198	1136	354	344	1732	102
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.13	0.13	0.11	0.20	0.20	0.12	0.45	0.45	0.20	0.53	0.53
Ln Grp Delay, s/veh	93.9	185.9	195.3	269.8	78.0	82.0	104.4	72.0	78.2	100.6	24.2	24.2
Ln Grp LOS	F	F	F	F	E	F	F	E	F	F	C	C
Approach Vol, veh/h		561			836			1665			1197	
Approach Delay, s/veh		182.8			138.5			78.3			45.3	
Approach LOS		F			F			E			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	4.0
Phs Duration (G+Y+Rc), s	36.0	74.0	21.0	24.0	22.6	87.4	9.6	35.4
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green (Gmax), s	31.5	69.5	16.5	19.5	18.5	82.5	13.5	22.5
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.4	3.8	5.3	3.8	5.4
Max Q Clear (g_c+I1), s	31.9	71.5	18.5	21.5	18.1	26.4	5.9	28.1
Green Ext Time (g_e), s	0.0	0.0	0.0	0.0	0.0	32.0	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	0.86	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	1.00	1.00	0.00	0.01	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1691		1757		1691		1757	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2534		2556		3239		2058

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		789		885		190		1308

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	330	0	258	0	178	0	45	0
Grp Sat Flow (s), veh/h/ln	1691	0	1757	0	1691	0	1757	0
Q Serve Time (g_s), s	29.9	0.0	16.5	0.0	16.1	0.0	3.9	0.0
Cycle Q Clear Time (g_c), s	29.9	0.0	16.5	0.0	16.1	0.0	3.9	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	344	0	187	0	198	0	58	0
V/C Ratio (X)	0.96	0.00	1.38	0.00	0.90	0.00	0.78	0.00
Avail Cap (c_a), veh/h	344	0	187	0	202	0	153	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	61.1	0.0	69.3	0.0	67.6	0.0	74.4	0.0
Incr Delay (d2), s/veh	39.4	0.0	200.6	0.0	36.9	0.0	19.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	100.6	0.0	269.8	0.0	104.4	0.0	93.9	0.0
1st-Term Q (Q1), veh/ln	14.0	0.0	8.0	0.0	7.5	0.0	1.9	0.0
2nd-Term Q (Q2), veh/ln	3.8	0.0	10.4	0.0	2.0	0.0	0.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	17.8	0.0	18.4	0.0	9.5	0.0	2.2	0.0
%ile Storage Ratio (RQ%)	1.45	0.00	2.01	0.00	1.53	0.00	0.46	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	17.7	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	747	0	260	0	426	0	298
Grp Sat Flow (s), veh/h/ln	0	1687	0	1752	0	1687	0	1752
Q Serve Time (g_s), s	0.0	67.9	0.0	19.5	0.0	24.4	0.0	25.4
Cycle Q Clear Time (g_c), s	0.0	67.9	0.0	19.5	0.0	24.4	0.0	25.4
Lane Grp Cap (c), veh/h	0	756	0	220	0	902	0	349
V/C Ratio (X)	0.00	0.99	0.00	1.18	0.00	0.47	0.00	0.85
Avail Cap (c_a), veh/h	0	756	0	220	0	902	0	349
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	42.3	0.0	67.8	0.0	22.5	0.0	59.9
Incr Delay (d2), s/veh	0.0	29.7	0.0	118.2	0.0	1.8	0.0	18.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	72.0	0.0	185.9	0.0	24.2	0.0	78.0
1st-Term Q (Q1), veh/ln	0.0	31.5	0.0	9.4	0.0	11.4	0.0	12.3

2nd-Term Q (Q2), veh/ln	0.0	6.2	0.0	7.2	0.0	0.4	0.0	1.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	37.8	0.0	16.7	0.0	11.8	0.0	14.1
%ile Storage Ratio (RQ%)	0.00	2.98	0.00	0.39	0.00	0.91	0.00	0.32
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	740	0	256	0	441	0	280
Grp Sat Flow (s), veh/h/ln	0	1636	0	1688	0	1742	0	1614
Q Serve Time (g_s), s	0.0	69.5	0.0	19.5	0.0	24.4	0.0	26.1
Cycle Q Clear Time (g_c), s	0.0	69.5	0.0	19.5	0.0	24.4	0.0	26.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.48	0.00	0.52	0.00	0.11	0.00	0.81
Lane Grp Cap (c), veh/h	0	734	0	212	0	932	0	322
V/C Ratio (X)	0.00	1.01	0.00	1.20	0.00	0.47	0.00	0.87
Avail Cap (c_a), veh/h	0	734	0	212	0	932	0	322
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	42.8	0.0	67.8	0.0	22.5	0.0	60.1
Incr Delay (d2), s/veh	0.0	35.5	0.0	127.5	0.0	1.7	0.0	21.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	78.2	0.0	195.3	0.0	24.2	0.0	82.0
1st-Term Q (Q1), veh/ln	0.0	31.4	0.0	9.1	0.0	11.7	0.0	11.7
2nd-Term Q (Q2), veh/ln	0.0	7.2	0.0	7.5	0.0	0.4	0.0	2.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	38.6	0.0	16.6	0.0	12.2	0.0	13.6
%ile Storage Ratio (RQ%)	0.00	3.04	0.00	0.39	0.00	0.94	0.00	0.31
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	1.7	0.0	10.8	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		94.6						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	34	68	80	34	115	74	500	164	140	422	7
Future Volume (veh/h)	3	34	68	80	34	115	74	500	164	140	422	7
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1900	1712	1712	1712	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	3	36	72	85	36	122	79	532	174	149	449	7
Adj No. of Lanes	1	1	0	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	11	11	11	11	11	11	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	7	52	103	101	273	232	74	1316	429	74	1788	28
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.00	0.10	0.10	0.06	0.16	0.16	0.04	0.53	0.53	0.04	0.53	0.53
Ln Grp Delay, s/veh	88.6	0.0	45.5	86.7	33.4	37.3	172.1	14.5	14.6	550.0	12.6	12.6
Ln Grp LOS	F		D	F	C	D	F	B	B	F	B	B
Approach Vol, veh/h		111			243			785			605	
Approach Delay, s/veh		46.7			54.0			30.4			144.9	
Approach LOS		D			D			C			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	10.0	54.4	12.0	15.6	10.0	54.4	6.7	21.0
Change Period (Y+Rc), s	6.0	6.0	* 6.3	* 6.3	6.0	6.0	* 6.3	* 6.3
Max Green (Gmax), s	4.0	34.0	* 5.7	* 24	4.0	34.0	* 5.7	* 24
Max Allow Headway (MAH), s	3.8	5.3	3.8	4.8	3.8	5.3	3.8	4.8
Max Q Clear (g_c+I1), s	6.0	13.8	6.7	8.3	6.0	8.6	2.2	9.1
Green Ext Time (g_e), s	0.0	7.5	0.0	1.1	0.0	8.2	0.0	1.0
Prob of Phs Call (p_c)	0.98	1.00	0.89	1.00	0.87	1.00	0.07	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.01	1.00	0.00	1.00	0.01

Left-Turn Movement Data								
Assigned Mvmt		1		3		5		7
Mvmt Sat Flow, veh/h		1691		1630		1691		1630

Through Movement Data								
Assigned Mvmt			2		4		6		8
Mvmt Sat Flow, veh/h			2503		511		3400		1712

Right-Turn Movement Data								
Assigned Mvmt			12		14		16		18
Mvmt Sat Flow, veh/h			815		1021		53		1455

Left Lane Group Data								
Assigned Mvmt		1	0	3	0	5	0	7	0
Lane Assignment		(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	149	0	85	0	79	0	3	0
Grp Sat Flow (s), veh/h/ln	1691	0	1630	0	1691	0	1630	0
Q Serve Time (g_s), s	4.0	0.0	4.7	0.0	4.0	0.0	0.2	0.0
Cycle Q Clear Time (g_c), s	4.0	0.0	4.7	0.0	4.0	0.0	0.2	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	74	0	101	0	74	0	7	0
V/C Ratio (X)	2.03	0.00	0.84	0.00	1.07	0.00	0.46	0.00
Avail Cap (c_a), veh/h	74	0	101	0	74	0	101	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	44.0	0.0	42.7	0.0	44.0	0.0	45.7	0.0
Incr Delay (d2), s/veh	506.0	0.0	44.0	0.0	126.8	0.0	42.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0
Control Delay (d), s/veh	550.0	0.0	86.7	0.0	172.1	0.0	88.6	0.0
1st-Term Q (Q1), veh/ln	1.9	0.0	2.1	0.0	1.9	0.0	0.1	0.0
2nd-Term Q (Q2), veh/ln	10.3	0.0	1.2	0.0	2.6	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	12.2	0.0	3.4	0.0	4.4	0.0	0.2	0.0
%ile Storage Ratio (RQ%)	1.42	0.00	0.65	0.00	0.37	0.00	0.03	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	18.9	0.0	0.0	0.0	1.4	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.5	0.0	0.0	0.0	0.3	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	358	0	0	0	223	0	36
Grp Sat Flow (s), veh/h/ln	0	1687	0	0	0	1687	0	1712
Q Serve Time (g_s), s	0.0	11.7	0.0	0.0	0.0	6.6	0.0	1.7
Cycle Q Clear Time (g_c), s	0.0	11.7	0.0	0.0	0.0	6.6	0.0	1.7
Lane Grp Cap (c), veh/h	0	887	0	0	0	887	0	273
V/C Ratio (X)	0.00	0.40	0.00	0.00	0.00	0.25	0.00	0.13
Avail Cap (c_a), veh/h	0	887	0	0	0	887	0	441
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	13.1	0.0	0.0	0.0	11.9	0.0	33.2
Incr Delay (d2), s/veh	0.0	1.4	0.0	0.0	0.0	0.7	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	14.5	0.0	0.0	0.0	12.6	0.0	33.4
1st-Term Q (Q1), veh/ln	0.0	5.5	0.0	0.0	0.0	3.1	0.0	0.8

2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	5.8	0.0	0.0	0.0	3.3	0.0	0.8
%ile Storage Ratio (RQ%)	0.00	0.19	0.00	0.00	0.00	0.10	0.00	0.02
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	348	0	108	0	233	0	122
Grp Sat Flow (s), veh/h/ln	0	1632	0	1532	0	1766	0	1455
Q Serve Time (g_s), s	0.0	11.8	0.0	6.3	0.0	6.6	0.0	7.1
Cycle Q Clear Time (g_c), s	0.0	11.8	0.0	6.3	0.0	6.6	0.0	7.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.50	0.00	0.67	0.00	0.03	0.00	1.00
Lane Grp Cap (c), veh/h	0	858	0	155	0	929	0	232
V/C Ratio (X)	0.00	0.41	0.00	0.70	0.00	0.25	0.00	0.53
Avail Cap (c_a), veh/h	0	858	0	395	0	929	0	375
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	13.1	0.0	40.0	0.0	11.9	0.0	35.5
Incr Delay (d2), s/veh	0.0	1.4	0.0	5.5	0.0	0.6	0.0	1.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	14.6	0.0	45.5	0.0	12.6	0.0	37.3
1st-Term Q (Q1), veh/ln	0.0	5.3	0.0	2.6	0.0	3.2	0.0	2.8
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.2	0.0	0.2	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	5.7	0.0	2.9	0.0	3.4	0.0	2.9
%ile Storage Ratio (RQ%)	0.00	0.18	0.00	0.07	0.00	0.10	0.00	0.52
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	74.5
HCM 2010 LOS	E

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	250	39	143	215	167	83	972	177	312	980	65
Future Volume (veh/h)	87	250	39	143	215	167	83	972	177	312	980	65
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	89	255	40	146	219	170	85	992	181	318	1000	66
Adj No. of Lanes	1	1	0	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	96	308	48	96	364	310	104	1351	246	185	1676	111
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.20	0.20	0.05	0.20	0.20	0.06	0.47	0.47	0.11	0.52	0.52
Ln Grp Delay, s/veh	136.3	0.0	61.2	347.3	54.9	54.2	95.3	36.9	37.0	403.0	26.4	26.3
Ln Grp LOS	F		E	F	D	D	F	D	D	F	C	C
Approach Vol, veh/h		384			535			1258			1384	
Approach Delay, s/veh		78.6			134.5			40.9			112.9	
Approach LOS		E			F			D			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	22.0	75.2	14.0	34.8	15.0	82.2	14.0	34.8
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green (Gmax), s	16.0	46.0	8.0	52.0	11.0	51.0	8.0	52.0
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.0	3.8	5.3	3.8	5.0
Max Q Clear (g_c+I1), s	18.0	43.1	10.0	24.9	9.3	33.6	9.4	17.8
Green Ext Time (g_e), s	0.0	2.7	0.0	3.9	0.0	13.3	0.0	4.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.97	1.00	0.97	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.01	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		1		3		5		7
Mvmt Sat Flow, veh/h		1691		1757		1691		1757

Through Movement Data								
Assigned Mvmt			2		4		6		8
Mvmt Sat Flow, veh/h			2851		1557		3213		1845

Right-Turn Movement Data								
Assigned Mvmt			12		14		16		18
Mvmt Sat Flow, veh/h			520		244		212		1568

Left Lane Group Data								
Assigned Mvmt		1	0	3	0	5	0	7	0
Lane Assignment		(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	318	0	146	0	85	0	89	0
Grp Sat Flow (s), veh/h/ln	1691	0	1757	0	1691	0	1757	0
Q Serve Time (g_s), s	16.0	0.0	8.0	0.0	7.3	0.0	7.4	0.0
Cycle Q Clear Time (g_c), s	16.0	0.0	8.0	0.0	7.3	0.0	7.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	185	0	96	0	104	0	96	0
V/C Ratio (X)	1.72	0.00	1.52	0.00	0.82	0.00	0.92	0.00
Avail Cap (c_a), veh/h	185	0	96	0	127	0	96	0
Upstream Filter (I)	0.72	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	65.0	0.0	69.0	0.0	67.7	0.0	68.7	0.0
Incr Delay (d2), s/veh	338.0	0.0	278.3	0.0	27.7	0.0	67.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	403.0	0.0	347.3	0.0	95.3	0.0	136.3	0.0
1st-Term Q (Q1), veh/ln	7.5	0.0	3.9	0.0	3.4	0.0	3.6	0.0
2nd-Term Q (Q2), veh/ln	17.4	0.0	7.4	0.0	0.8	0.0	1.8	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	24.9	0.0	11.3	0.0	4.2	0.0	5.4	0.0
%ile Storage Ratio (RQ%)	2.63	0.00	2.15	0.00	0.52	0.00	0.84	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	33.2	0.0	12.4	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.4	0.0	0.4	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	586	0	0	0	525	0	219
Grp Sat Flow (s), veh/h/ln	0	1687	0	0	0	1687	0	1845
Q Serve Time (g_s), s	0.0	40.9	0.0	0.0	0.0	31.5	0.0	15.8
Cycle Q Clear Time (g_c), s	0.0	40.9	0.0	0.0	0.0	31.5	0.0	15.8
Lane Grp Cap (c), veh/h	0	799	0	0	0	880	0	364
V/C Ratio (X)	0.00	0.73	0.00	0.00	0.00	0.60	0.00	0.60
Avail Cap (c_a), veh/h	0	799	0	0	0	880	0	657
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.72	0.00	1.00
Uniform Delay (d1), s/veh	0.0	31.0	0.0	0.0	0.0	24.2	0.0	53.3
Incr Delay (d2), s/veh	0.0	5.9	0.0	0.0	0.0	2.1	0.0	1.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	36.9	0.0	0.0	0.0	26.4	0.0	54.9
1st-Term Q (Q1), veh/ln	0.0	19.1	0.0	0.0	0.0	14.7	0.0	8.0

2nd-Term Q (Q2), veh/ln	0.0	1.3	0.0	0.0	0.0	0.5	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	20.4	0.0	0.0	0.0	15.3	0.0	8.2
%ile Storage Ratio (RQ%)	0.00	1.03	0.00	0.00	0.00	0.32	0.00	0.23
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	587	0	295	0	541	0	170
Grp Sat Flow (s), veh/h/ln	0	1684	0	1802	0	1738	0	1568
Q Serve Time (g_s), s	0.0	41.1	0.0	22.9	0.0	31.6	0.0	14.2
Cycle Q Clear Time (g_c), s	0.0	41.1	0.0	22.9	0.0	31.6	0.0	14.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.31	0.00	0.14	0.00	0.12	0.00	1.00
Lane Grp Cap (c), veh/h	0	798	0	356	0	907	0	310
V/C Ratio (X)	0.00	0.74	0.00	0.83	0.00	0.60	0.00	0.55
Avail Cap (c_a), veh/h	0	798	0	642	0	907	0	558
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.72	0.00	1.00
Uniform Delay (d1), s/veh	0.0	31.0	0.0	56.2	0.0	24.2	0.0	52.7
Incr Delay (d2), s/veh	0.0	6.0	0.0	5.0	0.0	2.1	0.0	1.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	37.0	0.0	61.2	0.0	26.3	0.0	54.2
1st-Term Q (Q1), veh/ln	0.0	19.1	0.0	11.4	0.0	15.2	0.0	6.2
2nd-Term Q (Q2), veh/ln	0.0	1.3	0.0	0.5	0.0	0.5	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	20.4	0.0	11.9	0.0	15.7	0.0	6.3
%ile Storage Ratio (RQ%)	0.00	1.03	0.00	0.33	0.00	0.33	0.00	0.18
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		87.0						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	129	227	101	127	298	184	104	888	72	243	1099	101
Future Volume (veh/h)	129	227	101	127	298	184	104	888	72	243	1099	101
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	137	241	107	135	317	196	111	945	77	259	1169	107
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	207	596	506	273	596	506	132	1454	118	217	1595	146
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.08	0.46	0.46	0.13	0.51	0.51
Ln Grp Delay, s/veh	66.9	40.5	37.6	54.5	42.9	40.3	70.6	32.0	32.0	180.1	32.9	32.9
Ln Grp LOS	E	D	D	D	D	D	E	C	C	F	C	C
Approach Vol, veh/h		485			648			1133			1535	
Approach Delay, s/veh		47.3			44.5			35.8			57.7	
Approach LOS		D			D			D			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Case No	2.0	4.0		5.0	2.0	4.0		5.0
Phs Duration (G+Y+Rc), s	24.0	74.4		53.6	16.4	82.1		53.6
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green (Gmax), s	19.5	67.5		51.5	19.5	67.5		51.5
Max Allow Headway (MAH), s	3.8	5.3		4.9	3.8	5.3		4.9
Max Q Clear (g_c+I1), s	21.5	37.0		46.4	11.8	46.6		35.6
Green Ext Time (g_e), s	0.0	20.7		2.6	0.1	15.7		5.5
Prob of Phs Call (p_c)	1.00	1.00		1.00	0.99	1.00		1.00
Prob of Max Out (p_x)	1.00	0.00		0.98	0.02	0.00		0.27

Left-Turn Movement Data								
Assigned Mvmt	1			7	5			3
Mvmt Sat Flow, veh/h	1691			875	1691			1019

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3160		1845		3126		1845

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		257		1568		286		1568

Left Lane Group Data								
Assigned Mvmt	1	0	0	7	5	0	0	3
Lane Assignment	(Prot)				(Prot)			

Lanes in Grp	1	0	0	1	1	0	0	1
Grp Vol (v), veh/h	259	0	0	137	111	0	0	135
Grp Sat Flow (s), veh/h/ln	1691	0	0	875	1691	0	0	1019
Q Serve Time (g_s), s	19.5	0.0	0.0	23.1	9.8	0.0	0.0	18.1
Cycle Q Clear Time (g_c), s	19.5	0.0	0.0	44.4	9.8	0.0	0.0	33.6
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	875	0	0	0	1019
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	49.1	0.0	0.0	0.0	49.1
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	27.7	0.0	0.0	0.0	33.6
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	23.1	0.0	0.0	0.0	18.1
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	217	0	0	207	132	0	0	273
V/C Ratio (X)	1.19	0.00	0.00	0.66	0.84	0.00	0.00	0.50
Avail Cap (c_a), veh/h	217	0	0	221	217	0	0	289
Upstream Filter (I)	0.68	0.00	0.00	1.00	0.09	0.00	0.00	1.00
Uniform Delay (d1), s/veh	66.3	0.0	0.0	60.2	69.1	0.0	0.0	53.2
Incr Delay (d2), s/veh	113.8	0.0	0.0	6.6	1.5	0.0	0.0	1.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	180.1	0.0	0.0	66.9	70.6	0.0	0.0	54.5
1st-Term Q (Q1), veh/ln	9.1	0.0	0.0	5.6	4.6	0.0	0.0	5.1
2nd-Term Q (Q2), veh/ln	6.9	0.0	0.0	0.4	0.1	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	16.0	0.0	0.0	6.0	4.6	0.0	0.0	5.2
%ile Storage Ratio (RQ%)	1.56	0.00	0.00	0.90	0.63	0.00	0.00	0.72
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	10.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	505	0	241	0	630	0	317
Grp Sat Flow (s), veh/h/ln	0	1687	0	1845	0	1687	0	1845
Q Serve Time (g_s), s	0.0	35.0	0.0	15.5	0.0	44.4	0.0	21.4
Cycle Q Clear Time (g_c), s	0.0	35.0	0.0	15.5	0.0	44.4	0.0	21.4
Lane Grp Cap (c), veh/h	0	776	0	596	0	861	0	596
V/C Ratio (X)	0.00	0.65	0.00	0.40	0.00	0.73	0.00	0.53
Avail Cap (c_a), veh/h	0	776	0	625	0	861	0	625
Upstream Filter (I)	0.00	0.09	0.00	1.00	0.00	0.68	0.00	1.00
Uniform Delay (d1), s/veh	0.0	31.6	0.0	40.1	0.0	29.1	0.0	42.1
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.4	0.0	3.8	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	32.0	0.0	40.5	0.0	32.9	0.0	42.9
1st-Term Q (Q1), veh/ln	0.0	16.3	0.0	7.9	0.0	20.6	0.0	10.9

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.0	0.9	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	16.3	0.0	8.0	0.0	21.5	0.0	11.0
%ile Storage Ratio (RQ%)	0.00	0.34	0.00	0.24	0.00	0.95	0.00	0.26
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	517	0	107	0	646	0	196
Grp Sat Flow (s), veh/h/ln	0	1730	0	1568	0	1725	0	1568
Q Serve Time (g_s), s	0.0	35.0	0.0	7.5	0.0	44.6	0.0	14.7
Cycle Q Clear Time (g_c), s	0.0	35.0	0.0	7.5	0.0	44.6	0.0	14.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.15	0.00	1.00	0.00	0.17	0.00	1.00
Lane Grp Cap (c), veh/h	0	796	0	506	0	880	0	506
V/C Ratio (X)	0.00	0.65	0.00	0.21	0.00	0.73	0.00	0.39
Avail Cap (c_a), veh/h	0	796	0	531	0	880	0	531
Upstream Filter (I)	0.00	0.09	0.00	1.00	0.00	0.68	0.00	1.00
Uniform Delay (d1), s/veh	0.0	31.6	0.0	37.4	0.0	29.1	0.0	39.8
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.2	0.0	3.7	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	32.0	0.0	37.6	0.0	32.9	0.0	40.3
1st-Term Q (Q1), veh/ln	0.0	16.7	0.0	3.3	0.0	21.2	0.0	6.4
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.9	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	16.8	0.0	3.3	0.0	22.1	0.0	6.4
%ile Storage Ratio (RQ%)	0.00	0.35	0.00	0.58	0.00	0.97	0.00	0.92
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		47.6						
HCM 2010 LOS		D						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	45	38	112	37	501	41	1144	76	434	1339	86
Future Volume (veh/h)	64	45	38	112	37	501	41	1144	76	434	1339	86
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	68	48	40	119	39	533	44	1217	81	462	1424	91
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	46	126	105	140	27	374	179	1463	97	300	2161	138
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.14	0.14	0.14	0.08	0.25	0.25	0.46	0.46	0.46	0.18	0.67	0.67
Ln Grp Delay, s/veh	386.7	0.0	63.3	89.6	0.0	264.8	34.1	44.7	44.7	316.5	16.7	16.8
Ln Grp LOS	F		E	F		F	C	D	D	F	B	B
Approach Vol, veh/h		156			691			1342			1977	
Approach Delay, s/veh		204.3			234.6			44.3			86.8	
Approach LOS		F			F			D			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4		6		8
Case No	2.0	6.0	2.0	6.0		4.0		4.0
Phs Duration (G+Y+Rc), s	34.0	78.0	18.6	27.4		112.0		46.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0		6.0		6.0
Max Green (Gmax), s	28.0	72.0	19.0	15.0		106.0		40.0
Max Allow Headway (MAH), s	3.8	5.4	3.8	5.5		5.4		5.5
Max Q Clear (g_c+I1), s	30.0	54.6	12.6	23.4		43.4		42.0
Green Ext Time (g_e), s	0.0	15.7	0.1	0.0		45.3		0.0
Prob of Phs Call (p_c)	1.00	1.00	0.99	1.00		1.00		1.00
Prob of Max Out (p_x)	1.00	0.00	0.08	1.00		0.00		1.00

Left-Turn Movement Data				
Assigned Mvmt	1	5	3	7
Mvmt Sat Flow, veh/h	1691	327	1757	829

Through Movement Data				
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3211		931		3221		108

Right-Turn Movement Data				
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		213		776		205		1476

Left Lane Group Data								
Assigned Mvmt	1	5	3	7	0	0	0	0
Lane Assignment	(Prot)		(Prot)					

Lanes in Grp	1	1	1	1	0	0	0	0
Grp Vol (v), veh/h	462	44	119	68	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1691	327	1757	829	0	0	0	0
Q Serve Time (g_s), s	28.0	14.5	10.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	28.0	22.0	10.6	21.4	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	327	0	829	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	72.0	0.0	21.4	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	64.6	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	14.5	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	300	179	140	46	0	0	0	0
V/C Ratio (X)	1.54	0.25	0.85	1.49	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	300	179	211	46	0	0	0	0
Upstream Filter (I)	0.47	0.67	1.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	65.0	31.9	71.7	79.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	251.5	2.2	17.8	307.7	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	316.5	34.1	89.6	386.7	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	13.1	1.3	5.1	2.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	20.9	0.1	0.7	3.9	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	34.0	1.4	5.8	5.9	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	3.59	0.17	0.66	1.88	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	40.6	0.0	0.0	5.6	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.4	0.0	0.0	0.4	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	639	0	0	0	743	0	0
Grp Sat Flow (s), veh/h/ln	0	1687	0	0	0	1687	0	0
Q Serve Time (g_s), s	0.0	52.4	0.0	0.0	0.0	41.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	52.4	0.0	0.0	0.0	41.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	769	0	0	0	1132	0	0
V/C Ratio (X)	0.00	0.83	0.00	0.00	0.00	0.66	0.00	0.00
Avail Cap (c_a), veh/h	0	769	0	0	0	1132	0	0
Upstream Filter (I)	0.00	0.67	0.00	0.00	0.00	0.47	0.00	0.00
Uniform Delay (d1), s/veh	0.0	37.7	0.0	0.0	0.0	15.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	7.1	0.0	0.0	0.0	1.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	44.7	0.0	0.0	0.0	16.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	24.3	0.0	0.0	0.0	19.0	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	1.5	0.0	0.0	0.0	0.4	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	25.8	0.0	0.0	0.0	19.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.13	0.00	0.00	0.00	0.99	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	659	0	88	0	772	0	572
Grp Sat Flow (s), veh/h/ln	0	1738	0	1708	0	1739	0	1584
Q Serve Time (g_s), s	0.0	52.6	0.0	7.4	0.0	41.4	0.0	40.0
Cycle Q Clear Time (g_c), s	0.0	52.6	0.0	7.4	0.0	41.4	0.0	40.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.12	0.00	0.45	0.00	0.12	0.00	0.93
Lane Grp Cap (c), veh/h	0	792	0	231	0	1167	0	401
V/C Ratio (X)	0.00	0.83	0.00	0.38	0.00	0.66	0.00	1.43
Avail Cap (c_a), veh/h	0	792	0	231	0	1167	0	401
Upstream Filter (I)	0.00	0.67	0.00	1.00	0.00	0.47	0.00	1.00
Uniform Delay (d1), s/veh	0.0	37.7	0.0	62.3	0.0	15.4	0.0	59.0
Incr Delay (d2), s/veh	0.0	7.0	0.0	1.0	0.0	1.4	0.0	205.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	44.7	0.0	63.3	0.0	16.8	0.0	264.8
1st-Term Q (Q1), veh/ln	0.0	25.1	0.0	3.5	0.0	19.7	0.0	17.5
2nd-Term Q (Q2), veh/ln	0.0	1.5	0.0	0.1	0.0	0.5	0.0	22.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	26.6	0.0	3.6	0.0	20.2	0.0	40.4
%ile Storage Ratio (RQ%)	0.00	1.17	0.00	0.47	0.00	1.03	0.00	4.31
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.7
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	102.0
HCM 2010 LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	454	626	344	672	757	7	233	936	1	0	798	301
Future Volume (veh/h)	454	626	344	672	757	7	233	936	1	0	798	301
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1759	1759	1759	1900	1776	1776	1776	0	1776	1776
Adj Flow Rate, veh/h	473	652	358	700	789	7	243	975	0	0	831	0
Adj No. of Lanes	2	2	1	2	2	0	1	2	1	0	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	8	8	8	8	8	8	7	7	7	0	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			No		
Cap, veh/h	539	455	204	759	693	6	134	1713	766	0	1314	588
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.17	0.14	0.14	0.23	0.20	0.20	0.08	0.51	0.00	0.00	0.39	0.00
Ln Grp Delay, s/veh	68.3	272.5	426.1	71.1	152.3	151.3	449.2	26.4	0.0	0.0	39.9	0.0
Ln Grp LOS	E	F	F	E	F	F	F	C			D	
Approach Vol, veh/h		1483			1496			1218			831	
Approach Delay, s/veh		244.5			114.0			110.7			39.9	
Approach LOS		F			F			F			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Case No		3.0	2.0	3.0	2.0	7.0	2.0	4.0
Phs Duration (G+Y+Rc), s		83.5	41.5	27.0	18.0	65.5	31.2	37.3
Change Period (Y+Rc), s		6.3	6.0	6.3	6.0	6.3	6.0	6.3
Max Green (Gmax), s		72.7	40.0	20.7	12.0	54.7	40.0	20.7
Max Allow Headway (MAH), s		5.3	3.8	5.0	3.8	5.3	3.8	5.0
Max Q Clear (g_c+I1), s		32.4	34.0	22.7	14.0	32.3	23.6	33.0
Green Ext Time (g_e), s		19.4	1.5	0.0	0.0	13.9	1.6	0.0
Prob of Phs Call (p_c)		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)		0.00	0.46	1.00	1.00	0.00	0.00	1.00

Left-Turn Movement Data								
Assigned Mvmt			3		5	1	7	
Mvmt Sat Flow, veh/h			3250		1691	0	3250	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3374		3343		3463		3395

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1509		1495		1509		30

Left Lane Group Data								
Assigned Mvmt	0	0	3	0	5	1	7	0
Lane Assignment			(Prot)		(Prot)		(Prot)	

Lanes in Grp	0	0	2	0	1	0	2	0
Grp Vol (v), veh/h	0	0	700	0	243	0	473	0
Grp Sat Flow (s), veh/h/ln	0	0	1625	0	1691	0	1625	0
Q Serve Time (g_s), s	0.0	0.0	32.0	0.0	12.0	0.0	21.6	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	32.0	0.0	12.0	0.0	21.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	59.2	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	759	0	134	0	539	0
V/C Ratio (X)	0.00	0.00	0.92	0.00	1.82	0.00	0.88	0.00
Avail Cap (c_a), veh/h	0	0	855	0	134	0	855	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.35	0.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	56.9	0.0	70.0	0.0	61.9	0.0
Incr Delay (d2), s/veh	0.0	0.0	14.2	0.0	379.2	0.0	6.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	71.1	0.0	449.2	0.0	68.3	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	14.4	0.0	5.6	0.0	9.7	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	1.5	0.0	14.1	0.0	0.5	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	15.9	0.0	19.7	0.0	10.2	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	1.06	0.00	2.21	0.00	0.97	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	27.4	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	2	0	1
Grp Vol (v), veh/h	0	975	0	652	0	831	0	388
Grp Sat Flow (s), veh/h/ln	0	1687	0	1671	0	1687	0	1671
Q Serve Time (g_s), s	0.0	30.4	0.0	20.7	0.0	30.3	0.0	31.0
Cycle Q Clear Time (g_c), s	0.0	30.4	0.0	20.7	0.0	30.3	0.0	31.0
Lane Grp Cap (c), veh/h	0	1713	0	455	0	1314	0	341
V/C Ratio (X)	0.00	0.57	0.00	1.43	0.00	0.63	0.00	1.14
Avail Cap (c_a), veh/h	0	1713	0	455	0	1314	0	341
Upstream Filter (I)	0.00	0.35	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	25.9	0.0	65.6	0.0	37.6	0.0	60.5
Incr Delay (d2), s/veh	0.0	0.5	0.0	206.9	0.0	2.3	0.0	91.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	26.4	0.0	272.5	0.0	39.9	0.0	152.3
1st-Term Q (Q1), veh/ln	0.0	14.1	0.0	9.5	0.0	14.1	0.0	14.3

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	13.1	0.0	0.4	0.0	8.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	14.2	0.0	22.6	0.0	14.5	0.0	23.0
%ile Storage Ratio (RQ%)	0.00	0.73	0.00	0.78	0.00	0.49	0.00	0.70
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	49.2	0.0	0.0	0.0	11.8
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	358	0	0	0	408
Grp Sat Flow (s), veh/h/ln	0	1509	0	1495	0	1509	0	1754
Q Serve Time (g_s), s	0.0	0.0	0.0	20.7	0.0	0.0	0.0	31.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	20.7	0.0	0.0	0.0	31.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.02
Lane Grp Cap (c), veh/h	0	766	0	204	0	588	0	358
V/C Ratio (X)	0.00	0.00	0.00	1.76	0.00	0.00	0.00	1.14
Avail Cap (c_a), veh/h	0	766	0	204	0	588	0	358
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	65.6	0.0	0.0	0.0	60.5
Incr Delay (d2), s/veh	0.0	0.0	0.0	360.5	0.0	0.0	0.0	90.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	426.1	0.0	0.0	0.0	151.3
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	8.6	0.0	0.0	0.0	15.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	20.4	0.0	0.0	0.0	9.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	29.0	0.0	0.0	0.0	24.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.73
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	38.6	0.0	0.0	0.0	12.4
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.3
Intersection Summary								
HCM 2010 Ctrl Delay		139.5						
HCM 2010 LOS		F						

APPENDIX I-O4:
Year 2020 Zoning Intersection Background LOS PM Analysis with Mitigation

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	617	1126	599	198	629	77	305	281	192	156	188	60
Future Volume (veh/h)	617	1126	599	198	629	77	305	281	192	156	188	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1743	1743	1900	1743	1743	1743
Adj Flow Rate, veh/h	656	1198	637	211	669	82	324	299	204	166	200	64
Adj No. of Lanes	2	2	1	1	2	1	2	2	0	2	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	9	9	9	9	9	9
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	721	1615	723	193	1259	563	211	472	314	65	669	299
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.21	0.45	0.45	0.11	0.35	0.35	0.07	0.25	0.25	0.02	0.20	0.20
Ln Grp Delay, s/veh	72.0	37.9	53.0	160.4	41.4	34.6	334.6	58.9	60.4	820.6	53.3	52.9
Ln Grp LOS	E	D	D	F	D	C	F	E	E	F	D	D
Approach Vol, veh/h		2491			962			827			430	
Approach Delay, s/veh		50.7			66.9			167.4			349.5	
Approach LOS		D			E			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	10.0	45.0	23.0	76.0	17.0	38.0	38.4	60.6
Change Period (Y+Rc), s	6.9	6.9	6.4	6.4	6.9	6.9	6.4	6.4
Max Green (Gmax), s	3.1	38.1	16.6	69.6	10.1	31.1	37.6	48.6
Max Allow Headway (MAH), s	3.8	5.3	3.7	4.8	3.8	5.3	3.8	4.8
Max Q Clear (g_c+I1), s	5.1	24.2	18.6	57.9	12.1	9.9	30.4	25.0
Green Ext Time (g_e), s	0.0	4.0	0.0	9.8	0.0	4.8	1.6	17.4
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	0.26	0.00

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	3221	1792	3221	3476

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	1908	3574	3312	3574

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	1268	1599	1482	1599

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	1	0	2	0	2	0
Grp Vol (v), veh/h	166	0	211	0	324	0	656	0
Grp Sat Flow (s), veh/h/ln	1610	0	1792	0	1610	0	1738	0
Q Serve Time (g_s), s	3.1	0.0	16.6	0.0	10.1	0.0	28.4	0.0
Cycle Q Clear Time (g_c), s	3.1	0.0	16.6	0.0	10.1	0.0	28.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	65	0	193	0	211	0	721	0
V/C Ratio (X)	2.56	0.00	1.09	0.00	1.53	0.00	0.91	0.00
Avail Cap (c_a), veh/h	65	0	193	0	211	0	849	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	75.4	0.0	68.7	0.0	71.9	0.0	59.6	0.0
Incr Delay (d2), s/veh	745.2	0.0	91.7	0.0	262.7	0.0	12.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	820.6	0.0	160.4	0.0	334.6	0.0	72.0	0.0
1st-Term Q (Q1), veh/ln	1.4	0.0	8.2	0.0	4.5	0.0	13.7	0.0
2nd-Term Q (Q2), veh/ln	6.7	0.0	4.9	0.0	7.7	0.0	1.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	8.1	0.0	13.1	0.0	12.2	0.0	14.9	0.0
%ile Storage Ratio (RQ%)	0.68	0.00	1.03	0.00	1.02	0.00	0.61	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	25.3	0.0	4.5	0.0	28.2	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.6	0.0	0.3	0.0	0.4	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	2	0	2
Grp Vol (v), veh/h	0	258	0	1198	0	200	0	669
Grp Sat Flow (s), veh/h/ln	0	1656	0	1787	0	1656	0	1787
Q Serve Time (g_s), s	0.0	21.4	0.0	42.6	0.0	7.9	0.0	23.0
Cycle Q Clear Time (g_c), s	0.0	21.4	0.0	42.6	0.0	7.9	0.0	23.0
Lane Grp Cap (c), veh/h	0	410	0	1615	0	669	0	1259
V/C Ratio (X)	0.00	0.63	0.00	0.74	0.00	0.30	0.00	0.53
Avail Cap (c_a), veh/h	0	410	0	1615	0	669	0	1259
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	51.7	0.0	34.8	0.0	52.2	0.0	39.7
Incr Delay (d2), s/veh	0.0	7.2	0.0	3.1	0.0	1.1	0.0	1.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	58.9	0.0	37.9	0.0	53.3	0.0	41.4
1st-Term Q (Q1), veh/ln	0.0	9.8	0.0	21.0	0.0	3.6	0.0	11.3

2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	0.7	0.0	0.1	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	10.7	0.0	21.7	0.0	3.7	0.0	11.6
%ile Storage Ratio (RQ%)	0.00	0.38	0.00	0.48	0.00	0.14	0.00	0.54
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	245	0	637	0	64	0	82
Grp Sat Flow (s), veh/h/ln	0	1519	0	1599	0	1482	0	1599
Q Serve Time (g_s), s	0.0	22.2	0.0	55.9	0.0	5.5	0.0	5.4
Cycle Q Clear Time (g_c), s	0.0	22.2	0.0	55.9	0.0	5.5	0.0	5.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.83	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	376	0	723	0	299	0	563
V/C Ratio (X)	0.00	0.65	0.00	0.88	0.00	0.21	0.00	0.15
Avail Cap (c_a), veh/h	0	376	0	723	0	299	0	563
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	52.0	0.0	38.4	0.0	51.3	0.0	34.1
Incr Delay (d2), s/veh	0.0	8.5	0.0	14.6	0.0	1.6	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	60.4	0.0	53.0	0.0	52.9	0.0	34.6
1st-Term Q (Q1), veh/ln	0.0	9.3	0.0	24.7	0.0	2.3	0.0	2.4
2nd-Term Q (Q2), veh/ln	0.0	0.9	0.0	2.9	0.0	0.1	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	10.2	0.0	27.6	0.0	2.4	0.0	2.5
%ile Storage Ratio (RQ%)	0.00	0.37	0.00	2.90	0.00	0.27	0.00	0.12
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		101.8						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	139	1283	158	130	763	125	181	114	177	137	61	59
Future Volume (veh/h)	139	1283	158	130	763	125	181	114	177	137	61	59
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	148	1365	168	138	812	133	193	121	188	146	65	63
Adj No. of Lanes	2	2	1	2	2	0	2	1	1	2	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	191	1938	867	181	1659	272	247	319	271	198	292	248
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.55	0.55	0.05	0.54	0.54	0.07	0.17	0.17	0.06	0.16	0.16
Ln Grp Delay, s/veh	89.7	27.8	18.1	83.8	23.1	23.1	75.5	59.7	73.4	76.7	58.3	59.3
Ln Grp LOS	F	C	B	F	C	C	E	E	E	E	E	E
Approach Vol, veh/h		1681			1083			502			274	
Approach Delay, s/veh		32.3			30.8			70.9			68.3	
Approach LOS		C			C			E			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	15.5	33.3	14.5	90.7	17.8	31.0	14.9	90.3
Change Period (Y+Rc), s	6.6	6.6	6.4	6.4	6.6	6.6	6.4	6.4
Max Green (Gmax), s	32.4	24.4	8.6	62.6	32.4	24.4	8.6	62.6
Max Allow Headway (MAH), s	3.8	4.6	3.7	5.0	3.8	4.6	3.7	5.0
Max Q Clear (g_c+I1), s	8.5	19.3	8.1	45.7	10.6	7.4	8.5	27.5
Green Ext Time (g_e), s	0.4	0.9	0.0	13.4	0.6	1.7	0.0	23.1
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3408		3442		3408		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1845		3539		1845		3046

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		1583		1568		499

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	146	0	138	0	193	0	148	0
Grp Sat Flow (s), veh/h/ln	1704	0	1721	0	1704	0	1721	0
Q Serve Time (g_s), s	6.5	0.0	6.1	0.0	8.6	0.0	6.5	0.0
Cycle Q Clear Time (g_c), s	6.5	0.0	6.1	0.0	8.6	0.0	6.5	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	198	0	181	0	247	0	191	0
V/C Ratio (X)	0.74	0.00	0.76	0.00	0.78	0.00	0.78	0.00
Avail Cap (c_a), veh/h	717	0	192	0	717	0	192	0
Upstream Filter (I)	1.00	0.00	0.74	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	71.4	0.0	72.0	0.0	70.2	0.0	71.8	0.0
Incr Delay (d2), s/veh	5.3	0.0	11.8	0.0	5.3	0.0	17.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	76.7	0.0	83.8	0.0	75.5	0.0	89.7	0.0
1st-Term Q (Q1), veh/ln	3.1	0.0	2.9	0.0	4.0	0.0	3.1	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.3	0.0	0.2	0.0	0.5	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	3.2	0.0	3.2	0.0	4.2	0.0	3.6	0.0
%ile Storage Ratio (RQ%)	0.61	0.00	0.30	0.00	0.80	0.00	0.28	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	1	0	1
Grp Vol (v), veh/h	0	121	0	1365	0	65	0	472
Grp Sat Flow (s), veh/h/ln	0	1845	0	1770	0	1845	0	1770
Q Serve Time (g_s), s	0.0	8.9	0.0	43.7	0.0	4.7	0.0	25.5
Cycle Q Clear Time (g_c), s	0.0	8.9	0.0	43.7	0.0	4.7	0.0	25.5
Lane Grp Cap (c), veh/h	0	319	0	1938	0	292	0	964
V/C Ratio (X)	0.00	0.38	0.00	0.70	0.00	0.22	0.00	0.49
Avail Cap (c_a), veh/h	0	319	0	1938	0	292	0	964
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.74
Uniform Delay (d1), s/veh	0.0	56.3	0.0	25.7	0.0	56.5	0.0	21.8
Incr Delay (d2), s/veh	0.0	3.4	0.0	2.2	0.0	1.8	0.0	1.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	59.7	0.0	27.8	0.0	58.3	0.0	23.1
1st-Term Q (Q1), veh/ln	0.0	4.6	0.0	21.2	0.0	2.4	0.0	12.5

2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.6	0.0	0.1	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	4.9	0.0	21.8	0.0	2.6	0.0	12.8
%ile Storage Ratio (RQ%)	0.00	0.17	0.00	0.23	0.00	0.09	0.00	0.24
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	188	0	168	0	63	0	473
Grp Sat Flow (s), veh/h/ln	0	1568	0	1583	0	1568	0	1775
Q Serve Time (g_s), s	0.0	17.3	0.0	8.3	0.0	5.4	0.0	25.5
Cycle Q Clear Time (g_c), s	0.0	17.3	0.0	8.3	0.0	5.4	0.0	25.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.28
Lane Grp Cap (c), veh/h	0	271	0	867	0	248	0	967
V/C Ratio (X)	0.00	0.69	0.00	0.19	0.00	0.25	0.00	0.49
Avail Cap (c_a), veh/h	0	271	0	867	0	248	0	967
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.74
Uniform Delay (d1), s/veh	0.0	59.8	0.0	17.6	0.0	56.8	0.0	21.8
Incr Delay (d2), s/veh	0.0	13.6	0.0	0.5	0.0	2.4	0.0	1.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	73.4	0.0	18.1	0.0	59.3	0.0	23.1
1st-Term Q (Q1), veh/ln	0.0	7.5	0.0	3.6	0.0	2.4	0.0	12.5
2nd-Term Q (Q2), veh/ln	0.0	1.0	0.0	0.1	0.0	0.2	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	8.6	0.0	3.7	0.0	2.5	0.0	12.8
%ile Storage Ratio (RQ%)	0.00	0.29	0.00	0.04	0.00	0.09	0.00	0.24
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		40.1						
HCM 2010 LOS		D						

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	165	1413	906	272	214	42
Future Volume (veh/h)	165	1413	906	272	214	42
Number	7	4	8	18	1	16
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00			1.00	1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1676	1676	1676	1710	1660	1660
Adj Flow Rate, veh/h	170	1457	934	280	221	43
Adj No. of Lanes	2	2	2	0	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	3	3
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	208	2300	1492	446	317	283
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.07	0.72	0.62	0.62	0.20	0.20
Ln Grp Delay, s/veh	83.2	12.4	22.6	22.8	74.0	56.2
Ln Grp LOS	F	B	C	C	E	E
Approach Vol, veh/h		1627	1214		264	
Approach Delay, s/veh		19.8	22.7		71.1	
Approach LOS		B	C		E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	6			4			7	8
Case No	9.0			4.0			2.0	8.0
Phs Duration (G+Y+Rc), s	40.0			127.0			17.6	109.4
Change Period (Y+Rc), s	6.5			6.4			6.4	6.4
Max Green (Gmax), s	33.5			120.6			14.6	99.6
Max Allow Headway (MAH), s	3.9			5.0			3.7	5.0
Max Q Clear (g_c+I1), s	23.7			41.1			11.0	42.5
Green Ext Time (g_e), s	0.5			43.8			0.2	36.4
Prob of Phs Call (p_c)	1.00			1.00			1.00	1.00
Prob of Max Out (p_x)	0.00			0.00			1.00	0.00
Left-Turn Movement Data								
Assigned Mvmt	1						7	3
Mvmt Sat Flow, veh/h	1581						3097	0
Through Movement Data								
Assigned Mvmt	6			4				8
Mvmt Sat Flow, veh/h	0			3269				2503
Right-Turn Movement Data								
Assigned Mvmt	16			14				18
Mvmt Sat Flow, veh/h	1411			0				723
Left Lane Group Data								
Assigned Mvmt	1	0	0	0	0	0	7	3
Lane Assignment							(Prot)	

Lanes in Grp	1	0	0	0	0	0	2	0
Grp Vol (v), veh/h	221	0	0	0	0	0	170	0
Grp Sat Flow (s), veh/h/ln	1581	0	0	0	0	0	1549	0
Q Serve Time (g_s), s	21.7	0.0	0.0	0.0	0.0	0.0	9.0	0.0
Cycle Q Clear Time (g_c), s	21.7	0.0	0.0	0.0	0.0	0.0	9.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1581	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	103.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	317	0	0	0	0	0	208	0
V/C Ratio (X)	0.70	0.00	0.00	0.00	0.00	0.00	0.82	0.00
Avail Cap (c_a), veh/h	317	0	0	0	0	0	271	0
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.42	0.00
Uniform Delay (d1), s/veh	62.0	0.0	0.0	0.0	0.0	0.0	76.9	0.0
Incr Delay (d2), s/veh	12.0	0.0	0.0	0.0	0.0	0.0	6.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	74.0	0.0	0.0	0.0	0.0	0.0	83.2	0.0
1st-Term Q (Q1), veh/ln	9.5	0.0	0.0	0.0	0.0	0.0	3.9	0.0
2nd-Term Q (Q2), veh/ln	1.1	0.0	0.0	0.0	0.0	0.0	0.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	10.6	0.0	0.0	0.0	0.0	0.0	4.1	0.0
%ile Storage Ratio (RQ%)	0.53	0.00	0.00	0.00	0.00	0.00	0.47	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	6	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	1
Grp Vol (v), veh/h	0	0	0	1457	0	0	0	614
Grp Sat Flow (s), veh/h/ln	0	0	0	1593	0	0	0	1593
Q Serve Time (g_s), s	0.0	0.0	0.0	39.1	0.0	0.0	0.0	40.2
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	39.1	0.0	0.0	0.0	40.2
Lane Grp Cap (c), veh/h	0	0	0	2300	0	0	0	982
V/C Ratio (X)	0.00	0.00	0.00	0.63	0.00	0.00	0.00	0.63
Avail Cap (c_a), veh/h	0	0	0	2300	0	0	0	982
Upstream Filter (I)	0.00	0.00	0.00	0.42	0.00	0.00	0.00	0.88
Uniform Delay (d1), s/veh	0.0	0.0	0.0	11.9	0.0	0.0	0.0	20.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.6	0.0	0.0	0.0	2.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	12.4	0.0	0.0	0.0	22.6
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	17.0	0.0	0.0	0.0	17.6

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	17.2	0.0	0.0	0.0	18.3
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.32	0.00	0.00	0.00	0.28
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	16	0	0	14	0	0	0	18
Lane Assignment	R							T+R
Lanes in Grp	1	0	0	0	0	0	0	1
Grp Vol (v), veh/h	43	0	0	0	0	0	0	600
Grp Sat Flow (s), veh/h/ln	1411	0	0	0	0	0	0	1549
Q Serve Time (g_s), s	4.2	0.0	0.0	0.0	0.0	0.0	0.0	40.5
Cycle Q Clear Time (g_c), s	4.2	0.0	0.0	0.0	0.0	0.0	0.0	40.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.47
Lane Grp Cap (c), veh/h	283	0	0	0	0	0	0	955
V/C Ratio (X)	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.63
Avail Cap (c_a), veh/h	283	0	0	0	0	0	0	955
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.88
Uniform Delay (d1), s/veh	55.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0
Incr Delay (d2), s/veh	1.1	0.0	0.0	0.0	0.0	0.0	0.0	2.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	56.2	0.0	0.0	0.0	0.0	0.0	0.0	22.8
1st-Term Q (Q1), veh/ln	3.6	0.0	0.0	0.0	0.0	0.0	0.0	17.2
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	3.7	0.0	0.0	0.0	0.0	0.0	0.0	17.9
%ile Storage Ratio (RQ%)	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.27
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		25.3						
HCM 2010 LOS		C						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	1453	44	73	1093	88	66	17	68	60	6	30
Future Volume (veh/h)	35	1453	44	73	1093	88	66	17	68	60	6	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	36	1483	48	74	1115	90	67	17	69	61	6	31
Adj No. of Lanes	2	2	0	2	2	0	2	2	1	2	1	1
Peak Hour Factor	0.98	0.98	0.92	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	88	2515	81	113	2409	194	114	117	52	140	76	65
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.72	0.72	0.03	0.73	0.73	0.03	0.03	0.03	0.04	0.04	0.04
Ln Grp Delay, s/veh	75.6	11.9	11.9	78.8	9.8	9.7	93.4	74.4	306.1	81.1	72.6	95.2
Ln Grp LOS	E	B	B	E	A	A	F	E	F	F	E	F
Approach Vol, veh/h		1567			1279			153			98	
Approach Delay, s/veh		13.4			13.7			187.2			85.0	
Approach LOS		B			B			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	6	2	3	4			7	8
Case No	9.0	9.0	2.0	4.0			2.0	4.0
Phs Duration (G+Y+Rc), s	13.0	12.0	11.4	116.6			10.3	117.7
Change Period (Y+Rc), s	6.7	6.9	6.4	* 6.6			6.4	* 6.6
Max Green (Gmax), s	6.3	5.1	6.6	* 1.1E2			6.6	* 1.1E2
Max Allow Headway (MAH), s	4.0	4.1	3.8	5.1			3.7	5.1
Max Q Clear (g_c+I1), s	5.0	7.1	5.3	33.8			3.6	23.2
Green Ext Time (g_e), s	0.0	0.0	0.0	43.8			0.0	46.9
Prob of Phs Call (p_c)	1.00	1.00	0.96	1.00			0.78	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.00			1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1	5	3				7	
Mvmt Sat Flow, veh/h	3408	3408	3442				3442	

Through Movement Data								
Assigned Mvmt	6	2		4				8
Mvmt Sat Flow, veh/h	1845	3505		3499				3318

Right-Turn Movement Data								
Assigned Mvmt	16	12		14				18
Mvmt Sat Flow, veh/h	1568	1568		113				268

Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	7	0
Lane Assignment			(Prot)				(Prot)	

Lanes in Grp	2	2	2	0	0	0	2	0
Grp Vol (v), veh/h	61	67	74	0	0	0	36	0
Grp Sat Flow (s), veh/h/ln	1704	1704	1721	0	0	0	1721	0
Q Serve Time (g_s), s	2.7	3.0	3.3	0.0	0.0	0.0	1.6	0.0
Cycle Q Clear Time (g_c), s	2.7	3.0	3.3	0.0	0.0	0.0	1.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1704	1704	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	140	114	113	0	0	0	88	0
V/C Ratio (X)	0.43	0.59	0.65	0.00	0.00	0.00	0.41	0.00
Avail Cap (c_a), veh/h	140	114	148	0	0	0	148	0
Upstream Filter (I)	1.00	1.00	0.92	0.00	0.00	0.00	0.72	0.00
Uniform Delay (d1), s/veh	71.6	72.9	73.1	0.0	0.0	0.0	73.4	0.0
Incr Delay (d2), s/veh	9.5	20.5	5.7	0.0	0.0	0.0	2.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	81.1	93.4	78.8	0.0	0.0	0.0	75.6	0.0
1st-Term Q (Q1), veh/ln	1.3	1.4	1.6	0.0	0.0	0.0	0.8	0.0
2nd-Term Q (Q2), veh/ln	0.2	0.3	0.1	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	1.4	1.7	1.6	0.0	0.0	0.0	0.8	0.0
%ile Storage Ratio (RQ%)	0.07	0.10	0.12	0.00	0.00	0.00	0.11	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	6	2	0	4	0	0	0	8
Lane Assignment	T	T		T				T
Lanes in Grp	1	2	0	1	0	0	0	1
Grp Vol (v), veh/h	6	17	0	749	0	0	0	594
Grp Sat Flow (s), veh/h/ln	1845	1752	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.5	0.7	0.0	31.6	0.0	0.0	0.0	21.2
Cycle Q Clear Time (g_c), s	0.5	0.7	0.0	31.6	0.0	0.0	0.0	21.2
Lane Grp Cap (c), veh/h	76	117	0	1272	0	0	0	1285
V/C Ratio (X)	0.08	0.15	0.00	0.59	0.00	0.00	0.00	0.46
Avail Cap (c_a), veh/h	76	117	0	1272	0	0	0	1285
Upstream Filter (I)	1.00	1.00	0.00	0.72	0.00	0.00	0.00	0.92
Uniform Delay (d1), s/veh	70.6	71.8	0.0	10.5	0.0	0.0	0.0	8.6
Incr Delay (d2), s/veh	2.0	2.6	0.0	1.5	0.0	0.0	0.0	1.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	72.6	74.4	0.0	11.9	0.0	0.0	0.0	9.8
1st-Term Q (Q1), veh/ln	0.2	0.3	0.0	15.2	0.0	0.0	0.0	10.2

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.3	0.4	0.0	15.7	0.0	0.0	0.0	10.6
%ile Storage Ratio (RQ%)	0.01	0.02	0.00	0.23	0.00	0.00	0.00	0.69
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	16	12	0	14	0	0	0	18
Lane Assignment	R	R		T+R				T+R
Lanes in Grp	1	1	0	1	0	0	0	1
Grp Vol (v), veh/h	31	69	0	782	0	0	0	611
Grp Sat Flow (s), veh/h/ln	1568	1568	0	1843	0	0	0	1816
Q Serve Time (g_s), s	3.0	5.1	0.0	31.8	0.0	0.0	0.0	21.2
Cycle Q Clear Time (g_c), s	3.0	5.1	0.0	31.8	0.0	0.0	0.0	21.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	1.00	0.00	0.06	0.00	0.00	0.00	0.15
Lane Grp Cap (c), veh/h	65	52	0	1324	0	0	0	1318
V/C Ratio (X)	0.48	1.32	0.00	0.59	0.00	0.00	0.00	0.46
Avail Cap (c_a), veh/h	65	52	0	1324	0	0	0	1318
Upstream Filter (I)	1.00	1.00	0.00	0.72	0.00	0.00	0.00	0.92
Uniform Delay (d1), s/veh	71.7	73.9	0.0	10.5	0.0	0.0	0.0	8.7
Incr Delay (d2), s/veh	23.4	232.2	0.0	1.4	0.0	0.0	0.0	1.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	95.2	306.1	0.0	11.9	0.0	0.0	0.0	9.7
1st-Term Q (Q1), veh/ln	1.3	2.2	0.0	16.1	0.0	0.0	0.0	10.5
2nd-Term Q (Q2), veh/ln	0.4	3.4	0.0	0.5	0.0	0.0	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	1.7	5.6	0.0	16.6	0.0	0.0	0.0	10.9
%ile Storage Ratio (RQ%)	1.09	1.30	0.00	0.24	0.00	0.00	0.00	0.71
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	24.4
HCM 2010 LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1358	208	258	998	242	262
Future Volume (veh/h)	1358	208	258	998	242	262
Number	4	14	3	8	5	12
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)		1.00	1.00		1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1845	1845
Adj Flow Rate, veh/h	1415	217	269	1040	252	273
Adj No. of Lanes	3	0	2	2	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	3	3
Opposing Right Turn Influence			Yes		Yes	
Cap, veh/h	2742	420	316	2641	602	277
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.62	0.62	0.09	0.75	0.18	0.18
Ln Grp Delay, s/veh	18.7	19.4	86.6	8.1	63.3	119.1
Ln Grp LOS	B	B	F	A	E	F
Approach Vol, veh/h	1632			1309	525	
Approach Delay, s/veh	19.0			24.2	92.3	
Approach LOS	B			C	F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Case No		9.0	2.0	8.0				4.0
Phs Duration (G+Y+Rc), s		36.0	21.7	109.3				131.0
Change Period (Y+Rc), s		6.5	6.4	6.4				6.4
Max Green (Gmax), s		29.5	20.6	97.6				124.6
Max Allow Headway (MAH), s		3.9	3.8	5.3				5.3
Max Q Clear (g_c+I1), s		31.0	14.9	31.9				19.6
Green Ext Time (g_e), s		0.0	0.5	42.1				54.0
Prob of Phs Call (p_c)		1.00	1.00	1.00				1.00
Prob of Max Out (p_x)		0.00	0.24	0.00				0.00
Left-Turn Movement Data								
Assigned Mvmt		5	3	7				
Mvmt Sat Flow, veh/h		3408	3442	0				
Through Movement Data								
Assigned Mvmt		2		4				8
Mvmt Sat Flow, veh/h		0		4618				3632
Right-Turn Movement Data								
Assigned Mvmt		12		14				18
Mvmt Sat Flow, veh/h		1568		682				0
Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	0	0	0
Lane Assignment			(Prot)					

Lanes in Grp	0	2	2	0	0	0	0	0
Grp Vol (v), veh/h	0	252	269	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1704	1721	0	0	0	0	0
Q Serve Time (g_s), s	0.0	11.0	12.9	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	11.0	12.9	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1704	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	102.9	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	602	316	0	0	0	0	0
V/C Ratio (X)	0.00	0.42	0.85	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	602	425	0	0	0	0	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	61.1	74.7	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.1	11.9	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	63.3	86.6	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	5.2	6.1	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.5	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	5.4	6.6	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.23	0.73	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	2
Grp Vol (v), veh/h	0	0	0	1078	0	0	0	1040
Grp Sat Flow (s), veh/h/ln	0	0	0	1695	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	29.9	0.0	0.0	0.0	17.6
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	29.9	0.0	0.0	0.0	17.6
Lane Grp Cap (c), veh/h	0	0	0	2089	0	0	0	2641
V/C Ratio (X)	0.00	0.00	0.00	0.52	0.00	0.00	0.00	0.39
Avail Cap (c_a), veh/h	0	0	0	2089	0	0	0	2641
Upstream Filter (I)	0.00	0.00	0.00	0.77	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	18.0	0.0	0.0	0.0	7.6
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	18.7	0.0	0.0	0.0	8.1
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	13.9	0.0	0.0	0.0	8.5

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	14.1	0.0	0.0	0.0	8.7
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.92	0.00	0.00	0.00	0.90
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	0	0	18
Lane Assignment		R		T+R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	273	0	554	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1568	0	1742	0	0	0	0
Q Serve Time (g_s), s	0.0	29.0	0.0	29.9	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	29.0	0.0	29.9	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.39	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	277	0	1073	0	0	0	0
V/C Ratio (X)	0.00	0.99	0.00	0.52	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	277	0	1073	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.77	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	68.5	0.0	18.1	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	50.6	0.0	1.4	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	119.1	0.0	19.4	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	12.6	0.0	14.3	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	3.9	0.0	0.4	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	16.4	0.0	14.7	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.71	0.00	0.96	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		32.1						
HCM 2010 LOS		C						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	1437	265	87	1176	19	105	3	71	11	3	21
Future Volume (veh/h)	41	1437	265	87	1176	19	105	3	71	11	3	21
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1900	1900	1845	1900
Adj Flow Rate, veh/h	43	1513	279	92	1238	20	111	3	75	12	3	22
Adj No. of Lanes	2	2	0	2	2	0	1	1	0	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	91	2200	397	107	2633	43	309	12	303	106	37	166
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.73	0.73	0.03	0.74	0.74	0.20	0.20	0.20	0.20	0.20	0.20
Ln Grp Delay, s/veh	81.0	14.2	15.0	120.7	9.5	9.5	60.0	0.0	56.1	53.5	0.0	0.0
Ln Grp LOS	F	B	B	F	A	A	E		E	D		
Approach Vol, veh/h		1835			1350			189			37	
Approach Delay, s/veh		16.1			17.1			58.4			53.5	
Approach LOS		B			B			E			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		6.0	2.0	4.0		8.0	2.0	4.0
Phs Duration (G+Y+Rc), s		39.0	11.4	125.0		39.0	10.7	125.7
Change Period (Y+Rc), s		* 6.8	6.4	6.4		* 6.8	6.4	6.4
Max Green (Gmax), s		* 32	5.0	104.6		* 32	5.0	104.6
Max Allow Headway (MAH), s		4.7	3.8	5.3		4.7	3.8	5.3
Max Q Clear (g_c+I1), s		14.6	6.3	47.6		8.8	4.0	24.4
Green Ext Time (g_e), s		0.9	0.0	45.3		1.0	0.0	58.7
Prob of Phs Call (p_c)		1.00	0.98	1.00		1.00	0.85	1.00
Prob of Max Out (p_x)		0.00	1.00	0.00		0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		1367	3442			382	3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		61		2996		183		3565

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1516		541		829		58

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0
Lane Assignment			(Prot)			L+T+R	(Prot)	

Lanes in Grp	0	1	2	0	0	1	2	0
Grp Vol (v), veh/h	0	111	92	0	0	37	43	0
Grp Sat Flow (s), veh/h/ln	0	1367	1721	0	0	1394	1721	0
Q Serve Time (g_s), s	0.0	5.8	4.3	0.0	0.0	0.1	2.0	0.0
Cycle Q Clear Time (g_c), s	0.0	12.6	4.3	0.0	0.0	6.8	2.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1367	0	0	0	1342	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	1147	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	32.2	0.0	0.0	0.0	32.2	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	25.4	0.0	0.0	0.0	25.5	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	5.8	0.0	0.0	0.0	0.1	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	4.2	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	2.9	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	0.00	0.32	1.00	0.00
Lane Grp Cap (c), veh/h	0	309	107	0	0	308	91	0
V/C Ratio (X)	0.00	0.36	0.86	0.00	0.00	0.12	0.47	0.00
Avail Cap (c_a), veh/h	0	309	107	0	0	308	107	0
Upstream Filter (I)	0.00	1.00	0.89	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	56.8	77.7	0.0	0.0	52.7	77.3	0.0
Incr Delay (d2), s/veh	0.0	3.2	43.1	0.0	0.0	0.8	3.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	60.0	120.7	0.0	0.0	53.5	81.0	0.0
1st-Term Q (Q1), veh/ln	0.0	4.3	2.0	0.0	0.0	1.3	0.9	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.6	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	4.6	2.7	0.0	0.0	1.4	1.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.54	0.28	0.00	0.00	0.12	0.13	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	880	0	0	0	614
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	42.3	0.0	0.0	0.0	22.4
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	42.3	0.0	0.0	0.0	22.4
Lane Grp Cap (c), veh/h	0	0	0	1299	0	0	0	1307
V/C Ratio (X)	0.00	0.00	0.00	0.68	0.00	0.00	0.00	0.47
Avail Cap (c_a), veh/h	0	0	0	1299	0	0	0	1307
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.89
Uniform Delay (d1), s/veh	0.0	0.0	0.0	11.3	0.0	0.0	0.0	8.4
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.9	0.0	0.0	0.0	1.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	14.2	0.0	0.0	0.0	9.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	20.5	0.0	0.0	0.0	10.8

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	21.6	0.0	0.0	0.0	11.1
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.70	0.00	0.00	0.00	0.16
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R				T+R
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	78	0	912	0	0	0	644
Grp Sat Flow (s), veh/h/ln	0	1577	0	1767	0	0	0	1853
Q Serve Time (g_s), s	0.0	6.7	0.0	45.6	0.0	0.0	0.0	22.4
Cycle Q Clear Time (g_c), s	0.0	6.7	0.0	45.6	0.0	0.0	0.0	22.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.96	0.00	0.31	0.00	0.59	0.00	0.03
Lane Grp Cap (c), veh/h	0	315	0	1298	0	0	0	1369
V/C Ratio (X)	0.00	0.25	0.00	0.70	0.00	0.00	0.00	0.47
Avail Cap (c_a), veh/h	0	315	0	1298	0	0	0	1369
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.89
Uniform Delay (d1), s/veh	0.0	54.2	0.0	11.8	0.0	0.0	0.0	8.4
Incr Delay (d2), s/veh	0.0	1.9	0.0	3.2	0.0	0.0	0.0	1.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	56.1	0.0	15.0	0.0	0.0	0.0	9.5
1st-Term Q (Q1), veh/ln	0.0	2.9	0.0	22.0	0.0	0.0	0.0	11.3
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	1.2	0.0	0.0	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	3.1	0.0	23.2	0.0	0.0	0.0	11.7
%ile Storage Ratio (RQ%)	0.00	0.28	0.00	0.75	0.00	0.00	0.00	0.17
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	19.2
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	1319	225	257	1199	5	171	0	190	3	4	4
Future Volume (veh/h)	6	1319	225	257	1199	5	171	0	190	3	4	4
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1845	1900	1845	1900
Adj Flow Rate, veh/h	6	1374	234	268	1249	5	178	0	198	3	4	4
Adj No. of Lanes	1	2	0	1	2	0	2	1	1	0	1	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	329	2042	344	290	2782	11	566	326	277	87	114	100
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.67	0.67	0.67	0.07	0.77	0.77	0.18	0.00	0.18	0.18	0.18	0.18
Ln Grp Delay, s/veh	10.6	17.7	18.1	57.9	7.9	7.8	61.9	0.0	79.4	57.2	0.0	0.0
Ln Grp LOS	B	B	B	E	A	A	E		E	E		
Approach Vol, veh/h		1614			1522			376			11	
Approach Delay, s/veh		17.8			16.6			71.1			57.2	
Approach LOS		B			B			E			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Case No		5.0	1.2	6.0		8.0		4.0
Phs Duration (G+Y+Rc), s		34.0	16.0	117.0		34.0		133.0
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5		4.5
Max Green (Gmax), s		29.5	18.5	105.5		29.5		128.5
Max Allow Headway (MAH), s		4.0	3.8	5.3		4.0		5.3
Max Q Clear (g_c+I1), s		21.9	11.1	48.2		2.9		22.3
Green Ext Time (g_e), s		0.9	0.5	42.0		1.4		62.3
Prob of Phs Call (p_c)		1.00	1.00	1.00		1.00		1.00
Prob of Max Out (p_x)		0.00	0.09	0.00		0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3	7		1		
Mvmt Sat Flow, veh/h		2693	1774	441		338		

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1845		3032		648		3615

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		510		563		14

Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	1	0	0
Lane Assignment			(Pr/Pm)			L+T+R		

Lanes in Grp	0	2	1	1	0	1	0	0
Grp Vol (v), veh/h	0	178	268	6	0	11	0	0
Grp Sat Flow (s), veh/h/ln	0	1346	1774	441	0	1550	0	0
Q Serve Time (g_s), s	0.0	8.6	9.1	0.8	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	9.5	9.1	5.1	0.0	0.9	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1346	314	441	0	1203	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	1704	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	29.5	114.5	112.5	0.0	29.5	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	28.6	66.3	108.2	0.0	29.5	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	8.6	66.3	0.8	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	5.3	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	1.00	0.00	0.27	0.00	0.00
Lane Grp Cap (c), veh/h	0	566	290	329	0	301	0	0
V/C Ratio (X)	0.00	0.31	0.92	0.02	0.00	0.04	0.00	0.00
Avail Cap (c_a), veh/h	0	566	364	329	0	301	0	0
Upstream Filter (I)	0.00	1.00	1.00	0.51	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	60.4	32.7	10.5	0.0	57.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.5	25.2	0.1	0.0	0.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	61.9	57.9	10.6	0.0	57.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.6	12.2	0.1	0.0	0.4	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	2.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	3.7	14.2	0.1	0.0	0.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.68	1.13	0.01	0.00	0.04	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T				T
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	795	0	0	0	611
Grp Sat Flow (s), veh/h/ln	0	1845	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	44.5	0.0	0.0	0.0	20.3
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	44.5	0.0	0.0	0.0	20.3
Lane Grp Cap (c), veh/h	0	326	0	1192	0	0	0	1362
V/C Ratio (X)	0.00	0.00	0.00	0.67	0.00	0.00	0.00	0.45
Avail Cap (c_a), veh/h	0	326	0	1192	0	0	0	1362
Upstream Filter (I)	0.00	0.00	0.00	0.51	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	16.2	0.0	0.0	0.0	6.8
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.5	0.0	0.0	0.0	1.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	17.7	0.0	0.0	0.0	7.9
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	21.6	0.0	0.0	0.0	9.8

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	22.1	0.0	0.0	0.0	10.3
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.32	0.00	0.00	0.00	0.38
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R				T+R
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	198	0	813	0	0	0	643
Grp Sat Flow (s), veh/h/ln	0	1568	0	1773	0	0	0	1860
Q Serve Time (g_s), s	0.0	19.9	0.0	46.2	0.0	0.0	0.0	20.3
Cycle Q Clear Time (g_c), s	0.0	19.9	0.0	46.2	0.0	0.0	0.0	20.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.29	0.00	0.36	0.00	0.01
Lane Grp Cap (c), veh/h	0	277	0	1194	0	0	0	1431
V/C Ratio (X)	0.00	0.71	0.00	0.68	0.00	0.00	0.00	0.45
Avail Cap (c_a), veh/h	0	277	0	1194	0	0	0	1431
Upstream Filter (I)	0.00	1.00	0.00	0.51	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	64.8	0.0	16.5	0.0	0.0	0.0	6.8
Incr Delay (d2), s/veh	0.0	14.6	0.0	1.6	0.0	0.0	0.0	1.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	79.4	0.0	18.1	0.0	0.0	0.0	7.8
1st-Term Q (Q1), veh/ln	0.0	8.6	0.0	22.6	0.0	0.0	0.0	10.4
2nd-Term Q (Q2), veh/ln	0.0	1.1	0.0	0.5	0.0	0.0	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	9.7	0.0	23.1	0.0	0.0	0.0	10.8
%ile Storage Ratio (RQ%)	0.00	0.84	0.00	0.33	0.00	0.00	0.00	0.40
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		23.1						
HCM 2010 LOS		C						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	1530	0	23	1510	153	0	0	28	106	0	33
Future Volume (veh/h)	52	1530	0	23	1510	153	0	0	28	106	0	33
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	0	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	53	1561	0	23	1541	156	0	0	29	108	0	34
Adj No. of Lanes	1	2	0	1	3	1	0	1	0	1	1	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	0	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			No			Yes		
Cap, veh/h	87	1275	0	47	1718	535	0	0	470	511	0	470
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.36	0.00	0.03	0.34	0.34	0.00	0.00	0.30	0.30	0.00	0.30
Ln Grp Delay, s/veh	34.8	127.5	0.0	36.4	26.7	16.0	0.0	0.0	15.2	17.5	0.0	15.3
Ln Grp LOS	C	F		D	C	B			B	B		B
Approach Vol, veh/h		1614			1720			29			142	
Approach Delay, s/veh		124.5			25.9			15.2			17.0	
Approach LOS		F			C			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		8.0	2.0	4.0		6.0	2.0	3.0
Phs Duration (G+Y+Rc), s		24.0	8.0	28.0		24.0	9.3	26.7
Change Period (Y+Rc), s		6.0	6.4	6.4		6.0	6.4	6.4
Max Green (Gmax), s		18.0	5.0	18.6		18.0	5.0	18.6
Max Allow Headway (MAH), s		4.5	3.8	5.2		4.5	3.8	5.2
Max Q Clear (g_c+I1), s		2.8	2.8	23.6		6.5	3.8	19.3
Green Ext Time (g_e), s		0.5	0.0	0.0		0.5	0.0	0.0
Prob of Phs Call (p_c)		1.00	0.32	1.00		1.00	0.59	1.00
Prob of Max Out (p_x)		0.00	1.00	0.00		0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		0	1774			1362	1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		0		3632		0		5085

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		0		1568		1583

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0
Lane Assignment			(Prot)				(Prot)	

Lanes in Grp	0	0	1	0	0	1	1	0
Grp Vol (v), veh/h	0	0	23	0	0	108	53	0
Grp Sat Flow (s), veh/h/ln	0	0	1774	0	0	1362	1774	0
Q Serve Time (g_s), s	0.0	0.0	0.8	0.0	0.0	3.7	1.8	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.8	0.0	0.0	4.5	1.8	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	1362	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	18.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	17.2	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	3.7	0.0	0.0
Time to First Blk (g_f), s	0.0	18.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	47	0	0	511	87	0
V/C Ratio (X)	0.00	0.00	0.49	0.00	0.00	0.21	0.61	0.00
Avail Cap (c_a), veh/h	0	0	148	0	0	511	148	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	28.8	0.0	0.0	16.6	28.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	7.6	0.0	0.0	0.9	6.8	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	36.4	0.0	0.0	17.5	34.8	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.4	0.0	0.0	1.4	0.9	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.1	0.0	0.0	0.1	0.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.5	0.0	0.0	1.5	1.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.06	0.00	0.00	0.26	0.14	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	3
Grp Vol (v), veh/h	0	0	0	1561	0	0	0	1541
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1695
Q Serve Time (g_s), s	0.0	0.0	0.0	21.6	0.0	0.0	0.0	17.3
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	21.6	0.0	0.0	0.0	17.3
Lane Grp Cap (c), veh/h	0	0	0	1275	0	0	0	1718
V/C Ratio (X)	0.00	0.00	0.00	1.22	0.00	0.00	0.00	0.90
Avail Cap (c_a), veh/h	0	0	0	1275	0	0	0	1718
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	19.2	0.0	0.0	0.0	18.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	108.3	0.0	0.0	0.0	7.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	127.5	0.0	0.0	0.0	26.7
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	10.4	0.0	0.0	0.0	8.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	19.2	0.0	0.0	0.0	1.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	29.6	0.0	0.0	0.0	9.2
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	3.50	0.00	0.00	0.00	0.76
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	71.6	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R				T+R		R
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	29	0	0	0	34	0	156
Grp Sat Flow (s), veh/h/ln	0	1568	0	0	0	1568	0	1583
Q Serve Time (g_s), s	0.0	0.8	0.0	0.0	0.0	0.9	0.0	4.3
Cycle Q Clear Time (g_c), s	0.0	0.8	0.0	0.0	0.0	0.9	0.0	4.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	470	0	0	0	470	0	535
V/C Ratio (X)	0.00	0.06	0.00	0.00	0.00	0.07	0.00	0.29
Avail Cap (c_a), veh/h	0	470	0	0	0	470	0	535
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	15.0	0.0	0.0	0.0	15.0	0.0	14.6
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.0	0.0	0.3	0.0	1.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	15.2	0.0	0.0	0.0	15.3	0.0	16.0
1st-Term Q (Q1), veh/ln	0.0	0.3	0.0	0.0	0.0	0.4	0.0	1.9
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.4	0.0	0.0	0.0	0.4	0.0	2.1
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.00	0.00	0.04	0.00	0.17
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		70.8						
HCM 2010 LOS		E						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	463	935	216	346	812	114	314	1004	306	245	961	460
Future Volume (veh/h)	463	935	216	346	812	114	314	1004	306	245	961	460
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	493	995	230	368	864	121	334	1068	326	261	1022	489
Adj No. of Lanes	2	3	0	2	3	0	2	3	0	2	3	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	522	1133	261	427	1113	155	353	1122	342	323	1433	446
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.15	0.27	0.27	0.12	0.25	0.25	0.10	0.29	0.29	0.09	0.28	0.28
Ln Grp Delay, s/veh	74.8	51.7	60.8	64.4	47.7	53.8	86.1	59.3	70.9	60.6	40.3	112.8
Ln Grp LOS	E	D	E	E	D	D	F	E	E	E	D	F
Approach Vol, veh/h		1718			1353			1728			1772	
Approach Delay, s/veh		60.5			53.7			67.5			63.3	
Approach LOS		E			D			E			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	17.0	40.0	20.8	38.2	18.0	39.0	24.0	35.0
Change Period (Y+Rc), s	6.0	6.0	6.4	6.4	6.0	6.0	6.4	6.4
Max Green (Gmax), s	14.0	31.0	15.6	30.6	12.0	33.0	17.6	28.6
Max Allow Headway (MAH), s	3.8	5.1	3.8	5.3	3.8	5.1	3.8	5.3
Max Q Clear (g_c+I1), s	10.7	33.7	14.2	28.8	13.3	35.0	18.5	22.8
Green Ext Time (g_e), s	0.3	0.0	0.2	1.7	0.0	0.0	0.0	5.1
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3408		3442		3408		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3828		4132		5036		4513

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1168		953		1568		629

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	261	0	368	0	334	0	493	0
Grp Sat Flow (s), veh/h/ln	1704	0	1721	0	1704	0	1721	0
Q Serve Time (g_s), s	8.7	0.0	12.2	0.0	11.3	0.0	16.5	0.0
Cycle Q Clear Time (g_c), s	8.7	0.0	12.2	0.0	11.3	0.0	16.5	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	323	0	427	0	353	0	522	0
V/C Ratio (X)	0.81	0.00	0.86	0.00	0.95	0.00	0.94	0.00
Avail Cap (c_a), veh/h	411	0	463	0	353	0	522	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	51.5	0.0	49.8	0.0	51.7	0.0	48.7	0.0
Incr Delay (d2), s/veh	9.1	0.0	14.5	0.0	34.4	0.0	26.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	60.6	0.0	64.4	0.0	86.1	0.0	74.8	0.0
1st-Term Q (Q1), veh/ln	4.1	0.0	5.8	0.0	5.3	0.0	7.8	0.0
2nd-Term Q (Q2), veh/ln	0.4	0.0	0.9	0.0	1.7	0.0	1.9	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	4.5	0.0	6.6	0.0	7.0	0.0	9.7	0.0
%ile Storage Ratio (RQ%)	0.36	0.00	0.99	0.00	0.56	0.00	0.82	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	3	0	2
Grp Vol (v), veh/h	0	937	0	816	0	1022	0	648
Grp Sat Flow (s), veh/h/ln	0	1679	0	1695	0	1679	0	1695
Q Serve Time (g_s), s	0.0	31.7	0.0	26.7	0.0	21.1	0.0	20.7
Cycle Q Clear Time (g_c), s	0.0	31.7	0.0	26.7	0.0	21.1	0.0	20.7
Lane Grp Cap (c), veh/h	0	984	0	930	0	1433	0	836
V/C Ratio (X)	0.00	0.95	0.00	0.88	0.00	0.71	0.00	0.78
Avail Cap (c_a), veh/h	0	984	0	930	0	1433	0	836
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	40.2	0.0	40.2	0.0	37.3	0.0	40.7
Incr Delay (d2), s/veh	0.0	19.1	0.0	11.5	0.0	3.1	0.0	7.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	59.3	0.0	51.7	0.0	40.3	0.0	47.7
1st-Term Q (Q1), veh/ln	0.0	14.7	0.0	12.5	0.0	9.7	0.0	9.6

2nd-Term Q (Q2), veh/ln	0.0	2.6	0.0	1.5	0.0	0.4	0.0	0.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	17.3	0.0	14.0	0.0	10.2	0.0	10.4
%ile Storage Ratio (RQ%)	0.00	0.97	0.00	0.57	0.00	0.39	0.00	1.66
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	457	0	409	0	489	0	337
Grp Sat Flow (s), veh/h/ln	0	1639	0	1695	0	1568	0	1752
Q Serve Time (g_s), s	0.0	31.7	0.0	26.8	0.0	33.0	0.0	20.8
Cycle Q Clear Time (g_c), s	0.0	31.7	0.0	26.8	0.0	33.0	0.0	20.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.71	0.00	0.56	0.00	1.00	0.00	0.36
Lane Grp Cap (c), veh/h	0	480	0	465	0	446	0	432
V/C Ratio (X)	0.00	0.95	0.00	0.88	0.00	1.10	0.00	0.78
Avail Cap (c_a), veh/h	0	480	0	465	0	446	0	432
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	40.2	0.0	40.3	0.0	41.5	0.0	40.8
Incr Delay (d2), s/veh	0.0	30.7	0.0	20.5	0.0	71.3	0.0	13.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	70.9	0.0	60.8	0.0	112.8	0.0	53.8
1st-Term Q (Q1), veh/ln	0.0	14.4	0.0	12.5	0.0	14.2	0.0	10.0
2nd-Term Q (Q2), veh/ln	0.0	4.1	0.0	2.7	0.0	8.8	0.0	1.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	18.4	0.0	15.1	0.0	23.1	0.0	11.6
%ile Storage Ratio (RQ%)	0.00	1.03	0.00	0.62	0.00	0.88	0.00	1.84
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	10.7	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		61.7						
HCM 2010 LOS		E						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	161	1258	43	0	1164	133	124	47	3	92	35	120
Future Volume (veh/h)	161	1258	43	0	1164	133	124	47	3	92	35	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	0	1863	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	166	1297	44	0	1200	137	128	48	3	95	36	124
Adj No. of Lanes	2	2	0	0	2	0	2	1	1	2	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	0	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			No			Yes			Yes		
Cap, veh/h	186	2392	81	0	1906	217	96	337	286	96	337	286
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.68	0.68	0.00	0.59	0.59	0.03	0.18	0.18	0.03	0.18	0.18
Ln Grp Delay, s/veh	121.7	15.8	15.7	0.0	26.2	26.2	292.9	61.9	59.6	176.4	61.3	69.3
Ln Grp LOS	F	B	B		C	C	F	E	E	F	E	E
Approach Vol, veh/h		1507			1337			179			255	
Approach Delay, s/veh		27.4			26.2			227.1			108.1	
Approach LOS		C			C			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6	7	8
Case No	2.0	3.0		4.0	2.0	3.0	2.0	8.0
Phs Duration (G+Y+Rc), s	10.7	39.0		128.3	10.7	39.0	16.0	112.3
Change Period (Y+Rc), s	* 5.7	6.5		6.4	* 5.7	6.5	6.4	6.4
Max Green (Gmax), s	* 5	32.5		121.6	* 5	32.5	9.6	105.6
Max Allow Headway (MAH), s	3.8	4.5		5.3	3.8	4.5	3.8	5.3
Max Q Clear (g_c+I1), s	7.0	5.9		35.2	7.0	14.5	10.5	45.4
Green Ext Time (g_e), s	0.0	0.8		48.0	0.0	0.8	0.0	39.1
Prob of Phs Call (p_c)	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	0.00	0.00		0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1				5		7	3
Mvmt Sat Flow, veh/h	3408				3408		3442	0

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1845		3493		1845		3296

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		118		1568		365

Left Lane Group Data								
Assigned Mvmt	1	0	0	0	5	0	7	3
Lane Assignment	(Prot)				(Prot)		(Prot)	

Lanes in Grp	2	0	0	0	2	0	2	0
Grp Vol (v), veh/h	95	0	0	0	128	0	166	0
Grp Sat Flow (s), veh/h/ln	1704	0	0	0	1704	0	1721	0
Q Serve Time (g_s), s	5.0	0.0	0.0	0.0	5.0	0.0	8.5	0.0
Cycle Q Clear Time (g_c), s	5.0	0.0	0.0	0.0	5.0	0.0	8.5	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	105.9
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	96	0	0	0	96	0	186	0
V/C Ratio (X)	0.99	0.00	0.00	0.00	1.34	0.00	0.89	0.00
Avail Cap (c_a), veh/h	96	0	0	0	96	0	186	0
Upstream Filter (I)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	86.5	0.0	0.0	0.0	86.5	0.0	83.7	0.0
Incr Delay (d2), s/veh	89.9	0.0	0.0	0.0	206.4	0.0	38.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	176.4	0.0	0.0	0.0	292.9	0.0	121.7	0.0
1st-Term Q (Q1), veh/ln	2.3	0.0	0.0	0.0	2.4	0.0	4.1	0.0
2nd-Term Q (Q2), veh/ln	1.2	0.0	0.0	0.0	2.7	0.0	1.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	3.5	0.0	0.0	0.0	5.1	0.0	5.0	0.0
%ile Storage Ratio (RQ%)	0.90	0.00	0.00	0.00	0.93	0.00	0.30	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	8.1	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	48	0	657	0	36	0	661
Grp Sat Flow (s), veh/h/ln	0	1845	0	1770	0	1845	0	1770
Q Serve Time (g_s), s	0.0	3.9	0.0	33.1	0.0	2.9	0.0	43.0
Cycle Q Clear Time (g_c), s	0.0	3.9	0.0	33.1	0.0	2.9	0.0	43.0
Lane Grp Cap (c), veh/h	0	337	0	1212	0	337	0	1053
V/C Ratio (X)	0.00	0.14	0.00	0.54	0.00	0.11	0.00	0.63
Avail Cap (c_a), veh/h	0	337	0	1212	0	337	0	1053
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	61.1	0.0	14.1	0.0	60.7	0.0	23.3
Incr Delay (d2), s/veh	0.0	0.9	0.0	1.7	0.0	0.6	0.0	2.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	61.9	0.0	15.8	0.0	61.3	0.0	26.2
1st-Term Q (Q1), veh/ln	0.0	2.0	0.0	16.0	0.0	1.5	0.0	20.9

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.6	0.0	0.1	0.0	0.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.1	0.0	16.6	0.0	1.5	0.0	21.8
%ile Storage Ratio (RQ%)	0.00	0.22	0.00	0.20	0.00	0.08	0.00	0.44
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	3	0	684	0	124	0	676
Grp Sat Flow (s), veh/h/ln	0	1568	0	1842	0	1568	0	1798
Q Serve Time (g_s), s	0.0	0.3	0.0	33.2	0.0	12.5	0.0	43.4
Cycle Q Clear Time (g_c), s	0.0	0.3	0.0	33.2	0.0	12.5	0.0	43.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.06	0.00	1.00	0.00	0.20
Lane Grp Cap (c), veh/h	0	286	0	1261	0	286	0	1070
V/C Ratio (X)	0.00	0.01	0.00	0.54	0.00	0.43	0.00	0.63
Avail Cap (c_a), veh/h	0	286	0	1261	0	286	0	1070
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	59.6	0.0	14.1	0.0	64.6	0.0	23.4
Incr Delay (d2), s/veh	0.0	0.1	0.0	1.7	0.0	4.7	0.0	2.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	59.6	0.0	15.7	0.0	69.3	0.0	26.2
1st-Term Q (Q1), veh/ln	0.0	0.1	0.0	16.7	0.0	11.1	0.0	21.4
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.6	0.0	0.4	0.0	0.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.1	0.0	17.3	0.0	11.5	0.0	22.2
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.20	0.00	0.63	0.00	0.45
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	44.1
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	399	784	151	237	669	228	407	1638	217	364	1020	213
Future Volume (veh/h)	399	784	151	237	669	228	407	1638	217	364	1020	213
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	407	800	154	242	683	233	415	1671	221	371	1041	217
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	327	1131	352	159	883	275	464	2248	700	422	2186	681
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.10	0.22	0.22	0.05	0.17	0.17	0.14	0.45	0.45	0.12	0.43	0.43
Ln Grp Delay, s/veh	206.8	62.6	58.8	340.4	71.2	91.9	85.3	39.9	30.4	83.2	33.8	31.7
Ln Grp LOS	F	E	E	F	E	F	F	D	C	F	C	C
Approach Vol, veh/h		1361			1158			2307			1629	
Approach Delay, s/veh		105.3			131.6			47.1			44.8	
Approach LOS		F			F			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	27.1	80.0	14.0	42.9	29.1	78.0	22.0	34.9
Change Period (Y+Rc), s	6.8	6.8	6.4	6.4	6.8	6.8	6.4	6.4
Max Green (Gmax), s	26.2	71.2	7.6	32.6	26.2	71.2	15.6	24.6
Max Allow Headway (MAH), s	3.8	5.1	3.8	5.0	3.8	5.1	3.8	5.0
Max Q Clear (g_c+I1), s	19.6	47.1	9.6	25.8	21.6	26.2	17.6	25.4
Green Ext Time (g_e), s	0.8	21.2	0.0	5.2	0.7	36.2	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	0.18	0.00	1.00	0.00	0.66	0.00	1.00	0.00

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	3408	3442	3408	3442

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	5036	5085	5036	5085

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	1568	1583	1568	1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	371	0	242	0	415	0	407	0
Grp Sat Flow (s), veh/h/ln	1704	0	1721	0	1704	0	1721	0
Q Serve Time (g_s), s	17.6	0.0	7.6	0.0	19.6	0.0	15.6	0.0
Cycle Q Clear Time (g_c), s	17.6	0.0	7.6	0.0	19.6	0.0	15.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	422	0	159	0	464	0	327	0
V/C Ratio (X)	0.88	0.00	1.52	0.00	0.89	0.00	1.24	0.00
Avail Cap (c_a), veh/h	544	0	159	0	544	0	327	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	70.6	0.0	78.2	0.0	69.7	0.0	74.2	0.0
Incr Delay (d2), s/veh	12.6	0.0	262.2	0.0	15.6	0.0	132.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	83.2	0.0	340.4	0.0	85.3	0.0	206.8	0.0
1st-Term Q (Q1), veh/ln	8.3	0.0	3.6	0.0	9.3	0.0	7.4	0.0
2nd-Term Q (Q2), veh/ln	0.7	0.0	5.8	0.0	1.0	0.0	6.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	9.0	0.0	9.4	0.0	10.3	0.0	13.4	0.0
%ile Storage Ratio (RQ%)	0.40	0.00	0.49	0.00	0.66	0.00	0.68	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	20.6	0.0	0.0	0.0	19.9	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.4	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	3	0	3	0	3
Grp Vol (v), veh/h	0	1671	0	800	0	1041	0	683
Grp Sat Flow (s), veh/h/ln	0	1679	0	1695	0	1679	0	1695
Q Serve Time (g_s), s	0.0	45.1	0.0	23.8	0.0	24.2	0.0	21.0
Cycle Q Clear Time (g_c), s	0.0	45.1	0.0	23.8	0.0	24.2	0.0	21.0
Lane Grp Cap (c), veh/h	0	2248	0	1131	0	2186	0	883
V/C Ratio (X)	0.00	0.74	0.00	0.71	0.00	0.48	0.00	0.77
Avail Cap (c_a), veh/h	0	2248	0	1131	0	2186	0	883
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	37.6	0.0	58.8	0.0	33.1	0.0	64.7
Incr Delay (d2), s/veh	0.0	2.3	0.0	3.7	0.0	0.7	0.0	6.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	39.9	0.0	62.6	0.0	33.8	0.0	71.2
1st-Term Q (Q1), veh/ln	0.0	20.9	0.0	11.2	0.0	11.2	0.0	9.9

2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.4	0.0	0.2	0.0	0.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	21.4	0.0	11.6	0.0	11.3	0.0	10.4
%ile Storage Ratio (RQ%)	0.00	0.98	0.00	0.56	0.00	0.44	0.00	0.18
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	221	0	154	0	217	0	233
Grp Sat Flow (s), veh/h/ln	0	1568	0	1583	0	1568	0	1583
Q Serve Time (g_s), s	0.0	14.9	0.0	13.7	0.0	14.9	0.0	23.4
Cycle Q Clear Time (g_c), s	0.0	14.9	0.0	13.7	0.0	14.9	0.0	23.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	700	0	352	0	681	0	275
V/C Ratio (X)	0.00	0.32	0.00	0.44	0.00	0.32	0.00	0.85
Avail Cap (c_a), veh/h	0	700	0	352	0	681	0	275
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	29.3	0.0	54.9	0.0	30.5	0.0	65.7
Incr Delay (d2), s/veh	0.0	1.2	0.0	3.9	0.0	1.2	0.0	26.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	30.4	0.0	58.8	0.0	31.7	0.0	91.9
1st-Term Q (Q1), veh/ln	0.0	6.4	0.0	6.0	0.0	6.4	0.0	10.3
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.4	0.0	0.2	0.0	2.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	6.7	0.0	6.4	0.0	6.7	0.0	12.3
%ile Storage Ratio (RQ%)	0.00	0.31	0.00	0.31	0.00	0.26	0.00	0.44
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		74.0						
HCM 2010 LOS		E						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	149	660	3	18	1337	491	2	13	23	216	1	91
Future Volume (veh/h)	149	660	3	18	1337	491	2	13	23	216	1	91
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1696	1696	1696	1696	1696	1696	1900	1696	1900	1696	1696	1696
Adj Flow Rate, veh/h	157	695	3	19	1407	0	2	14	24	227	1	0
Adj No. of Lanes	1	2	1	1	2	1	0	2	0	2	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	12	12	12	12	12	12	12	12	12	12	12	12
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	184	2283	1021	22	1960	877	0	47	42	132	203	172
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.11	0.71	0.71	0.01	0.61	0.00	0.00	0.03	0.03	0.04	0.12	0.00
Ln Grp Delay, s/veh	68.6	7.6	5.7	96.2	19.1	0.0	0.0	66.6	75.1	417.6	51.6	0.0
Ln Grp LOS	E	A	A	F	B			E	E	F	D	
Approach Vol, veh/h		855			1426			38			228	
Approach Delay, s/veh		18.8			20.1			72.0			416.0	
Approach LOS		B			C			E			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	4.0	2.0	3.0	0.0	3.0
Phs Duration (G+Y+Rc), s	22.2	88.0	12.0	10.8	8.9	101.3	0.0	22.8
Change Period (Y+Rc), s	7.1	7.1	6.4	6.9	7.1	7.1	6.9	* 6.9
Max Green (Gmax), s	67.9	18.9	5.6	13.1	30.9	55.9	13.1	* 5.6
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.5	3.8	5.3	0.0	5.5
Max Q Clear (g_c+I1), s	14.7	42.4	7.6	4.2	3.6	12.7	0.0	2.1
Green Ext Time (g_e), s	0.5	0.0	0.0	0.1	0.0	25.5	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	0.78	0.50	1.00	0.00	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.04	0.00	0.00	0.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1616		3134		1616		0	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3223		1612		3223		1696

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1442		1442		1442		1442

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)			

Lanes in Grp	1	0	2	0	1	0	0	0
Grp Vol (v), veh/h	157	0	227	0	19	0	0	0
Grp Sat Flow (s), veh/h/ln	1616	0	1567	0	1616	0	0	0
Q Serve Time (g_s), s	12.7	0.0	5.6	0.0	1.6	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	12.7	0.0	5.6	0.0	1.6	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	184	0	132	0	22	0	0	0
V/C Ratio (X)	0.85	0.00	1.72	0.00	0.86	0.00	0.00	0.00
Avail Cap (c_a), veh/h	825	0	132	0	375	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.41	0.00	0.00	0.00
Uniform Delay (d1), s/veh	57.9	0.0	63.7	0.0	65.5	0.0	0.0	0.0
Incr Delay (d2), s/veh	10.7	0.0	353.9	0.0	30.8	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	68.6	0.0	417.6	0.0	96.2	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	5.7	0.0	2.4	0.0	0.7	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.5	0.0	6.5	0.0	0.2	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	6.2	0.0	8.9	0.0	0.9	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.20	0.00	0.39	0.00	0.07	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	23.8	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	1407	0	14	0	695	0	1
Grp Sat Flow (s), veh/h/ln	0	1612	0	1612	0	1612	0	1696
Q Serve Time (g_s), s	0.0	40.4	0.0	1.1	0.0	10.7	0.0	0.1
Cycle Q Clear Time (g_c), s	0.0	40.4	0.0	1.1	0.0	10.7	0.0	0.1
Lane Grp Cap (c), veh/h	0	1960	0	47	0	2283	0	203
V/C Ratio (X)	0.00	0.72	0.00	0.30	0.00	0.30	0.00	0.00
Avail Cap (c_a), veh/h	0	1960	0	159	0	2283	0	203
Upstream Filter (I)	0.00	0.41	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	18.1	0.0	63.2	0.0	7.2	0.0	51.6
Incr Delay (d2), s/veh	0.0	0.9	0.0	3.4	0.0	0.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	19.1	0.0	66.6	0.0	7.6	0.0	51.6
1st-Term Q (Q1), veh/ln	0.0	17.8	0.0	0.5	0.0	4.7	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	18.0	0.0	0.6	0.0	4.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.25	0.00	0.04	0.00	0.04	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	24	0	3	0	0
Grp Sat Flow (s), veh/h/ln	0	1442	0	1442	0	1442	0	1442
Q Serve Time (g_s), s	0.0	0.0	0.0	2.2	0.0	0.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	2.2	0.0	0.1	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	877	0	42	0	1021	0	172
V/C Ratio (X)	0.00	0.00	0.00	0.57	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	877	0	142	0	1021	0	172
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	63.7	0.0	5.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	11.4	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	75.1	0.0	5.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	55.9
HCM 2010 LOS	E

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	103	812	1706	301	491	281
Future Volume (veh/h)	103	812	1706	301	491	281
Number	1	6	2	12	3	18
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00			1.00	1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1696	1696	1696	1696	1696	1696
Adj Flow Rate, veh/h	108	855	1796	0	517	0
Adj No. of Lanes	1	2	3	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	12	12	12	12	12	12
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	134	2049	2150	669	629	289
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.64	0.46	0.00	0.20	0.00
Ln Grp Delay, s/veh	52.8	7.7	21.5	0.0	34.3	0.0
Ln Grp LOS	D	A	C		C	
Approach Vol, veh/h		963	1796		517	
Approach Delay, s/veh		12.7	21.5		34.3	
Approach LOS		B	C		C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8			6		
Case No	2.0	7.0	9.0			4.0		
Phs Duration (G+Y+Rc), s	13.7	44.2	22.1			57.9		
Change Period (Y+Rc), s	7.1	7.1	6.0			7.1		
Max Green (Gmax), s	7.9	27.9	24.0			42.9		
Max Allow Headway (MAH), s	3.8	5.3	3.8			5.3		
Max Q Clear (g_c+I1), s	7.3	29.2	14.6			12.5		
Green Ext Time (g_e), s	0.0	0.0	1.4			24.6		
Prob of Phs Call (p_c)	0.91	1.00	1.00			1.00		
Prob of Max Out (p_x)	1.00	0.00	0.08			0.00		
Left-Turn Movement Data								
Assigned Mvmt	1	5	3					
Mvmt Sat Flow, veh/h	1616	0	3134					
Through Movement Data								
Assigned Mvmt		2	8			6		
Mvmt Sat Flow, veh/h		4784	0			3308		
Right-Turn Movement Data								
Assigned Mvmt		12	18			16		
Mvmt Sat Flow, veh/h		1442	1442			0		
Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	0	0
Lane Assignment	(Prot)							

Lanes in Grp	1	0	2	0	0	0	0	0
Grp Vol (v), veh/h	108	0	517	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1616	0	1567	0	0	0	0	0
Q Serve Time (g_s), s	5.3	0.0	12.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	5.3	0.0	12.6	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1567	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	37.1	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	134	0	629	0	0	0	0	0
V/C Ratio (X)	0.81	0.00	0.82	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	160	0	940	0	0	0	0	0
Upstream Filter (I)	0.71	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	36.1	0.0	30.6	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	16.7	0.0	3.7	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	52.8	0.0	34.3	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	2.3	0.0	5.5	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.6	0.0	0.3	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	3.0	0.0	5.8	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.17	0.00	0.36	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	3	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1796	0	0	0	855	0	0
Grp Sat Flow (s), veh/h/ln	0	1544	0	0	0	1612	0	0
Q Serve Time (g_s), s	0.0	27.2	0.0	0.0	0.0	10.5	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	27.2	0.0	0.0	0.0	10.5	0.0	0.0
Lane Grp Cap (c), veh/h	0	2150	0	0	0	2049	0	0
V/C Ratio (X)	0.00	0.84	0.00	0.00	0.00	0.42	0.00	0.00
Avail Cap (c_a), veh/h	0	2150	0	0	0	2049	0	0
Upstream Filter (I)	0.00	0.67	0.00	0.00	0.00	0.71	0.00	0.00
Uniform Delay (d1), s/veh	0.0	18.8	0.0	0.0	0.0	7.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.8	0.0	0.0	0.0	0.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	21.5	0.0	0.0	0.0	7.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	11.5	0.0	0.0	0.0	4.6	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	12.0	0.0	0.0	0.0	4.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.10	0.00	0.00	0.00	0.07	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lane Assignment		R	R					
Lanes in Grp	0	1	1	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1442	1442	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	669	289	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	669	433	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		21.0						
HCM 2010 LOS		C						

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	566	1177	1594	67	397	2384
Future Volume (veh/h)	566	1177	1594	67	397	2384
Number	3	18	2	12	1	6
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1845	1845	1845	1845
Adj Flow Rate, veh/h	596	1239	1678	0	418	2509
Adj No. of Lanes	2	2	3	1	2	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	4	3	3	3	3
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	881	713	2610	813	535	3839
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.26	0.26	0.52	0.00	0.16	0.76
Ln Grp Delay, s/veh	25.0	363.3	13.1	0.0	31.6	4.8
Ln Grp LOS	C	F	B		C	A
Approach Vol, veh/h	1835		1678			2927
Approach Delay, s/veh	253.4		13.1			8.6
Approach LOS	F		B			A

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8			6		
Case No	2.0	7.0	9.0			4.0		
Phs Duration (G+Y+Rc), s	16.8	42.2	24.4			59.0		
Change Period (Y+Rc), s	6.0	6.0	6.4			6.0		
Max Green (Gmax), s	15.0	18.0	18.0			39.0		
Max Allow Headway (MAH), s	3.8	5.2	4.0			5.2		
Max Q Clear (g_c+I1), s	10.1	18.6	20.0			18.3		
Green Ext Time (g_e), s	0.7	0.0	0.0			20.4		
Prob of Phs Call (p_c)	1.00	1.00	1.00			1.00		
Prob of Max Out (p_x)	0.56	0.00	1.00			0.00		

Left-Turn Movement Data			
Assigned Mvmt	1	5	3
Mvmt Sat Flow, veh/h	3408	0	3375

Through Movement Data			
Assigned Mvmt		2	8			6
Mvmt Sat Flow, veh/h		5202	0			5202

Right-Turn Movement Data			
Assigned Mvmt		12	18			16
Mvmt Sat Flow, veh/h		1568	2733			0

Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	0	0
Lane Assignment	(Prot)							

Lanes in Grp	2	0	2	0	0	0	0	0
Grp Vol (v), veh/h	418	0	596	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1704	0	1688	0	0	0	0	0
Q Serve Time (g_s), s	8.1	0.0	10.9	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	8.1	0.0	10.9	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1688	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	35.8	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	535	0	881	0	0	0	0	0
V/C Ratio (X)	0.78	0.00	0.68	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	741	0	881	0	0	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	27.9	0.0	22.9	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	3.7	0.0	2.1	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	31.6	0.0	25.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	3.8	0.0	5.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	4.1	0.0	5.3	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.33	0.00	0.28	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	3	0	0	0	3	0	0
Grp Vol (v), veh/h	0	1678	0	0	0	2509	0	0
Grp Sat Flow (s), veh/h/ln	0	1679	0	0	0	1679	0	0
Q Serve Time (g_s), s	0.0	16.6	0.0	0.0	0.0	16.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	16.6	0.0	0.0	0.0	16.3	0.0	0.0
Lane Grp Cap (c), veh/h	0	2610	0	0	0	3839	0	0
V/C Ratio (X)	0.00	0.64	0.00	0.00	0.00	0.65	0.00	0.00
Avail Cap (c_a), veh/h	0	2610	0	0	0	3839	0	0
Upstream Filter (I)	0.00	0.87	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	12.0	0.0	0.0	0.0	3.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.1	0.0	0.0	0.0	0.9	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	13.1	0.0	0.0	0.0	4.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	7.6	0.0	0.0	0.0	7.2	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	7.9	0.0	0.0	0.0	7.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.12	0.00	0.00	0.00	0.18	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lane Assignment		R	R					
Lanes in Grp	0	1	2	0	0	0	0	0
Grp Vol (v), veh/h	0	0	1239	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1568	1367	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	18.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	18.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	813	713	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	1.74	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	813	713	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	25.5	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	337.8	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	363.3	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	6.7	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	33.5	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	40.2	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	4.32	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	131.5	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		79.5						
HCM 2010 LOS		E						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	600	561	47	40	809	246	326	293	186	139	59	768
Future Volume (veh/h)	600	561	47	40	809	246	326	293	186	139	59	768
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1712	1712	1712	1712	1712	1712	1900	1712	1712	1712
Adj Flow Rate, veh/h	606	567	47	40	817	0	329	296	188	140	60	776
Adj No. of Lanes	2	3	1	2	3	1	2	2	0	1	1	2
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	11	11	11	11	11	11	11	11	11	11	11	11
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	667	2325	724	82	1461	455	372	369	228	161	293	439
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.21	0.50	0.50	0.03	0.31	0.00	0.12	0.19	0.19	0.10	0.17	0.17
Ln Grp Delay, s/veh	71.7	23.2	21.0	81.3	47.4	0.0	86.2	75.4	79.6	84.5	57.3	421.8
Ln Grp LOS	E	C	C	F	D		F	E	E	F	E	F
Approach Vol, veh/h		1220			857			813			976	
Approach Delay, s/veh		47.2			48.9			81.0			351.0	
Approach LOS		D			D			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	4.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	41.2	57.1	23.4	38.3	11.7	86.7	26.5	35.1
Change Period (Y+Rc), s	7.5	7.1	7.6	* 7.7	7.5	7.1	* 7.7	* 7.7
Max Green (Gmax), s	42.5	37.9	27.4	* 22	42.5	37.9	* 22	* 27
Max Allow Headway (MAH), s	3.8	5.2	3.8	4.6	3.8	5.2	3.8	4.6
Max Q Clear (g_c+I1), s	31.9	25.3	15.5	26.2	4.0	13.1	18.4	29.4
Green Ext Time (g_e), s	1.8	7.5	0.3	0.0	0.1	11.3	0.4	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.83	1.00	1.00	1.00
Prob of Max Out (p_x)	0.07	0.00	0.00	1.00	0.00	0.00	0.96	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3163		1630		3163		3163	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		4673		1932		4673		1712

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1455		1195		1455		2561

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	1	0	2	0	2	0
Grp Vol (v), veh/h	606	0	140	0	40	0	329	0
Grp Sat Flow (s), veh/h/ln	1581	0	1630	0	1581	0	1581	0
Q Serve Time (g_s), s	29.9	0.0	13.5	0.0	2.0	0.0	16.4	0.0
Cycle Q Clear Time (g_c), s	29.9	0.0	13.5	0.0	2.0	0.0	16.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	667	0	161	0	82	0	372	0
V/C Ratio (X)	0.91	0.00	0.87	0.00	0.49	0.00	0.88	0.00
Avail Cap (c_a), veh/h	840	0	279	0	840	0	441	0
Upstream Filter (I)	0.83	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	61.6	0.0	71.1	0.0	76.9	0.0	69.5	0.0
Incr Delay (d2), s/veh	10.0	0.0	13.4	0.0	4.4	0.0	16.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	71.7	0.0	84.5	0.0	81.3	0.0	86.2	0.0
1st-Term Q (Q1), veh/ln	13.1	0.0	6.1	0.0	0.9	0.0	7.2	0.0
2nd-Term Q (Q2), veh/ln	0.9	0.0	0.6	0.0	0.1	0.0	0.9	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	14.1	0.0	6.7	0.0	0.9	0.0	8.0	0.0
%ile Storage Ratio (RQ%)	0.52	0.00	1.66	0.00	0.06	0.00	0.44	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	1	0	3	0	1
Grp Vol (v), veh/h	0	817	0	248	0	567	0	60
Grp Sat Flow (s), veh/h/ln	0	1558	0	1626	0	1558	0	1712
Q Serve Time (g_s), s	0.0	23.3	0.0	23.3	0.0	11.1	0.0	4.8
Cycle Q Clear Time (g_c), s	0.0	23.3	0.0	23.3	0.0	11.1	0.0	4.8
Lane Grp Cap (c), veh/h	0	1461	0	311	0	2325	0	293
V/C Ratio (X)	0.00	0.56	0.00	0.80	0.00	0.24	0.00	0.20
Avail Cap (c_a), veh/h	0	1461	0	311	0	2325	0	293
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.83	0.00	1.00
Uniform Delay (d1), s/veh	0.0	45.8	0.0	61.8	0.0	23.0	0.0	56.9
Incr Delay (d2), s/veh	0.0	1.6	0.0	13.6	0.0	0.2	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	47.4	0.0	75.4	0.0	23.2	0.0	57.3
1st-Term Q (Q1), veh/ln	0.0	10.1	0.0	10.5	0.0	4.8	0.0	2.3

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	1.2	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	10.3	0.0	11.6	0.0	4.8	0.0	2.3
%ile Storage Ratio (RQ%)	0.00	0.11	0.00	0.64	0.00	0.04	0.00	0.07
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	2
Grp Vol (v), veh/h	0	0	0	236	0	47	0	776
Grp Sat Flow (s), veh/h/ln	0	1455	0	1501	0	1455	0	1280
Q Serve Time (g_s), s	0.0	0.0	0.0	24.2	0.0	2.7	0.0	27.4
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	24.2	0.0	2.7	0.0	27.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.80	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	455	0	287	0	724	0	439
V/C Ratio (X)	0.00	0.00	0.00	0.82	0.00	0.06	0.00	1.77
Avail Cap (c_a), veh/h	0	455	0	287	0	724	0	439
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.83	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	62.1	0.0	20.9	0.0	66.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	17.4	0.0	0.1	0.0	355.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	79.6	0.0	21.0	0.0	421.8
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	10.0	0.0	1.1	0.0	9.7
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.4	0.0	0.0	0.0	21.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	11.4	0.0	1.1	0.0	31.4
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.63	0.00	0.06	0.00	0.96
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	84.4
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	131.4
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	421	812	53	204	697	701	142	1099	235	231	616	180
Future Volume (veh/h)	421	812	53	204	697	701	142	1099	235	231	616	180
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1776	1776	1776	1776	1776	1776	1776	1776	1776	1776	1900
Adj Flow Rate, veh/h	425	820	54	206	704	708	143	1110	237	233	622	182
Adj No. of Lanes	2	3	1	2	3	2	2	3	1	2	2	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	7	7	7	7	7	7	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	80	1482	462	80	1482	812	214	1076	335	313	625	182
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.02	0.31	0.31	0.02	0.31	0.31	0.07	0.22	0.22	0.10	0.24	0.24
Ln Grp Delay, s/veh	2007.4	25.3	21.0	783.5	24.2	39.3	41.0	67.8	36.1	41.3	74.2	75.4
Ln Grp LOS	F	C	C	F	C	D	D	F	D	D	E	E
Approach Vol, veh/h		1299			1618			1490			1037	
Approach Delay, s/veh		673.6			127.5			60.2			67.3	
Approach LOS		F			F			E			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	9.2	32.4	14.6	25.8	9.2	32.4	13.0	27.5
Change Period (Y+Rc), s	7.2	* 7.3	6.8	* 7.6	7.2	* 7.3	* 7.6	* 7.6
Max Green (Gmax), s	2.0	* 24	10.2	* 18	2.0	* 24	* 7.4	* 19
Max Allow Headway (MAH), s	3.8	4.9	3.8	5.2	3.8	4.9	3.8	5.2
Max Q Clear (g_c+I1), s	4.0	22.7	7.7	20.2	4.0	13.6	5.5	21.8
Green Ext Time (g_e), s	0.0	0.9	0.2	0.0	0.0	8.1	0.1	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.99	1.00	0.96	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3281		3281		3281		3281	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		4848		4848		4848		2577

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		2656		1509		1509		753

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	425	0	233	0	206	0	143	0
Grp Sat Flow (s), veh/h/ln	1640	0	1640	0	1640	0	1640	0
Q Serve Time (g_s), s	2.0	0.0	5.7	0.0	2.0	0.0	3.5	0.0
Cycle Q Clear Time (g_c), s	2.0	0.0	5.7	0.0	2.0	0.0	3.5	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	80	0	313	0	80	0	214	0
V/C Ratio (X)	5.31	0.00	0.74	0.00	2.57	0.00	0.67	0.00
Avail Cap (c_a), veh/h	80	0	408	0	80	0	296	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	40.0	0.0	36.1	0.0	40.0	0.0	37.5	0.0
Incr Delay (d2), s/veh	1967.4	0.0	5.2	0.0	743.5	0.0	3.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	2007.4	0.0	41.3	0.0	783.5	0.0	41.0	0.0
1st-Term Q (Q1), veh/ln	0.9	0.0	2.6	0.0	0.9	0.0	1.6	0.0
2nd-Term Q (Q2), veh/ln	21.9	0.0	0.2	0.0	8.3	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	22.8	0.0	2.8	0.0	9.2	0.0	1.7	0.0
%ile Storage Ratio (RQ%)	1.31	0.00	0.06	0.00	0.47	0.00	0.05	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	86.2	0.0	0.0	0.0	31.5	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	1.3	0.0	0.0	0.0	0.6	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	3	0	3	0	1
Grp Vol (v), veh/h	0	704	0	1110	0	820	0	407
Grp Sat Flow (s), veh/h/ln	0	1616	0	1616	0	1616	0	1687
Q Serve Time (g_s), s	0.0	9.7	0.0	18.2	0.0	11.6	0.0	19.7
Cycle Q Clear Time (g_c), s	0.0	9.7	0.0	18.2	0.0	11.6	0.0	19.7
Lane Grp Cap (c), veh/h	0	1482	0	1076	0	1482	0	409
V/C Ratio (X)	0.00	0.47	0.00	1.03	0.00	0.55	0.00	1.00
Avail Cap (c_a), veh/h	0	1482	0	1076	0	1482	0	409
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	23.1	0.0	31.9	0.0	23.8	0.0	31.0
Incr Delay (d2), s/veh	0.0	1.1	0.0	35.9	0.0	1.5	0.0	43.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	24.2	0.0	67.8	0.0	25.3	0.0	74.2
1st-Term Q (Q1), veh/ln	0.0	4.3	0.0	8.1	0.0	5.2	0.0	9.2

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	3.6	0.0	0.2	0.0	4.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	4.5	0.0	11.6	0.0	5.4	0.0	14.1
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.31	0.00	0.06	0.00	0.28
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	8.5	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	2	0	1	0	1	0	1
Grp Vol (v), veh/h	0	708	0	237	0	54	0	397
Grp Sat Flow (s), veh/h/ln	0	1328	0	1509	0	1509	0	1643
Q Serve Time (g_s), s	0.0	20.7	0.0	11.9	0.0	2.1	0.0	19.8
Cycle Q Clear Time (g_c), s	0.0	20.7	0.0	11.9	0.0	2.1	0.0	19.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.46
Lane Grp Cap (c), veh/h	0	812	0	335	0	462	0	398
V/C Ratio (X)	0.00	0.87	0.00	0.71	0.00	0.12	0.00	1.00
Avail Cap (c_a), veh/h	0	812	0	335	0	462	0	398
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	26.9	0.0	29.4	0.0	20.5	0.0	31.0
Incr Delay (d2), s/veh	0.0	12.4	0.0	6.7	0.0	0.5	0.0	44.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	39.3	0.0	36.1	0.0	21.0	0.0	75.4
1st-Term Q (Q1), veh/ln	0.0	7.6	0.0	4.9	0.0	0.9	0.0	8.9
2nd-Term Q (Q2), veh/ln	0.0	1.4	0.0	0.6	0.0	0.1	0.0	4.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	9.0	0.0	5.5	0.0	1.0	0.0	13.8
%ile Storage Ratio (RQ%)	0.00	0.35	0.00	0.15	0.00	0.06	0.00	0.27
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	227.9
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	371	130	250	340	220	173	1096	346	320	794	47
Future Volume (veh/h)	44	371	130	250	340	220	173	1096	346	320	794	47
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1776	1776	1776	1776	1776	1900
Adj Flow Rate, veh/h	45	382	134	258	351	227	178	1130	357	330	819	48
Adj No. of Lanes	2	3	1	2	2	1	2	2	1	2	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	94	524	163	304	580	260	225	1645	736	667	2016	118
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.10	0.10	0.09	0.17	0.17	0.07	0.49	0.49	0.20	0.62	0.62
Ln Grp Delay, s/veh	78.0	70.7	88.2	84.5	61.8	89.5	77.3	33.0	28.9	57.3	16.0	15.9
Ln Grp LOS	E	E	F	F	E	F	E	C	C	E	B	B
Approach Vol, veh/h		561			836			1665			1197	
Approach Delay, s/veh		75.5			76.3			36.8			27.4	
Approach LOS		E			E			D			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	36.0	80.1	18.3	20.6	15.1	100.9	8.8	30.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green (Gmax), s	31.5	69.5	16.5	19.5	18.5	82.5	13.5	22.5
Max Allow Headway (MAH), s	3.8	5.1	3.8	4.8	3.8	5.1	3.8	4.8
Max Q Clear (g_c+I1), s	15.8	42.0	13.6	15.0	10.3	21.8	4.0	23.9
Green Ext Time (g_e), s	1.0	18.8	0.3	1.1	0.3	29.7	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	0.86	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	1.00	0.02	0.00	0.00	1.00

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	3281	3408	3281	3408

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	3374	5036	3239	3505

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	1509	1568	190	1568

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	330	0	258	0	178	0	45	0
Grp Sat Flow (s), veh/h/ln	1640	0	1704	0	1640	0	1704	0
Q Serve Time (g_s), s	13.8	0.0	11.6	0.0	8.3	0.0	2.0	0.0
Cycle Q Clear Time (g_c), s	13.8	0.0	11.6	0.0	8.3	0.0	2.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	667	0	304	0	225	0	94	0
V/C Ratio (X)	0.49	0.00	0.85	0.00	0.79	0.00	0.48	0.00
Avail Cap (c_a), veh/h	667	0	363	0	392	0	297	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	54.7	0.0	69.6	0.0	71.1	0.0	74.3	0.0
Incr Delay (d2), s/veh	2.6	0.0	15.0	0.0	6.2	0.0	3.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	57.3	0.0	84.5	0.0	77.3	0.0	78.0	0.0
1st-Term Q (Q1), veh/ln	6.3	0.0	5.4	0.0	3.8	0.0	1.0	0.0
2nd-Term Q (Q2), veh/ln	0.2	0.0	0.6	0.0	0.2	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	6.5	0.0	6.1	0.0	4.0	0.0	1.0	0.0
%ile Storage Ratio (RQ%)	0.53	0.00	0.66	0.00	0.63	0.00	0.20	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	3	0	1	0	2
Grp Vol (v), veh/h	0	1130	0	382	0	426	0	351
Grp Sat Flow (s), veh/h/ln	0	1687	0	1679	0	1687	0	1752
Q Serve Time (g_s), s	0.0	40.0	0.0	11.4	0.0	19.8	0.0	14.4
Cycle Q Clear Time (g_c), s	0.0	40.0	0.0	11.4	0.0	19.8	0.0	14.4
Lane Grp Cap (c), veh/h	0	1645	0	524	0	1050	0	580
V/C Ratio (X)	0.00	0.69	0.00	0.73	0.00	0.41	0.00	0.60
Avail Cap (c_a), veh/h	0	1645	0	634	0	1050	0	580
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	30.6	0.0	67.3	0.0	14.8	0.0	60.0
Incr Delay (d2), s/veh	0.0	2.4	0.0	3.4	0.0	1.2	0.0	1.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	33.0	0.0	70.7	0.0	16.0	0.0	61.8
1st-Term Q (Q1), veh/ln	0.0	18.7	0.0	5.3	0.0	9.2	0.0	7.0

2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.2	0.0	0.3	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	19.2	0.0	5.5	0.0	9.6	0.0	7.1
%ile Storage Ratio (RQ%)	0.00	1.70	0.00	0.13	0.00	0.80	0.00	0.67
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	357	0	134	0	441	0	227
Grp Sat Flow (s), veh/h/ln	0	1509	0	1568	0	1742	0	1568
Q Serve Time (g_s), s	0.0	24.6	0.0	13.0	0.0	19.8	0.0	21.9
Cycle Q Clear Time (g_c), s	0.0	24.6	0.0	13.0	0.0	19.8	0.0	21.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.11	0.00	1.00
Lane Grp Cap (c), veh/h	0	736	0	163	0	1084	0	260
V/C Ratio (X)	0.00	0.49	0.00	0.82	0.00	0.41	0.00	0.87
Avail Cap (c_a), veh/h	0	736	0	197	0	1084	0	260
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	26.7	0.0	68.0	0.0	14.8	0.0	63.1
Incr Delay (d2), s/veh	0.0	2.3	0.0	20.2	0.0	1.1	0.0	26.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	28.9	0.0	88.2	0.0	15.9	0.0	89.5
1st-Term Q (Q1), veh/ln	0.0	10.3	0.0	5.6	0.0	9.5	0.0	9.5
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.9	0.0	0.3	0.0	1.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	10.7	0.0	6.5	0.0	9.9	0.0	11.4
%ile Storage Ratio (RQ%)	0.00	0.95	0.00	0.15	0.00	0.82	0.00	1.07
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		47.0						
HCM 2010 LOS		D						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	34	68	80	34	55	74	500	164	140	422	7
Future Volume (veh/h)	3	34	68	80	34	55	74	500	164	140	422	7
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1900	1712	1712	1712	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	3	36	72	85	36	59	79	532	174	149	449	7
Adj No. of Lanes	1	1	0	2	1	1	1	2	0	2	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	11	11	11	11	11	11	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	7	50	101	152	244	208	74	1358	442	143	1844	29
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.00	0.10	0.10	0.05	0.14	0.14	0.04	0.54	0.54	0.04	0.54	0.54
Ln Grp Delay, s/veh	88.6	0.0	46.4	46.0	34.8	36.0	172.1	13.5	13.6	132.0	11.7	11.7
Ln Grp LOS	F		D	D	C	D	F	B	B	F	B	B
Approach Vol, veh/h		111			180			785			605	
Approach Delay, s/veh		47.5			40.5			29.5			41.3	
Approach LOS		D			D			C			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	10.0	55.9	10.7	15.4	10.0	55.9	6.7	19.4
Change Period (Y+Rc), s	6.0	6.0	* 6.3	* 6.3	6.0	6.0	* 6.3	* 6.3
Max Green (Gmax), s	4.0	34.0	* 5.7	* 24	4.0	34.0	* 5.7	* 24
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.0	3.8	5.3	3.8	5.0
Max Q Clear (g_c+I1), s	6.0	13.4	4.4	8.3	6.0	8.4	2.2	5.3
Green Ext Time (g_e), s	0.0	7.6	0.0	0.8	0.0	8.2	0.0	0.9
Prob of Phs Call (p_c)	0.98	1.00	0.89	0.99	0.87	1.00	0.07	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3281		3163		1691		1630	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2503		511		3400		1712

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		815		1021		53		1455

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	1	0	1	0
Grp Vol (v), veh/h	149	0	85	0	79	0	3	0
Grp Sat Flow (s), veh/h/ln	1640	0	1581	0	1691	0	1630	0
Q Serve Time (g_s), s	4.0	0.0	2.4	0.0	4.0	0.0	0.2	0.0
Cycle Q Clear Time (g_c), s	4.0	0.0	2.4	0.0	4.0	0.0	0.2	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	143	0	152	0	74	0	7	0
V/C Ratio (X)	1.04	0.00	0.56	0.00	1.07	0.00	0.46	0.00
Avail Cap (c_a), veh/h	143	0	196	0	74	0	101	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	44.0	0.0	42.8	0.0	44.0	0.0	45.7	0.0
Incr Delay (d2), s/veh	87.7	0.0	3.2	0.0	126.8	0.0	42.9	0.0
Initial Q Delay (d3), s/veh	0.3	0.0	0.0	0.0	1.3	0.0	0.0	0.0
Control Delay (d), s/veh	132.0	0.0	46.0	0.0	172.1	0.0	88.6	0.0
1st-Term Q (Q1), veh/ln	1.8	0.0	1.1	0.0	1.9	0.0	0.1	0.0
2nd-Term Q (Q2), veh/ln	1.7	0.0	0.1	0.0	2.6	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	3.5	0.0	1.1	0.0	4.4	0.0	0.2	0.0
%ile Storage Ratio (RQ%)	0.41	0.00	0.22	0.00	0.37	0.00	0.03	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	1.6	0.0	0.0	0.0	1.4	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	358	0	0	0	223	0	36
Grp Sat Flow (s), veh/h/ln	0	1687	0	0	0	1687	0	1712
Q Serve Time (g_s), s	0.0	11.3	0.0	0.0	0.0	6.4	0.0	1.7
Cycle Q Clear Time (g_c), s	0.0	11.3	0.0	0.0	0.0	6.4	0.0	1.7
Lane Grp Cap (c), veh/h	0	915	0	0	0	915	0	244
V/C Ratio (X)	0.00	0.39	0.00	0.00	0.00	0.24	0.00	0.15
Avail Cap (c_a), veh/h	0	915	0	0	0	915	0	441
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	12.2	0.0	0.0	0.0	11.1	0.0	34.5
Incr Delay (d2), s/veh	0.0	1.3	0.0	0.0	0.0	0.6	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	13.5	0.0	0.0	0.0	11.7	0.0	34.8
1st-Term Q (Q1), veh/ln	0.0	5.3	0.0	0.0	0.0	3.0	0.0	0.8

2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	5.6	0.0	0.0	0.0	3.1	0.0	0.8
%ile Storage Ratio (RQ%)	0.00	0.18	0.00	0.00	0.00	0.09	0.00	0.02
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	348	0	108	0	233	0	59
Grp Sat Flow (s), veh/h/ln	0	1632	0	1532	0	1766	0	1455
Q Serve Time (g_s), s	0.0	11.4	0.0	6.3	0.0	6.4	0.0	3.3
Cycle Q Clear Time (g_c), s	0.0	11.4	0.0	6.3	0.0	6.4	0.0	3.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.50	0.00	0.67	0.00	0.03	0.00	1.00
Lane Grp Cap (c), veh/h	0	885	0	151	0	958	0	208
V/C Ratio (X)	0.00	0.39	0.00	0.71	0.00	0.24	0.00	0.28
Avail Cap (c_a), veh/h	0	885	0	395	0	958	0	375
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	12.3	0.0	40.2	0.0	11.1	0.0	35.2
Incr Delay (d2), s/veh	0.0	1.3	0.0	6.1	0.0	0.6	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	13.6	0.0	46.4	0.0	11.7	0.0	36.0
1st-Term Q (Q1), veh/ln	0.0	5.1	0.0	2.7	0.0	3.1	0.0	1.3
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.3	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	5.4	0.0	2.9	0.0	3.3	0.0	1.4
%ile Storage Ratio (RQ%)	0.00	0.18	0.00	0.07	0.00	0.10	0.00	0.24
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	36.1
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	250	39	143	215	107	83	972	177	312	980	65
Future Volume (veh/h)	87	250	39	143	215	107	83	972	177	312	980	65
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	89	255	40	146	219	109	85	992	181	318	1000	66
Adj No. of Lanes	2	2	1	2	1	1	1	3	0	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	132	481	215	187	283	241	104	2202	401	185	1870	123
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.04	0.14	0.14	0.05	0.15	0.15	0.06	0.53	0.53	0.11	0.58	0.58
Ln Grp Delay, s/veh	75.2	59.5	56.2	87.2	63.9	57.6	95.3	21.7	22.6	408.9	20.6	20.5
Ln Grp LOS	E	E	E	F	E	E	F	C	C	F	C	C
Approach Vol, veh/h		384			474			1258			1384	
Approach Delay, s/veh		62.8			69.6			27.0			109.8	
Approach LOS		E			E			C			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	3.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	22.0	84.0	14.0	26.0	15.0	91.0	11.6	28.4
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green (Gmax), s	16.0	46.0	8.0	52.0	11.0	51.0	8.0	52.0
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.0	3.8	5.3	3.8	5.0
Max Q Clear (g_c+I1), s	18.0	23.6	8.2	11.9	9.3	29.6	5.8	18.7
Green Ext Time (g_e), s	0.0	16.2	0.0	3.8	0.0	15.6	0.0	3.7
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.97	1.00	0.97	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1691		3408		1691		3408	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		4124		3505		3213		1845

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		751		1568		212		1568

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	2	0	1	0	2	0
Grp Vol (v), veh/h	318	0	146	0	85	0	89	0
Grp Sat Flow (s), veh/h/ln	1691	0	1704	0	1691	0	1704	0
Q Serve Time (g_s), s	16.0	0.0	6.2	0.0	7.3	0.0	3.8	0.0
Cycle Q Clear Time (g_c), s	16.0	0.0	6.2	0.0	7.3	0.0	3.8	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	185	0	187	0	104	0	132	0
V/C Ratio (X)	1.72	0.00	0.78	0.00	0.82	0.00	0.68	0.00
Avail Cap (c_a), veh/h	185	0	187	0	127	0	187	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	65.0	0.0	68.1	0.0	67.7	0.0	69.3	0.0
Incr Delay (d2), s/veh	343.9	0.0	19.0	0.0	27.7	0.0	5.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	408.9	0.0	87.2	0.0	95.3	0.0	75.2	0.0
1st-Term Q (Q1), veh/ln	7.5	0.0	2.9	0.0	3.4	0.0	1.8	0.0
2nd-Term Q (Q2), veh/ln	17.7	0.0	0.5	0.0	0.8	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	25.2	0.0	3.4	0.0	4.2	0.0	1.9	0.0
%ile Storage Ratio (RQ%)	2.66	0.00	0.65	0.00	0.52	0.00	0.29	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	33.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	1	0	1
Grp Vol (v), veh/h	0	777	0	255	0	525	0	219
Grp Sat Flow (s), veh/h/ln	0	1616	0	1752	0	1687	0	1845
Q Serve Time (g_s), s	0.0	21.5	0.0	9.9	0.0	27.6	0.0	16.7
Cycle Q Clear Time (g_c), s	0.0	21.5	0.0	9.9	0.0	27.6	0.0	16.7
Lane Grp Cap (c), veh/h	0	1726	0	481	0	982	0	283
V/C Ratio (X)	0.00	0.45	0.00	0.53	0.00	0.53	0.00	0.77
Avail Cap (c_a), veh/h	0	1726	0	1248	0	982	0	657
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	20.9	0.0	58.6	0.0	18.5	0.0	59.4
Incr Delay (d2), s/veh	0.0	0.9	0.0	0.9	0.0	2.1	0.0	4.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	21.7	0.0	59.5	0.0	20.6	0.0	63.9
1st-Term Q (Q1), veh/ln	0.0	9.6	0.0	4.8	0.0	12.8	0.0	8.5

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.1	0.0	0.6	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	9.8	0.0	4.8	0.0	13.4	0.0	8.9
%ile Storage Ratio (RQ%)	0.00	0.52	0.00	0.14	0.00	1.25	0.00	1.36
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	396	0	40	0	541	0	109
Grp Sat Flow (s), veh/h/ln	0	1643	0	1568	0	1738	0	1568
Q Serve Time (g_s), s	0.0	21.6	0.0	3.3	0.0	27.6	0.0	9.2
Cycle Q Clear Time (g_c), s	0.0	21.6	0.0	3.3	0.0	27.6	0.0	9.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.46	0.00	1.00	0.00	0.12	0.00	1.00
Lane Grp Cap (c), veh/h	0	877	0	215	0	1012	0	241
V/C Ratio (X)	0.00	0.45	0.00	0.19	0.00	0.53	0.00	0.45
Avail Cap (c_a), veh/h	0	877	0	558	0	1012	0	558
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	20.9	0.0	55.8	0.0	18.5	0.0	56.2
Incr Delay (d2), s/veh	0.0	1.7	0.0	0.4	0.0	2.0	0.0	1.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	22.6	0.0	56.2	0.0	20.5	0.0	57.6
1st-Term Q (Q1), veh/ln	0.0	9.8	0.0	1.4	0.0	13.2	0.0	4.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.0	0.6	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	10.2	0.0	1.5	0.0	13.8	0.0	4.1
%ile Storage Ratio (RQ%)	0.00	0.55	0.00	0.25	0.00	1.29	0.00	0.63
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		69.4						
HCM 2010 LOS		E						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	129	227	41	127	298	124	104	888	72	243	1099	101
Future Volume (veh/h)	129	227	41	127	298	124	104	888	72	243	1099	101
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	137	241	44	135	317	132	111	945	77	259	1169	107
Adj No. of Lanes	2	1	1	2	1	1	2	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	309	499	424	431	499	424	156	1619	132	217	1854	169
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.05	0.51	0.51	0.13	0.59	0.59
Ln Grp Delay, s/veh	64.8	47.3	41.7	57.6	50.3	44.6	77.2	28.7	28.6	182.6	22.4	22.4
Ln Grp LOS	E	D	D	E	D	D	E	C	C	F	C	C
Approach Vol, veh/h		422			584			1133			1535	
Approach Delay, s/veh		52.4			50.7			33.4			49.4	
Approach LOS		D			D			C			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Case No	2.0	4.0		5.0	2.0	4.0		5.0
Phs Duration (G+Y+Rc), s	24.0	82.4		45.6	11.7	94.7		45.6
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green (Gmax), s	19.5	67.5		51.5	19.5	67.5		51.5
Max Allow Headway (MAH), s	3.8	5.3		5.0	3.8	5.3		5.0
Max Q Clear (g_c+I1), s	21.5	33.6		36.0	7.1	39.0		27.5
Green Ext Time (g_e), s	0.0	22.2		5.1	0.2	19.7		6.0
Prob of Phs Call (p_c)	1.00	1.00		1.00	0.99	1.00		1.00
Prob of Max Out (p_x)	1.00	0.00		0.24	0.00	0.00		0.07

Left-Turn Movement Data								
Assigned Mvmt	1			7	5			3
Mvmt Sat Flow, veh/h	1691			1801	3281			2094

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3160		1845		3126		1845

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		257		1568		286		1568

Left Lane Group Data								
Assigned Mvmt	1	0	0	7	5	0	0	3
Lane Assignment	(Prot)				(Prot)			

Lanes in Grp	1	0	0	2	2	0	0	2
Grp Vol (v), veh/h	259	0	0	137	111	0	0	135
Grp Sat Flow (s), veh/h/ln	1691	0	0	901	1640	0	0	1047
Q Serve Time (g_s), s	19.5	0.0	0.0	11.0	5.1	0.0	0.0	8.8
Cycle Q Clear Time (g_c), s	19.5	0.0	0.0	34.0	5.1	0.0	0.0	25.5
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	901	0	0	0	1047
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	41.1	0.0	0.0	0.0	41.1
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	18.1	0.0	0.0	0.0	24.4
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	11.0	0.0	0.0	0.0	8.8
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	217	0	0	309	156	0	0	431
V/C Ratio (X)	1.19	0.00	0.00	0.44	0.71	0.00	0.00	0.31
Avail Cap (c_a), veh/h	217	0	0	432	421	0	0	575
Upstream Filter (I)	0.76	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	66.3	0.0	0.0	63.8	71.4	0.0	0.0	57.2
Incr Delay (d2), s/veh	116.3	0.0	0.0	1.0	5.9	0.0	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	182.6	0.0	0.0	64.8	77.2	0.0	0.0	57.6
1st-Term Q (Q1), veh/ln	9.1	0.0	0.0	2.7	2.3	0.0	0.0	2.5
2nd-Term Q (Q2), veh/ln	7.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	16.1	0.0	0.0	2.8	2.4	0.0	0.0	2.6
%ile Storage Ratio (RQ%)	1.58	0.00	0.00	0.42	0.33	0.00	0.00	0.36
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	10.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	505	0	241	0	630	0	317
Grp Sat Flow (s), veh/h/ln	0	1687	0	1845	0	1687	0	1845
Q Serve Time (g_s), s	0.0	31.6	0.0	16.7	0.0	36.9	0.0	23.0
Cycle Q Clear Time (g_c), s	0.0	31.6	0.0	16.7	0.0	36.9	0.0	23.0
Lane Grp Cap (c), veh/h	0	864	0	499	0	1001	0	499
V/C Ratio (X)	0.00	0.58	0.00	0.48	0.00	0.63	0.00	0.64
Avail Cap (c_a), veh/h	0	864	0	625	0	1001	0	625
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.76	0.00	1.00
Uniform Delay (d1), s/veh	0.0	25.8	0.0	46.5	0.0	20.1	0.0	48.8
Incr Delay (d2), s/veh	0.0	2.9	0.0	0.7	0.0	2.3	0.0	1.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	28.7	0.0	47.3	0.0	22.4	0.0	50.3
1st-Term Q (Q1), veh/ln	0.0	14.7	0.0	8.5	0.0	17.1	0.0	11.7

2nd-Term Q (Q2), veh/ln	0.0	0.7	0.0	0.1	0.0	0.6	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	15.4	0.0	8.6	0.0	17.8	0.0	11.9
%ile Storage Ratio (RQ%)	0.00	0.44	0.00	0.26	0.00	0.85	0.00	0.28
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	517	0	44	0	646	0	132
Grp Sat Flow (s), veh/h/ln	0	1730	0	1568	0	1725	0	1568
Q Serve Time (g_s), s	0.0	31.6	0.0	3.2	0.0	37.0	0.0	10.2
Cycle Q Clear Time (g_c), s	0.0	31.6	0.0	3.2	0.0	37.0	0.0	10.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.15	0.00	1.00	0.00	0.17	0.00	1.00
Lane Grp Cap (c), veh/h	0	887	0	424	0	1023	0	424
V/C Ratio (X)	0.00	0.58	0.00	0.10	0.00	0.63	0.00	0.31
Avail Cap (c_a), veh/h	0	887	0	531	0	1023	0	531
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.76	0.00	1.00
Uniform Delay (d1), s/veh	0.0	25.8	0.0	41.6	0.0	20.1	0.0	44.2
Incr Delay (d2), s/veh	0.0	2.8	0.0	0.1	0.0	2.3	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	28.6	0.0	41.7	0.0	22.4	0.0	44.6
1st-Term Q (Q1), veh/ln	0.0	15.1	0.0	1.4	0.0	17.6	0.0	4.4
2nd-Term Q (Q2), veh/ln	0.0	0.7	0.0	0.0	0.0	0.6	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	15.8	0.0	1.4	0.0	18.2	0.0	4.5
%ile Storage Ratio (RQ%)	0.00	0.46	0.00	0.25	0.00	0.87	0.00	0.64
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		45.0						
HCM 2010 LOS		D						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	45	38	112	37	501	41	1144	76	434	1339	86
Future Volume (veh/h)	64	45	38	112	37	501	41	1144	76	434	1339	86
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	68	48	40	119	39	533	44	1217	81	462	1424	91
Adj No. of Lanes	2	3	1	2	1	1	1	2	0	2	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	359	840	262	165	467	397	179	1533	102	511	2161	138
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.17	0.17	0.17	0.05	0.25	0.25	0.48	0.48	0.48	0.16	0.67	0.67
Ln Grp Delay, s/veh	57.5	55.4	56.5	80.0	45.1	229.3	34.3	40.5	40.5	75.4	16.9	17.0
Ln Grp LOS	E	E	E	E	D	F	C	D	D	E	B	B
Approach Vol, veh/h		156			691			1342			1977	
Approach Delay, s/veh		56.6			193.2			40.3			30.6	
Approach LOS		E			F			D			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4		6		8
Case No	2.0	6.0	2.0	5.0		4.0		3.0
Phs Duration (G+Y+Rc), s	30.6	81.4	13.6	32.4		112.0		46.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0		6.0		6.0
Max Green (Gmax), s	28.0	72.0	19.0	15.0		106.0		40.0
Max Allow Headway (MAH), s	3.8	5.4	3.8	4.3		5.4		4.3
Max Q Clear (g_c+I1), s	23.9	52.5	7.4	7.8		43.4		42.0
Green Ext Time (g_e), s	0.7	17.3	0.2	2.0		45.3		0.0
Prob of Phs Call (p_c)	1.00	1.00	0.99	1.00		1.00		1.00
Prob of Max Out (p_x)	0.86	0.00	0.00	0.49		0.00		1.00

Left-Turn Movement Data				
Assigned Mvmt	1	5	3	7
Mvmt Sat Flow, veh/h	3281	327	3408	1608

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	3211	5036	3221	1845

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	213	1568	205	1568

Left Lane Group Data								
Assigned Mvmt	1	5	3	7	0	0	0	0
Lane Assignment	(Prot)		(Prot)					

Lanes in Grp	2	1	2	2	0	0	0	0
Grp Vol (v), veh/h	462	44	119	68	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1640	327	1704	804	0	0	0	0
Q Serve Time (g_s), s	21.9	14.5	5.4	5.8	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	21.9	25.4	5.4	5.8	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	327	0	804	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	75.4	0.0	26.4	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	64.6	0.0	26.4	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	14.5	0.0	5.8	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	511	179	165	359	0	0	0	0
V/C Ratio (X)	0.90	0.25	0.72	0.19	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	581	179	410	359	0	0	0	0
Upstream Filter (I)	0.53	0.72	1.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	65.6	31.9	74.1	57.3	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	9.9	2.3	5.9	0.3	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	75.4	34.3	80.0	57.5	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	9.9	1.3	2.6	1.3	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.7	0.1	0.1	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	10.6	1.4	2.7	1.3	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	1.12	0.17	0.31	0.42	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	3	0	1	0	1
Grp Vol (v), veh/h	0	639	0	48	0	743	0	39
Grp Sat Flow (s), veh/h/ln	0	1687	0	1679	0	1687	0	1845
Q Serve Time (g_s), s	0.0	50.3	0.0	1.3	0.0	41.0	0.0	2.5
Cycle Q Clear Time (g_c), s	0.0	50.3	0.0	1.3	0.0	41.0	0.0	2.5
Lane Grp Cap (c), veh/h	0	805	0	840	0	1132	0	467
V/C Ratio (X)	0.00	0.79	0.00	0.06	0.00	0.66	0.00	0.08
Avail Cap (c_a), veh/h	0	805	0	840	0	1132	0	467
Upstream Filter (I)	0.00	0.72	0.00	1.00	0.00	0.53	0.00	1.00
Uniform Delay (d1), s/veh	0.0	34.7	0.0	55.4	0.0	15.3	0.0	45.0
Incr Delay (d2), s/veh	0.0	5.8	0.0	0.0	0.0	1.6	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	40.5	0.0	55.4	0.0	16.9	0.0	45.1
1st-Term Q (Q1), veh/ln	0.0	23.4	0.0	0.6	0.0	19.0	0.0	1.3

2nd-Term Q (Q2), veh/ln	0.0	1.3	0.0	0.0	0.0	0.5	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	24.7	0.0	0.6	0.0	19.5	0.0	1.3
%ile Storage Ratio (RQ%)	0.00	1.18	0.00	0.08	0.00	1.06	0.00	0.14
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	659	0	40	0	772	0	533
Grp Sat Flow (s), veh/h/ln	0	1738	0	1568	0	1739	0	1568
Q Serve Time (g_s), s	0.0	50.5	0.0	3.4	0.0	41.4	0.0	40.0
Cycle Q Clear Time (g_c), s	0.0	50.5	0.0	3.4	0.0	41.4	0.0	40.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.12	0.00	1.00	0.00	0.12	0.00	1.00
Lane Grp Cap (c), veh/h	0	830	0	262	0	1167	0	397
V/C Ratio (X)	0.00	0.79	0.00	0.15	0.00	0.66	0.00	1.34
Avail Cap (c_a), veh/h	0	830	0	262	0	1167	0	397
Upstream Filter (I)	0.00	0.72	0.00	1.00	0.00	0.53	0.00	1.00
Uniform Delay (d1), s/veh	0.0	34.8	0.0	56.3	0.0	15.4	0.0	59.0
Incr Delay (d2), s/veh	0.0	5.7	0.0	0.3	0.0	1.6	0.0	170.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	40.5	0.0	56.5	0.0	17.0	0.0	229.3
1st-Term Q (Q1), veh/ln	0.0	24.2	0.0	1.5	0.0	19.7	0.0	17.3
2nd-Term Q (Q2), veh/ln	0.0	1.3	0.0	0.0	0.0	0.5	0.0	18.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	25.5	0.0	1.5	0.0	20.2	0.0	36.1
%ile Storage Ratio (RQ%)	0.00	1.21	0.00	0.20	0.00	1.10	0.00	3.95
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	61.7
HCM 2010 LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	454	626	275	672	757	7	233	936	1	0	798	181
Future Volume (veh/h)	454	626	275	672	757	7	233	936	1	0	798	181
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1759	1759	1759	1900	1776	1776	1776	0	1776	1776
Adj Flow Rate, veh/h	473	652	286	700	789	7	243	975	0	0	831	0
Adj No. of Lanes	2	3	1	2	3	0	2	2	1	0	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	8	8	8	8	8	8	7	7	7	0	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			No		
Cap, veh/h	539	654	204	759	1002	9	259	1713	766	0	1314	588
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.17	0.14	0.14	0.23	0.20	0.20	0.08	0.51	0.00	0.00	0.39	0.00
Ln Grp Delay, s/veh	68.3	100.0	274.4	71.1	63.7	68.5	95.8	26.6	0.0	0.0	39.9	0.0
Ln Grp LOS	E	F	F	E	E	E	F	C			D	
Approach Vol, veh/h		1411			1496			1218			831	
Approach Delay, s/veh		124.7			68.1			40.4			39.9	
Approach LOS		F			E			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Case No		3.0	2.0	3.0	2.0	7.0	2.0	4.0
Phs Duration (G+Y+Rc), s		83.5	41.5	27.0	18.0	65.5	31.2	37.3
Change Period (Y+Rc), s		6.3	6.0	6.3	6.0	6.3	6.0	6.3
Max Green (Gmax), s		72.7	40.0	20.7	12.0	54.7	40.0	20.7
Max Allow Headway (MAH), s		5.3	3.8	5.1	3.8	5.3	3.8	5.1
Max Q Clear (g_c+I1), s		32.4	34.0	22.7	13.2	32.3	23.6	25.2
Green Ext Time (g_e), s		19.4	1.5	0.0	0.0	13.9	1.6	0.0
Prob of Phs Call (p_c)		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)		0.00	0.46	1.00	1.00	0.00	0.00	1.00

Left-Turn Movement Data								
Assigned Mvmt			3		5	1	7	
Mvmt Sat Flow, veh/h			3250		3281	0	3250	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3374		4803		3463		4910

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1509		1495		1509		44

Left Lane Group Data								
Assigned Mvmt	0	0	3	0	5	1	7	0
Lane Assignment			(Prot)		(Prot)		(Prot)	

Lanes in Grp	0	0	2	0	2	0	2	0
Grp Vol (v), veh/h	0	0	700	0	243	0	473	0
Grp Sat Flow (s), veh/h/ln	0	0	1625	0	1640	0	1625	0
Q Serve Time (g_s), s	0.0	0.0	32.0	0.0	11.2	0.0	21.6	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	32.0	0.0	11.2	0.0	21.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	59.2	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	759	0	259	0	539	0
V/C Ratio (X)	0.00	0.00	0.92	0.00	0.94	0.00	0.88	0.00
Avail Cap (c_a), veh/h	0	0	855	0	259	0	855	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.53	0.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	56.9	0.0	69.6	0.0	61.9	0.0
Incr Delay (d2), s/veh	0.0	0.0	14.2	0.0	26.2	0.0	6.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	71.1	0.0	95.8	0.0	68.3	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	14.4	0.0	5.1	0.0	9.7	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	1.5	0.0	0.9	0.0	0.5	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	15.9	0.0	6.0	0.0	10.2	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	1.06	0.00	0.68	0.00	0.97	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	3	0	2	0	2
Grp Vol (v), veh/h	0	975	0	652	0	831	0	514
Grp Sat Flow (s), veh/h/ln	0	1687	0	1601	0	1687	0	1601
Q Serve Time (g_s), s	0.0	30.4	0.0	20.6	0.0	30.3	0.0	23.2
Cycle Q Clear Time (g_c), s	0.0	30.4	0.0	20.6	0.0	30.3	0.0	23.2
Lane Grp Cap (c), veh/h	0	1713	0	654	0	1314	0	653
V/C Ratio (X)	0.00	0.57	0.00	1.00	0.00	0.63	0.00	0.79
Avail Cap (c_a), veh/h	0	1713	0	654	0	1314	0	653
Upstream Filter (I)	0.00	0.53	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	25.9	0.0	65.6	0.0	37.6	0.0	57.4
Incr Delay (d2), s/veh	0.0	0.7	0.0	34.3	0.0	2.3	0.0	6.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	26.6	0.0	100.0	0.0	39.9	0.0	63.7
1st-Term Q (Q1), veh/ln	0.0	14.1	0.0	9.1	0.0	14.1	0.0	10.2

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	2.1	0.0	0.4	0.0	0.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	14.3	0.0	11.2	0.0	14.5	0.0	10.8
%ile Storage Ratio (RQ%)	0.00	0.77	0.00	0.39	0.00	0.49	0.00	0.69
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	286	0	0	0	282
Grp Sat Flow (s), veh/h/ln	0	1509	0	1495	0	1509	0	1752
Q Serve Time (g_s), s	0.0	0.0	0.0	20.7	0.0	0.0	0.0	23.2
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	20.7	0.0	0.0	0.0	23.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.02
Lane Grp Cap (c), veh/h	0	766	0	204	0	588	0	357
V/C Ratio (X)	0.00	0.00	0.00	1.40	0.00	0.00	0.00	0.79
Avail Cap (c_a), veh/h	0	766	0	204	0	588	0	357
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	65.6	0.0	0.0	0.0	57.4
Incr Delay (d2), s/veh	0.0	0.0	0.0	208.7	0.0	0.0	0.0	11.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	274.4	0.0	0.0	0.0	68.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	8.6	0.0	0.0	0.0	11.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	11.8	0.0	0.0	0.0	1.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	20.4	0.0	0.0	0.0	12.3
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.71	0.00	0.00	0.00	0.78
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	20.6	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		72.7						
HCM 2010 LOS		E						

APPENDIX I-P:
2040 Background Intersection LOS

APPENDIX I-P1:
Year 2040 Zoning Intersection Background LOS AM Analysis without Mitigation

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	269	506	442	191	1822	42	587	377	195	115	377	671
Future Volume (veh/h)	269	506	442	191	1822	42	587	377	195	115	377	671
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1743	1743	1900	1743	1743	1743
Adj Flow Rate, veh/h	277	522	456	197	1878	43	605	389	201	119	389	692
Adj No. of Lanes	2	2	1	1	3	0	1	2	0	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	9	9	9	9	9	9
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	133	1240	555	69	1792	41	125	635	324	55	447	380
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.04	0.35	0.35	0.04	0.35	0.35	0.08	0.30	0.30	0.03	0.26	0.26
Ln Grp Delay, s/veh	556.4	24.5	41.0	925.7	70.3	79.7	1782.6	33.8	34.5	628.7	53.6	414.9
Ln Grp LOS	F	C	D	F	F	F	F	C	C	F	D	F
Approach Vol, veh/h		1255			2118			1195			1200	
Approach Delay, s/veh		147.9			152.8			919.3			319.0	
Approach LOS		F			F			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	3.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	10.0	35.0	10.0	39.0	14.0	31.0	10.0	39.0
Change Period (Y+Rc), s	6.9	6.9	6.4	6.4	6.9	6.9	6.4	6.4
Max Green (Gmax), s	3.1	28.1	3.6	32.6	7.1	24.1	3.6	32.6
Max Allow Headway (MAH), s	3.8	4.8	3.7	4.9	3.8	4.8	3.8	4.9
Max Q Clear (g_c+I1), s	5.1	17.0	5.6	26.5	9.1	26.1	5.6	34.6
Green Ext Time (g_e), s	0.0	6.7	0.0	5.7	0.0	0.0	0.0	0.0
Prob of Phs Call (p_c)	0.96	1.00	0.99	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	1660	1792	1660	3476

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	2125	3574	1743	5166

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	1083	1599	1482	118

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	2	0
Grp Vol (v), veh/h	119	0	197	0	605	0	277	0
Grp Sat Flow (s), veh/h/ln	1660	0	1792	0	1660	0	1738	0
Q Serve Time (g_s), s	3.1	0.0	3.6	0.0	7.1	0.0	3.6	0.0
Cycle Q Clear Time (g_c), s	3.1	0.0	3.6	0.0	7.1	0.0	3.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	55	0	69	0	125	0	133	0
V/C Ratio (X)	2.17	0.00	2.87	0.00	4.82	0.00	2.08	0.00
Avail Cap (c_a), veh/h	55	0	69	0	125	0	133	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	45.5	0.0	45.2	0.0	43.5	0.0	45.2	0.0
Incr Delay (d2), s/veh	583.2	0.0	880.5	0.0	1739.1	0.0	511.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	628.7	0.0	925.7	0.0	1782.6	0.0	556.4	0.0
1st-Term Q (Q1), veh/ln	1.4	0.0	1.8	0.0	3.2	0.0	1.7	0.0
2nd-Term Q (Q2), veh/ln	8.9	0.0	16.8	0.0	60.6	0.0	9.5	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	10.3	0.0	18.6	0.0	63.8	0.0	11.2	0.0
%ile Storage Ratio (RQ%)	0.81	0.00	1.95	0.00	5.70	0.00	0.45	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	16.1	0.0	32.1	0.0	119.9	0.0	36.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.5	0.0	0.7	0.0	1.2	0.0	0.5	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	1	0	2
Grp Vol (v), veh/h	0	302	0	522	0	389	0	1244
Grp Sat Flow (s), veh/h/ln	0	1656	0	1787	0	1743	0	1712
Q Serve Time (g_s), s	0.0	14.7	0.0	10.5	0.0	20.1	0.0	32.6
Cycle Q Clear Time (g_c), s	0.0	14.7	0.0	10.5	0.0	20.1	0.0	32.6
Lane Grp Cap (c), veh/h	0	495	0	1240	0	447	0	1187
V/C Ratio (X)	0.00	0.61	0.00	0.42	0.00	0.87	0.00	1.05
Avail Cap (c_a), veh/h	0	495	0	1240	0	447	0	1187
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	28.3	0.0	23.5	0.0	33.5	0.0	30.7
Incr Delay (d2), s/veh	0.0	5.5	0.0	1.1	0.0	20.1	0.0	39.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	33.8	0.0	24.5	0.0	53.6	0.0	70.3
1st-Term Q (Q1), veh/ln	0.0	6.7	0.0	5.1	0.0	9.6	0.0	15.3

2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	0.2	0.0	2.5	0.0	6.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.5	0.0	5.3	0.0	12.1	0.0	21.9
%ile Storage Ratio (RQ%)	0.00	0.27	0.00	0.12	0.00	0.47	0.00	1.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.2
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	288	0	456	0	692	0	677
Grp Sat Flow (s), veh/h/ln	0	1552	0	1599	0	1482	0	1860
Q Serve Time (g_s), s	0.0	15.0	0.0	24.5	0.0	24.1	0.0	32.6
Cycle Q Clear Time (g_c), s	0.0	15.0	0.0	24.5	0.0	24.1	0.0	32.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.70	0.00	1.00	0.00	1.00	0.00	0.06
Lane Grp Cap (c), veh/h	0	464	0	555	0	380	0	645
V/C Ratio (X)	0.00	0.62	0.00	0.82	0.00	1.82	0.00	1.05
Avail Cap (c_a), veh/h	0	464	0	555	0	380	0	645
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	28.4	0.0	28.1	0.0	35.0	0.0	30.7
Incr Delay (d2), s/veh	0.0	6.1	0.0	12.9	0.0	380.0	0.0	49.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	34.5	0.0	41.0	0.0	414.9	0.0	79.7
1st-Term Q (Q1), veh/ln	0.0	6.4	0.0	10.8	0.0	9.8	0.0	16.7
2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	2.0	0.0	40.1	0.0	8.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.2	0.0	12.8	0.0	49.9	0.0	25.4
%ile Storage Ratio (RQ%)	0.00	0.26	0.00	0.62	0.00	1.92	0.00	1.17
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	78.0	0.0	7.9
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.3
Intersection Summary								
HCM 2010 Ctrl Delay		345.1						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	688	156	262	1421	304	314	154	190	269	222	229
Future Volume (veh/h)	120	688	156	262	1421	304	314	154	190	269	222	229
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	124	709	161	270	1465	313	324	159	196	277	229	236
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	119	1069	243	221	1255	262	259	120	148	236	272	231
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.07	0.37	0.37	0.12	0.43	0.43	0.15	0.16	0.16	0.13	0.15	0.15
Ln Grp Delay, s/veh	152.4	37.9	37.9	157.4	104.0	124.9	194.8	0.0	220.2	167.5	78.0	118.6
Ln Grp LOS	F	D	D	F	F	F	F		F	F	E	F
Approach Vol, veh/h		994			2048			679			742	
Approach Delay, s/veh		52.2			120.3			208.1			124.3	
Approach LOS		D			F			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	23.4	26.6	22.0	53.0	25.0	25.0	14.8	60.2
Change Period (Y+Rc), s	6.6	6.6	6.4	6.4	6.6	6.6	6.4	6.4
Max Green (Gmax), s	16.8	20.0	15.6	46.6	18.4	18.4	8.4	53.8
Max Allow Headway (MAH), s	3.8	5.0	3.7	5.1	3.8	5.0	3.7	5.1
Max Q Clear (g_c+I1), s	18.8	22.0	17.6	27.8	20.4	20.4	10.4	55.8
Green Ext Time (g_e), s	0.0	0.0	0.0	15.7	0.0	0.0	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1757		1774		1757		1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		753		2867		1845		2917

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		928		651		1568		608

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	277	0	270	0	324	0	124	0
Grp Sat Flow (s), veh/h/ln	1757	0	1774	0	1757	0	1774	0
Q Serve Time (g_s), s	16.8	0.0	15.6	0.0	18.4	0.0	8.4	0.0
Cycle Q Clear Time (g_c), s	16.8	0.0	15.6	0.0	18.4	0.0	8.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	236	0	221	0	259	0	119	0
V/C Ratio (X)	1.17	0.00	1.22	0.00	1.25	0.00	1.04	0.00
Avail Cap (c_a), veh/h	236	0	221	0	259	0	119	0
Upstream Filter (I)	1.00	0.00	0.09	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	54.1	0.0	54.7	0.0	53.3	0.0	58.3	0.0
Incr Delay (d2), s/veh	113.4	0.0	102.7	0.0	141.5	0.0	93.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0
Control Delay (d), s/veh	167.5	0.0	157.4	0.0	194.8	0.0	152.4	0.0
1st-Term Q (Q1), veh/ln	8.1	0.0	7.6	0.0	8.9	0.0	4.1	0.0
2nd-Term Q (Q2), veh/ln	7.4	0.0	6.3	0.0	10.2	0.0	3.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	15.6	0.0	13.9	0.0	19.1	0.0	7.2	0.0
%ile Storage Ratio (RQ%)	2.95	0.00	1.31	0.00	3.62	0.00	0.57	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	10.2	0.0	12.1	0.0	16.3	0.0	1.2	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.3	0.0	0.3	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T		T		T
Lanes in Grp	0	0	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	438	0	229	0	875
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	1845	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	25.8	0.0	15.1	0.0	53.8
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	25.8	0.0	15.1	0.0	53.8
Lane Grp Cap (c), veh/h	0	0	0	660	0	272	0	762
V/C Ratio (X)	0.00	0.00	0.00	0.66	0.00	0.84	0.00	1.15
Avail Cap (c_a), veh/h	0	0	0	660	0	272	0	762
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	0.0	0.0	32.7	0.0	51.9	0.0	35.6
Incr Delay (d2), s/veh	0.0	0.0	0.0	5.2	0.0	26.1	0.0	68.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	37.9	0.0	78.0	0.0	104.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	12.5	0.0	7.7	0.0	26.2

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.0	0.0	2.0	0.0	14.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	13.5	0.0	9.7	0.0	40.7
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.18	0.00	0.34	0.00	0.69
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.3
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	355	0	432	0	236	0	903
Grp Sat Flow (s), veh/h/ln	0	1681	0	1748	0	1568	0	1755
Q Serve Time (g_s), s	0.0	20.0	0.0	25.8	0.0	18.4	0.0	53.8
Cycle Q Clear Time (g_c), s	0.0	20.0	0.0	25.8	0.0	18.4	0.0	53.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.55	0.00	0.37	0.00	1.00	0.00	0.35
Lane Grp Cap (c), veh/h	0	269	0	652	0	231	0	756
V/C Ratio (X)	0.00	1.32	0.00	0.66	0.00	1.02	0.00	1.20
Avail Cap (c_a), veh/h	0	269	0	652	0	231	0	756
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	52.5	0.0	32.7	0.0	53.3	0.0	35.6
Incr Delay (d2), s/veh	0.0	167.7	0.0	5.3	0.0	65.2	0.0	89.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Control Delay (d), s/veh	0.0	220.2	0.0	37.9	0.0	118.6	0.0	124.9
1st-Term Q (Q1), veh/ln	0.0	9.3	0.0	12.4	0.0	8.0	0.0	26.0
2nd-Term Q (Q2), veh/ln	0.0	12.5	0.0	1.0	0.0	4.2	0.0	18.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	21.8	0.0	13.3	0.0	12.2	0.0	44.8
%ile Storage Ratio (RQ%)	0.00	0.72	0.00	0.17	0.00	0.43	0.00	0.76
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	21.5	0.0	0.0	0.0	1.3	0.0	36.9
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.3
Intersection Summary								
HCM 2010 Ctrl Delay		119.1						
HCM 2010 LOS		F						

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	83	1035	1727	495	412	190
Future Volume (veh/h)	83	1035	1727	495	412	190
Number	7	4	8	18	1	16
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00			1.00	1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1676	1676	1676	1710	1660	1660
Adj Flow Rate, veh/h	88	1101	1837	527	438	202
Adj No. of Lanes	1	2	2	0	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	3	3
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	40	1919	1227	336	370	330
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.60	0.50	0.50	0.23	0.23
Ln Grp Delay, s/veh	607.4	10.2	226.3	276.6	136.8	35.2
Ln Grp LOS	F	B	F	F	F	D
Approach Vol, veh/h		1189	2364		640	
Approach Delay, s/veh		54.4	252.1		104.8	
Approach LOS		D	F		F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	6			4			7	8
Case No	9.0			4.0			2.0	8.0
Phs Duration (G+Y+Rc), s	25.0			54.0			8.4	45.6
Change Period (Y+Rc), s	6.5			6.4			6.4	6.4
Max Green (Gmax), s	18.5			46.6			2.0	39.2
Max Allow Headway (MAH), s	3.9			5.1			3.7	5.1
Max Q Clear (g_c+I1), s	20.5			18.6			4.0	41.2
Green Ext Time (g_e), s	0.0			26.5			0.0	0.0
Prob of Phs Call (p_c)	1.00			1.00			0.86	1.00
Prob of Max Out (p_x)	0.00			0.00			1.00	0.00
Left-Turn Movement Data								
Assigned Mvmt	1						7	3
Mvmt Sat Flow, veh/h	1581						1597	0
Through Movement Data								
Assigned Mvmt	6			4				8
Mvmt Sat Flow, veh/h	0			3269				2557
Right-Turn Movement Data								
Assigned Mvmt	16			14				18
Mvmt Sat Flow, veh/h	1411			0				677
Left Lane Group Data								
Assigned Mvmt	1	0	0	0	0	0	7	3
Lane Assignment							(Prot)	

Lanes in Grp	1	0	0	0	0	0	1	0
Grp Vol (v), veh/h	438	0	0	0	0	0	88	0
Grp Sat Flow (s), veh/h/ln	1581	0	0	0	0	0	1597	0
Q Serve Time (g_s), s	18.5	0.0	0.0	0.0	0.0	0.0	2.0	0.0
Cycle Q Clear Time (g_c), s	18.5	0.0	0.0	0.0	0.0	0.0	2.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1581	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.2
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	370	0	0	0	0	0	40	0
V/C Ratio (X)	1.18	0.00	0.00	0.00	0.00	0.00	2.18	0.00
Avail Cap (c_a), veh/h	370	0	0	0	0	0	40	0
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.51	0.00
Uniform Delay (d1), s/veh	30.3	0.0	0.0	0.0	0.0	0.0	38.5	0.0
Incr Delay (d2), s/veh	106.6	0.0	0.0	0.0	0.0	0.0	568.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	136.8	0.0	0.0	0.0	0.0	0.0	607.4	0.0
1st-Term Q (Q1), veh/ln	8.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0
2nd-Term Q (Q2), veh/ln	11.0	0.0	0.0	0.0	0.0	0.0	6.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	19.0	0.0	0.0	0.0	0.0	0.0	7.3	0.0
%ile Storage Ratio (RQ%)	0.94	0.00	0.00	0.00	0.00	0.00	0.84	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	16.9	0.0	0.0	0.0	0.0	0.0	11.9	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.0	0.0	0.0	0.0	0.5	0.0
Middle Lane Group Data								
Assigned Mvmt	6	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	1
Grp Vol (v), veh/h	0	0	0	1101	0	0	0	1152
Grp Sat Flow (s), veh/h/ln	0	0	0	1593	0	0	0	1593
Q Serve Time (g_s), s	0.0	0.0	0.0	16.6	0.0	0.0	0.0	39.2
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	16.6	0.0	0.0	0.0	39.2
Lane Grp Cap (c), veh/h	0	0	0	1919	0	0	0	790
V/C Ratio (X)	0.00	0.00	0.00	0.57	0.00	0.00	0.00	1.46
Avail Cap (c_a), veh/h	0	0	0	1919	0	0	0	790
Upstream Filter (I)	0.00	0.00	0.00	0.51	0.00	0.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	0.0	0.0	9.5	0.0	0.0	0.0	19.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.6	0.0	0.0	0.0	206.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	10.2	0.0	0.0	0.0	226.3
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	7.2	0.0	0.0	0.0	17.1

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	45.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	7.4	0.0	0.0	0.0	62.4
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.90
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.4
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
Right Lane Group Data								
Assigned Mvmt	16	0	0	14	0	0	0	18
Lane Assignment	R							T+R
Lanes in Grp	1	0	0	0	0	0	0	1
Grp Vol (v), veh/h	202	0	0	0	0	0	0	1212
Grp Sat Flow (s), veh/h/ln	1411	0	0	0	0	0	0	1557
Q Serve Time (g_s), s	10.1	0.0	0.0	0.0	0.0	0.0	0.0	39.2
Cycle Q Clear Time (g_c), s	10.1	0.0	0.0	0.0	0.0	0.0	0.0	39.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43
Lane Grp Cap (c), veh/h	330	0	0	0	0	0	0	773
V/C Ratio (X)	0.61	0.00	0.00	0.00	0.00	0.00	0.00	1.57
Avail Cap (c_a), veh/h	330	0	0	0	0	0	0	773
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09
Uniform Delay (d1), s/veh	27.0	0.0	0.0	0.0	0.0	0.0	0.0	19.9
Incr Delay (d2), s/veh	8.2	0.0	0.0	0.0	0.0	0.0	0.0	256.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	35.2	0.0	0.0	0.0	0.0	0.0	0.0	276.6
1st-Term Q (Q1), veh/ln	7.8	0.0	0.0	0.0	0.0	0.0	0.0	16.7
2nd-Term Q (Q2), veh/ln	0.8	0.0	0.0	0.0	0.0	0.0	0.0	55.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	8.5	0.0	0.0	0.0	0.0	0.0	0.0	71.8
%ile Storage Ratio (RQ%)	0.42	0.00	0.00	0.00	0.00	0.00	0.00	1.04
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	109.9
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
Intersection Summary								
HCM 2010 Ctrl Delay		173.6						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	1198	40	52	1824	32	154	9	16	67	26	52
Future Volume (veh/h)	32	1198	40	52	1824	32	154	9	16	67	26	52
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1845	1845	1900	1845	1845
Adj Flow Rate, veh/h	33	1222	41	53	1861	33	157	9	16	68	27	53
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	39	2184	73	55	2257	40	133	8	125	86	34	105
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.02	0.63	0.63	0.03	0.63	0.63	0.08	0.08	0.08	0.07	0.07	0.07
Ln Grp Delay, s/veh	66.1	8.1	8.1	104.6	12.7	12.7	162.8	0.0	29.5	69.8	0.0	45.0
Ln Grp LOS	E	A	A	F	B	B	F		C	E		D
Approach Vol, veh/h		1296			1947			182			148	
Approach Delay, s/veh		9.6			15.2			151.1			60.9	
Approach LOS		A			B			F			E	

Timer:		1	2	3	4	5	6	7	8			
Assigned Phs		6	2	3	4			7	8			
Case No		11.0	11.0	2.0	4.0			2.0	4.0			
Phs Duration (G+Y+Rc), s		11.0	12.0	8.4	47.0			7.8	47.6			
Change Period (Y+Rc), s		6.7	6.9	6.4	* 6.6			6.4	* 6.6			
Max Green (Gmax), s		4.3	5.1	2.0	* 26			2.0	* 26			
Max Allow Headway (MAH), s		4.9	5.2	3.8	5.2			3.7	5.2			
Max Q Clear (g_c+I1), s		5.4	7.1	3.9	14.9			3.2	27.8			
Green Ext Time (g_e), s		0.0	0.0	0.0	10.9			0.0	0.0			
Prob of Phs Call (p_c)		1.00	1.00	0.61	1.00			0.44	1.00			
Prob of Max Out (p_x)		0.00	0.00	1.00	0.00			1.00	0.00			

Left-Turn Movement Data												
Assigned Mvmt		1	5	3				7				
Mvmt Sat Flow, veh/h		1275	1666	1774				1774				

Through Movement Data												
Assigned Mvmt		6	2		4				8			
Mvmt Sat Flow, veh/h		506	95		3494				3558			

Right-Turn Movement Data												
Assigned Mvmt		16	12		14				18			
Mvmt Sat Flow, veh/h		1568	1568		117				63			

Left Lane Group Data												
Assigned Mvmt		1	5	3	0	0	0	7	0			
Lane Assignment		L+T	L+T	(Prot)				(Prot)				

Lanes in Grp	1	1	1	0	0	0	1	0
Grp Vol (v), veh/h	95	166	53	0	0	0	33	0
Grp Sat Flow (s), veh/h/ln	1781	1761	1774	0	0	0	1774	0
Q Serve Time (g_s), s	3.4	5.1	1.9	0.0	0.0	0.0	1.2	0.0
Cycle Q Clear Time (g_c), s	3.4	5.1	1.9	0.0	0.0	0.0	1.2	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.72	0.95	1.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	120	140	55	0	0	0	39	0
V/C Ratio (X)	0.79	1.18	0.96	0.00	0.00	0.00	0.84	0.00
Avail Cap (c_a), veh/h	120	140	55	0	0	0	55	0
Upstream Filter (I)	1.00	1.00	0.53	0.00	0.00	0.00	0.58	0.00
Uniform Delay (d1), s/veh	29.4	29.5	31.0	0.0	0.0	0.0	31.2	0.0
Incr Delay (d2), s/veh	40.4	133.4	73.7	0.0	0.0	0.0	34.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	69.8	162.8	104.6	0.0	0.0	0.0	66.1	0.0
1st-Term Q (Q1), veh/ln	1.7	2.5	0.9	0.0	0.0	0.0	0.6	0.0
2nd-Term Q (Q2), veh/ln	1.3	5.2	1.1	0.0	0.0	0.0	0.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	3.0	7.7	2.1	0.0	0.0	0.0	1.0	0.0
%ile Storage Ratio (RQ%)	0.15	0.42	0.15	0.00	0.00	0.00	0.14	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	6.4	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	6	2	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	619	0	0	0	923
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	12.9	0.0	0.0	0.0	25.5
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	12.9	0.0	0.0	0.0	25.5
Lane Grp Cap (c), veh/h	0	0	0	1106	0	0	0	1122
V/C Ratio (X)	0.00	0.00	0.00	0.56	0.00	0.00	0.00	0.82
Avail Cap (c_a), veh/h	0	0	0	1106	0	0	0	1122
Upstream Filter (I)	0.00	0.00	0.00	0.58	0.00	0.00	0.00	0.53
Uniform Delay (d1), s/veh	0.0	0.0	0.0	6.9	0.0	0.0	0.0	9.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.2	0.0	0.0	0.0	3.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	8.1	0.0	0.0	0.0	12.7
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	6.2	0.0	0.0	0.0	12.3

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.4	0.0	0.0	0.0	1.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	6.6	0.0	0.0	0.0	13.5
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.79
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	16	12	0	14	0	0	0	18
Lane Assignment	R	R		T+R				T+R
Lanes in Grp	1	1	0	1	0	0	0	1
Grp Vol (v), veh/h	53	16	0	644	0	0	0	971
Grp Sat Flow (s), veh/h/ln	1568	1568	0	1842	0	0	0	1852
Q Serve Time (g_s), s	2.1	0.6	0.0	12.9	0.0	0.0	0.0	25.8
Cycle Q Clear Time (g_c), s	2.1	0.6	0.0	12.9	0.0	0.0	0.0	25.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	1.00	0.00	0.06	0.00	0.00	0.00	0.03
Lane Grp Cap (c), veh/h	105	125	0	1151	0	0	0	1174
V/C Ratio (X)	0.50	0.13	0.00	0.56	0.00	0.00	0.00	0.83
Avail Cap (c_a), veh/h	105	125	0	1151	0	0	0	1174
Upstream Filter (I)	1.00	1.00	0.00	0.58	0.00	0.00	0.00	0.53
Uniform Delay (d1), s/veh	28.8	27.4	0.0	6.9	0.0	0.0	0.0	9.0
Incr Delay (d2), s/veh	16.1	2.1	0.0	1.1	0.0	0.0	0.0	3.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	45.0	29.5	0.0	8.1	0.0	0.0	0.0	12.7
1st-Term Q (Q1), veh/ln	0.9	0.3	0.0	6.4	0.0	0.0	0.0	12.9
2nd-Term Q (Q2), veh/ln	0.5	0.1	0.0	0.4	0.0	0.0	0.0	1.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	1.4	0.3	0.0	6.8	0.0	0.0	0.0	14.2
%ile Storage Ratio (RQ%)	0.88	0.08	0.00	0.10	0.00	0.00	0.00	0.83
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary

HCM 2010 Ctrl Delay	22.0
HCM 2010 LOS	C

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1094	164	502	1596	236	368
Future Volume (veh/h)	1094	164	502	1596	236	368
Number	4	14	3	8	5	12
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)		1.00	1.00		1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1845	1845
Adj Flow Rate, veh/h	1116	167	512	1629	241	376
Adj No. of Lanes	2	0	1	2	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	3	3
Opposing Right Turn Influence			Yes		Yes	
Cap, veh/h	1133	169	196	1978	484	432
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.37	0.37	0.11	0.56	0.28	0.28
Ln Grp Delay, s/veh	42.8	43.7	764.0	14.4	27.3	47.5
Ln Grp LOS	D	D	F	B	C	D
Approach Vol, veh/h	1283			2141	617	
Approach Delay, s/veh	43.3			193.7	39.6	
Approach LOS	D			F	D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Case No		9.0	2.0	8.0				4.0
Phs Duration (G+Y+Rc), s		28.0	15.0	35.0				50.0
Change Period (Y+Rc), s		6.5	6.4	6.4				6.4
Max Green (Gmax), s		21.5	8.6	28.6				43.6
Max Allow Headway (MAH), s		4.0	3.8	5.3				5.3
Max Q Clear (g_c+I1), s		19.8	10.6	30.0				31.3
Green Ext Time (g_e), s		0.4	0.0	0.0				11.4
Prob of Phs Call (p_c)		1.00	1.00	1.00				1.00
Prob of Max Out (p_x)		0.00	1.00	0.00				0.00
Left-Turn Movement Data								
Assigned Mvmt		5	3	7				
Mvmt Sat Flow, veh/h		1757	1774	0				
Through Movement Data								
Assigned Mvmt		2		4				8
Mvmt Sat Flow, veh/h		0		3183				3632
Right-Turn Movement Data								
Assigned Mvmt		12		14				18
Mvmt Sat Flow, veh/h		1568		461				0
Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	0	0	0
Lane Assignment			(Prot)					

Lanes in Grp	0	1	1	0	0	0	0	0
Grp Vol (v), veh/h	0	241	512	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1757	1774	0	0	0	0	0
Q Serve Time (g_s), s	0.0	9.0	8.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	9.0	8.6	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1757	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	28.6	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	484	196	0	0	0	0	0
V/C Ratio (X)	0.00	0.50	2.62	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	484	196	0	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.09	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	23.7	34.7	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	3.6	729.3	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	27.3	764.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	4.4	4.2	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.5	39.6	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	4.8	43.8	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.20	4.84	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	79.1	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	2
Grp Vol (v), veh/h	0	0	0	638	0	0	0	1629
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	27.8	0.0	0.0	0.0	29.3
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	27.8	0.0	0.0	0.0	29.3
Lane Grp Cap (c), veh/h	0	0	0	649	0	0	0	1978
V/C Ratio (X)	0.00	0.00	0.00	0.98	0.00	0.00	0.00	0.82
Avail Cap (c_a), veh/h	0	0	0	649	0	0	0	1978
Upstream Filter (I)	0.00	0.00	0.00	0.39	0.00	0.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	0.0	0.0	24.5	0.0	0.0	0.0	14.1
Incr Delay (d2), s/veh	0.0	0.0	0.0	18.4	0.0	0.0	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	42.8	0.0	0.0	0.0	14.4
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	13.5	0.0	0.0	0.0	14.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	3.3	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	16.8	0.0	0.0	0.0	14.1
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.99	0.00	0.00	0.00	0.36
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	0	0	18
Lane Assignment		R		T+R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	376	0	645	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1568	0	1781	0	0	0	0
Q Serve Time (g_s), s	0.0	17.8	0.0	28.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	17.8	0.0	28.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.26	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	432	0	653	0	0	0	0
V/C Ratio (X)	0.00	0.87	0.00	0.99	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	432	0	653	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.39	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	26.9	0.0	24.5	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	20.6	0.0	19.2	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	47.5	0.0	43.7	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	7.7	0.0	13.6	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	2.5	0.0	3.5	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	10.2	0.0	17.1	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.42	0.00	1.01	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		122.4						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	1283	205	61	1898	10	320	2	105	9	6	52
Future Volume (veh/h)	33	1283	205	61	1898	10	320	2	105	9	6	52
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1900	1900	1845	1900
Adj Flow Rate, veh/h	34	1323	211	63	1957	10	330	2	108	9	6	54
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	0	1	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	41	1829	289	48	2171	11	508	9	463	87	71	371
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.02	0.60	0.60	0.03	0.60	0.60	0.30	0.30	0.30	0.30	0.30	0.30
Ln Grp Delay, s/veh	61.4	11.8	12.0	228.8	18.9	18.7	29.8	0.0	20.7	19.4	0.0	0.0
Ln Grp LOS	E	B	B	F	B	B	C		C	B		
Approach Vol, veh/h		1568			2030			440			69	
Approach Delay, s/veh		13.0			25.3			27.5			19.4	
Approach LOS		B			C			C			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		6.0	2.0	4.0		8.0	2.0	4.0
Phs Duration (G+Y+Rc), s		29.0	8.4	51.0		29.0	8.1	51.3
Change Period (Y+Rc), s		* 6.8	6.4	6.4		* 6.8	6.4	6.4
Max Green (Gmax), s		* 22	2.0	30.6		* 22	2.0	30.6
Max Allow Headway (MAH), s		4.5	3.8	5.3		4.5	3.8	5.3
Max Q Clear (g_c+I1), s		18.2	4.0	25.0		4.3	3.4	37.0
Green Ext Time (g_e), s		0.9	0.0	5.5		2.1	0.0	0.0
Prob of Phs Call (p_c)		1.00	0.73	1.00		1.00	0.50	1.00
Prob of Max Out (p_x)		0.00	1.00	0.00		0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		1324	1774			106	1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		29		3063		237		3611

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1544		484		1235		18

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0
Lane Assignment			(Prot)			L+T+R	(Prot)	

Lanes in Grp	0	1	1	0	0	1	1	0
Grp Vol (v), veh/h	0	330	63	0	0	69	34	0
Grp Sat Flow (s), veh/h/ln	0	1324	1774	0	0	1578	1774	0
Q Serve Time (g_s), s	0.0	13.9	2.0	0.0	0.0	0.0	1.4	0.0
Cycle Q Clear Time (g_c), s	0.0	16.2	2.0	0.0	0.0	2.3	1.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1324	0	0	0	1304	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	1757	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	22.2	0.0	0.0	0.0	22.2	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	19.9	0.0	0.0	0.0	18.3	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	13.9	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	10.5	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	0.00	0.13	1.00	0.00
Lane Grp Cap (c), veh/h	0	508	48	0	0	528	41	0
V/C Ratio (X)	0.00	0.65	1.31	0.00	0.00	0.13	0.83	0.00
Avail Cap (c_a), veh/h	0	508	48	0	0	528	48	0
Upstream Filter (I)	0.00	1.00	0.45	0.00	0.00	1.00	0.30	0.00
Uniform Delay (d1), s/veh	0.0	23.5	36.0	0.0	0.0	18.9	36.0	0.0
Incr Delay (d2), s/veh	0.0	6.3	192.8	0.0	0.0	0.5	25.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	29.8	228.8	0.0	0.0	19.4	61.4	0.0
1st-Term Q (Q1), veh/ln	0.0	6.1	1.0	0.0	0.0	1.0	0.7	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.9	2.6	0.0	0.0	0.1	0.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	7.0	3.5	0.0	0.0	1.1	1.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.82	0.37	0.00	0.00	0.09	0.13	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	3.8	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	759	0	0	0	958
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	22.4	0.0	0.0	0.0	34.9
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	22.4	0.0	0.0	0.0	34.9
Lane Grp Cap (c), veh/h	0	0	0	1057	0	0	0	1064
V/C Ratio (X)	0.00	0.00	0.00	0.72	0.00	0.00	0.00	0.90
Avail Cap (c_a), veh/h	0	0	0	1057	0	0	0	1064
Upstream Filter (I)	0.00	0.00	0.00	0.30	0.00	0.00	0.00	0.45
Uniform Delay (d1), s/veh	0.0	0.0	0.0	10.5	0.0	0.0	0.0	12.8
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.3	0.0	0.0	0.0	6.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	11.8	0.0	0.0	0.0	18.9
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	10.8	0.0	0.0	0.0	16.8

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.4	0.0	0.0	0.0	1.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	11.1	0.0	0.0	0.0	18.6
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.29	0.00	0.00	0.00	0.25
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R				T+R
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	110	0	775	0	0	0	1009
Grp Sat Flow (s), veh/h/ln	0	1572	0	1777	0	0	0	1859
Q Serve Time (g_s), s	0.0	3.9	0.0	23.0	0.0	0.0	0.0	35.0
Cycle Q Clear Time (g_c), s	0.0	3.9	0.0	23.0	0.0	0.0	0.0	35.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.98	0.00	0.27	0.00	0.78	0.00	0.01
Lane Grp Cap (c), veh/h	0	472	0	1062	0	0	0	1118
V/C Ratio (X)	0.00	0.23	0.00	0.73	0.00	0.00	0.00	0.90
Avail Cap (c_a), veh/h	0	472	0	1062	0	0	0	1118
Upstream Filter (I)	0.00	1.00	0.00	0.30	0.00	0.00	0.00	0.45
Uniform Delay (d1), s/veh	0.0	19.5	0.0	10.6	0.0	0.0	0.0	12.9
Incr Delay (d2), s/veh	0.0	1.2	0.0	1.3	0.0	0.0	0.0	5.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	20.7	0.0	12.0	0.0	0.0	0.0	18.7
1st-Term Q (Q1), veh/ln	0.0	1.7	0.0	11.2	0.0	0.0	0.0	17.7
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.4	0.0	0.0	0.0	1.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.8	0.0	11.6	0.0	0.0	0.0	19.5
%ile Storage Ratio (RQ%)	0.00	0.16	0.00	0.30	0.00	0.00	0.00	0.27
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	20.7
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	1376	112	219	1514	6	233	0	420	1	1	0
Future Volume (veh/h)	5	1376	112	219	1514	6	233	0	420	1	1	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1845	1900	1845	1900
Adj Flow Rate, veh/h	5	1496	122	238	1646	7	253	0	457	1	1	0
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	135	1488	121	138	1923	8	585	650	553	270	248	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.45	0.45	0.45	0.03	0.53	0.53	0.35	0.00	0.35	0.35	0.35	0.00
Ln Grp Delay, s/veh	29.3	31.1	33.9	356.5	16.7	16.6	22.3	0.0	36.3	16.4	0.0	0.0
Ln Grp LOS	C	F	F	F	B	B	C		D	B		
Approach Vol, veh/h		1623			1891			710			2	
Approach Delay, s/veh		32.5			59.4			31.3			16.4	
Approach LOS		C			E			C			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Case No		5.0	1.2	6.0		8.0		4.0
Phs Duration (G+Y+Rc), s		32.0	6.5	39.5		32.0		46.0
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5		4.5
Max Green (Gmax), s		27.5	2.0	29.5		27.5		41.5
Max Allow Headway (MAH), s		4.0	3.8	5.3		4.0		5.3
Max Q Clear (g_c+I1), s		22.8	4.0	37.0		2.1		32.5
Green Ext Time (g_e), s		1.2	0.0	0.0		2.5		8.6
Prob of Phs Call (p_c)		1.00	0.99	1.00		1.00		1.00
Prob of Max Out (p_x)		0.00	1.00	0.00		0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3	7		1		
Mvmt Sat Flow, veh/h		1397	1774	301		570		

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1845		3316		704		3614

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		269		0		15

Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	1	0	0
Lane Assignment			(Pr/Pm)			L+T		

Lanes in Grp	0	1	1	1	0	1	0	0
Grp Vol (v), veh/h	0	253	238	5	0	2	0	0
Grp Sat Flow (s), veh/h/ln	0	1397	1774	301	0	1274	0	0
Q Serve Time (g_s), s	0.0	11.1	2.0	1.1	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	11.2	2.0	25.2	0.0	0.1	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1397	311	301	0	949	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	1757	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	27.5	37.0	35.0	0.0	27.5	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	27.4	0.0	11.0	0.0	27.5	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	11.1	0.0	1.1	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	1.00	0.00	0.50	0.00	0.00
Lane Grp Cap (c), veh/h	0	585	138	135	0	518	0	0
V/C Ratio (X)	0.00	0.43	1.73	0.04	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	585	138	135	0	518	0	0
Upstream Filter (I)	0.00	1.00	0.09	0.09	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	20.0	26.5	29.3	0.0	16.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.3	330.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	22.3	356.5	29.3	0.0	16.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	4.3	0.0	0.1	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	12.6	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	4.7	12.6	0.1	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.85	1.00	0.01	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	25.1	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T				T
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	794	0	0	0	806
Grp Sat Flow (s), veh/h/ln	0	1845	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	35.0	0.0	0.0	0.0	30.5
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	35.0	0.0	0.0	0.0	30.5
Lane Grp Cap (c), veh/h	0	650	0	794	0	0	0	942
V/C Ratio (X)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.86
Avail Cap (c_a), veh/h	0	650	0	794	0	0	0	942
Upstream Filter (I)	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	0.0	0.0	21.5	0.0	0.0	0.0	15.7
Incr Delay (d2), s/veh	0.0	0.0	0.0	9.6	0.0	0.0	0.0	1.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	31.1	0.0	0.0	0.0	16.7
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	17.0	0.0	0.0	0.0	14.8

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	2.1	0.0	0.0	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	19.1	0.0	0.0	0.0	15.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.26	0.00	0.00	0.00	0.39
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R				T+R
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	457	0	824	0	0	0	847
Grp Sat Flow (s), veh/h/ln	0	1568	0	1815	0	0	0	1860
Q Serve Time (g_s), s	0.0	20.8	0.0	35.0	0.0	0.0	0.0	30.5
Cycle Q Clear Time (g_c), s	0.0	20.8	0.0	35.0	0.0	0.0	0.0	30.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.15	0.00	0.00	0.00	0.01
Lane Grp Cap (c), veh/h	0	553	0	815	0	0	0	990
V/C Ratio (X)	0.00	0.83	0.00	1.01	0.00	0.00	0.00	0.86
Avail Cap (c_a), veh/h	0	553	0	815	0	0	0	990
Upstream Filter (I)	0.00	1.00	0.00	0.09	0.00	0.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	23.1	0.0	21.5	0.0	0.0	0.0	15.7
Incr Delay (d2), s/veh	0.0	13.3	0.0	12.4	0.0	0.0	0.0	1.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	36.3	0.0	33.9	0.0	0.0	0.0	16.6
1st-Term Q (Q1), veh/ln	0.0	8.9	0.0	17.4	0.0	0.0	0.0	15.5
2nd-Term Q (Q2), veh/ln	0.0	2.0	0.0	2.8	0.0	0.0	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	11.0	0.0	20.2	0.0	0.0	0.0	15.8
%ile Storage Ratio (RQ%)	0.00	0.89	0.00	0.28	0.00	0.00	0.00	0.41
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		44.4						
HCM 2010 LOS		D						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	1834	0	15	1611	119	15	0	67	206	0	67
Future Volume (veh/h)	30	1834	0	15	1611	119	15	0	67	206	0	67
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	32	1951	0	16	1714	127	16	0	71	219	0	71
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	61	1299	0	35	1178	86	120	37	381	531	0	470
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.37	0.00	0.02	0.35	0.35	0.30	0.00	0.30	0.30	0.00	0.30
Ln Grp Delay, s/veh	29.7	245.3	0.0	38.4	227.6	239.3	16.2	0.0	0.0	19.5	0.0	16.1
Ln Grp LOS	C	F		D	F	F	B			B		B
Approach Vol, veh/h		1983			1857			87			290	
Approach Delay, s/veh		241.8			231.9			16.2			18.6	
Approach LOS		F			F			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		8.0	2.0	4.0		6.0	2.0	4.0
Phs Duration (G+Y+Rc), s		24.0	7.6	28.4		24.0	8.5	27.5
Change Period (Y+Rc), s		6.0	6.4	6.4		6.0	6.4	6.4
Max Green (Gmax), s		18.0	5.0	18.6		18.0	5.0	18.6
Max Allow Headway (MAH), s		4.6	3.8	5.3		4.6	3.8	5.3
Max Q Clear (g_c+I1), s		4.4	2.5	24.0		9.4	3.1	23.1
Green Ext Time (g_e), s		1.4	0.0	0.0		1.1	0.0	0.0
Prob of Phs Call (p_c)		1.00	0.23	1.00		1.00	0.41	1.00
Prob of Max Out (p_x)		0.00	1.00	0.00		0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		163	1774			1311	1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		123		3632		0		3344

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1269		0		1568		245

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0
Lane Assignment		L+T+R	(Prot)				(Prot)	

Lanes in Grp	0	1	1	0	0	1	1	0
Grp Vol (v), veh/h	0	87	16	0	0	219	32	0
Grp Sat Flow (s), veh/h/ln	0	1554	1774	0	0	1311	1774	0
Q Serve Time (g_s), s	0.0	0.0	0.5	0.0	0.0	5.0	1.1	0.0
Cycle Q Clear Time (g_c), s	0.0	2.4	0.5	0.0	0.0	7.4	1.1	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1350	0	0	0	1311	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	1757	0	0
Perm LT Eff Green (g_p), s	0.0	18.0	0.0	0.0	0.0	18.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	16.0	0.0	0.0	0.0	15.6	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0
Time to First Blk (g_f), s	0.0	7.4	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.18	1.00	0.00	0.00	1.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	537	35	0	0	531	61	0
V/C Ratio (X)	0.00	0.16	0.46	0.00	0.00	0.41	0.52	0.00
Avail Cap (c_a), veh/h	0	537	148	0	0	531	148	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	0.00	1.00	0.17	0.00
Uniform Delay (d1), s/veh	0.0	15.5	29.1	0.0	0.0	17.1	28.5	0.0
Incr Delay (d2), s/veh	0.0	0.6	9.3	0.0	0.0	2.4	1.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	16.2	38.4	0.0	0.0	19.5	29.7	0.0
1st-Term Q (Q1), veh/ln	0.0	1.1	0.3	0.0	0.0	3.0	0.5	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.1	0.0	0.0	0.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	1.2	0.4	0.0	0.0	3.3	0.5	0.0
%ile Storage Ratio (RQ%)	0.00	0.08	0.05	0.00	0.00	0.57	0.08	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	1
Grp Vol (v), veh/h	0	0	0	1951	0	0	0	899
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	22.0	0.0	0.0	0.0	21.1
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	22.0	0.0	0.0	0.0	21.1
Lane Grp Cap (c), veh/h	0	0	0	1299	0	0	0	623
V/C Ratio (X)	0.00	0.00	0.00	1.50	0.00	0.00	0.00	1.44
Avail Cap (c_a), veh/h	0	0	0	1299	0	0	0	623
Upstream Filter (I)	0.00	0.00	0.00	0.17	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	19.0	0.0	0.0	0.0	19.4
Incr Delay (d2), s/veh	0.0	0.0	0.0	226.3	0.0	0.0	0.0	208.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	245.3	0.0	0.0	0.0	227.6
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	10.6	0.0	0.0	0.0	10.2

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	40.8	0.0	0.0	0.0	36.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	51.5	0.0	0.0	0.0	46.3
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	1.34	0.00	0.00	0.00	3.81
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	162.9	0.0	0.0	0.0	69.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.4
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment						T+R		T+R
Lanes in Grp	0	0	0	0	0	1	0	1
Grp Vol (v), veh/h	0	0	0	0	0	71	0	942
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	1568	0	1819
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	2.0	0.0	21.1
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	2.0	0.0	21.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.82	0.00	0.00	0.00	1.00	0.00	0.13
Lane Grp Cap (c), veh/h	0	0	0	0	0	470	0	641
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.15	0.00	1.47
Avail Cap (c_a), veh/h	0	0	0	0	0	470	0	641
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	15.4	0.0	19.4
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.7	0.0	219.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	16.1	0.0	239.3
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.8	0.0	10.5
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	39.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.9	0.0	49.6
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.07	0.00	4.09
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	75.3
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	217.4
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	486	1254	203	319	878	145	246	815	273	347	1058	466
Future Volume (veh/h)	486	1254	203	319	878	145	246	815	273	347	1058	466
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	506	1306	211	332	915	151	256	849	284	361	1102	485
Adj No. of Lanes	2	3	0	2	3	0	2	3	0	2	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	505	1324	214	391	1175	193	311	966	321	414	989	435
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.15	0.30	0.30	0.11	0.27	0.27	0.09	0.26	0.26	0.12	0.29	0.29
Ln Grp Delay, s/veh	91.9	66.9	78.0	65.1	47.2	53.1	67.5	55.0	65.5	69.2	108.4	120.3
Ln Grp LOS	F	E	E	E	D	D	E	D	E	E	F	F
Approach Vol, veh/h		2023			1398			1389			1948	
Approach Delay, s/veh		76.0			53.0			60.1			104.2	
Approach LOS		E			D			E			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	4.0
Phs Duration (G+Y+Rc), s	20.6	37.0	20.0	42.4	17.0	40.6	24.0	38.4
Change Period (Y+Rc), s	6.0	6.0	6.4	6.4	6.0	6.0	6.4	6.4
Max Green (Gmax), s	15.0	31.0	15.6	33.6	12.0	34.0	17.6	31.6
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.3	3.8	5.3	3.8	5.3
Max Q Clear (g_c+I1), s	14.5	28.3	13.4	37.3	10.9	36.6	19.6	25.2
Green Ext Time (g_e), s	0.1	2.6	0.3	0.0	0.1	0.0	0.0	5.9
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	3408	3442	3408	3442

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	3739	4414	3429	4402

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	1244	713	1507	724

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	361	0	332	0	256	0	506	0
Grp Sat Flow (s), veh/h/ln	1704	0	1721	0	1704	0	1721	0
Q Serve Time (g_s), s	12.5	0.0	11.4	0.0	8.9	0.0	17.6	0.0
Cycle Q Clear Time (g_c), s	12.5	0.0	11.4	0.0	8.9	0.0	17.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	414	0	391	0	311	0	505	0
V/C Ratio (X)	0.87	0.00	0.85	0.00	0.82	0.00	1.00	0.00
Avail Cap (c_a), veh/h	426	0	447	0	341	0	505	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	51.8	0.0	52.2	0.0	53.6	0.0	51.2	0.0
Incr Delay (d2), s/veh	17.4	0.0	12.9	0.0	13.9	0.0	40.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	69.2	0.0	65.1	0.0	67.5	0.0	91.9	0.0
1st-Term Q (Q1), veh/ln	5.9	0.0	5.4	0.0	4.2	0.0	8.3	0.0
2nd-Term Q (Q2), veh/ln	1.0	0.0	0.7	0.0	0.6	0.0	2.9	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	6.9	0.0	6.1	0.0	4.8	0.0	11.2	0.0
%ile Storage Ratio (RQ%)	0.60	0.00	0.46	0.00	0.36	0.00	0.95	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	2	0	2
Grp Vol (v), veh/h	0	762	0	1003	0	1079	0	704
Grp Sat Flow (s), veh/h/ln	0	1679	0	1695	0	1679	0	1695
Q Serve Time (g_s), s	0.0	26.1	0.0	35.3	0.0	34.6	0.0	23.1
Cycle Q Clear Time (g_c), s	0.0	26.1	0.0	35.3	0.0	34.6	0.0	23.1
Lane Grp Cap (c), veh/h	0	867	0	1017	0	968	0	905
V/C Ratio (X)	0.00	0.88	0.00	0.99	0.00	1.11	0.00	0.78
Avail Cap (c_a), veh/h	0	867	0	1017	0	968	0	905
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	42.7	0.0	41.8	0.0	42.7	0.0	40.7
Incr Delay (d2), s/veh	0.0	12.3	0.0	25.1	0.0	65.7	0.0	6.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	55.0	0.0	66.9	0.0	108.4	0.0	47.2
1st-Term Q (Q1), veh/ln	0.0	12.1	0.0	16.6	0.0	16.0	0.0	10.8

2nd-Term Q (Q2), veh/ln	0.0	1.5	0.0	3.6	0.0	8.8	0.0	0.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	13.5	0.0	20.1	0.0	24.8	0.0	11.6
%ile Storage Ratio (RQ%)	0.00	0.76	0.00	0.81	0.00	0.94	0.00	1.84
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	27.7	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	371	0	514	0	508	0	362
Grp Sat Flow (s), veh/h/ln	0	1625	0	1737	0	1579	0	1735
Q Serve Time (g_s), s	0.0	26.3	0.0	35.3	0.0	34.6	0.0	23.2
Cycle Q Clear Time (g_c), s	0.0	26.3	0.0	35.3	0.0	34.6	0.0	23.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.77	0.00	0.41	0.00	0.95	0.00	0.42
Lane Grp Cap (c), veh/h	0	420	0	521	0	455	0	463
V/C Ratio (X)	0.00	0.88	0.00	0.99	0.00	1.12	0.00	0.78
Avail Cap (c_a), veh/h	0	420	0	521	0	455	0	463
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	42.8	0.0	41.8	0.0	42.7	0.0	40.7
Incr Delay (d2), s/veh	0.0	22.7	0.0	36.2	0.0	77.6	0.0	12.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	65.5	0.0	78.0	0.0	120.3	0.0	53.1
1st-Term Q (Q1), veh/ln	0.0	11.9	0.0	17.0	0.0	15.1	0.0	11.1
2nd-Term Q (Q2), veh/ln	0.0	2.7	0.0	5.2	0.0	9.8	0.0	1.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	14.5	0.0	22.2	0.0	24.9	0.0	12.7
%ile Storage Ratio (RQ%)	0.00	0.81	0.00	0.89	0.00	0.94	0.00	2.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	13.2	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		76.1						
HCM 2010 LOS		E						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	107	1979	17	1	915	117	112	38	0	264	112	303
Future Volume (veh/h)	107	1979	17	1	915	117	112	38	0	264	112	303
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	116	2151	18	1	995	127	122	41	0	287	122	329
Adj No. of Lanes	1	2	0	0	2	0	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	73	2672	22	23	2047	261	36	223	190	36	223	190
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.04	0.74	0.74	0.66	0.66	0.66	0.02	0.12	0.00	0.02	0.12	0.12
Ln Grp Delay, s/veh	400.0	18.5	18.4	14.3	0.0	14.5	1220.2	65.4	0.0	3271.6	75.9	421.4
Ln Grp LOS	F	B	B	B		B	F	E		F	E	F
Approach Vol, veh/h		2285			1123			163			738	
Approach Delay, s/veh		37.8			14.4			929.7			1472.7	
Approach LOS		D			B			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6	7	8
Case No	2.0	3.0		4.0	2.0	3.0	2.0	8.0
Phs Duration (G+Y+Rc), s	9.0	26.0		126.0	9.0	26.0	13.0	113.0
Change Period (Y+Rc), s	* 5.7	6.5		6.4	* 5.7	6.5	6.4	6.4
Max Green (Gmax), s	* 3.3	19.5		119.6	* 3.3	19.5	6.6	100.6
Max Allow Headway (MAH), s	3.8	4.4		5.3	3.8	4.4	3.8	5.3
Max Q Clear (g_c+I1), s	5.3	5.2		63.8	5.3	21.5	8.6	27.9
Green Ext Time (g_e), s	0.0	1.8		48.9	0.0	0.0	0.0	61.5
Prob of Phs Call (p_c)	1.00	1.00		1.00	1.00	1.00	0.99	1.00
Prob of Max Out (p_x)	0.00	0.00		0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1				5		7	3
Mvmt Sat Flow, veh/h	1757				1757		1774	0

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1845		3597		1845		3091

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		30		1568		394

Left Lane Group Data								
Assigned Mvmt	1	0	0	0	5	0	7	3
Lane Assignment	(Prot)				(Prot)		(Prot)	L+T

Lanes in Grp	1	0	0	0	1	0	1	1
Grp Vol (v), veh/h	287	0	0	0	122	0	116	599
Grp Sat Flow (s), veh/h/ln	1757	0	0	0	1757	0	1774	1860
Q Serve Time (g_s), s	3.3	0.0	0.0	0.0	3.3	0.0	6.6	0.0
Cycle Q Clear Time (g_c), s	3.3	0.0	0.0	0.0	3.3	0.0	6.6	25.8
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	185
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	106.6
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.8
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	94.9
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.8
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	36	0	0	0	36	0	73	1254
V/C Ratio (X)	7.97	0.00	0.00	0.00	3.39	0.00	1.60	0.48
Avail Cap (c_a), veh/h	36	0	0	0	36	0	73	1254
Upstream Filter (I)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.61
Uniform Delay (d1), s/veh	78.8	0.0	0.0	0.0	78.8	0.0	77.2	13.5
Incr Delay (d2), s/veh	3192.7	0.0	0.0	0.0	1141.4	0.0	322.8	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	3271.6	0.0	0.0	0.0	1220.2	0.0	400.0	14.3
1st-Term Q (Q1), veh/ln	1.6	0.0	0.0	0.0	1.6	0.0	3.2	13.1
2nd-Term Q (Q2), veh/ln	31.9	0.0	0.0	0.0	11.4	0.0	6.5	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	33.5	0.0	0.0	0.0	13.0	0.0	9.8	13.4
%ile Storage Ratio (RQ%)	8.59	0.00	0.00	0.00	2.38	0.00	0.59	0.18
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	62.7	0.0	0.0	0.0	21.5	0.0	10.8	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	2.0	0.0	0.0	0.0	0.8	0.0	0.4	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	41	0	1057	0	122	0	0
Grp Sat Flow (s), veh/h/ln	0	1845	0	1770	0	1845	0	0
Q Serve Time (g_s), s	0.0	3.2	0.0	61.4	0.0	10.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	3.2	0.0	61.4	0.0	10.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	223	0	1315	0	223	0	0
V/C Ratio (X)	0.00	0.18	0.00	0.80	0.00	0.55	0.00	0.00
Avail Cap (c_a), veh/h	0	223	0	1315	0	223	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	63.6	0.0	13.2	0.0	66.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.8	0.0	5.3	0.0	9.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	65.4	0.0	18.5	0.0	75.9	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.6	0.0	29.6	0.0	5.1	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	1.9	0.0	0.6	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.8	0.0	31.6	0.0	5.7	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.19	0.00	0.37	0.00	0.29	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	1112	0	329	0	524
Grp Sat Flow (s), veh/h/ln	0	1568	0	1857	0	1568	0	1626
Q Serve Time (g_s), s	0.0	0.0	0.0	61.8	0.0	19.5	0.0	25.9
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	61.8	0.0	19.5	0.0	25.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.02	0.00	1.00	0.00	0.24
Lane Grp Cap (c), veh/h	0	190	0	1380	0	190	0	1076
V/C Ratio (X)	0.00	0.00	0.00	0.81	0.00	1.73	0.00	0.49
Avail Cap (c_a), veh/h	0	190	0	1380	0	190	0	1076
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.61
Uniform Delay (d1), s/veh	0.0	0.0	0.0	13.3	0.0	70.8	0.0	13.6
Incr Delay (d2), s/veh	0.0	0.0	0.0	5.1	0.0	350.7	0.0	1.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	18.4	0.0	421.4	0.0	14.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	31.2	0.0	8.5	0.0	11.5
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	2.0	0.0	18.5	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	33.2	0.0	27.0	0.0	11.8
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.39	0.00	1.40	0.00	0.16
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	34.8	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	311.2
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	474	1071	209	166	619	130	257	1228	146	438	2015	249
Future Volume (veh/h)	474	1071	209	166	619	130	257	1228	146	438	2015	249
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	489	1104	215	171	638	134	265	1266	151	452	2077	257
Adj No. of Lanes	2	3	0	2	3	1	2	3	0	2	3	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	348	794	155	216	750	233	311	2159	258	399	2271	277
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.10	0.19	0.19	0.06	0.15	0.15	0.09	0.47	0.47	0.12	0.50	0.50
Ln Grp Delay, s/veh	257.0	243.1	244.4	82.2	75.1	67.3	86.7	33.1	34.5	158.8	46.6	55.6
Ln Grp LOS	F	F	F	F	E	E	F	C	C	F	D	E
Approach Vol, veh/h		1808			943			1682			2786	
Approach Delay, s/veh		247.2			75.3			41.9			67.4	
Approach LOS		F			E			D			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	26.0	84.4	16.7	36.9	21.7	88.7	23.0	30.6
Change Period (Y+Rc), s	6.8	6.8	6.4	6.4	6.8	6.8	6.4	6.4
Max Green (Gmax), s	19.2	73.2	16.6	28.6	19.2	73.2	16.6	28.6
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.2	3.8	5.3	3.8	5.2
Max Q Clear (g_c+I1), s	21.2	35.2	10.0	32.5	14.6	72.8	18.6	22.1
Green Ext Time (g_e), s	0.0	35.6	0.3	0.0	0.4	0.4	0.0	2.1
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	0.08	1.00	0.55	0.00	1.00	0.96

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3408		3442		3408		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		4562		4274		4549		5085

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		544		832		555		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	452	0	171	0	265	0	489	0
Grp Sat Flow (s), veh/h/ln	1704	0	1721	0	1704	0	1721	0
Q Serve Time (g_s), s	19.2	0.0	8.0	0.0	12.6	0.0	16.6	0.0
Cycle Q Clear Time (g_c), s	19.2	0.0	8.0	0.0	12.6	0.0	16.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	399	0	216	0	311	0	348	0
V/C Ratio (X)	1.13	0.00	0.79	0.00	0.85	0.00	1.40	0.00
Avail Cap (c_a), veh/h	399	0	348	0	399	0	348	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	0.09	0.00
Uniform Delay (d1), s/veh	72.4	0.0	75.8	0.0	73.4	0.0	73.7	0.0
Incr Delay (d2), s/veh	86.4	0.0	6.4	0.0	13.3	0.0	183.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	158.8	0.0	82.2	0.0	86.7	0.0	257.0	0.0
1st-Term Q (Q1), veh/ln	9.0	0.0	3.8	0.0	5.9	0.0	7.9	0.0
2nd-Term Q (Q2), veh/ln	4.8	0.0	0.2	0.0	0.6	0.0	8.9	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	13.8	0.0	4.0	0.0	6.5	0.0	16.8	0.0
%ile Storage Ratio (RQ%)	0.62	0.00	0.21	0.00	0.42	0.00	0.85	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	13.2	0.0	0.0	0.0	0.0	0.0	35.2	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.0	0.0	0.0	0.0	0.4	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	2	0	3
Grp Vol (v), veh/h	0	932	0	876	0	1525	0	638
Grp Sat Flow (s), veh/h/ln	0	1679	0	1695	0	1679	0	1695
Q Serve Time (g_s), s	0.0	33.2	0.0	30.5	0.0	68.4	0.0	20.1
Cycle Q Clear Time (g_c), s	0.0	33.2	0.0	30.5	0.0	68.4	0.0	20.1
Lane Grp Cap (c), veh/h	0	1589	0	630	0	1676	0	750
V/C Ratio (X)	0.00	0.59	0.00	1.39	0.00	0.91	0.00	0.85
Avail Cap (c_a), veh/h	0	1589	0	630	0	1676	0	887
Upstream Filter (I)	0.00	1.00	0.00	0.09	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	31.5	0.0	66.8	0.0	37.7	0.0	68.2
Incr Delay (d2), s/veh	0.0	1.6	0.0	176.3	0.0	8.9	0.0	7.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	33.1	0.0	243.1	0.0	46.6	0.0	75.1
1st-Term Q (Q1), veh/ln	0.0	15.4	0.0	14.3	0.0	31.6	0.0	9.4

2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	15.4	0.0	2.1	0.0	0.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	15.8	0.0	29.7	0.0	33.6	0.0	9.9
%ile Storage Ratio (RQ%)	0.00	0.72	0.00	0.40	0.00	1.30	0.00	0.17
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	61.4	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	485	0	443	0	809	0	134
Grp Sat Flow (s), veh/h/ln	0	1749	0	1716	0	1747	0	1583
Q Serve Time (g_s), s	0.0	33.2	0.0	30.5	0.0	70.8	0.0	12.9
Cycle Q Clear Time (g_c), s	0.0	33.2	0.0	30.5	0.0	70.8	0.0	12.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.31	0.00	0.48	0.00	0.32	0.00	1.00
Lane Grp Cap (c), veh/h	0	828	0	319	0	872	0	233
V/C Ratio (X)	0.00	0.59	0.00	1.39	0.00	0.93	0.00	0.57
Avail Cap (c_a), veh/h	0	828	0	319	0	872	0	276
Upstream Filter (I)	0.00	1.00	0.00	0.09	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	31.5	0.0	66.8	0.0	38.3	0.0	65.1
Incr Delay (d2), s/veh	0.0	3.0	0.0	177.7	0.0	17.3	0.0	2.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	34.5	0.0	244.4	0.0	55.6	0.0	67.3
1st-Term Q (Q1), veh/ln	0.0	16.0	0.0	14.4	0.0	34.2	0.0	5.7
2nd-Term Q (Q2), veh/ln	0.0	0.7	0.0	15.7	0.0	4.2	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	16.7	0.0	30.2	0.0	38.3	0.0	5.8
%ile Storage Ratio (RQ%)	0.00	0.76	0.00	0.40	0.00	1.48	0.00	0.21
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	31.2	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		107.5						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	135	712	98	240	1289	147	182	88	331	274	190	182
Future Volume (veh/h)	135	712	98	240	1289	147	182	88	331	274	190	182
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1900	1712	1712	1712	1776	1776	1900	1776	1776	1776
Adj Flow Rate, veh/h	139	734	101	247	1329	152	188	91	341	282	196	188
Adj No. of Lanes	2	3	0	2	3	1	1	2	0	2	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	11	11	11	11	11	11	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	104	1006	137	104	1130	352	227	673	602	374	1278	572
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.24	0.24	0.03	0.24	0.24	0.13	0.40	0.40	0.11	0.38	0.38
Ln Grp Delay, s/veh	245.4	35.3	38.9	688.6	123.4	30.0	45.5	17.8	24.9	42.2	18.9	21.6
Ln Grp LOS	F	D	D	F	F	C	D	B	C	D	B	C
Approach Vol, veh/h		974			1728			620			666	
Approach Delay, s/veh		66.4			196.0			30.1			29.5	
Approach LOS		E			F			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	14.4	41.6	7.0	28.0	16.2	39.8	7.0	28.0
Change Period (Y+Rc), s	4.0	5.3	4.0	* 6	4.0	5.3	4.0	* 6
Max Green (Gmax), s	23.0	23.7	3.0	* 22	32.0	14.7	3.0	* 22
Max Allow Headway (MAH), s	3.8	5.1	3.8	5.2	3.8	5.1	3.8	5.2
Max Q Clear (g_c+I1), s	9.6	18.0	5.0	16.9	11.9	10.0	5.0	24.0
Green Ext Time (g_e), s	0.8	2.4	0.0	4.5	0.5	2.0	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.99	1.00	0.97	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3281		3163		1691		3163	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1687		4159		3374		4673

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1509		568		1509		1455

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	1	0	2	0
Grp Vol (v), veh/h	282	0	247	0	188	0	139	0
Grp Sat Flow (s), veh/h/ln	1640	0	1581	0	1691	0	1581	0
Q Serve Time (g_s), s	7.6	0.0	3.0	0.0	9.9	0.0	3.0	0.0
Cycle Q Clear Time (g_c), s	7.6	0.0	3.0	0.0	9.9	0.0	3.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	374	0	104	0	227	0	104	0
V/C Ratio (X)	0.75	0.00	2.37	0.00	0.83	0.00	1.33	0.00
Avail Cap (c_a), veh/h	829	0	104	0	595	0	104	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.95	0.00	1.00	0.00
Uniform Delay (d1), s/veh	39.1	0.0	44.0	0.0	38.4	0.0	44.0	0.0
Incr Delay (d2), s/veh	3.1	0.0	644.6	0.0	7.1	0.0	201.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	42.2	0.0	688.6	0.0	45.5	0.0	245.4	0.0
1st-Term Q (Q1), veh/ln	3.4	0.0	1.3	0.0	4.6	0.0	1.3	0.0
2nd-Term Q (Q2), veh/ln	0.2	0.0	9.3	0.0	0.5	0.0	2.9	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	3.6	0.0	10.6	0.0	5.0	0.0	4.2	0.0
%ile Storage Ratio (RQ%)	0.49	0.00	1.48	0.00	0.83	0.00	0.33	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	35.7	0.0	0.0	0.0	8.7	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.6	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	2	0	3
Grp Vol (v), veh/h	0	91	0	548	0	196	0	1329
Grp Sat Flow (s), veh/h/ln	0	1687	0	1558	0	1687	0	1558
Q Serve Time (g_s), s	0.0	3.1	0.0	14.7	0.0	3.5	0.0	22.0
Cycle Q Clear Time (g_c), s	0.0	3.1	0.0	14.7	0.0	3.5	0.0	22.0
Lane Grp Cap (c), veh/h	0	673	0	753	0	1278	0	1130
V/C Ratio (X)	0.00	0.14	0.00	0.73	0.00	0.15	0.00	1.18
Avail Cap (c_a), veh/h	0	673	0	753	0	1278	0	1130
Upstream Filter (I)	0.00	0.95	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	17.4	0.0	31.7	0.0	18.6	0.0	34.5
Incr Delay (d2), s/veh	0.0	0.4	0.0	3.6	0.0	0.3	0.0	88.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	17.8	0.0	35.3	0.0	18.9	0.0	123.4
1st-Term Q (Q1), veh/ln	0.0	1.4	0.0	6.3	0.0	1.6	0.0	9.4

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.4	0.0	0.0	0.0	9.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.5	0.0	6.7	0.0	1.7	0.0	18.7
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.07	0.00	0.02	0.00	0.32
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.8
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	341	0	287	0	188	0	152
Grp Sat Flow (s), veh/h/ln	0	1509	0	1612	0	1509	0	1455
Q Serve Time (g_s), s	0.0	16.0	0.0	14.9	0.0	8.0	0.0	8.0
Cycle Q Clear Time (g_c), s	0.0	16.0	0.0	14.9	0.0	8.0	0.0	8.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.35	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	602	0	390	0	572	0	352
V/C Ratio (X)	0.00	0.57	0.00	0.74	0.00	0.33	0.00	0.43
Avail Cap (c_a), veh/h	0	602	0	390	0	572	0	352
Upstream Filter (I)	0.00	0.95	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	21.2	0.0	31.8	0.0	20.1	0.0	29.2
Incr Delay (d2), s/veh	0.0	3.6	0.0	7.1	0.0	1.5	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	24.9	0.0	38.9	0.0	21.6	0.0	30.0
1st-Term Q (Q1), veh/ln	0.0	6.6	0.0	6.6	0.0	3.3	0.0	3.2
2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.8	0.0	0.2	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.2	0.0	7.4	0.0	3.6	0.0	3.3
%ile Storage Ratio (RQ%)	0.00	0.08	0.00	0.08	0.00	0.59	0.00	0.06
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	110.7
HCM 2010 LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	84	72	131	69	106	56	299	69	67	283	49
Future Volume (veh/h)	67	84	72	131	69	106	56	299	69	67	283	49
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1900	1900	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	69	87	74	135	71	109	58	308	71	69	292	51
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	166	170	110	342	153	417	573	746	172	544	787	137
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.53	0.53	0.53	0.53	0.53	0.53
Ln Grp Delay, s/veh	15.6	0.0	0.0	14.6	0.0	13.4	8.4	0.0	7.6	8.7	0.0	6.2
Ln Grp LOS	B			B		B	A		A	A		A
Approach Vol, veh/h		230			315			437			412	
Approach Delay, s/veh		15.6			14.2			7.7			6.6	
Approach LOS		B			B			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		8.0		6.0		7.0
Phs Duration (G+Y+Rc), s		28.5		16.5		28.5		16.5
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green (Gmax), s		18.0		18.0		18.0		18.0
Max Allow Headway (MAH), s		5.3		5.2		5.3		5.2
Max Q Clear (g_c+I1), s		8.8		10.0		10.0		7.7
Green Ext Time (g_e), s		3.5		2.0		3.2		2.3
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.51		0.00		0.29

Left-Turn Movement Data				
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		985		235		953		788

Through Movement Data				
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1397		639		1473		577

Right-Turn Movement Data				
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		322		415		257		1568

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment				L+T+R				L+T

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	58	0	230	0	69	0	206
Grp Sat Flow (s), veh/h/ln	0	985	0	1289	0	953	0	1365
Q Serve Time (g_s), s	0.0	1.6	0.0	2.2	0.0	2.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	6.8	0.0	8.0	0.0	8.0	0.0	5.7
Perm LT Sat Flow (s_l), veh/h/ln	0	985	0	1223	0	953	0	1245
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	1289
Perm LT Eff Green (g_p), s	0.0	24.0	0.0	12.0	0.0	24.0	0.0	12.0
Perm LT Serve Time (g_u), s	0.0	18.9	0.0	6.2	0.0	18.1	0.0	4.0
Perm LT Q Serve Time (g_ps), s	0.0	1.6	0.0	2.2	0.0	2.1	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	3.5	0.0	0.0	0.0	1.1
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	3.5	0.0	0.0	0.0	1.1
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	0.30	0.00	1.00	0.00	0.66
Lane Grp Cap (c), veh/h	0	573	0	447	0	544	0	495
V/C Ratio (X)	0.00	0.10	0.00	0.51	0.00	0.13	0.00	0.42
Avail Cap (c_a), veh/h	0	573	0	649	0	544	0	679
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	8.1	0.0	14.7	0.0	8.7	0.0	14.1
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.9	0.0	0.0	0.0	0.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.4	0.0	15.6	0.0	8.7	0.0	14.6
1st-Term Q (Q1), veh/ln	0.0	0.4	0.0	2.6	0.0	0.5	0.0	2.2
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.5	0.0	2.7	0.0	0.5	0.0	2.3
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.12	0.00	0.01	0.00	0.08
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment								
Lanes in Grp	0	0	0	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R				T+R		R
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	379	0	0	0	343	0	109
Grp Sat Flow (s), veh/h/ln	0	1719	0	0	0	1730	0	1568
Q Serve Time (g_s), s	0.0	5.9	0.0	0.0	0.0	5.2	0.0	2.5
Cycle Q Clear Time (g_c), s	0.0	5.9	0.0	0.0	0.0	5.2	0.0	2.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.19	0.00	0.32	0.00	0.15	0.00	1.00
Lane Grp Cap (c), veh/h	0	918	0	0	0	924	0	417
V/C Ratio (X)	0.00	0.41	0.00	0.00	0.00	0.37	0.00	0.26
Avail Cap (c_a), veh/h	0	918	0	0	0	924	0	627
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	6.3	0.0	0.0	0.0	6.1	0.0	13.0
Incr Delay (d2), s/veh	0.0	1.4	0.0	0.0	0.0	0.1	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	7.6	0.0	0.0	0.0	6.2	0.0	13.4
1st-Term Q (Q1), veh/ln	0.0	2.7	0.0	0.0	0.0	2.4	0.0	1.1
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	3.1	0.0	0.0	0.0	2.4	0.0	1.1
%ile Storage Ratio (RQ%)	0.00	0.14	0.00	0.00	0.00	0.03	0.00	0.04
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		10.2						
HCM 2010 LOS		B						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	943	1546	35	107	745	552	19	19	163	428	33	32
Future Volume (veh/h)	943	1546	35	107	745	552	19	19	163	428	33	32
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1696	1696	1696	1696	1696	1696	1900	1696	1900	1696	1696	1696
Adj Flow Rate, veh/h	982	1610	36	111	776	0	20	20	170	446	34	0
Adj No. of Lanes	1	2	1	1	2	1	0	1	0	2	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	12	12	12	12	12	12	12	12	12	12	12	12
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	825	1835	821	134	458	205	0	15	129	132	320	272
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.51	0.57	0.57	0.08	0.14	0.00	0.00	0.10	0.10	0.04	0.19	0.00
Ln Grp Delay, s/veh	130.3	30.9	12.7	61.2	370.3	0.0	0.0	0.0	242.8	1153.5	44.8	0.0
Ln Grp LOS	F	C	B	E	F				F	F	D	
Approach Vol, veh/h		2628			887			190			480	
Approach Delay, s/veh		67.8			331.6			242.8			1075.0	
Approach LOS		E			F			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	4.0	2.0	3.0	0.0	3.0
Phs Duration (G+Y+Rc), s	75.0	26.0	12.0	20.0	18.2	82.8	0.0	32.0
Change Period (Y+Rc), s	7.1	7.1	6.4	6.9	7.1	7.1	6.9	* 6.9
Max Green (Gmax), s	67.9	18.9	5.6	13.1	30.9	55.9	13.1	* 5.6
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.5	3.8	5.3	0.0	5.5
Max Q Clear (g_c+I1), s	69.9	20.9	7.6	15.1	11.0	59.1	0.0	4.2
Green Ext Time (g_e), s	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.2
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.98	1.00	0.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1616		3134		1616		0	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3223		154		3223		1696

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1442		1311		1442		1442

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)			

Lanes in Grp	1	0	2	0	1	0	0	0
Grp Vol (v), veh/h	982	0	446	0	111	0	0	0
Grp Sat Flow (s), veh/h/ln	1616	0	1567	0	1616	0	0	0
Q Serve Time (g_s), s	67.9	0.0	5.6	0.0	9.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	67.9	0.0	5.6	0.0	9.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	825	0	132	0	134	0	0	0
V/C Ratio (X)	1.19	0.00	3.38	0.00	0.83	0.00	0.00	0.00
Avail Cap (c_a), veh/h	825	0	132	0	375	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.09	0.00	0.00	0.00
Uniform Delay (d1), s/veh	32.6	0.0	63.7	0.0	60.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	97.7	0.0	1089.8	0.0	1.2	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	130.3	0.0	1153.5	0.0	61.2	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	30.0	0.0	2.4	0.0	4.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	22.4	0.0	20.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	52.4	0.0	22.4	0.0	4.1	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	1.67	0.00	0.98	0.00	0.33	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	39.3	0.0	78.5	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.8	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	2	0	0	0	2	0	1
Grp Vol (v), veh/h	0	776	0	0	0	1610	0	34
Grp Sat Flow (s), veh/h/ln	0	1612	0	0	0	1612	0	1696
Q Serve Time (g_s), s	0.0	18.9	0.0	0.0	0.0	57.1	0.0	2.2
Cycle Q Clear Time (g_c), s	0.0	18.9	0.0	0.0	0.0	57.1	0.0	2.2
Lane Grp Cap (c), veh/h	0	458	0	0	0	1835	0	320
V/C Ratio (X)	0.00	1.69	0.00	0.00	0.00	0.88	0.00	0.11
Avail Cap (c_a), veh/h	0	458	0	0	0	1835	0	320
Upstream Filter (I)	0.00	0.09	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	57.0	0.0	0.0	0.0	24.6	0.0	44.7
Incr Delay (d2), s/veh	0.0	313.2	0.0	0.0	0.0	6.3	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	370.3	0.0	0.0	0.0	30.9	0.0	44.8
1st-Term Q (Q1), veh/ln	0.0	8.4	0.0	0.0	0.0	25.3	0.0	1.0

2nd-Term Q (Q2), veh/ln	0.0	19.9	0.0	0.0	0.0	1.6	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	28.3	0.0	0.0	0.0	26.9	0.0	1.1
%ile Storage Ratio (RQ%)	0.00	0.39	0.00	0.00	0.00	0.24	0.00	0.05
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	79.5	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	190	0	36	0	0
Grp Sat Flow (s), veh/h/ln	0	1442	0	1465	0	1442	0	1442
Q Serve Time (g_s), s	0.0	0.0	0.0	13.1	0.0	1.5	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	13.1	0.0	1.5	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.89	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	205	0	144	0	821	0	272
V/C Ratio (X)	0.00	0.00	0.00	1.32	0.00	0.04	0.00	0.00
Avail Cap (c_a), veh/h	0	205	0	144	0	821	0	272
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	60.0	0.0	12.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	182.9	0.0	0.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	242.8	0.0	12.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	5.3	0.0	0.6	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	7.3	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	12.6	0.0	0.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.81	0.00	0.07	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	11.4	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	247.2
HCM 2010 LOS	F

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	300	1902	1485	163	774	130
Future Volume (veh/h)	300	1902	1485	163	774	130
Number	1	6	2	12	3	18
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00			1.00	1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1696	1696	1696	1696	1696	1696
Adj Flow Rate, veh/h	312	1981	1547	0	806	0
Adj No. of Lanes	1	2	2	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	12	12	12	12	12	12
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	160	1782	1178	527	888	408
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.10	0.55	0.37	0.00	0.28	0.00
Ln Grp Delay, s/veh	468.1	68.9	169.8	0.0	39.7	0.0
Ln Grp LOS	F	F	F		D	
Approach Vol, veh/h		2293	1547		806	
Approach Delay, s/veh		123.2	169.8		39.7	
Approach LOS		F	F		D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8			6		
Case No	2.0	7.0	9.0			4.0		
Phs Duration (G+Y+Rc), s	15.0	36.3	28.7			51.3		
Change Period (Y+Rc), s	7.1	7.1	6.0			7.1		
Max Green (Gmax), s	7.9	27.9	24.0			42.9		
Max Allow Headway (MAH), s	3.8	5.3	3.8			5.3		
Max Q Clear (g_c+I1), s	9.9	31.2	21.8			46.2		
Green Ext Time (g_e), s	0.0	0.0	0.8			0.0		
Prob of Phs Call (p_c)	1.00	1.00	1.00			1.00		
Prob of Max Out (p_x)	1.00	0.00	1.00			0.00		

Left-Turn Movement Data			
Assigned Mvmt	1	5	3
Mvmt Sat Flow, veh/h	1616	0	3134

Through Movement Data			
Assigned Mvmt		2	8			6
Mvmt Sat Flow, veh/h		3308	0			3308

Right-Turn Movement Data			
Assigned Mvmt		12	18			16
Mvmt Sat Flow, veh/h		1442	1442			0

Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	0	0
Lane Assignment	(Prot)							

Lanes in Grp	1	0	2	0	0	0	0	0
Grp Vol (v), veh/h	312	0	806	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1616	0	1567	0	0	0	0	0
Q Serve Time (g_s), s	7.9	0.0	19.8	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	7.9	0.0	19.8	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1567	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	29.2	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	160	0	888	0	0	0	0	0
V/C Ratio (X)	1.96	0.00	0.91	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	160	0	940	0	0	0	0	0
Upstream Filter (I)	0.09	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	36.0	0.0	27.7	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	432.1	0.0	12.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	468.1	0.0	39.7	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	3.5	0.0	8.5	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	19.1	0.0	1.5	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	22.6	0.0	10.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	1.32	0.00	0.62	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	38.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1547	0	0	0	1981	0	0
Grp Sat Flow (s), veh/h/ln	0	1612	0	0	0	1612	0	0
Q Serve Time (g_s), s	0.0	29.2	0.0	0.0	0.0	44.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	29.2	0.0	0.0	0.0	44.2	0.0	0.0
Lane Grp Cap (c), veh/h	0	1178	0	0	0	1782	0	0
V/C Ratio (X)	0.00	1.31	0.00	0.00	0.00	1.11	0.00	0.00
Avail Cap (c_a), veh/h	0	1178	0	0	0	1782	0	0
Upstream Filter (I)	0.00	0.55	0.00	0.00	0.00	0.09	0.00	0.00
Uniform Delay (d1), s/veh	0.0	25.4	0.0	0.0	0.0	17.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	144.4	0.0	0.0	0.0	51.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	169.8	0.0	0.0	0.0	68.9	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	12.9	0.0	0.0	0.0	19.3	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	23.6	0.0	0.0	0.0	12.6	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	36.5	0.0	0.0	0.0	31.9	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.29	0.00	0.00	0.00	0.44	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	92.2	0.0	0.0	0.0	49.6	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lane Assignment		R	R					
Lanes in Grp	0	1	1	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1442	1442	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	527	408	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	527	433	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		124.2						
HCM 2010 LOS		F						

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	433	118	907	2438	2059	881
Future Volume (veh/h)	433	118	907	2438	2059	881
Number	7	14	5	2	6	16
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00	1.00			1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1827	1827	1827	1827
Adj Flow Rate, veh/h	466	0	975	2622	2214	0
Adj No. of Lanes	2	1	2	3	3	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	4	4	4	4
Opposing Right Turn Influence	Yes		Yes			
Cap, veh/h	514	237	1081	3810	2003	624
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.15	0.00	0.32	0.76	0.40	0.00
Ln Grp Delay, s/veh	78.1	0.0	49.5	9.4	91.0	0.0
Ln Grp LOS	E		D	A	F	
Approach Vol, veh/h	466			3597	2214	
Approach Delay, s/veh	78.1			20.3	91.0	
Approach LOS	E			C	F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Case No		4.0		9.0	2.0	7.0		
Phs Duration (G+Y+Rc), s		115.2		27.8	51.8	63.4		
Change Period (Y+Rc), s		6.0		6.4	6.0	6.0		
Max Green (Gmax), s		108.0		22.6	84.0	18.0		
Max Allow Headway (MAH), s		5.2		3.8	3.8	5.2		
Max Q Clear (g_c+I1), s		39.4		21.0	41.5	59.4		
Green Ext Time (g_e), s		67.4		0.3	4.3	0.0		
Prob of Phs Call (p_c)		1.00		1.00	1.00	1.00		
Prob of Max Out (p_x)		0.00		1.00	0.00	0.00		
Left-Turn Movement Data								
Assigned Mvmt				7	5	1		
Mvmt Sat Flow, veh/h				3442	3375	0		
Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		5152		0		5152		
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		0		1583		1553		
Left Lane Group Data								
Assigned Mvmt	0	0	0	7	5	1	0	0
Lane Assignment					(Prot)			

Lanes in Grp	0	0	0	2	2	0	0	0
Grp Vol (v), veh/h	0	0	0	466	975	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1721	1688	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	19.0	39.5	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	19.0	39.5	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1721	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	57.4	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	514	1081	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.91	0.90	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	544	1983	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	59.8	46.4	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	18.3	3.1	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	78.1	49.5	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	9.1	18.4	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.3	0.5	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	10.4	18.9	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.81	1.13	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	3	0	0	0	3	0	0
Grp Vol (v), veh/h	0	2622	0	0	0	2214	0	0
Grp Sat Flow (s), veh/h/ln	0	1663	0	0	0	1663	0	0
Q Serve Time (g_s), s	0.0	37.4	0.0	0.0	0.0	57.4	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	37.4	0.0	0.0	0.0	57.4	0.0	0.0
Lane Grp Cap (c), veh/h	0	3810	0	0	0	2003	0	0
V/C Ratio (X)	0.00	0.69	0.00	0.00	0.00	1.11	0.00	0.00
Avail Cap (c_a), veh/h	0	3810	0	0	0	2003	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.09	0.00	0.00
Uniform Delay (d1), s/veh	0.0	8.4	0.0	0.0	0.0	42.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.0	0.0	0.0	0.0	48.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.4	0.0	0.0	0.0	91.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	17.0	0.0	0.0	0.0	26.3	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.0	8.9	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	17.4	0.0	0.0	0.0	35.3	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.53	0.00	0.00	0.00	0.56	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	52.7	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment				R		R		
Lanes in Grp	0	0	0	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1583	0	1553	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	237	0	624	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	250	0	624	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		49.5						
HCM 2010 LOS		D						

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	426	1505	2174	364	644	3098
Future Volume (veh/h)	426	1505	2174	364	644	3098
Number	3	18	2	12	1	6
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1845	1845	1845	1845
Adj Flow Rate, veh/h	444	1568	2265	0	671	3227
Adj No. of Lanes	2	2	3	1	2	3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	3	3	3	3
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	881	713	2306	718	741	3839
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.26	0.26	0.46	0.00	0.22	0.76
Ln Grp Delay, s/veh	22.2	569.7	29.6	0.0	41.1	7.8
Ln Grp LOS	C	F	C		D	A
Approach Vol, veh/h	2012		2265			3898
Approach Delay, s/veh	448.9		29.6			13.5
Approach LOS	F		C			B

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8			6		
Case No	2.0	7.0	9.0			4.0		
Phs Duration (G+Y+Rc), s	21.0	38.0	24.4			59.0		
Change Period (Y+Rc), s	6.0	6.0	6.4			6.0		
Max Green (Gmax), s	15.0	18.0	18.0			39.0		
Max Allow Headway (MAH), s	3.8	5.2	4.0			5.2		
Max Q Clear (g_c+I1), s	15.2	32.6	20.0			31.3		
Green Ext Time (g_e), s	0.0	0.0	0.0			7.7		
Prob of Phs Call (p_c)	1.00	1.00	1.00			1.00		
Prob of Max Out (p_x)	1.00	0.00	1.00			0.00		

Left-Turn Movement Data			
Assigned Mvmt	1	5	3
Mvmt Sat Flow, veh/h	3408	0	3375

Through Movement Data			
Assigned Mvmt		2	8			6
Mvmt Sat Flow, veh/h		5202	0			5202

Right-Turn Movement Data			
Assigned Mvmt		12	18			16
Mvmt Sat Flow, veh/h		1568	2733			0

Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	0	0
Lane Assignment	(Prot)							

Lanes in Grp	2	0	2	0	0	0	0	0
Grp Vol (v), veh/h	671	0	444	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1704	0	1688	0	0	0	0	0
Q Serve Time (g_s), s	13.2	0.0	7.7	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	13.2	0.0	7.7	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1688	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	31.6	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	741	0	881	0	0	0	0	0
V/C Ratio (X)	0.91	0.00	0.50	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	741	0	881	0	0	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	26.3	0.0	21.7	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	14.7	0.0	0.5	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	41.1	0.0	22.2	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	6.2	0.0	3.6	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	1.5	0.0	0.1	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	7.7	0.0	3.6	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.46	0.00	0.19	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	3	0	0	0	3	0	0
Grp Vol (v), veh/h	0	2265	0	0	0	3227	0	0
Grp Sat Flow (s), veh/h/ln	0	1679	0	0	0	1679	0	0
Q Serve Time (g_s), s	0.0	30.6	0.0	0.0	0.0	29.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	30.6	0.0	0.0	0.0	29.3	0.0	0.0
Lane Grp Cap (c), veh/h	0	2306	0	0	0	3839	0	0
V/C Ratio (X)	0.00	0.98	0.00	0.00	0.00	0.84	0.00	0.00
Avail Cap (c_a), veh/h	0	2306	0	0	0	3839	0	0
Upstream Filter (I)	0.00	0.62	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	18.4	0.0	0.0	0.0	5.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	11.2	0.0	0.0	0.0	2.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	29.6	0.0	0.0	0.0	7.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	14.1	0.0	0.0	0.0	12.8	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	2.4	0.0	0.0	0.0	0.9	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	16.4	0.0	0.0	0.0	13.7	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.26	0.00	0.00	0.00	0.33	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lane Assignment		R	R					
Lanes in Grp	0	1	2	0	0	0	0	0
Grp Vol (v), veh/h	0	0	1568	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1568	1367	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	18.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	18.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	718	713	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	2.20	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	718	713	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	25.5	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	544.2	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	569.7	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	6.7	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	53.9	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	60.6	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	2.41	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	213.8	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		125.1						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	711	1287	325	178	433	131	96	112	75	243	271	875
Future Volume (veh/h)	711	1287	325	178	433	131	96	112	75	243	271	875
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1712	1712	1712	1712	1712	1712	1900	1900	1712	1712
Adj Flow Rate, veh/h	741	1341	339	185	451	0	100	117	78	253	282	911
Adj No. of Lanes	1	3	1	1	3	1	1	2	0	0	1	2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	11	11	11	11	11	11	11	11	11	11	11	11
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	433	2060	641	208	1413	440	119	564	351	0	293	439
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.27	0.44	0.44	0.13	0.30	0.00	0.07	0.29	0.29	0.00	0.17	0.17
Ln Grp Delay, s/veh	379.7	35.2	32.9	81.0	43.7	0.0	87.4	42.8	43.1	0.0	108.0	558.9
Ln Grp LOS	F	D	C	F	D		F	D	D		F	F
Approach Vol, veh/h		2421			636			295			1193	
Approach Delay, s/veh		140.3			54.5			58.0			452.3	
Approach LOS		F			D			E			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	0.0	4.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	50.0	55.5	0.0	54.5	27.9	77.6	19.4	35.1
Change Period (Y+Rc), s	7.5	7.1	7.6	* 7.7	7.5	7.1	* 7.7	* 7.7
Max Green (Gmax), s	42.5	37.9	27.4	* 22	42.5	37.9	* 22	* 27
Max Allow Headway (MAH), s	3.8	5.1	0.0	4.5	3.8	5.1	3.8	4.5
Max Q Clear (g_c+I1), s	44.5	13.9	0.0	9.9	19.9	38.0	11.7	29.4
Green Ext Time (g_e), s	0.0	16.0	0.0	5.8	0.5	0.0	0.2	0.0
Prob of Phs Call (p_c)	1.00	1.00	0.00	1.00	1.00	1.00	0.99	1.00
Prob of Max Out (p_x)	1.00	0.00	0.00	0.43	0.00	0.00	0.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1630		0		1630		1630	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		4673		1927		4673		1712

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1455		1199		1455		2561

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)				(Prot)		(Prot)	

Lanes in Grp	1	0	0	0	1	0	1	0
Grp Vol (v), veh/h	741	0	0	0	185	0	100	0
Grp Sat Flow (s), veh/h/ln	1630	0	0	0	1630	0	1630	0
Q Serve Time (g_s), s	42.5	0.0	0.0	0.0	17.9	0.0	9.7	0.0
Cycle Q Clear Time (g_c), s	42.5	0.0	0.0	0.0	17.9	0.0	9.7	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	433	0	0	0	208	0	119	0
V/C Ratio (X)	1.71	0.00	0.00	0.00	0.89	0.00	0.84	0.00
Avail Cap (c_a), veh/h	433	0	0	0	433	0	227	0
Upstream Filter (I)	0.09	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	58.8	0.0	0.0	0.0	68.7	0.0	73.2	0.0
Incr Delay (d2), s/veh	321.0	0.0	0.0	0.0	12.3	0.0	14.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	379.7	0.0	0.0	0.0	81.0	0.0	87.4	0.0
1st-Term Q (Q1), veh/ln	19.1	0.0	0.0	0.0	8.1	0.0	4.4	0.0
2nd-Term Q (Q2), veh/ln	38.6	0.0	0.0	0.0	0.7	0.0	0.5	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	57.7	0.0	0.0	0.0	8.8	0.0	4.8	0.0
%ile Storage Ratio (RQ%)	2.14	0.00	0.00	0.00	0.57	0.00	0.26	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	77.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	1	0	3	0	1
Grp Vol (v), veh/h	0	451	0	97	0	1341	0	282
Grp Sat Flow (s), veh/h/ln	0	1558	0	1626	0	1558	0	1712
Q Serve Time (g_s), s	0.0	11.9	0.0	7.2	0.0	36.0	0.0	26.2
Cycle Q Clear Time (g_c), s	0.0	11.9	0.0	7.2	0.0	36.0	0.0	26.2
Lane Grp Cap (c), veh/h	0	1413	0	476	0	2060	0	293
V/C Ratio (X)	0.00	0.32	0.00	0.20	0.00	0.65	0.00	0.96
Avail Cap (c_a), veh/h	0	1413	0	476	0	2060	0	293
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	43.1	0.0	42.6	0.0	35.1	0.0	65.8
Incr Delay (d2), s/veh	0.0	0.6	0.0	0.2	0.0	0.1	0.0	42.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	43.7	0.0	42.8	0.0	35.2	0.0	108.0
1st-Term Q (Q1), veh/ln	0.0	5.1	0.0	3.2	0.0	15.5	0.0	12.4

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.0	0.0	3.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	5.2	0.0	3.3	0.0	15.5	0.0	15.8
%ile Storage Ratio (RQ%)	0.00	0.06	0.00	0.18	0.00	0.12	0.00	0.47
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	2
Grp Vol (v), veh/h	0	0	0	98	0	339	0	911
Grp Sat Flow (s), veh/h/ln	0	1455	0	1500	0	1455	0	1280
Q Serve Time (g_s), s	0.0	0.0	0.0	7.9	0.0	27.2	0.0	27.4
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	7.9	0.0	27.2	0.0	27.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.80	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	440	0	439	0	641	0	439
V/C Ratio (X)	0.00	0.00	0.00	0.22	0.00	0.53	0.00	2.08
Avail Cap (c_a), veh/h	0	440	0	439	0	641	0	439
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	42.8	0.0	32.6	0.0	66.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.3	0.0	0.3	0.0	492.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	43.1	0.0	32.9	0.0	558.9
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.3	0.0	10.9	0.0	9.7
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	30.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	3.3	0.0	10.9	0.0	39.7
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.18	0.00	0.61	0.00	1.18
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	118.1
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	204.9
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	207	1007	277	409	1074	199	132	561	166	676	1526	199
Future Volume (veh/h)	207	1007	277	409	1074	199	132	561	166	676	1526	199
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1776	1776	1776	1776	1776	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	218	1060	292	431	1131	209	139	591	175	712	1606	209
Adj No. of Lanes	2	3	1	2	3	2	2	2	0	2	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	7	7	7	7	7	7	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	264	1213	378	213	1138	623	181	976	288	374	1303	167
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.25	0.25	0.06	0.23	0.23	0.06	0.38	0.38	0.11	0.43	0.43
Ln Grp Delay, s/veh	80.4	63.2	66.9	547.6	83.0	49.5	84.8	39.2	39.3	484.1	152.5	167.4
Ln Grp LOS	F	E	E	F	F	D	F	D	D	F	F	F
Approach Vol, veh/h		1570			1771			905			2527	
Approach Delay, s/veh		66.3			192.1			46.3			251.4	
Approach LOS		E			F			D			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	4.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	19.3	42.7	24.0	64.9	17.0	45.1	15.9	73.0
Change Period (Y+Rc), s	7.2	* 7.3	6.8	* 7.6	7.2	* 7.3	* 7.6	* 7.6
Max Green (Gmax), s	15.8	* 31	17.2	* 59	9.8	* 37	* 9.4	* 65
Max Allow Headway (MAH), s	3.8	5.0	3.8	5.3	3.8	5.0	3.8	5.3
Max Q Clear (g_c+I1), s	11.9	37.2	19.2	30.1	11.8	33.7	8.3	67.4
Green Ext Time (g_e), s	0.3	0.0	0.0	23.4	0.0	2.8	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	0.93	0.00	1.00	0.80	1.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3281		3281		3281		3281	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		4848		2570		4848		3009

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		2656		759		1509		385

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	218	0	712	0	431	0	139	0
Grp Sat Flow (s), veh/h/ln	1640	0	1640	0	1640	0	1640	0
Q Serve Time (g_s), s	9.9	0.0	17.2	0.0	9.8	0.0	6.3	0.0
Cycle Q Clear Time (g_c), s	9.9	0.0	17.2	0.0	9.8	0.0	6.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	264	0	374	0	213	0	181	0
V/C Ratio (X)	0.83	0.00	1.91	0.00	2.02	0.00	0.77	0.00
Avail Cap (c_a), veh/h	343	0	374	0	213	0	204	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	68.4	0.0	66.9	0.0	70.6	0.0	70.4	0.0
Incr Delay (d2), s/veh	12.1	0.0	417.2	0.0	477.0	0.0	14.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	80.4	0.0	484.1	0.0	547.6	0.0	84.8	0.0
1st-Term Q (Q1), veh/ln	4.5	0.0	7.8	0.0	4.4	0.0	2.9	0.0
2nd-Term Q (Q2), veh/ln	0.4	0.0	21.7	0.0	14.1	0.0	0.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	4.9	0.0	29.4	0.0	18.5	0.0	3.2	0.0
%ile Storage Ratio (RQ%)	0.28	0.00	0.58	0.00	0.94	0.00	0.09	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	84.6	0.0	54.5	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.5	0.0	0.5	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	1	0	3	0	1
Grp Vol (v), veh/h	0	1131	0	388	0	1060	0	889
Grp Sat Flow (s), veh/h/ln	0	1616	0	1687	0	1616	0	1687
Q Serve Time (g_s), s	0.0	35.2	0.0	27.9	0.0	31.7	0.0	65.4
Cycle Q Clear Time (g_c), s	0.0	35.2	0.0	27.9	0.0	31.7	0.0	65.4
Lane Grp Cap (c), veh/h	0	1138	0	640	0	1213	0	731
V/C Ratio (X)	0.00	0.99	0.00	0.61	0.00	0.87	0.00	1.22
Avail Cap (c_a), veh/h	0	1138	0	661	0	1213	0	731
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	57.7	0.0	37.7	0.0	54.3	0.0	42.8
Incr Delay (d2), s/veh	0.0	25.3	0.0	1.5	0.0	8.9	0.0	109.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	83.0	0.0	39.2	0.0	63.2	0.0	152.5
1st-Term Q (Q1), veh/ln	0.0	15.7	0.0	13.0	0.0	14.1	0.0	30.4

2nd-Term Q (Q2), veh/ln	0.0	2.7	0.0	0.3	0.0	1.0	0.0	22.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	18.4	0.0	13.3	0.0	15.1	0.0	52.7
%ile Storage Ratio (RQ%)	0.00	0.10	0.00	0.35	0.00	0.14	0.00	1.04
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.5
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		T+R
Lanes in Grp	0	2	0	1	0	1	0	1
Grp Vol (v), veh/h	0	209	0	378	0	292	0	926
Grp Sat Flow (s), veh/h/ln	0	1328	0	1642	0	1509	0	1708
Q Serve Time (g_s), s	0.0	9.9	0.0	28.1	0.0	27.2	0.0	65.4
Cycle Q Clear Time (g_c), s	0.0	9.9	0.0	28.1	0.0	27.2	0.0	65.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.46	0.00	1.00	0.00	0.23
Lane Grp Cap (c), veh/h	0	623	0	623	0	378	0	740
V/C Ratio (X)	0.00	0.34	0.00	0.61	0.00	0.77	0.00	1.25
Avail Cap (c_a), veh/h	0	623	0	644	0	378	0	740
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	48.0	0.0	37.8	0.0	52.6	0.0	42.8
Incr Delay (d2), s/veh	0.0	1.4	0.0	1.6	0.0	14.3	0.0	124.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	49.5	0.0	39.3	0.0	66.9	0.0	167.4
1st-Term Q (Q1), veh/ln	0.0	3.6	0.0	12.7	0.0	11.3	0.0	30.8
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.3	0.0	1.5	0.0	25.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	3.7	0.0	13.0	0.0	12.8	0.0	56.4
%ile Storage Ratio (RQ%)	0.00	0.15	0.00	0.35	0.00	0.80	0.00	1.12
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	46.7
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	165.6
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	616	1814	0	0	2505	914	0	0	1274	0	0	0
Future Volume (veh/h)	616	1814	0	0	2505	914	0	0	1274	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q, veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1845	1845	0	0	1845	1845	0	0	1845			
Adj Flow Rate, veh/h	635	1870	0	0	2582	0	0	0	1313			
Adj No. of Lanes	2	3	0	0	3	1	0	0	2			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97			
Percent Heavy Veh, %	3	3	0	0	3	3	0	0	3			
Opposing Right Turn Influence	Yes			No			No					
Cap, veh/h	562	4811	0	0	3754	1169	0	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Prop Arrive On Green	0.17	0.96	0.00	0.00	0.75	0.00	0.00	0.00	0.00			
Ln Grp Delay, s/veh	138.4	0.5	0.0	0.0	10.6	0.0	0.0	0.0	0.0			
Ln Grp LOS	F	A			B							

Approach Vol, veh/h	2505	2582	0	Timer:
Approach Delay, s/veh	35.4	10.6	0.0	Assigned Phs
Approach LOS	D	B		Case No
Phs Duration (G+Y+Rc), s		143.0	30.0	113.0
Change Period (Y+Rc), s		6.4	6.4	6.4
Max Green (Gmax), s		76.6	23.6	46.6
Max Allow Headway (MAH), s		5.2	3.8	5.2
Max Q Clear (g_c+I1), s		5.8	25.6	40.3
Green Ext Time (g_e), s		68.4	0.0	6.3
Prob of Phs Call (p_c)		1.00	1.00	1.00
Prob of Max Out (p_x)		0.00	1.00	0.00

Left-Turn Movement Data				
Assigned Mvmt			7	3
Mvmt Sat Flow, veh/h			3408	0

Through Movement Data				
Assigned Mvmt		4		8
Mvmt Sat Flow, veh/h		5202		5202

Right-Turn Movement Data				
Assigned Mvmt		14		18
Mvmt Sat Flow, veh/h		0		1568

Left Lane Group Data									
Assigned Mvmt	0	0	0	0	0	0	7	3	
Lane Assignment							(Prot)		
Lanes in Grp	0	0	0	0	0	0	2	0	
Grp Vol (v), veh/h	0	0	0	0	0	0	635	0	
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	1704	0	

Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	23.6	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	23.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	106.6
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	562	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	1.13	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	562	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	59.7	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	78.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	138.4	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	11.1	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	6.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	17.2	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.56	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	18.1	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	3	0	0	0	3
Grp Vol (v), veh/h	0	0	0	1870	0	0	0	2582
Grp Sat Flow (s), veh/h/ln	0	0	0	1679	0	0	0	1679
Q Serve Time (g_s), s	0.0	0.0	0.0	3.8	0.0	0.0	0.0	38.3
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	3.8	0.0	0.0	0.0	38.3
Lane Grp Cap (c), veh/h	0	0	0	4811	0	0	0	3754
V/C Ratio (X)	0.00	0.00	0.00	0.39	0.00	0.00	0.00	0.69
Avail Cap (c_a), veh/h	0	0	0	4811	0	0	0	3754
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	9.5
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	1.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.5	0.0	0.0	0.0	10.6
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.6	0.0	0.0	0.0	17.5
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00

%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	1.7	0.0	0.0	0.0	17.8
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.12	0.00	0.00	0.00	1.32
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	0	0	18
Lane Assignment								R
Lanes in Grp	0	0	0	0	0	0	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	1568
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	1169
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	1169
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		22.8						
HCM 2010 LOS		C						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1576	1001	1471	2239	0	0	0	0	0	0	327
Future Volume (veh/h)	0	1576	1001	1471	2239	0	0	0	0	0	0	327
Number	7	4	14	3	8	18				1	6	16
Initial Q, veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1845	1845	1845	1845	0				0	0	1845
Adj Flow Rate, veh/h	0	1625	0	1516	2308	0				0	0	0
Adj No. of Lanes	0	3	1	2	3	0				0	0	2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97				0.97	0.97	0.97
Percent Heavy Veh, %	0	3	3	3	3	0				0	0	3
Opposing Right Turn Influence	No			Yes						No		
Cap, veh/h	0	2216	690	1237	4540	0				0	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Prop Arrive On Green	0.00	0.44	0.00	0.36	0.90	0.00				0.00	0.00	0.00
Ln Grp Delay, s/veh	0.0	17.2	0.0	129.4	1.0	0.0				0.0	0.0	0.0
Ln Grp LOS		B		F	A							
Approach Vol, veh/h		1625			3824						0	
Approach Delay, s/veh		17.2			51.9						0.0	
Approach LOS		B			D							

Timer:	1	2	3	4	5	6	7	8
Assigned Phs			3	4				8
Case No			2.0	7.0				4.0
Phs Duration (G+Y+Rc), s			30.0	35.0				65.0
Change Period (Y+Rc), s			6.4	6.4				6.4
Max Green (Gmax), s			23.6	18.0				48.0
Max Allow Headway (MAH), s			3.8	5.2				5.2
Max Q Clear (g_c+I1), s			25.6	19.3				7.4
Green Ext Time (g_e), s			0.0	0.0				38.7
Prob of Phs Call (p_c)			1.00	1.00				1.00
Prob of Max Out (p_x)			1.00	0.00				0.00

Left-Turn Movement Data		
Assigned Mvmt	3	7
Mvmt Sat Flow, veh/h	3408	0

Through Movement Data		
Assigned Mvmt	4	8
Mvmt Sat Flow, veh/h	5202	5202

Right-Turn Movement Data		
Assigned Mvmt	14	18
Mvmt Sat Flow, veh/h	1568	0

Left Lane Group Data								
Assigned Mvmt	0	0	3	7	0	0	0	0
Lane Assignment			(Prot)					

Lanes in Grp	0	0	2	0	0	0	0	0
Grp Vol (v), veh/h	0	0	1516	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1704	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	23.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	23.6	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	28.6	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	1237	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	1.23	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	1237	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	20.7	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	108.7	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	129.4	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	11.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	18.7	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	29.7	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	1.03	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	69.6	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	3	0	0	0	3
Grp Vol (v), veh/h	0	0	0	1625	0	0	0	2308
Grp Sat Flow (s), veh/h/ln	0	0	0	1679	0	0	0	1679
Q Serve Time (g_s), s	0.0	0.0	0.0	17.3	0.0	0.0	0.0	5.4
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	17.3	0.0	0.0	0.0	5.4
Lane Grp Cap (c), veh/h	0	0	0	2216	0	0	0	4540
V/C Ratio (X)	0.00	0.00	0.00	0.73	0.00	0.00	0.00	0.51
Avail Cap (c_a), veh/h	0	0	0	2216	0	0	0	4540
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	15.0	0.0	0.0	0.0	0.6
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.2	0.0	0.0	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	17.2	0.0	0.0	0.0	1.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	8.0	0.0	0.0	0.0	2.4

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	8.4	0.0	0.0	0.0	2.5
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.36	0.00	0.00	0.00	0.16
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	0	0	18
Lane Assignment				R				
Lanes in Grp	0	0	0	1	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1568	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	690	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	690	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		41.6						
HCM 2010 LOS		D						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	945	3317	0	0	2787	785	0	0	474	0	0	353
Future Volume (veh/h)	945	3317	0	0	2787	785	0	0	474	0	0	353
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	0	0	1863	0	0	1863
Adj Flow Rate, veh/h	1038	3645	0	0	3063	863	0	0	521	0	0	388
Adj No. of Lanes	2	3	0	0	3	2	0	0	3	0	0	3
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	0	0	2	2	0	0	2	0	0	2
Opposing Right Turn Influence	Yes			No			No			No		
Cap, veh/h	817	4795	0	0	3296	1806	0	0	0	0	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.24	0.94	0.00	0.00	0.65	0.65	0.00	0.00	0.00	0.00	0.00	0.00
Ln Grp Delay, s/veh	165.1	0.8	0.0	0.0	23.5	10.9	0.0	0.0	0.0	0.0	0.0	0.0
Ln Grp LOS	F	A			C	B						
Approach Vol, veh/h		4683			3926			0			0	
Approach Delay, s/veh		37.2			20.7			0.0			0.0	
Approach LOS		D			C							

Timer:	1	2	3	4	5	6	7	8
Assigned Phs				4			7	8
Case No				4.0			2.0	7.0
Phs Duration (G+Y+Rc), s				112.0			33.0	79.0
Change Period (Y+Rc), s				6.4			6.4	6.4
Max Green (Gmax), s				81.6			26.6	48.6
Max Allow Headway (MAH), s				5.1			3.8	5.1
Max Q Clear (g_c+I1), s				18.2			28.6	61.7
Green Ext Time (g_e), s				63.0			0.0	0.0
Prob of Phs Call (p_c)				1.00			1.00	1.00
Prob of Max Out (p_x)				0.00			1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt							7	3
Mvmt Sat Flow, veh/h							3442	0

Through Movement Data								
Assigned Mvmt				4				8
Mvmt Sat Flow, veh/h				5253				5253

Right-Turn Movement Data								
Assigned Mvmt				14				18
Mvmt Sat Flow, veh/h				0				2787

Left Lane Group Data								
Assigned Mvmt	0	0	0	0	0	0	7	3
Lane Assignment							(Prot)	

Lanes in Grp	0	0	0	0	0	0	2	0
Grp Vol (v), veh/h	0	0	0	0	0	0	1038	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	1721	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	26.6	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	26.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	72.6
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	817	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	1.27	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	817	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	42.7	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	122.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	165.1	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	12.6	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	13.9	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	26.5	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	1.27	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	55.2	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	3	0	0	0	3
Grp Vol (v), veh/h	0	0	0	3645	0	0	0	3063
Grp Sat Flow (s), veh/h/ln	0	0	0	1695	0	0	0	1695
Q Serve Time (g_s), s	0.0	0.0	0.0	16.2	0.0	0.0	0.0	59.7
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	16.2	0.0	0.0	0.0	59.7
Lane Grp Cap (c), veh/h	0	0	0	4795	0	0	0	3296
V/C Ratio (X)	0.00	0.00	0.00	0.76	0.00	0.00	0.00	0.93
Avail Cap (c_a), veh/h	0	0	0	4795	0	0	0	3296
Upstream Filter (I)	0.00	0.00	0.00	0.09	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.6	0.0	0.0	0.0	17.4
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.0	0.0	6.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.8	0.0	0.0	0.0	23.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	6.8	0.0	0.0	0.0	27.5

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	6.8	0.0	0.0	0.0	29.3
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.47
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	0	0	18
Lane Assignment								R
Lanes in Grp	0	0	0	0	0	0	0	2
Grp Vol (v), veh/h	0	0	0	0	0	0	0	863
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	1393
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.7
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	1806
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	1806
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.9
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.3
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	29.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	3170	689	1178	1906	0	0	0	966	0	0	250
Future Volume (veh/h)	0	3170	689	1178	1906	0	0	0	966	0	0	250
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	0	0	0	1863	0	0	1863
Adj Flow Rate, veh/h	0	3268	710	1214	1965	0	0	0	996	0	0	258
Adj No. of Lanes	0	3	2	2	3	0	0	0	3	0	0	3
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	2	2	2	2	0	0	0	2	0	0	2
Opposing Right Turn Influence	No			Yes			No			No		
Cap, veh/h	0	3320	1819	942	4898	0	0	0	0	0	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.00	0.65	0.65	0.27	0.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ln Grp Delay, s/veh	0.0	41.7	14.7	194.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ln Grp LOS		D	B	F	A							
Approach Vol, veh/h		3978			3179			0			0	
Approach Delay, s/veh		36.9			74.3			0.0			0.0	
Approach LOS		D			E							

Timer:	1	2	3	4	5	6	7	8
Assigned Phs			3	4				8
Case No			2.0	7.0				4.0
Phs Duration (G+Y+Rc), s			54.0	120.0				174.0
Change Period (Y+Rc), s			6.4	6.4				6.4
Max Green (Gmax), s			47.6	93.6				147.6
Max Allow Headway (MAH), s			3.8	5.1				5.1
Max Q Clear (g_c+I1), s			49.6	110.6				6.0
Green Ext Time (g_e), s			0.0	0.0				139.9
Prob of Phs Call (p_c)			1.00	1.00				1.00
Prob of Max Out (p_x)			1.00	0.00				0.00

Left-Turn Movement Data								
Assigned Mvmt			3	7				
Mvmt Sat Flow, veh/h			3442	0				

Through Movement Data								
Assigned Mvmt				4				8
Mvmt Sat Flow, veh/h				5253				5253

Right-Turn Movement Data								
Assigned Mvmt				14				18
Mvmt Sat Flow, veh/h				2787				0

Left Lane Group Data								
Assigned Mvmt	0	0	3	7	0	0	0	0
Lane Assignment			(Prot)					

Lanes in Grp	0	0	2	0	0	0	0	0
Grp Vol (v), veh/h	0	0	1214	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1721	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	47.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	47.6	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	113.6	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	942	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	1.29	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	942	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	63.2	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	131.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	194.2	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	22.6	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	17.1	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	39.8	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	1.71	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	68.1	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	3	0	0	0	3
Grp Vol (v), veh/h	0	0	0	3268	0	0	0	1965
Grp Sat Flow (s), veh/h/ln	0	0	0	1695	0	0	0	1695
Q Serve Time (g_s), s	0.0	0.0	0.0	108.6	0.0	0.0	0.0	4.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	108.6	0.0	0.0	0.0	4.0
Lane Grp Cap (c), veh/h	0	0	0	3320	0	0	0	4898
V/C Ratio (X)	0.00	0.00	0.00	0.98	0.00	0.00	0.00	0.40
Avail Cap (c_a), veh/h	0	0	0	3320	0	0	0	4898
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	0.0	0.0	29.3	0.0	0.0	0.0	0.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	12.4	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	41.7	0.0	0.0	0.0	0.2
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	50.5	0.0	0.0	0.0	1.6

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	54.3	0.0	0.0	0.0	1.6
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.90	0.00	0.00	0.00	0.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	0	0	18
Lane Assignment				R				
Lanes in Grp	0	0	0	2	0	0	0	0
Grp Vol (v), veh/h	0	0	0	710	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1393	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	20.7	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	20.7	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	1819	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.39	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	1819	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	14.1	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	14.7	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	7.9	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	8.1	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.29	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		53.5						
HCM 2010 LOS		D						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	343	262	381	381	317	127	755	353	204	1448	12
Future Volume (veh/h)	27	343	262	381	381	317	127	755	353	204	1448	12
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	31	390	298	433	433	360	144	858	401	232	1645	14
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	38	432	327	72	450	372	90	1046	486	90	1602	14
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.02	0.23	0.23	0.04	0.25	0.25	0.05	0.47	0.47	0.05	0.47	0.47
Ln Grp Delay, s/veh	75.6	54.7	58.4	2313.8	65.3	68.7	359.6	28.8	29.8	787.7	61.6	61.2
Ln Grp LOS	E	D	E	F	E	E	F	C	C	F	F	F
Approach Vol, veh/h		719			1226			1403			1891	
Approach Delay, s/veh		57.3			860.4			63.2			150.5	
Approach LOS		E			F			E			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	4.0
Phs Duration (G+Y+Rc), s	9.0	44.2	8.0	23.8	9.0	44.2	6.3	25.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green (Gmax), s	4.5	39.5	3.5	19.5	4.5	39.5	3.5	19.5
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.4	3.8	5.3	3.8	5.4
Max Q Clear (g_c+I1), s	6.5	30.4	5.5	19.2	6.5	41.7	3.5	22.1
Green Ext Time (g_e), s	0.0	8.5	0.0	0.1	0.0	0.0	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.97	1.00	0.52	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1691		1757		1691		1757	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2240		1904		3428		1823

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1040		1439		29		1508

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	232	0	433	0	144	0	31	0
Grp Sat Flow (s), veh/h/ln	1691	0	1757	0	1691	0	1757	0
Q Serve Time (g_s), s	4.5	0.0	3.5	0.0	4.5	0.0	1.5	0.0
Cycle Q Clear Time (g_c), s	4.5	0.0	3.5	0.0	4.5	0.0	1.5	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	90	0	72	0	90	0	38	0
V/C Ratio (X)	2.59	0.00	5.99	0.00	1.61	0.00	0.83	0.00
Avail Cap (c_a), veh/h	90	0	72	0	90	0	72	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	40.3	0.0	40.8	0.0	40.3	0.0	41.4	0.0
Incr Delay (d2), s/veh	747.4	0.0	2273.0	0.0	319.3	0.0	34.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	787.7	0.0	2313.8	0.0	359.6	0.0	75.6	0.0
1st-Term Q (Q1), veh/ln	2.1	0.0	1.7	0.0	2.1	0.0	0.7	0.0
2nd-Term Q (Q2), veh/ln	18.6	0.0	45.7	0.0	7.9	0.0	0.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	20.7	0.0	47.4	0.0	10.0	0.0	1.1	0.0
%ile Storage Ratio (RQ%)	1.68	0.00	5.16	0.00	1.60	0.00	0.22	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	35.6	0.0	90.2	0.0	13.6	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.6	0.0	1.5	0.0	0.4	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	645	0	359	0	809	0	416
Grp Sat Flow (s), veh/h/ln	0	1687	0	1752	0	1687	0	1752
Q Serve Time (g_s), s	0.0	28.0	0.0	16.9	0.0	39.7	0.0	19.9
Cycle Q Clear Time (g_c), s	0.0	28.0	0.0	16.9	0.0	39.7	0.0	19.9
Lane Grp Cap (c), veh/h	0	788	0	398	0	788	0	432
V/C Ratio (X)	0.00	0.82	0.00	0.90	0.00	1.03	0.00	0.96
Avail Cap (c_a), veh/h	0	788	0	402	0	788	0	432
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	19.5	0.0	31.9	0.0	22.6	0.0	31.6
Incr Delay (d2), s/veh	0.0	9.2	0.0	22.8	0.0	38.9	0.0	33.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	28.8	0.0	54.7	0.0	61.6	0.0	65.3
1st-Term Q (Q1), veh/ln	0.0	12.9	0.0	8.2	0.0	18.4	0.0	9.6

2nd-Term Q (Q2), veh/ln	0.0	2.0	0.0	2.5	0.0	8.5	0.0	4.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	14.9	0.0	10.7	0.0	26.9	0.0	13.6
%ile Storage Ratio (RQ%)	0.00	1.18	0.00	0.25	0.00	2.07	0.00	0.27
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	5.2	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	614	0	329	0	850	0	377
Grp Sat Flow (s), veh/h/ln	0	1592	0	1591	0	1771	0	1579
Q Serve Time (g_s), s	0.0	28.4	0.0	17.2	0.0	39.7	0.0	20.1
Cycle Q Clear Time (g_c), s	0.0	28.4	0.0	17.2	0.0	39.7	0.0	20.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.65	0.00	0.90	0.00	0.02	0.00	0.96
Lane Grp Cap (c), veh/h	0	744	0	361	0	827	0	389
V/C Ratio (X)	0.00	0.83	0.00	0.91	0.00	1.03	0.00	0.97
Avail Cap (c_a), veh/h	0	744	0	365	0	827	0	389
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	19.6	0.0	32.0	0.0	22.6	0.0	31.7
Incr Delay (d2), s/veh	0.0	10.1	0.0	26.4	0.0	38.6	0.0	37.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	29.8	0.0	58.4	0.0	61.2	0.0	68.7
1st-Term Q (Q1), veh/ln	0.0	12.5	0.0	7.5	0.0	19.3	0.0	8.7
2nd-Term Q (Q2), veh/ln	0.0	2.1	0.0	2.6	0.0	8.9	0.0	4.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	14.5	0.0	10.1	0.0	28.2	0.0	12.7
%ile Storage Ratio (RQ%)	0.00	1.15	0.00	0.24	0.00	2.16	0.00	0.26
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	5.7	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		280.5						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	210	337	409	76	245	84	506	358	124	538	9
Future Volume (veh/h)	45	210	337	409	76	245	84	506	358	124	538	9
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1900	1712	1712	1712	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	47	221	355	431	80	258	88	533	377	131	566	9
Adj No. of Lanes	1	1	0	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	11	11	11	11	11	11	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	62	153	245	101	482	410	74	699	494	74	1256	20
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.04	0.26	0.26	0.06	0.28	0.28	0.04	0.37	0.37	0.04	0.37	0.37
Ln Grp Delay, s/veh	60.9	0.0	249.6	1536.3	25.1	31.9	211.4	34.1	34.8	444.7	24.3	24.2
Ln Grp LOS	E		F	F	C	C	F	C	C	F	C	C
Approach Vol, veh/h		623			769			998			706	
Approach Delay, s/veh		235.4			874.4			50.0			102.2	
Approach LOS		F			F			D			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	10.0	40.0	12.0	30.0	10.0	40.0	9.8	32.2
Change Period (Y+Rc), s	6.0	6.0	* 6.3	* 6.3	6.0	6.0	* 6.3	* 6.3
Max Green (Gmax), s	4.0	34.0	* 5.7	* 24	4.0	34.0	* 5.7	* 24
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.1	3.8	5.3	3.8	5.1
Max Q Clear (g_c+I1), s	6.0	24.8	7.7	25.7	6.0	13.6	4.6	16.2
Green Ext Time (g_e), s	0.0	5.9	0.0	0.0	0.0	10.1	0.0	3.3
Prob of Phs Call (p_c)	0.96	1.00	1.00	1.00	0.89	1.00	0.70	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.73

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1691		1630		1691		1630	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1890		592		3399		1712

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1336		951		54		1455

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	131	0	431	0	88	0	47	0
Grp Sat Flow (s), veh/h/ln	1691	0	1630	0	1691	0	1630	0
Q Serve Time (g_s), s	4.0	0.0	5.7	0.0	4.0	0.0	2.6	0.0
Cycle Q Clear Time (g_c), s	4.0	0.0	5.7	0.0	4.0	0.0	2.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	74	0	101	0	74	0	62	0
V/C Ratio (X)	1.78	0.00	4.27	0.00	1.20	0.00	0.76	0.00
Avail Cap (c_a), veh/h	74	0	101	0	74	0	101	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	44.0	0.0	43.2	0.0	44.0	0.0	43.8	0.0
Incr Delay (d2), s/veh	400.7	0.0	1493.2	0.0	167.4	0.0	17.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	444.7	0.0	1536.3	0.0	211.4	0.0	60.9	0.0
1st-Term Q (Q1), veh/ln	1.9	0.0	2.6	0.0	1.9	0.0	1.2	0.0
2nd-Term Q (Q2), veh/ln	8.2	0.0	41.9	0.0	3.4	0.0	0.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	10.0	0.0	44.4	0.0	5.3	0.0	1.5	0.0
%ile Storage Ratio (RQ%)	1.17	0.00	8.64	0.00	0.44	0.00	0.27	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	14.4	0.0	82.5	0.0	3.6	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.4	0.0	1.1	0.0	0.3	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	476	0	0	0	281	0	80
Grp Sat Flow (s), veh/h/ln	0	1687	0	0	0	1687	0	1712
Q Serve Time (g_s), s	0.0	22.8	0.0	0.0	0.0	11.6	0.0	3.2
Cycle Q Clear Time (g_c), s	0.0	22.8	0.0	0.0	0.0	11.6	0.0	3.2
Lane Grp Cap (c), veh/h	0	623	0	0	0	623	0	482
V/C Ratio (X)	0.00	0.76	0.00	0.00	0.00	0.45	0.00	0.17
Avail Cap (c_a), veh/h	0	623	0	0	0	623	0	482
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	25.5	0.0	0.0	0.0	21.9	0.0	24.9
Incr Delay (d2), s/veh	0.0	8.6	0.0	0.0	0.0	2.3	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	34.1	0.0	0.0	0.0	24.3	0.0	25.1
1st-Term Q (Q1), veh/ln	0.0	10.6	0.0	0.0	0.0	5.4	0.0	1.5

2nd-Term Q (Q2), veh/ln	0.0	1.5	0.0	0.0	0.0	0.4	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	12.1	0.0	0.0	0.0	5.8	0.0	1.6
%ile Storage Ratio (RQ%)	0.00	0.39	0.00	0.00	0.00	0.17	0.00	0.05
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	434	0	576	0	294	0	258
Grp Sat Flow (s), veh/h/ln	0	1540	0	1544	0	1766	0	1455
Q Serve Time (g_s), s	0.0	22.8	0.0	23.7	0.0	11.6	0.0	14.2
Cycle Q Clear Time (g_c), s	0.0	22.8	0.0	23.7	0.0	11.6	0.0	14.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.87	0.00	0.62	0.00	0.03	0.00	1.00
Lane Grp Cap (c), veh/h	0	569	0	398	0	653	0	410
V/C Ratio (X)	0.00	0.76	0.00	1.45	0.00	0.45	0.00	0.63
Avail Cap (c_a), veh/h	0	569	0	398	0	653	0	410
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	25.5	0.0	34.2	0.0	21.9	0.0	28.9
Incr Delay (d2), s/veh	0.0	9.4	0.0	215.4	0.0	2.2	0.0	3.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	34.8	0.0	249.6	0.0	24.2	0.0	31.9
1st-Term Q (Q1), veh/ln	0.0	9.7	0.0	10.1	0.0	5.6	0.0	5.7
2nd-Term Q (Q2), veh/ln	0.0	1.5	0.0	23.8	0.0	0.4	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	11.1	0.0	33.9	0.0	6.0	0.0	6.1
%ile Storage Ratio (RQ%)	0.00	0.36	0.00	0.82	0.00	0.18	0.00	1.07
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	44.6	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	304.0
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	123	246	50	208	163	159	77	663	149	281	1012	48
Future Volume (veh/h)	123	246	50	208	163	159	77	663	149	281	1012	48
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	126	251	51	212	166	162	79	677	152	287	1033	49
Adj No. of Lanes	1	1	0	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	61	309	63	61	382	325	39	1248	280	39	1494	71
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.21	0.21	0.03	0.21	0.21	0.02	0.46	0.46	0.02	0.46	0.46
Ln Grp Delay, s/veh	568.3	0.0	40.6	1188.1	30.5	31.3	573.7	19.7	19.7	2895.2	20.5	20.5
Ln Grp LOS	F		D	F	C	C	F	B	B	F	C	C
Approach Vol, veh/h		428			540			908			1369	
Approach Delay, s/veh		195.9			485.2			67.9			623.1	
Approach LOS		F			F			E			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	8.0	45.2	9.0	23.8	8.0	45.2	9.0	23.8
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green (Gmax), s	2.0	34.0	3.0	23.0	2.0	34.0	3.0	23.0
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.0	3.8	5.3	3.8	5.0
Max Q Clear (g_c+I1), s	4.0	17.4	5.0	15.8	4.0	23.5	5.0	9.9
Green Ext Time (g_e), s	0.0	11.3	0.0	2.0	0.0	7.9	0.0	2.8
Prob of Phs Call (p_c)	1.00	1.00	0.99	1.00	0.85	1.00	0.95	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.60	1.00	0.00	1.00	0.15

Left-Turn Movement Data								
Assigned Mvmt		1		3		5		7
Mvmt Sat Flow, veh/h		1691		1757		1691		1757

Through Movement Data								
Assigned Mvmt			2		4		6		8
Mvmt Sat Flow, veh/h			2740		1489		3280		1845

Right-Turn Movement Data								
Assigned Mvmt			12		14		16		18
Mvmt Sat Flow, veh/h			615		303		156		1568

Left Lane Group Data								
Assigned Mvmt		1	0	3	0	5	0	7	0
Lane Assignment		(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	287	0	212	0	79	0	126	0
Grp Sat Flow (s), veh/h/ln	1691	0	1757	0	1691	0	1757	0
Q Serve Time (g_s), s	2.0	0.0	3.0	0.0	2.0	0.0	3.0	0.0
Cycle Q Clear Time (g_c), s	2.0	0.0	3.0	0.0	2.0	0.0	3.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	39	0	61	0	39	0	61	0
V/C Ratio (X)	7.30	0.00	3.46	0.00	2.01	0.00	2.06	0.00
Avail Cap (c_a), veh/h	39	0	61	0	39	0	61	0
Upstream Filter (I)	0.37	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	42.0	0.0	41.5	0.0	42.0	0.0	41.5	0.0
Incr Delay (d2), s/veh	2853.2	0.0	1146.6	0.0	531.7	0.0	526.8	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	2895.2	0.0	1188.1	0.0	573.7	0.0	568.3	0.0
1st-Term Q (Q1), veh/ln	0.9	0.0	1.4	0.0	0.9	0.0	1.4	0.0
2nd-Term Q (Q2), veh/ln	31.2	0.0	19.5	0.0	5.8	0.0	9.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	32.1	0.0	21.0	0.0	6.7	0.0	10.4	0.0
%ile Storage Ratio (RQ%)	3.39	0.00	3.98	0.00	0.83	0.00	1.62	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	61.9	0.0	37.7	0.0	9.9	0.0	16.2	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	1.8	0.0	0.9	0.0	0.5	0.0	0.5	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	417	0	0	0	531	0	166
Grp Sat Flow (s), veh/h/ln	0	1687	0	0	0	1687	0	1845
Q Serve Time (g_s), s	0.0	15.4	0.0	0.0	0.0	21.5	0.0	6.7
Cycle Q Clear Time (g_c), s	0.0	15.4	0.0	0.0	0.0	21.5	0.0	6.7
Lane Grp Cap (c), veh/h	0	768	0	0	0	768	0	382
V/C Ratio (X)	0.00	0.54	0.00	0.00	0.00	0.69	0.00	0.43
Avail Cap (c_a), veh/h	0	768	0	0	0	768	0	493
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.37	0.00	1.00
Uniform Delay (d1), s/veh	0.0	16.9	0.0	0.0	0.0	18.6	0.0	29.7
Incr Delay (d2), s/veh	0.0	2.7	0.0	0.0	0.0	1.9	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	19.7	0.0	0.0	0.0	20.5	0.0	30.5
1st-Term Q (Q1), veh/ln	0.0	7.1	0.0	0.0	0.0	10.0	0.0	3.4

2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.0	0.0	0.4	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.6	0.0	0.0	0.0	10.4	0.0	3.5
%ile Storage Ratio (RQ%)	0.00	0.39	0.00	0.00	0.00	0.22	0.00	0.10
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	412	0	302	0	551	0	162
Grp Sat Flow (s), veh/h/ln	0	1667	0	1791	0	1748	0	1568
Q Serve Time (g_s), s	0.0	15.4	0.0	13.8	0.0	21.5	0.0	7.9
Cycle Q Clear Time (g_c), s	0.0	15.4	0.0	13.8	0.0	21.5	0.0	7.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.37	0.00	0.17	0.00	0.09	0.00	1.00
Lane Grp Cap (c), veh/h	0	759	0	371	0	796	0	325
V/C Ratio (X)	0.00	0.54	0.00	0.81	0.00	0.69	0.00	0.50
Avail Cap (c_a), veh/h	0	759	0	479	0	796	0	419
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.37	0.00	1.00
Uniform Delay (d1), s/veh	0.0	16.9	0.0	32.5	0.0	18.6	0.0	30.1
Incr Delay (d2), s/veh	0.0	2.8	0.0	8.1	0.0	1.8	0.0	1.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	19.7	0.0	40.6	0.0	20.5	0.0	31.3
1st-Term Q (Q1), veh/ln	0.0	7.0	0.0	6.8	0.0	10.4	0.0	3.4
2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.8	0.0	0.4	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.6	0.0	7.6	0.0	10.8	0.0	3.5
%ile Storage Ratio (RQ%)	0.00	0.38	0.00	0.22	0.00	0.23	0.00	0.10
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		388.5						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	132	326	71	84	257	227	81	1023	61	282	1455	63
Future Volume (veh/h)	132	326	71	84	257	227	81	1023	61	282	1455	63
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	142	351	76	90	276	244	87	1100	66	303	1565	68
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	220	531	452	193	531	452	110	1459	88	193	1648	71
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.07	0.45	0.45	0.11	0.50	0.50
Ln Grp Delay, s/veh	44.9	31.8	24.7	41.1	28.3	28.9	49.6	25.1	25.0	299.5	24.9	25.2
Ln Grp LOS	D	C	C	D	C	C	D	C	C	F	C	C
Approach Vol, veh/h		569			610			1253			1936	
Approach Delay, s/veh		34.1			30.4			26.7			68.0	
Approach LOS		C			C			C			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Case No	2.0	4.0		5.0	2.0	4.0		5.0
Phs Duration (G+Y+Rc), s	15.0	46.0		31.0	10.5	50.5		31.0
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green (Gmax), s	10.5	41.5		26.5	10.5	41.5		26.5
Max Allow Headway (MAH), s	3.8	5.3		4.9	3.8	5.3		4.9
Max Q Clear (g_c+I1), s	12.5	28.0		28.5	6.7	43.9		25.9
Green Ext Time (g_e), s	0.0	12.2		0.0	0.1	0.0		0.4
Prob of Phs Call (p_c)	1.00	1.00		1.00	0.89	1.00		1.00
Prob of Max Out (p_x)	1.00	0.00		1.00	0.99	0.00		1.00

Left-Turn Movement Data								
Assigned Mvmt	1			7	5			3
Mvmt Sat Flow, veh/h	1691			870	1691			947

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3234		1845		3295		1845

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		194		1568		143		1568

Left Lane Group Data								
Assigned Mvmt	1	0	0	7	5	0	0	3
Lane Assignment	(Prot)				(Prot)			

Lanes in Grp	1	0	0	1	1	0	0	1
Grp Vol (v), veh/h	303	0	0	142	87	0	0	90
Grp Sat Flow (s), veh/h/ln	1691	0	0	870	1691	0	0	947
Q Serve Time (g_s), s	10.5	0.0	0.0	15.0	4.7	0.0	0.0	8.5
Cycle Q Clear Time (g_c), s	10.5	0.0	0.0	26.5	4.7	0.0	0.0	23.9
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	870	0	0	0	947
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	26.5	0.0	0.0	0.0	26.5
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	15.0	0.0	0.0	0.0	11.1
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	15.0	0.0	0.0	0.0	8.5
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	193	0	0	220	110	0	0	193
V/C Ratio (X)	1.57	0.00	0.00	0.65	0.79	0.00	0.00	0.47
Avail Cap (c_a), veh/h	193	0	0	220	193	0	0	193
Upstream Filter (I)	0.09	0.00	0.00	1.00	0.58	0.00	0.00	1.00
Uniform Delay (d1), s/veh	40.8	0.0	0.0	38.5	42.4	0.0	0.0	39.3
Incr Delay (d2), s/veh	258.7	0.0	0.0	6.4	7.2	0.0	0.0	1.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	299.5	0.0	0.0	44.9	49.6	0.0	0.0	41.1
1st-Term Q (Q1), veh/ln	4.9	0.0	0.0	3.6	2.2	0.0	0.0	2.2
2nd-Term Q (Q2), veh/ln	13.9	0.0	0.0	0.4	0.2	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	18.8	0.0	0.0	4.0	2.4	0.0	0.0	2.3
%ile Storage Ratio (RQ%)	1.83	0.00	0.00	0.60	0.32	0.00	0.00	0.32
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	27.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	574	0	351	0	799	0	276
Grp Sat Flow (s), veh/h/ln	0	1687	0	1845	0	1687	0	1845
Q Serve Time (g_s), s	0.0	26.0	0.0	15.4	0.0	41.4	0.0	11.5
Cycle Q Clear Time (g_c), s	0.0	26.0	0.0	15.4	0.0	41.4	0.0	11.5
Lane Grp Cap (c), veh/h	0	761	0	531	0	844	0	531
V/C Ratio (X)	0.00	0.75	0.00	0.66	0.00	0.95	0.00	0.52
Avail Cap (c_a), veh/h	0	761	0	531	0	844	0	531
Upstream Filter (I)	0.00	0.58	0.00	1.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	21.0	0.0	28.8	0.0	21.8	0.0	27.4
Incr Delay (d2), s/veh	0.0	4.1	0.0	3.0	0.0	3.0	0.0	0.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	25.1	0.0	31.8	0.0	24.9	0.0	28.3
1st-Term Q (Q1), veh/ln	0.0	11.9	0.0	7.8	0.0	19.1	0.0	5.8

2nd-Term Q (Q2), veh/ln	0.0	0.9	0.0	0.4	0.0	0.7	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	12.8	0.0	8.2	0.0	19.8	0.0	6.0
%ile Storage Ratio (RQ%)	0.00	0.27	0.00	0.24	0.00	0.87	0.00	0.14
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	592	0	76	0	834	0	244
Grp Sat Flow (s), veh/h/ln	0	1741	0	1568	0	1751	0	1568
Q Serve Time (g_s), s	0.0	26.0	0.0	3.3	0.0	41.9	0.0	12.1
Cycle Q Clear Time (g_c), s	0.0	26.0	0.0	3.3	0.0	41.9	0.0	12.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.11	0.00	1.00	0.00	0.08	0.00	1.00
Lane Grp Cap (c), veh/h	0	786	0	452	0	875	0	452
V/C Ratio (X)	0.00	0.75	0.00	0.17	0.00	0.95	0.00	0.54
Avail Cap (c_a), veh/h	0	786	0	452	0	875	0	452
Upstream Filter (I)	0.00	0.58	0.00	1.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	21.0	0.0	24.5	0.0	22.0	0.0	27.6
Incr Delay (d2), s/veh	0.0	4.0	0.0	0.2	0.0	3.3	0.0	1.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	25.0	0.0	24.7	0.0	25.2	0.0	28.9
1st-Term Q (Q1), veh/ln	0.0	12.5	0.0	1.4	0.0	19.9	0.0	5.2
2nd-Term Q (Q2), veh/ln	0.0	0.9	0.0	0.0	0.0	0.8	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	13.4	0.0	1.5	0.0	20.7	0.0	5.3
%ile Storage Ratio (RQ%)	0.00	0.28	0.00	0.26	0.00	0.91	0.00	0.76
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		46.5						
HCM 2010 LOS		D						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	158	55	29	100	16	647	21	1389	40	608	1710	64
Future Volume (veh/h)	158	55	29	100	16	647	21	1389	40	608	1710	64
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	165	57	30	104	17	674	22	1447	42	633	1781	67
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	73	253	133	130	14	548	73	957	28	293	1726	65
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.22	0.22	0.22	0.07	0.36	0.36	0.29	0.29	0.29	0.17	0.52	0.52
Ln Grp Delay, s/veh	650.8	0.0	31.5	69.2	0.0	149.7	55.3	271.3	272.9	562.5	40.6	44.2
Ln Grp LOS	F		C	E		F	E	F	F	F	F	F
Approach Vol, veh/h		252			795			1511			2481	
Approach Delay, s/veh		437.0			139.2			269.0			175.1	
Approach LOS		F			F			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4		6		8
Case No	2.0	6.0	2.0	6.0		4.0		4.0
Phs Duration (G+Y+Rc), s	23.0	34.0	13.3	27.7		57.0		41.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0		6.0		6.0
Max Green (Gmax), s	17.0	28.0	8.0	15.0		51.0		35.0
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.6		5.3		5.6
Max Q Clear (g_c+I1), s	19.0	30.0	7.7	23.7		53.0		37.0
Green Ext Time (g_e), s	0.0	0.0	0.0	0.0		0.0		0.0
Prob of Phs Call (p_c)	1.00	1.00	0.94	1.00		1.00		1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00		0.00		1.00

Left-Turn Movement Data				
Assigned Mvmt	1	5	3	7
Mvmt Sat Flow, veh/h	1691	237	1757	742

Through Movement Data			
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	3348	1139	3317	39

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	97	600	124	1535

Left Lane Group Data								
Assigned Mvmt	1	5	3	7	0	0	0	0
Lane Assignment	(Prot)		(Prot)					

Lanes in Grp	1	1	1	1	0	0	0	0
Grp Vol (v), veh/h	633	22	104	165	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1691	237	1757	742	0	0	0	0
Q Serve Time (g_s), s	17.0	0.0	5.7	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	17.0	28.0	5.7	21.7	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	237	0	742	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	28.0	0.0	21.7	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	293	73	130	73	0	0	0	0
V/C Ratio (X)	2.16	0.30	0.80	2.25	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	293	73	143	73	0	0	0	0
Upstream Filter (I)	0.09	0.62	1.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	40.5	49.0	44.7	49.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	522.0	6.3	24.6	601.8	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	562.5	55.3	69.2	650.8	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	7.9	0.6	2.8	2.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	42.5	0.1	0.9	12.3	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	50.4	0.7	3.7	14.3	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	5.33	0.09	0.42	4.56	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	84.9	0.0	0.0	22.9	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.5	0.0	0.0	0.6	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	728	0	0	0	901	0	0
Grp Sat Flow (s), veh/h/ln	0	1687	0	0	0	1687	0	0
Q Serve Time (g_s), s	0.0	28.0	0.0	0.0	0.0	51.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	28.0	0.0	0.0	0.0	51.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	482	0	0	0	878	0	0
V/C Ratio (X)	0.00	1.51	0.00	0.00	0.00	1.03	0.00	0.00
Avail Cap (c_a), veh/h	0	482	0	0	0	878	0	0
Upstream Filter (I)	0.00	0.62	0.00	0.00	0.00	0.09	0.00	0.00
Uniform Delay (d1), s/veh	0.0	35.0	0.0	0.0	0.0	23.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	236.3	0.0	0.0	0.0	17.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	271.3	0.0	0.0	0.0	40.6	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	13.0	0.0	0.0	0.0	23.4	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	31.6	0.0	0.0	0.0	4.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	44.6	0.0	0.0	0.0	27.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.96	0.00	0.00	0.00	1.41	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	61.5	0.0	0.0	0.0	5.9	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.4	0.0	0.0	0.0	0.3	0.0	0.0

Right Lane Group Data

Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	761	0	87	0	947	0	691
Grp Sat Flow (s), veh/h/ln	0	1759	0	1739	0	1754	0	1574
Q Serve Time (g_s), s	0.0	28.0	0.0	4.0	0.0	51.0	0.0	35.0
Cycle Q Clear Time (g_c), s	0.0	28.0	0.0	4.0	0.0	51.0	0.0	35.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.06	0.00	0.34	0.00	0.07	0.00	0.98
Lane Grp Cap (c), veh/h	0	502	0	386	0	913	0	562
V/C Ratio (X)	0.00	1.51	0.00	0.23	0.00	1.04	0.00	1.23
Avail Cap (c_a), veh/h	0	502	0	386	0	913	0	562
Upstream Filter (I)	0.00	0.62	0.00	1.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	35.0	0.0	31.2	0.0	23.5	0.0	31.5
Incr Delay (d2), s/veh	0.0	237.9	0.0	0.3	0.0	20.7	0.0	118.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	272.9	0.0	31.5	0.0	44.2	0.0	149.7
1st-Term Q (Q1), veh/ln	0.0	13.5	0.0	1.9	0.0	24.3	0.0	15.1
2nd-Term Q (Q2), veh/ln	0.0	33.2	0.0	0.0	0.0	5.3	0.0	18.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	46.7	0.0	2.0	0.0	29.6	0.0	33.6
%ile Storage Ratio (RQ%)	0.00	2.05	0.00	0.26	0.00	1.51	0.00	3.58
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	64.6	0.0	0.0	0.0	8.5	0.0	32.2
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.4	0.0	0.0	0.0	0.3	0.0	0.3

Intersection Summary

HCM 2010 Ctrl Delay	210.7
HCM 2010 LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	339	648	305	640	843	0	255	1170	0	0	1336	410
Future Volume (veh/h)	339	648	305	640	843	0	255	1170	0	0	1336	410
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1759	1759	1759	1900	1776	1776	1776	0	1776	1776
Adj Flow Rate, veh/h	349	668	314	660	869	0	263	1206	0	0	1377	0
Adj No. of Lanes	2	2	1	2	2	0	1	2	1	0	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	8	8	8	8	8	8	7	7	7	0	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			No		
Cap, veh/h	434	484	217	765	825	0	165	1409	630	0	859	384
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.13	0.14	0.14	0.24	0.25	0.00	0.10	0.42	0.00	0.00	0.25	0.00
Ln Grp Delay, s/veh	43.4	222.7	265.5	40.2	81.1	0.0	309.5	25.0	0.0	0.0	311.3	0.0
Ln Grp LOS	D	F	F	D	F		F	C			F	
Approach Vol, veh/h		1331			1529			1469			1377	
Approach Delay, s/veh		185.8			63.4			75.9			311.3	
Approach LOS		F			E			E			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Case No		3.0	2.0	3.0	2.0	7.0	2.0	4.0
Phs Duration (G+Y+Rc), s		44.7	27.7	19.6	15.0	29.7	18.3	29.0
Change Period (Y+Rc), s		6.3	6.0	6.3	6.0	6.3	6.0	6.3
Max Green (Gmax), s		32.7	28.0	12.7	9.0	17.7	18.0	22.7
Max Allow Headway (MAH), s		5.3	3.8	5.1	3.8	5.3	3.8	5.1
Max Q Clear (g_c+I1), s		31.8	19.9	15.3	11.0	25.4	11.6	24.7
Green Ext Time (g_e), s		0.9	1.7	0.0	0.0	0.0	0.7	0.0
Prob of Phs Call (p_c)		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)		0.00	0.20	1.00	1.00	0.00	0.20	1.00

Left-Turn Movement Data								
Assigned Mvmt			3		5	1	7	
Mvmt Sat Flow, veh/h			3250		1691	0	3250	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3374		3343		3463		3431

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1509		1495		1509		0

Left Lane Group Data								
Assigned Mvmt	0	0	3	0	5	1	7	0
Lane Assignment			(Prot)		(Prot)		(Prot)	

Lanes in Grp	0	0	2	0	1	0	2	0
Grp Vol (v), veh/h	0	0	660	0	263	0	349	0
Grp Sat Flow (s), veh/h/ln	0	0	1625	0	1691	0	1625	0
Q Serve Time (g_s), s	0.0	0.0	17.9	0.0	9.0	0.0	9.6	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	17.9	0.0	9.0	0.0	9.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	23.4	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	765	0	165	0	434	0
V/C Ratio (X)	0.00	0.00	0.86	0.00	1.59	0.00	0.80	0.00
Avail Cap (c_a), veh/h	0	0	989	0	165	0	636	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.09	0.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	33.7	0.0	41.5	0.0	38.7	0.0
Incr Delay (d2), s/veh	0.0	0.0	6.4	0.0	268.0	0.0	4.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	40.2	0.0	309.5	0.0	43.4	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	8.1	0.0	4.2	0.0	4.3	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.7	0.0	12.3	0.0	0.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	8.7	0.0	16.5	0.0	4.6	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.58	0.00	1.85	0.00	0.44	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	24.4	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	2	0	2
Grp Vol (v), veh/h	0	1206	0	668	0	1377	0	869
Grp Sat Flow (s), veh/h/ln	0	1687	0	1671	0	1687	0	1671
Q Serve Time (g_s), s	0.0	29.8	0.0	13.3	0.0	23.4	0.0	22.7
Cycle Q Clear Time (g_c), s	0.0	29.8	0.0	13.3	0.0	23.4	0.0	22.7
Lane Grp Cap (c), veh/h	0	1409	0	484	0	859	0	825
V/C Ratio (X)	0.00	0.86	0.00	1.38	0.00	1.60	0.00	1.05
Avail Cap (c_a), veh/h	0	1409	0	484	0	859	0	825
Upstream Filter (I)	0.00	0.09	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	24.3	0.0	39.3	0.0	34.3	0.0	34.7
Incr Delay (d2), s/veh	0.0	0.7	0.0	183.3	0.0	277.0	0.0	46.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	25.0	0.0	222.7	0.0	311.3	0.0	81.1
1st-Term Q (Q1), veh/ln	0.0	13.7	0.0	6.1	0.0	10.9	0.0	10.4

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	12.3	0.0	33.0	0.0	5.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	13.9	0.0	18.5	0.0	43.9	0.0	15.7
%ile Storage Ratio (RQ%)	0.00	0.71	0.00	0.64	0.00	1.47	0.00	0.48
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	45.9	0.0	129.6	0.0	11.1
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.4	0.0	0.3

Right Lane Group Data

Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	314	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1509	0	1495	0	1509	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	13.3	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	13.3	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	630	0	217	0	384	0	0
V/C Ratio (X)	0.00	0.00	0.00	1.45	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	630	0	217	0	384	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	39.3	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	226.2	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	265.5	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	5.5	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	13.6	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	19.1	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.66	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	24.3	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0

Intersection Summary

HCM 2010 Ctrl Delay	155.0
HCM 2010 LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

APPENDIX I-P2:
Year 2040 Zoning Intersection Background LOS AM Analysis with Mitigation

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	269	506	502	191	1822	42	587	377	195	115	377	671
Future Volume (veh/h)	269	506	502	191	1822	42	587	377	195	115	377	671
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1743	1743	1743	1743	1743	1743
Adj Flow Rate, veh/h	277	522	518	197	1878	43	605	389	201	119	389	692
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	1	3	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	9	9	9	9	9	9
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	133	1781	555	133	1781	555	243	1423	443	55	1220	380
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.04	0.35	0.35	0.04	0.35	0.35	0.08	0.30	0.30	0.03	0.26	0.26
Ln Grp Delay, s/veh	556.4	22.7	54.6	296.9	68.0	20.9	724.8	25.6	30.1	628.7	29.0	414.9
Ln Grp LOS	F	C	D	F	F	C	F	C	C	F	C	F
Approach Vol, veh/h		1317			2118			1195			1200	
Approach Delay, s/veh		147.5			88.4			380.3			311.0	
Approach LOS		F			F			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	10.0	35.0	10.0	39.0	14.0	31.0	10.0	39.0
Change Period (Y+Rc), s	6.9	6.9	6.4	6.4	6.9	6.9	6.4	6.4
Max Green (Gmax), s	3.1	28.1	3.6	32.6	7.1	24.1	3.6	32.6
Max Allow Headway (MAH), s	3.8	4.6	3.7	4.8	3.8	4.6	3.8	4.8
Max Q Clear (g_c+I1), s	5.1	12.3	5.6	31.4	9.1	26.1	5.6	34.6
Green Ext Time (g_e), s	0.0	8.3	0.0	1.1	0.0	0.0	0.0	0.0
Prob of Phs Call (p_c)	0.96	1.00	0.99	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	1660	3476	3221	3476

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	4759	5136	4759	5136

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	1482	1599	1482	1599

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	2	0	2	0	2	0
Grp Vol (v), veh/h	119	0	197	0	605	0	277	0
Grp Sat Flow (s), veh/h/ln	1660	0	1738	0	1610	0	1738	0
Q Serve Time (g_s), s	3.1	0.0	3.6	0.0	7.1	0.0	3.6	0.0
Cycle Q Clear Time (g_c), s	3.1	0.0	3.6	0.0	7.1	0.0	3.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	55	0	133	0	243	0	133	0
V/C Ratio (X)	2.17	0.00	1.48	0.00	2.49	0.00	2.08	0.00
Avail Cap (c_a), veh/h	55	0	133	0	243	0	133	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	45.5	0.0	45.2	0.0	43.5	0.0	45.2	0.0
Incr Delay (d2), s/veh	583.2	0.0	251.7	0.0	681.3	0.0	511.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	628.7	0.0	296.9	0.0	724.8	0.0	556.4	0.0
1st-Term Q (Q1), veh/ln	1.4	0.0	1.7	0.0	3.1	0.0	1.7	0.0
2nd-Term Q (Q2), veh/ln	8.9	0.0	4.7	0.0	23.0	0.0	9.5	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	10.3	0.0	6.4	0.0	26.2	0.0	11.2	0.0
%ile Storage Ratio (RQ%)	0.81	0.00	0.67	0.00	2.34	0.00	0.45	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	16.1	0.0	16.0	0.0	90.4	0.0	36.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.5	0.0	0.4	0.0	0.6	0.0	0.5	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	3	0	3	0	3
Grp Vol (v), veh/h	0	389	0	522	0	389	0	1878
Grp Sat Flow (s), veh/h/ln	0	1586	0	1712	0	1586	0	1712
Q Serve Time (g_s), s	0.0	5.9	0.0	6.9	0.0	6.2	0.0	32.6
Cycle Q Clear Time (g_c), s	0.0	5.9	0.0	6.9	0.0	6.2	0.0	32.6
Lane Grp Cap (c), veh/h	0	1423	0	1781	0	1220	0	1781
V/C Ratio (X)	0.00	0.27	0.00	0.29	0.00	0.32	0.00	1.05
Avail Cap (c_a), veh/h	0	1423	0	1781	0	1220	0	1781
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	25.2	0.0	22.3	0.0	28.3	0.0	30.7
Incr Delay (d2), s/veh	0.0	0.5	0.0	0.4	0.0	0.7	0.0	37.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	25.6	0.0	22.7	0.0	29.0	0.0	68.0
1st-Term Q (Q1), veh/ln	0.0	2.6	0.0	3.3	0.0	2.7	0.0	15.3

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.0	0.1	0.0	6.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.6	0.0	3.4	0.0	2.8	0.0	21.5
%ile Storage Ratio (RQ%)	0.00	0.10	0.00	0.08	0.00	0.11	0.00	1.05
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.2
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	201	0	518	0	692	0	43
Grp Sat Flow (s), veh/h/ln	0	1482	0	1599	0	1482	0	1599
Q Serve Time (g_s), s	0.0	10.3	0.0	29.4	0.0	24.1	0.0	1.7
Cycle Q Clear Time (g_c), s	0.0	10.3	0.0	29.4	0.0	24.1	0.0	1.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	443	0	555	0	380	0	555
V/C Ratio (X)	0.00	0.45	0.00	0.93	0.00	1.82	0.00	0.08
Avail Cap (c_a), veh/h	0	443	0	555	0	380	0	555
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	26.7	0.0	29.7	0.0	35.0	0.0	20.6
Incr Delay (d2), s/veh	0.0	3.3	0.0	25.0	0.0	380.0	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	30.1	0.0	54.6	0.0	414.9	0.0	20.9
1st-Term Q (Q1), veh/ln	0.0	4.2	0.0	12.9	0.0	9.8	0.0	0.7
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	3.8	0.0	40.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	4.6	0.0	16.7	0.0	49.9	0.0	0.8
%ile Storage Ratio (RQ%)	0.00	0.17	0.00	0.81	0.00	1.95	0.00	0.02
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	78.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		207.4						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	688	156	262	1421	304	314	154	190	269	222	229
Future Volume (veh/h)	120	688	156	262	1421	304	314	154	190	269	222	229
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	124	709	161	270	1465	313	324	159	196	277	229	236
Adj No. of Lanes	1	2	1	1	2	1	2	1	1	2	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	119	1440	644	221	1644	735	386	298	253	338	516	231
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.07	0.41	0.41	0.12	0.46	0.46	0.11	0.16	0.16	0.10	0.15	0.15
Ln Grp Delay, s/veh	152.4	28.7	25.4	172.6	34.8	23.3	63.9	54.8	70.6	63.6	51.4	118.6
Ln Grp LOS	F	C	C	F	C	C	E	D	E	E	D	F
Approach Vol, veh/h		994			2048			679			742	
Approach Delay, s/veh		43.6			51.2			63.7			77.3	
Approach LOS		D			D			E			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	19.0	26.8	22.0	57.2	20.8	25.0	14.8	64.4
Change Period (Y+Rc), s	6.6	6.6	6.4	6.4	6.6	6.6	6.4	6.4
Max Green (Gmax), s	16.8	20.0	15.6	46.6	18.4	18.4	8.4	53.8
Max Allow Headway (MAH), s	3.8	4.6	3.7	4.8	3.8	4.6	3.7	4.8
Max Q Clear (g_c+I1), s	12.0	17.0	17.6	20.6	13.6	20.4	10.4	49.3
Green Ext Time (g_e), s	0.4	1.2	0.0	19.5	0.5	0.0	0.0	4.1
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00
Prob of Max Out (p_x)	0.48	0.00	1.00	0.00	0.54	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3408		1774		3408		1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1845		3539		3505		3539

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		1583		1568		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	1	0	2	0	1	0
Grp Vol (v), veh/h	277	0	270	0	324	0	124	0
Grp Sat Flow (s), veh/h/ln	1704	0	1774	0	1704	0	1774	0
Q Serve Time (g_s), s	10.0	0.0	15.6	0.0	11.6	0.0	8.4	0.0
Cycle Q Clear Time (g_c), s	10.0	0.0	15.6	0.0	11.6	0.0	8.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	338	0	221	0	386	0	119	0
V/C Ratio (X)	0.82	0.00	1.22	0.00	0.84	0.00	1.04	0.00
Avail Cap (c_a), veh/h	458	0	221	0	502	0	119	0
Upstream Filter (I)	1.00	0.00	0.51	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	55.2	0.0	54.7	0.0	54.3	0.0	58.3	0.0
Incr Delay (d2), s/veh	8.4	0.0	117.9	0.0	9.6	0.0	93.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0
Control Delay (d), s/veh	63.6	0.0	172.6	0.0	63.9	0.0	152.4	0.0
1st-Term Q (Q1), veh/ln	4.7	0.0	7.6	0.0	5.5	0.0	4.1	0.0
2nd-Term Q (Q2), veh/ln	0.4	0.0	7.3	0.0	0.5	0.0	3.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	5.1	0.0	14.9	0.0	6.0	0.0	7.2	0.0
%ile Storage Ratio (RQ%)	0.96	0.00	1.40	0.00	1.14	0.00	0.57	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	12.1	0.0	0.0	0.0	1.2	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	2	0	2
Grp Vol (v), veh/h	0	159	0	709	0	229	0	1465
Grp Sat Flow (s), veh/h/ln	0	1845	0	1770	0	1752	0	1770
Q Serve Time (g_s), s	0.0	9.9	0.0	18.6	0.0	7.5	0.0	47.3
Cycle Q Clear Time (g_c), s	0.0	9.9	0.0	18.6	0.0	7.5	0.0	47.3
Lane Grp Cap (c), veh/h	0	298	0	1440	0	516	0	1644
V/C Ratio (X)	0.00	0.53	0.00	0.49	0.00	0.44	0.00	0.89
Avail Cap (c_a), veh/h	0	298	0	1440	0	516	0	1644
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.51
Uniform Delay (d1), s/veh	0.0	48.1	0.0	27.5	0.0	48.6	0.0	30.6
Incr Delay (d2), s/veh	0.0	6.7	0.0	1.2	0.0	2.8	0.0	4.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	54.8	0.0	28.7	0.0	51.4	0.0	34.8
1st-Term Q (Q1), veh/ln	0.0	5.0	0.0	9.1	0.0	3.6	0.0	23.0

2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.2	0.0	0.2	0.0	1.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	5.6	0.0	9.3	0.0	3.8	0.0	23.9
%ile Storage Ratio (RQ%)	0.00	0.19	0.00	0.12	0.00	0.13	0.00	0.41
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	196	0	161	0	236	0	313
Grp Sat Flow (s), veh/h/ln	0	1568	0	1583	0	1568	0	1583
Q Serve Time (g_s), s	0.0	15.0	0.0	8.4	0.0	18.4	0.0	16.5
Cycle Q Clear Time (g_c), s	0.0	15.0	0.0	8.4	0.0	18.4	0.0	16.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	253	0	644	0	231	0	735
V/C Ratio (X)	0.00	0.77	0.00	0.25	0.00	1.02	0.00	0.43
Avail Cap (c_a), veh/h	0	253	0	644	0	231	0	735
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.51
Uniform Delay (d1), s/veh	0.0	50.2	0.0	24.5	0.0	53.3	0.0	22.3
Incr Delay (d2), s/veh	0.0	20.4	0.0	0.9	0.0	65.2	0.0	0.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Control Delay (d), s/veh	0.0	70.6	0.0	25.4	0.0	118.6	0.0	23.3
1st-Term Q (Q1), veh/ln	0.0	6.5	0.0	3.7	0.0	8.0	0.0	7.2
2nd-Term Q (Q2), veh/ln	0.0	1.4	0.0	0.2	0.0	4.2	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.9	0.0	3.8	0.0	12.2	0.0	7.4
%ile Storage Ratio (RQ%)	0.00	0.27	0.00	0.05	0.00	0.43	0.00	0.13
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		55.8						
HCM 2010 LOS		E						

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	83	1035	1727	495	412	250
Future Volume (veh/h)	83	1035	1727	495	412	250
Number	7	4	8	18	1	16
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00			1.00	1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1676	1676	1676	1676	1660	1660
Adj Flow Rate, veh/h	88	1101	1837	527	438	266
Adj No. of Lanes	1	2	3	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	3	3
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	40	1919	2271	707	718	330
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.60	0.50	0.50	0.23	0.23
Ln Grp Delay, s/veh	628.1	10.6	18.5	19.8	30.9	47.1
Ln Grp LOS	F	B	B	B	C	D
Approach Vol, veh/h		1189	2364		704	
Approach Delay, s/veh		56.3	18.8		37.0	
Approach LOS		E	B		D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	6			4			7	8
Case No	9.0			4.0			2.0	7.0
Phs Duration (G+Y+Rc), s	25.0			54.0			8.4	45.6
Change Period (Y+Rc), s	6.5			6.4			6.4	6.4
Max Green (Gmax), s	18.5			46.6			2.0	39.2
Max Allow Headway (MAH), s	3.9			4.8			3.7	4.8
Max Q Clear (g_c+I1), s	16.1			18.6			4.0	28.7
Green Ext Time (g_e), s	0.7			24.9			0.0	10.0
Prob of Phs Call (p_c)	1.00			1.00			0.86	1.00
Prob of Max Out (p_x)	0.00			0.00			1.00	0.00
Left-Turn Movement Data								
Assigned Mvmt	1						7	3
Mvmt Sat Flow, veh/h	3067						1597	0
Through Movement Data								
Assigned Mvmt	6			4				8
Mvmt Sat Flow, veh/h	0			3269				4728
Right-Turn Movement Data								
Assigned Mvmt	16			14				18
Mvmt Sat Flow, veh/h	1411			0				1425
Left Lane Group Data								
Assigned Mvmt	1	0	0	0	0	0	7	3
Lane Assignment							(Prot)	

Lanes in Grp	2	0	0	0	0	0	1	0
Grp Vol (v), veh/h	438	0	0	0	0	0	88	0
Grp Sat Flow (s), veh/h/ln	1534	0	0	0	0	0	1597	0
Q Serve Time (g_s), s	10.1	0.0	0.0	0.0	0.0	0.0	2.0	0.0
Cycle Q Clear Time (g_c), s	10.1	0.0	0.0	0.0	0.0	0.0	2.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1534	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.2
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	718	0	0	0	0	0	40	0
V/C Ratio (X)	0.61	0.00	0.00	0.00	0.00	0.00	2.18	0.00
Avail Cap (c_a), veh/h	718	0	0	0	0	0	40	0
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.81	0.00
Uniform Delay (d1), s/veh	27.0	0.0	0.0	0.0	0.0	0.0	38.5	0.0
Incr Delay (d2), s/veh	3.8	0.0	0.0	0.0	0.0	0.0	589.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	30.9	0.0	0.0	0.0	0.0	0.0	628.1	0.0
1st-Term Q (Q1), veh/ln	4.3	0.0	0.0	0.0	0.0	0.0	0.9	0.0
2nd-Term Q (Q2), veh/ln	0.4	0.0	0.0	0.0	0.0	0.0	6.6	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	4.6	0.0	0.0	0.0	0.0	0.0	7.5	0.0
%ile Storage Ratio (RQ%)	0.24	0.00	0.00	0.00	0.00	0.00	0.87	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	11.9	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0
Middle Lane Group Data								
Assigned Mvmt	6	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	3
Grp Vol (v), veh/h	0	0	0	1101	0	0	0	1837
Grp Sat Flow (s), veh/h/ln	0	0	0	1593	0	0	0	1526
Q Serve Time (g_s), s	0.0	0.0	0.0	16.6	0.0	0.0	0.0	26.7
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	16.6	0.0	0.0	0.0	26.7
Lane Grp Cap (c), veh/h	0	0	0	1919	0	0	0	2271
V/C Ratio (X)	0.00	0.00	0.00	0.57	0.00	0.00	0.00	0.81
Avail Cap (c_a), veh/h	0	0	0	1919	0	0	0	2271
Upstream Filter (I)	0.00	0.00	0.00	0.81	0.00	0.00	0.00	0.54
Uniform Delay (d1), s/veh	0.0	0.0	0.0	9.5	0.0	0.0	0.0	16.7
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.0	0.0	0.0	0.0	1.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	10.6	0.0	0.0	0.0	18.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	7.2	0.0	0.0	0.0	11.1

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	7.5	0.0	0.0	0.0	11.4
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.17
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	16	0	0	14	0	0	0	18
Lane Assignment	R							R
Lanes in Grp	1	0	0	0	0	0	0	1
Grp Vol (v), veh/h	266	0	0	0	0	0	0	527
Grp Sat Flow (s), veh/h/ln	1411	0	0	0	0	0	0	1425
Q Serve Time (g_s), s	14.1	0.0	0.0	0.0	0.0	0.0	0.0	23.4
Cycle Q Clear Time (g_c), s	14.1	0.0	0.0	0.0	0.0	0.0	0.0	23.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	330	0	0	0	0	0	0	707
V/C Ratio (X)	0.80	0.00	0.00	0.00	0.00	0.00	0.00	0.75
Avail Cap (c_a), veh/h	330	0	0	0	0	0	0	707
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.54
Uniform Delay (d1), s/veh	28.5	0.0	0.0	0.0	0.0	0.0	0.0	15.9
Incr Delay (d2), s/veh	18.6	0.0	0.0	0.0	0.0	0.0	0.0	3.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	47.1	0.0	0.0	0.0	0.0	0.0	0.0	19.8
1st-Term Q (Q1), veh/ln	10.2	0.0	0.0	0.0	0.0	0.0	0.0	9.1
2nd-Term Q (Q2), veh/ln	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	11.9	0.0	0.0	0.0	0.0	0.0	0.0	9.8
%ile Storage Ratio (RQ%)	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.14
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		32.3						
HCM 2010 LOS		C						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	1198	40	52	1824	32	154	9	16	67	26	52
Future Volume (veh/h)	32	1198	40	52	1824	32	154	9	16	67	26	52
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	33	1222	41	53	1861	33	157	9	16	68	27	53
Adj No. of Lanes	1	2	1	1	3	1	2	1	1	1	1	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	39	2212	990	55	3225	1004	272	147	125	118	37	74
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.02	0.63	0.63	0.03	0.63	0.63	0.08	0.08	0.08	0.07	0.07	0.07
Ln Grp Delay, s/veh	74.7	7.7	4.7	104.6	7.2	4.4	37.1	28.0	29.5	47.8	0.0	62.4
Ln Grp LOS	E	A	A	F	A	A	D	C	C	D		E
Approach Vol, veh/h		1296			1947			182			148	
Approach Delay, s/veh		9.3			9.8			36.0			55.7	
Approach LOS		A			A			D			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	6	2	3	4			7	8
Case No	10.0	9.0	2.0	3.0			2.0	3.0
Phs Duration (G+Y+Rc), s	11.0	12.0	8.4	47.0			7.8	47.6
Change Period (Y+Rc), s	6.7	6.9	6.4	* 6.6			6.4	* 6.6
Max Green (Gmax), s	4.3	5.1	2.0	* 26			2.0	* 26
Max Allow Headway (MAH), s	4.7	3.9	3.8	5.1			3.7	5.1
Max Q Clear (g_c+I1), s	5.0	4.8	3.9	14.7			3.2	15.5
Green Ext Time (g_e), s	0.0	0.0	0.0	11.1			0.0	10.3
Prob of Phs Call (p_c)	1.00	1.00	0.61	1.00			0.44	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.00			1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1	5	3				7	
Mvmt Sat Flow, veh/h	1757	3408	1774				1774	

Through Movement Data								
Assigned Mvmt	6	2		4				8
Mvmt Sat Flow, veh/h	557	1845		3539				5085

Right-Turn Movement Data								
Assigned Mvmt	16	12		14				18
Mvmt Sat Flow, veh/h	1094	1568		1583				1583

Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	7	0
Lane Assignment			(Prot)				(Prot)	

Lanes in Grp	1	2	1	0	0	0	1	0
Grp Vol (v), veh/h	68	157	53	0	0	0	33	0
Grp Sat Flow (s), veh/h/ln	1757	1704	1774	0	0	0	1774	0
Q Serve Time (g_s), s	2.4	2.8	1.9	0.0	0.0	0.0	1.2	0.0
Cycle Q Clear Time (g_c), s	2.4	2.8	1.9	0.0	0.0	0.0	1.2	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1757	1704	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	118	272	55	0	0	0	39	0
V/C Ratio (X)	0.58	0.58	0.96	0.00	0.00	0.00	0.84	0.00
Avail Cap (c_a), veh/h	118	272	55	0	0	0	55	0
Upstream Filter (I)	1.00	1.00	0.53	0.00	0.00	0.00	0.78	0.00
Uniform Delay (d1), s/veh	29.0	28.4	31.0	0.0	0.0	0.0	31.2	0.0
Incr Delay (d2), s/veh	18.9	8.7	73.7	0.0	0.0	0.0	43.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	47.8	37.1	104.6	0.0	0.0	0.0	74.7	0.0
1st-Term Q (Q1), veh/ln	1.2	1.3	0.9	0.0	0.0	0.0	0.6	0.0
2nd-Term Q (Q2), veh/ln	0.6	0.3	1.1	0.0	0.0	0.0	0.5	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	1.8	1.7	2.1	0.0	0.0	0.0	1.1	0.0
%ile Storage Ratio (RQ%)	0.10	0.09	0.15	0.00	0.00	0.00	0.15	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	6	2	0	4	0	0	0	8
Lane Assignment		T		T				T
Lanes in Grp	0	1	0	2	0	0	0	3
Grp Vol (v), veh/h	0	9	0	1222	0	0	0	1861
Grp Sat Flow (s), veh/h/ln	0	1845	0	1770	0	0	0	1695
Q Serve Time (g_s), s	0.0	0.3	0.0	12.7	0.0	0.0	0.0	13.5
Cycle Q Clear Time (g_c), s	0.0	0.3	0.0	12.7	0.0	0.0	0.0	13.5
Lane Grp Cap (c), veh/h	0	147	0	2212	0	0	0	3225
V/C Ratio (X)	0.00	0.06	0.00	0.55	0.00	0.00	0.00	0.58
Avail Cap (c_a), veh/h	0	147	0	2212	0	0	0	3225
Upstream Filter (I)	0.00	1.00	0.00	0.78	0.00	0.00	0.00	0.53
Uniform Delay (d1), s/veh	0.0	27.2	0.0	6.9	0.0	0.0	0.0	6.8
Incr Delay (d2), s/veh	0.0	0.8	0.0	0.8	0.0	0.0	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	28.0	0.0	7.7	0.0	0.0	0.0	7.2
1st-Term Q (Q1), veh/ln	0.0	0.1	0.0	6.1	0.0	0.0	0.0	6.2

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.2	0.0	6.4	0.0	0.0	0.0	6.3
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.09	0.00	0.00	0.00	0.40
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	16	12	0	14	0	0	0	18
Lane Assignment	T+R	R		R				R
Lanes in Grp	1	1	0	1	0	0	0	1
Grp Vol (v), veh/h	80	16	0	41	0	0	0	33
Grp Sat Flow (s), veh/h/ln	1652	1568	0	1583	0	0	0	1583
Q Serve Time (g_s), s	3.0	0.6	0.0	0.6	0.0	0.0	0.0	0.5
Cycle Q Clear Time (g_c), s	3.0	0.6	0.0	0.6	0.0	0.0	0.0	0.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.66	1.00	0.00	1.00	0.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	111	125	0	990	0	0	0	1004
V/C Ratio (X)	0.72	0.13	0.00	0.04	0.00	0.00	0.00	0.03
Avail Cap (c_a), veh/h	111	125	0	990	0	0	0	1004
Upstream Filter (I)	1.00	1.00	0.00	0.78	0.00	0.00	0.00	0.53
Uniform Delay (d1), s/veh	29.3	27.4	0.0	4.6	0.0	0.0	0.0	4.4
Incr Delay (d2), s/veh	33.2	2.1	0.0	0.1	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	62.4	29.5	0.0	4.7	0.0	0.0	0.0	4.4
1st-Term Q (Q1), veh/ln	1.4	0.3	0.0	0.3	0.0	0.0	0.0	0.2
2nd-Term Q (Q2), veh/ln	1.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	2.4	0.3	0.0	0.3	0.0	0.0	0.0	0.2
%ile Storage Ratio (RQ%)	0.13	0.08	0.00	0.00	0.00	0.00	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	12.8
HCM 2010 LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1094	164	502	1596	236	428
Future Volume (veh/h)	1094	164	502	1596	236	428
Number	4	14	3	8	5	12
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)		1.00	1.00		1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1845	1845
Adj Flow Rate, veh/h	1116	167	512	1629	241	437
Adj No. of Lanes	3	0	2	2	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	3	3
Opposing Right Turn Influence			Yes		Yes	
Cap, veh/h	1638	245	379	1978	484	432
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.37	0.37	0.11	0.56	0.28	0.28
Ln Grp Delay, s/veh	22.3	23.6	199.2	15.8	27.3	74.4
Ln Grp LOS	C	C	F	B	C	F
Approach Vol, veh/h	1283			2141	678	
Approach Delay, s/veh	22.7			59.6	57.7	
Approach LOS	C			E	E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Case No		9.0	2.0	8.0				4.0
Phs Duration (G+Y+Rc), s		28.0	15.0	35.0				50.0
Change Period (Y+Rc), s		6.5	6.4	6.4				6.4
Max Green (Gmax), s		21.5	8.6	28.6				43.6
Max Allow Headway (MAH), s		4.0	3.8	5.3				5.3
Max Q Clear (g_c+I1), s		23.5	10.6	18.5				31.3
Green Ext Time (g_e), s		0.0	0.0	9.5				11.4
Prob of Phs Call (p_c)		1.00	1.00	1.00				1.00
Prob of Max Out (p_x)		0.00	1.00	0.00				0.00

Left-Turn Movement Data			
Assigned Mvmt	5	3	7
Mvmt Sat Flow, veh/h	1757	3442	0

Through Movement Data			
Assigned Mvmt	2	4	8
Mvmt Sat Flow, veh/h	0	4635	3632

Right-Turn Movement Data			
Assigned Mvmt	12	14	18
Mvmt Sat Flow, veh/h	1568	668	0

Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	0	0	0
Lane Assignment			(Prot)					

Lanes in Grp	0	1	2	0	0	0	0	0
Grp Vol (v), veh/h	0	241	512	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1757	1721	0	0	0	0	0
Q Serve Time (g_s), s	0.0	9.0	8.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	9.0	8.6	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1757	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	28.6	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	484	379	0	0	0	0	0
V/C Ratio (X)	0.00	0.50	1.35	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	484	379	0	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.42	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	23.7	34.7	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	3.6	164.5	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	27.3	199.2	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	4.4	4.1	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.5	8.7	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	4.8	12.7	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.21	1.41	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	33.1	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	2
Grp Vol (v), veh/h	0	0	0	847	0	0	0	1629
Grp Sat Flow (s), veh/h/ln	0	0	0	1695	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	16.4	0.0	0.0	0.0	29.3
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	16.4	0.0	0.0	0.0	29.3
Lane Grp Cap (c), veh/h	0	0	0	1243	0	0	0	1978
V/C Ratio (X)	0.00	0.00	0.00	0.68	0.00	0.00	0.00	0.82
Avail Cap (c_a), veh/h	0	0	0	1243	0	0	0	1978
Upstream Filter (I)	0.00	0.00	0.00	0.47	0.00	0.00	0.00	0.42
Uniform Delay (d1), s/veh	0.0	0.0	0.0	20.9	0.0	0.0	0.0	14.1
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.4	0.0	0.0	0.0	1.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	22.3	0.0	0.0	0.0	15.8
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	7.6	0.0	0.0	0.0	14.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	7.9	0.0	0.0	0.0	14.5
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.49	0.00	0.00	0.00	0.37
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	0	0	18
Lane Assignment		R		T+R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	437	0	436	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1568	0	1745	0	0	0	0
Q Serve Time (g_s), s	0.0	21.5	0.0	16.5	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	21.5	0.0	16.5	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.38	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	432	0	640	0	0	0	0
V/C Ratio (X)	0.00	1.01	0.00	0.68	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	432	0	640	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.47	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	28.3	0.0	20.9	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	46.1	0.0	2.8	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	74.4	0.0	23.6	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	9.3	0.0	7.9	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	5.5	0.0	0.5	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	14.8	0.0	8.4	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.64	0.00	0.52	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		47.8						
HCM 2010 LOS		D						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	1283	205	61	1898	10	320	2	105	9	6	52
Future Volume (veh/h)	33	1283	205	61	1898	10	320	2	105	9	6	52
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1900	1900	1845	1900
Adj Flow Rate, veh/h	34	1323	211	63	1957	10	330	2	108	9	6	54
Adj No. of Lanes	1	2	0	1	3	0	1	1	0	0	1	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	41	1829	289	48	3139	16	508	9	463	87	71	371
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.02	0.60	0.60	0.03	0.60	0.60	0.30	0.30	0.30	0.30	0.30	0.30
Ln Grp Delay, s/veh	82.6	13.3	13.6	228.8	10.1	10.6	29.8	0.0	20.7	19.4	0.0	0.0
Ln Grp LOS	F	B	B	F	B	B	C		C	B		
Approach Vol, veh/h		1568			2030			440			69	
Approach Delay, s/veh		14.9			17.0			27.5			19.4	
Approach LOS		B			B			C			B	

Timer:		1	2	3	4	5	6	7	8
Assigned Phs			2	3	4		6	7	8
Case No			6.0	2.0	4.0		8.0	2.0	4.0
Phs Duration (G+Y+Rc), s			29.0	8.4	51.0		29.0	8.1	51.3
Change Period (Y+Rc), s			* 6.8	6.4	6.4		* 6.8	6.4	6.4
Max Green (Gmax), s			* 22	2.0	30.6		* 22	2.0	30.6
Max Allow Headway (MAH), s			4.5	3.8	5.3		4.5	3.8	5.3
Max Q Clear (g_c+I1), s			18.2	4.0	25.0		4.3	3.4	19.7
Green Ext Time (g_e), s			0.9	0.0	5.5		2.1	0.0	10.5
Prob of Phs Call (p_c)			1.00	0.73	1.00		1.00	0.50	1.00
Prob of Max Out (p_x)			0.00	1.00	0.00		0.00	1.00	0.00
Left-Turn Movement Data									
Assigned Mvmt			5	3			1	7	
Mvmt Sat Flow, veh/h			1324	1774			106	1774	
Through Movement Data									
Assigned Mvmt			2		4		6		8
Mvmt Sat Flow, veh/h			29		3063		237		5222
Right-Turn Movement Data									
Assigned Mvmt			12		14		16		18
Mvmt Sat Flow, veh/h			1544		484		1235		27
Left Lane Group Data									
Assigned Mvmt		0	5	3	0	0	1	7	0
Lane Assignment				(Prot)			L+T+R	(Prot)	

Lanes in Grp	0	1	1	0	0	1	1	0
Grp Vol (v), veh/h	0	330	63	0	0	69	34	0
Grp Sat Flow (s), veh/h/ln	0	1324	1774	0	0	1578	1774	0
Q Serve Time (g_s), s	0.0	13.9	2.0	0.0	0.0	0.0	1.4	0.0
Cycle Q Clear Time (g_c), s	0.0	16.2	2.0	0.0	0.0	2.3	1.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1324	0	0	0	1304	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	1757	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	22.2	0.0	0.0	0.0	22.2	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	19.9	0.0	0.0	0.0	18.3	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	13.9	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	10.5	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	0.00	0.13	1.00	0.00
Lane Grp Cap (c), veh/h	0	508	48	0	0	528	41	0
V/C Ratio (X)	0.00	0.65	1.31	0.00	0.00	0.13	0.83	0.00
Avail Cap (c_a), veh/h	0	508	48	0	0	528	48	0
Upstream Filter (I)	0.00	1.00	0.45	0.00	0.00	1.00	0.66	0.00
Uniform Delay (d1), s/veh	0.0	23.5	36.0	0.0	0.0	18.9	36.0	0.0
Incr Delay (d2), s/veh	0.0	6.3	192.8	0.0	0.0	0.5	46.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	29.8	228.8	0.0	0.0	19.4	82.6	0.0
1st-Term Q (Q1), veh/ln	0.0	6.1	1.0	0.0	0.0	1.0	0.7	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.9	2.6	0.0	0.0	0.1	0.5	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	7.0	3.5	0.0	0.0	1.1	1.2	0.0
%ile Storage Ratio (RQ%)	0.00	0.82	0.37	0.00	0.00	0.10	0.16	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	3.8	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	2
Grp Vol (v), veh/h	0	0	0	759	0	0	0	1270
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1695
Q Serve Time (g_s), s	0.0	0.0	0.0	22.4	0.0	0.0	0.0	17.7
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	22.4	0.0	0.0	0.0	17.7
Lane Grp Cap (c), veh/h	0	0	0	1057	0	0	0	2038
V/C Ratio (X)	0.00	0.00	0.00	0.72	0.00	0.00	0.00	0.62
Avail Cap (c_a), veh/h	0	0	0	1057	0	0	0	2038
Upstream Filter (I)	0.00	0.00	0.00	0.66	0.00	0.00	0.00	0.45
Uniform Delay (d1), s/veh	0.0	0.0	0.0	10.5	0.0	0.0	0.0	9.4
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.8	0.0	0.0	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	13.3	0.0	0.0	0.0	10.1
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	10.8	0.0	0.0	0.0	8.1

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	11.6	0.0	0.0	0.0	8.3
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.30	0.00	0.00	0.00	0.11
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R				T+R
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	110	0	775	0	0	0	697
Grp Sat Flow (s), veh/h/ln	0	1572	0	1777	0	0	0	1858
Q Serve Time (g_s), s	0.0	3.9	0.0	23.0	0.0	0.0	0.0	17.7
Cycle Q Clear Time (g_c), s	0.0	3.9	0.0	23.0	0.0	0.0	0.0	17.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.98	0.00	0.27	0.00	0.78	0.00	0.01
Lane Grp Cap (c), veh/h	0	472	0	1062	0	0	0	1117
V/C Ratio (X)	0.00	0.23	0.00	0.73	0.00	0.00	0.00	0.62
Avail Cap (c_a), veh/h	0	472	0	1062	0	0	0	1117
Upstream Filter (I)	0.00	1.00	0.00	0.66	0.00	0.00	0.00	0.45
Uniform Delay (d1), s/veh	0.0	19.5	0.0	10.6	0.0	0.0	0.0	9.4
Incr Delay (d2), s/veh	0.0	1.2	0.0	2.9	0.0	0.0	0.0	1.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	20.7	0.0	13.6	0.0	0.0	0.0	10.6
1st-Term Q (Q1), veh/ln	0.0	1.7	0.0	11.2	0.0	0.0	0.0	8.9
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.9	0.0	0.0	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.8	0.0	12.1	0.0	0.0	0.0	9.3
%ile Storage Ratio (RQ%)	0.00	0.17	0.00	0.31	0.00	0.00	0.00	0.13
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	17.4
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	1834	0	15	1611	119	15	0	67	206	0	67
Future Volume (veh/h)	30	1834	0	15	1611	119	15	0	67	206	0	67
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	32	1951	0	16	1714	127	16	0	71	219	0	71
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	61	1299	0	35	1178	86	120	37	381	531	0	470
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.37	0.00	0.02	0.35	0.35	0.30	0.00	0.30	0.30	0.00	0.30
Ln Grp Delay, s/veh	29.1	245.0	0.0	38.4	227.6	239.3	16.2	0.0	0.0	19.5	0.0	16.1
Ln Grp LOS	C	F		D	F	F	B			B		B
Approach Vol, veh/h		1983			1857			87			290	
Approach Delay, s/veh		241.5			231.9			16.2			18.6	
Approach LOS		F			F			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		8.0	2.0	4.0		6.0	2.0	4.0
Phs Duration (G+Y+Rc), s		24.0	7.6	28.4		24.0	8.5	27.5
Change Period (Y+Rc), s		6.0	6.4	6.4		6.0	6.4	6.4
Max Green (Gmax), s		18.0	5.0	18.6		18.0	5.0	18.6
Max Allow Headway (MAH), s		4.6	3.8	5.3		4.6	3.8	5.3
Max Q Clear (g_c+I1), s		4.4	2.5	24.0		9.4	3.1	23.1
Green Ext Time (g_e), s		1.4	0.0	0.0		1.1	0.0	0.0
Prob of Phs Call (p_c)		1.00	0.23	1.00		1.00	0.41	1.00
Prob of Max Out (p_x)		0.00	1.00	0.00		0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		163	1774			1311	1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		123		3632		0		3344

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1269		0		1568		245

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0
Lane Assignment		L+T+R	(Prot)				(Prot)	

Lanes in Grp	0	1	1	0	0	1	1	0
Grp Vol (v), veh/h	0	87	16	0	0	219	32	0
Grp Sat Flow (s), veh/h/ln	0	1554	1774	0	0	1311	1774	0
Q Serve Time (g_s), s	0.0	0.0	0.5	0.0	0.0	5.0	1.1	0.0
Cycle Q Clear Time (g_c), s	0.0	2.4	0.5	0.0	0.0	7.4	1.1	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1350	0	0	0	1311	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	1757	0	0
Perm LT Eff Green (g_p), s	0.0	18.0	0.0	0.0	0.0	18.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	16.0	0.0	0.0	0.0	15.6	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0
Time to First Blk (g_f), s	0.0	7.4	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.18	1.00	0.00	0.00	1.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	537	35	0	0	531	61	0
V/C Ratio (X)	0.00	0.16	0.46	0.00	0.00	0.41	0.52	0.00
Avail Cap (c_a), veh/h	0	537	148	0	0	531	148	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	0.00	1.00	0.09	0.00
Uniform Delay (d1), s/veh	0.0	15.5	29.1	0.0	0.0	17.1	28.5	0.0
Incr Delay (d2), s/veh	0.0	0.6	9.3	0.0	0.0	2.4	0.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	16.2	38.4	0.0	0.0	19.5	29.1	0.0
1st-Term Q (Q1), veh/ln	0.0	1.1	0.3	0.0	0.0	3.0	0.5	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.1	0.0	0.0	0.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	1.2	0.4	0.0	0.0	3.3	0.5	0.0
%ile Storage Ratio (RQ%)	0.00	0.08	0.05	0.00	0.00	0.57	0.08	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	1
Grp Vol (v), veh/h	0	0	0	1951	0	0	0	899
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	22.0	0.0	0.0	0.0	21.1
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	22.0	0.0	0.0	0.0	21.1
Lane Grp Cap (c), veh/h	0	0	0	1299	0	0	0	623
V/C Ratio (X)	0.00	0.00	0.00	1.50	0.00	0.00	0.00	1.44
Avail Cap (c_a), veh/h	0	0	0	1299	0	0	0	623
Upstream Filter (I)	0.00	0.00	0.00	0.09	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	19.0	0.0	0.0	0.0	19.4
Incr Delay (d2), s/veh	0.0	0.0	0.0	226.0	0.0	0.0	0.0	208.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	245.0	0.0	0.0	0.0	227.6
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	10.6	0.0	0.0	0.0	10.2

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	40.8	0.0	0.0	0.0	36.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	51.4	0.0	0.0	0.0	46.3
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	1.34	0.00	0.00	0.00	3.81
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	162.9	0.0	0.0	0.0	69.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.4
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment						T+R		T+R
Lanes in Grp	0	0	0	0	0	1	0	1
Grp Vol (v), veh/h	0	0	0	0	0	71	0	942
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	1568	0	1819
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	2.0	0.0	21.1
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	2.0	0.0	21.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.82	0.00	0.00	0.00	1.00	0.00	0.13
Lane Grp Cap (c), veh/h	0	0	0	0	0	470	0	641
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.15	0.00	1.47
Avail Cap (c_a), veh/h	0	0	0	0	0	470	0	641
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	15.4	0.0	19.4
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.7	0.0	219.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	16.1	0.0	239.3
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.8	0.0	10.5
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	39.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.9	0.0	49.6
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.07	0.00	4.09
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	75.3
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	217.3
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	486	1254	203	319	878	145	246	815	273	347	1058	466
Future Volume (veh/h)	486	1254	203	319	878	145	246	815	273	347	1058	466
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	506	1306	211	332	915	151	256	849	284	361	1102	485
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	505	1525	475	391	1357	423	311	1301	405	414	1452	452
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.15	0.30	0.30	0.11	0.27	0.27	0.09	0.26	0.26	0.12	0.29	0.29
Ln Grp Delay, s/veh	91.9	46.0	36.9	65.1	42.0	38.0	67.5	42.3	50.0	69.2	42.7	105.8
Ln Grp LOS	F	D	D	E	D	D	E	D	D	E	D	F
Approach Vol, veh/h		2023			1398			1389			1948	
Approach Delay, s/veh		56.5			47.1			48.5			63.3	
Approach LOS		E			D			D			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	20.6	37.0	20.0	42.4	17.0	40.6	24.0	38.4
Change Period (Y+Rc), s	6.0	6.0	6.4	6.4	6.0	6.0	6.4	6.4
Max Green (Gmax), s	15.0	31.0	15.6	33.6	12.0	34.0	17.6	31.6
Max Allow Headway (MAH), s	3.8	4.9	3.8	5.1	3.8	4.9	3.8	5.1
Max Q Clear (g_c+I1), s	14.5	21.7	13.4	31.0	10.9	36.6	19.6	21.3
Green Ext Time (g_e), s	0.1	8.2	0.3	2.4	0.1	0.0	0.0	9.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	3408	3442	3408	3442

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	5036	5085	5036	5085

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	1568	1583	1568	1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	361	0	332	0	256	0	506	0
Grp Sat Flow (s), veh/h/ln	1704	0	1721	0	1704	0	1721	0
Q Serve Time (g_s), s	12.5	0.0	11.4	0.0	8.9	0.0	17.6	0.0
Cycle Q Clear Time (g_c), s	12.5	0.0	11.4	0.0	8.9	0.0	17.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	414	0	391	0	311	0	505	0
V/C Ratio (X)	0.87	0.00	0.85	0.00	0.82	0.00	1.00	0.00
Avail Cap (c_a), veh/h	426	0	447	0	341	0	505	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	51.8	0.0	52.2	0.0	53.6	0.0	51.2	0.0
Incr Delay (d2), s/veh	17.4	0.0	12.9	0.0	13.9	0.0	40.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	69.2	0.0	65.1	0.0	67.5	0.0	91.9	0.0
1st-Term Q (Q1), veh/ln	5.9	0.0	5.4	0.0	4.2	0.0	8.3	0.0
2nd-Term Q (Q2), veh/ln	1.0	0.0	0.7	0.0	0.6	0.0	2.9	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	6.9	0.0	6.1	0.0	4.8	0.0	11.2	0.0
%ile Storage Ratio (RQ%)	0.60	0.00	0.46	0.00	0.36	0.00	0.95	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	3	0	3	0	3
Grp Vol (v), veh/h	0	849	0	1306	0	1102	0	915
Grp Sat Flow (s), veh/h/ln	0	1679	0	1695	0	1679	0	1695
Q Serve Time (g_s), s	0.0	18.0	0.0	29.0	0.0	23.9	0.0	19.3
Cycle Q Clear Time (g_c), s	0.0	18.0	0.0	29.0	0.0	23.9	0.0	19.3
Lane Grp Cap (c), veh/h	0	1301	0	1525	0	1452	0	1357
V/C Ratio (X)	0.00	0.65	0.00	0.86	0.00	0.76	0.00	0.67
Avail Cap (c_a), veh/h	0	1301	0	1525	0	1452	0	1357
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	39.7	0.0	39.6	0.0	38.9	0.0	39.3
Incr Delay (d2), s/veh	0.0	2.6	0.0	6.4	0.0	3.8	0.0	2.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	42.3	0.0	46.0	0.0	42.7	0.0	42.0
1st-Term Q (Q1), veh/ln	0.0	8.3	0.0	13.5	0.0	11.1	0.0	9.1

2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.9	0.0	0.5	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	8.6	0.0	14.4	0.0	11.6	0.0	9.4
%ile Storage Ratio (RQ%)	0.00	0.49	0.00	0.59	0.00	0.45	0.00	1.61
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	284	0	211	0	485	0	151
Grp Sat Flow (s), veh/h/ln	0	1568	0	1583	0	1568	0	1583
Q Serve Time (g_s), s	0.0	19.7	0.0	12.9	0.0	34.6	0.0	9.3
Cycle Q Clear Time (g_c), s	0.0	19.7	0.0	12.9	0.0	34.6	0.0	9.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	405	0	475	0	452	0	423
V/C Ratio (X)	0.00	0.70	0.00	0.44	0.00	1.07	0.00	0.36
Avail Cap (c_a), veh/h	0	405	0	475	0	452	0	423
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	40.3	0.0	33.9	0.0	42.7	0.0	35.6
Incr Delay (d2), s/veh	0.0	9.7	0.0	3.0	0.0	63.1	0.0	2.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	50.0	0.0	36.9	0.0	105.8	0.0	38.0
1st-Term Q (Q1), veh/ln	0.0	8.5	0.0	5.6	0.0	15.0	0.0	4.1
2nd-Term Q (Q2), veh/ln	0.0	1.1	0.0	0.4	0.0	7.9	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	9.6	0.0	6.0	0.0	22.9	0.0	4.3
%ile Storage Ratio (RQ%)	0.00	0.54	0.00	0.25	0.00	0.89	0.00	0.75
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	8.2	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		54.9						
HCM 2010 LOS		D						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	107	1979	17	0	915	117	112	38	0	264	112	363
Future Volume (veh/h)	107	1979	17	0	915	117	112	38	0	264	112	363
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	0	1863	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	116	2151	18	0	995	127	122	41	0	287	122	395
Adj No. of Lanes	1	3	0	0	2	0	1	1	1	2	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	0	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			No			Yes			Yes		
Cap, veh/h	73	3864	32	0	2091	267	36	223	190	70	223	190
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.04	0.74	0.74	0.00	0.66	0.66	0.02	0.12	0.00	0.02	0.12	0.12
Ln Grp Delay, s/veh	400.0	10.0	10.7	0.0	14.4	14.4	1220.2	65.4	0.0	1510.9	75.9	574.3
Ln Grp LOS	F	A	B		B	B	F	E		F	E	F
Approach Vol, veh/h		2285			1122			163			804	
Approach Delay, s/veh		30.0			14.4			929.7			833.0	
Approach LOS		C			B			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6	7	8
Case No	2.0	3.0		4.0	2.0	3.0	2.0	8.0
Phs Duration (G+Y+Rc), s	9.0	26.0		126.0	9.0	26.0	13.0	113.0
Change Period (Y+Rc), s	* 5.7	6.5		6.4	* 5.7	6.5	6.4	6.4
Max Green (Gmax), s	* 3.3	19.5		119.6	* 3.3	19.5	6.6	100.6
Max Allow Headway (MAH), s	3.8	4.4		5.3	3.8	4.4	3.8	5.3
Max Q Clear (g_c+I1), s	5.3	5.2		31.2	5.3	21.5	8.6	27.0
Green Ext Time (g_e), s	0.0	2.1		66.6	0.0	0.0	0.0	57.9
Prob of Phs Call (p_c)	1.00	1.00		1.00	1.00	1.00	0.99	1.00
Prob of Max Out (p_x)	0.00	0.00		0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1				5		7	3
Mvmt Sat Flow, veh/h	3408				1757		1774	0

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1845		5202		1845		3251

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		44		1568		403

Left Lane Group Data								
Assigned Mvmt	1	0	0	0	5	0	7	3
Lane Assignment	(Prot)				(Prot)		(Prot)	

Lanes in Grp	2	0	0	0	1	0	1	0
Grp Vol (v), veh/h	287	0	0	0	122	0	116	0
Grp Sat Flow (s), veh/h/ln	1704	0	0	0	1757	0	1774	0
Q Serve Time (g_s), s	3.3	0.0	0.0	0.0	3.3	0.0	6.6	0.0
Cycle Q Clear Time (g_c), s	3.3	0.0	0.0	0.0	3.3	0.0	6.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	106.6
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	70	0	0	0	36	0	73	0
V/C Ratio (X)	4.11	0.00	0.00	0.00	3.39	0.00	1.60	0.00
Avail Cap (c_a), veh/h	70	0	0	0	36	0	73	0
Upstream Filter (I)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	78.8	0.0	0.0	0.0	78.8	0.0	77.2	0.0
Incr Delay (d2), s/veh	1432.0	0.0	0.0	0.0	1141.4	0.0	322.8	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	1510.9	0.0	0.0	0.0	1220.2	0.0	400.0	0.0
1st-Term Q (Q1), veh/ln	1.6	0.0	0.0	0.0	1.6	0.0	3.2	0.0
2nd-Term Q (Q2), veh/ln	13.9	0.0	0.0	0.0	11.4	0.0	6.5	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	15.4	0.0	0.0	0.0	13.0	0.0	9.8	0.0
%ile Storage Ratio (RQ%)	3.95	0.00	0.00	0.00	2.38	0.00	0.59	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	54.3	0.0	0.0	0.0	21.5	0.0	10.8	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	1.0	0.0	0.0	0.0	0.8	0.0	0.4	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	1	0	1
Grp Vol (v), veh/h	0	41	0	1401	0	122	0	557
Grp Sat Flow (s), veh/h/ln	0	1845	0	1695	0	1845	0	1770
Q Serve Time (g_s), s	0.0	3.2	0.0	29.2	0.0	10.0	0.0	25.0
Cycle Q Clear Time (g_c), s	0.0	3.2	0.0	29.2	0.0	10.0	0.0	25.0
Lane Grp Cap (c), veh/h	0	223	0	2518	0	223	0	1172
V/C Ratio (X)	0.00	0.18	0.00	0.56	0.00	0.55	0.00	0.48
Avail Cap (c_a), veh/h	0	223	0	2518	0	223	0	1172
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.73
Uniform Delay (d1), s/veh	0.0	63.6	0.0	9.1	0.0	66.6	0.0	13.4
Incr Delay (d2), s/veh	0.0	1.8	0.0	0.9	0.0	9.3	0.0	1.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	65.4	0.0	10.0	0.0	75.9	0.0	14.4
1st-Term Q (Q1), veh/ln	0.0	1.6	0.0	13.4	0.0	5.1	0.0	12.1

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.3	0.0	0.6	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.8	0.0	13.7	0.0	5.7	0.0	12.4
%ile Storage Ratio (RQ%)	0.00	0.20	0.00	0.16	0.00	0.29	0.00	0.17
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	768	0	395	0	565
Grp Sat Flow (s), veh/h/ln	0	1568	0	1855	0	1568	0	1792
Q Serve Time (g_s), s	0.0	0.0	0.0	29.2	0.0	19.5	0.0	25.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	29.2	0.0	19.5	0.0	25.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.02	0.00	1.00	0.00	0.22
Lane Grp Cap (c), veh/h	0	190	0	1378	0	190	0	1186
V/C Ratio (X)	0.00	0.00	0.00	0.56	0.00	2.08	0.00	0.48
Avail Cap (c_a), veh/h	0	190	0	1378	0	190	0	1186
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.73
Uniform Delay (d1), s/veh	0.0	0.0	0.0	9.1	0.0	70.8	0.0	13.4
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.6	0.0	503.6	0.0	1.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	10.7	0.0	574.3	0.0	14.4
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	14.7	0.0	15.9	0.0	12.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.6	0.0	26.6	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	15.3	0.0	42.5	0.0	12.6
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.18	0.00	2.20	0.00	0.17
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	51.3	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	207.1
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	474	1071	269	166	619	190	257	1228	146	438	2015	249
Future Volume (veh/h)	474	1071	269	166	619	190	257	1228	146	438	2015	249
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	489	1104	277	171	638	196	265	1266	151	452	2077	257
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	348	948	295	216	752	234	311	2381	741	399	2512	782
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.10	0.19	0.19	0.06	0.15	0.15	0.09	0.47	0.47	0.12	0.50	0.50
Ln Grp Delay, s/veh	257.2	142.4	72.9	82.2	74.9	85.3	86.7	31.3	25.8	158.8	38.4	25.8
Ln Grp LOS	F	F	E	F	E	F	F	C	C	F	D	C
Approach Vol, veh/h		1870			1005			1682			2786	
Approach Delay, s/veh		162.1			78.2			39.5			56.7	
Approach LOS		F			E			D			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	26.0	84.3	16.7	37.0	21.7	88.6	23.0	30.7
Change Period (Y+Rc), s	6.8	6.8	6.4	6.4	6.8	6.8	6.4	6.4
Max Green (Gmax), s	19.2	73.2	16.6	28.6	19.2	73.2	16.6	28.6
Max Allow Headway (MAH), s	3.8	5.1	3.8	5.0	3.8	5.1	3.8	5.0
Max Q Clear (g_c+I1), s	21.2	31.0	10.0	32.6	14.6	59.7	18.6	22.0
Green Ext Time (g_e), s	0.0	38.7	0.3	0.0	0.4	13.1	0.0	2.2
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	0.08	1.00	0.55	0.00	1.00	0.95

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	3408	3442	3408	3442

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	5036	5085	5036	5085

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	1568	1583	1568	1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	452	0	171	0	265	0	489	0
Grp Sat Flow (s), veh/h/ln	1704	0	1721	0	1704	0	1721	0
Q Serve Time (g_s), s	19.2	0.0	8.0	0.0	12.6	0.0	16.6	0.0
Cycle Q Clear Time (g_c), s	19.2	0.0	8.0	0.0	12.6	0.0	16.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	399	0	216	0	311	0	348	0
V/C Ratio (X)	1.13	0.00	0.79	0.00	0.85	0.00	1.40	0.00
Avail Cap (c_a), veh/h	399	0	348	0	399	0	348	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	0.11	0.00
Uniform Delay (d1), s/veh	72.4	0.0	75.8	0.0	73.4	0.0	73.7	0.0
Incr Delay (d2), s/veh	86.4	0.0	6.4	0.0	13.3	0.0	183.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	158.8	0.0	82.2	0.0	86.7	0.0	257.2	0.0
1st-Term Q (Q1), veh/ln	9.0	0.0	3.8	0.0	5.9	0.0	7.9	0.0
2nd-Term Q (Q2), veh/ln	4.8	0.0	0.2	0.0	0.6	0.0	8.9	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	13.8	0.0	4.0	0.0	6.5	0.0	16.8	0.0
%ile Storage Ratio (RQ%)	0.62	0.00	0.21	0.00	0.42	0.00	0.85	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	13.2	0.0	0.0	0.0	0.0	0.0	35.2	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.0	0.0	0.0	0.0	0.4	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	3	0	3	0	3
Grp Vol (v), veh/h	0	1266	0	1104	0	2077	0	638
Grp Sat Flow (s), veh/h/ln	0	1679	0	1695	0	1679	0	1695
Q Serve Time (g_s), s	0.0	29.0	0.0	30.6	0.0	57.7	0.0	20.0
Cycle Q Clear Time (g_c), s	0.0	29.0	0.0	30.6	0.0	57.7	0.0	20.0
Lane Grp Cap (c), veh/h	0	2381	0	948	0	2512	0	752
V/C Ratio (X)	0.00	0.53	0.00	1.17	0.00	0.83	0.00	0.85
Avail Cap (c_a), veh/h	0	2381	0	948	0	2512	0	887
Upstream Filter (I)	0.00	1.00	0.00	0.11	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	30.4	0.0	66.7	0.0	35.1	0.0	68.1
Incr Delay (d2), s/veh	0.0	0.9	0.0	75.7	0.0	3.3	0.0	6.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	31.3	0.0	142.4	0.0	38.4	0.0	74.9
1st-Term Q (Q1), veh/ln	0.0	13.5	0.0	14.3	0.0	26.7	0.0	9.4

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	6.6	0.0	0.8	0.0	0.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	13.7	0.0	20.9	0.0	27.5	0.0	9.9
%ile Storage Ratio (RQ%)	0.00	0.64	0.00	0.28	0.00	1.06	0.00	0.17
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	39.1	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	151	0	277	0	257	0	196
Grp Sat Flow (s), veh/h/ln	0	1568	0	1583	0	1568	0	1583
Q Serve Time (g_s), s	0.0	9.2	0.0	28.3	0.0	16.1	0.0	19.7
Cycle Q Clear Time (g_c), s	0.0	9.2	0.0	28.3	0.0	16.1	0.0	19.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	741	0	295	0	782	0	234
V/C Ratio (X)	0.00	0.20	0.00	0.94	0.00	0.33	0.00	0.84
Avail Cap (c_a), veh/h	0	741	0	295	0	782	0	276
Upstream Filter (I)	0.00	1.00	0.00	0.11	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	25.2	0.0	65.8	0.0	24.6	0.0	67.9
Incr Delay (d2), s/veh	0.0	0.6	0.0	7.1	0.0	1.1	0.0	17.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	25.8	0.0	72.9	0.0	25.8	0.0	85.3
1st-Term Q (Q1), veh/ln	0.0	4.0	0.0	12.4	0.0	6.9	0.0	8.6
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.6	0.0	0.2	0.0	1.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	4.1	0.0	13.0	0.0	7.2	0.0	9.8
%ile Storage Ratio (RQ%)	0.00	0.19	0.00	0.17	0.00	0.28	0.00	0.35
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		82.6						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	135	712	98	240	1289	207	182	88	331	274	190	182
Future Volume (veh/h)	135	712	98	240	1289	207	182	88	331	274	190	182
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1900	1712	1712	1712	1776	1776	1900	1776	1776	1776
Adj Flow Rate, veh/h	139	734	101	247	1329	213	188	91	341	282	196	188
Adj No. of Lanes	2	3	0	2	3	1	1	2	0	2	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	11	11	11	11	11	11	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	104	1006	137	104	1130	352	227	673	602	374	1278	572
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.24	0.24	0.03	0.24	0.24	0.13	0.40	0.40	0.11	0.38	0.38
Ln Grp Delay, s/veh	245.4	35.3	38.9	688.6	123.4	33.6	45.5	17.8	24.9	42.2	18.9	21.6
Ln Grp LOS	F	D	D	F	F	C	D	B	C	D	B	C
Approach Vol, veh/h		974			1789			620			666	
Approach Delay, s/veh		66.4			190.7			30.1			29.5	
Approach LOS		E			F			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	14.4	41.6	7.0	28.0	16.2	39.8	7.0	28.0
Change Period (Y+Rc), s	4.0	5.3	4.0	* 6	4.0	5.3	4.0	* 6
Max Green (Gmax), s	23.0	23.7	3.0	* 22	32.0	14.7	3.0	* 22
Max Allow Headway (MAH), s	3.8	5.1	3.8	5.2	3.8	5.1	3.8	5.2
Max Q Clear (g_c+I1), s	9.6	18.0	5.0	16.9	11.9	10.0	5.0	24.0
Green Ext Time (g_e), s	0.8	2.4	0.0	4.6	0.5	2.0	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.99	1.00	0.97	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	3281	3163	1691	3163

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	1687	4159	3374	4673

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	1509	568	1509	1455

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	1	0	2	0
Grp Vol (v), veh/h	282	0	247	0	188	0	139	0
Grp Sat Flow (s), veh/h/ln	1640	0	1581	0	1691	0	1581	0
Q Serve Time (g_s), s	7.6	0.0	3.0	0.0	9.9	0.0	3.0	0.0
Cycle Q Clear Time (g_c), s	7.6	0.0	3.0	0.0	9.9	0.0	3.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	374	0	104	0	227	0	104	0
V/C Ratio (X)	0.75	0.00	2.37	0.00	0.83	0.00	1.33	0.00
Avail Cap (c_a), veh/h	829	0	104	0	595	0	104	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.95	0.00	1.00	0.00
Uniform Delay (d1), s/veh	39.1	0.0	44.0	0.0	38.4	0.0	44.0	0.0
Incr Delay (d2), s/veh	3.1	0.0	644.6	0.0	7.1	0.0	201.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	42.2	0.0	688.6	0.0	45.5	0.0	245.4	0.0
1st-Term Q (Q1), veh/ln	3.4	0.0	1.3	0.0	4.6	0.0	1.3	0.0
2nd-Term Q (Q2), veh/ln	0.2	0.0	9.3	0.0	0.5	0.0	2.9	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	3.6	0.0	10.6	0.0	5.0	0.0	4.2	0.0
%ile Storage Ratio (RQ%)	0.49	0.00	1.48	0.00	0.83	0.00	0.33	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	35.7	0.0	0.0	0.0	8.7	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.6	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	2	0	3
Grp Vol (v), veh/h	0	91	0	548	0	196	0	1329
Grp Sat Flow (s), veh/h/ln	0	1687	0	1558	0	1687	0	1558
Q Serve Time (g_s), s	0.0	3.1	0.0	14.7	0.0	3.5	0.0	22.0
Cycle Q Clear Time (g_c), s	0.0	3.1	0.0	14.7	0.0	3.5	0.0	22.0
Lane Grp Cap (c), veh/h	0	673	0	753	0	1278	0	1130
V/C Ratio (X)	0.00	0.14	0.00	0.73	0.00	0.15	0.00	1.18
Avail Cap (c_a), veh/h	0	673	0	753	0	1278	0	1130
Upstream Filter (I)	0.00	0.95	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	17.4	0.0	31.7	0.0	18.6	0.0	34.5
Incr Delay (d2), s/veh	0.0	0.4	0.0	3.6	0.0	0.3	0.0	88.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	17.8	0.0	35.3	0.0	18.9	0.0	123.4
1st-Term Q (Q1), veh/ln	0.0	1.4	0.0	6.3	0.0	1.6	0.0	9.4

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.4	0.0	0.0	0.0	9.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.5	0.0	6.7	0.0	1.7	0.0	18.7
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.07	0.00	0.02	0.00	0.32
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.8
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	341	0	287	0	188	0	213
Grp Sat Flow (s), veh/h/ln	0	1509	0	1612	0	1509	0	1455
Q Serve Time (g_s), s	0.0	16.0	0.0	14.9	0.0	8.0	0.0	11.8
Cycle Q Clear Time (g_c), s	0.0	16.0	0.0	14.9	0.0	8.0	0.0	11.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.35	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	602	0	390	0	572	0	352
V/C Ratio (X)	0.00	0.57	0.00	0.74	0.00	0.33	0.00	0.61
Avail Cap (c_a), veh/h	0	602	0	390	0	572	0	352
Upstream Filter (I)	0.00	0.95	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	21.2	0.0	31.8	0.0	20.1	0.0	30.6
Incr Delay (d2), s/veh	0.0	3.6	0.0	7.1	0.0	1.5	0.0	2.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	24.9	0.0	38.9	0.0	21.6	0.0	33.6
1st-Term Q (Q1), veh/ln	0.0	6.6	0.0	6.6	0.0	3.3	0.0	4.7
2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.8	0.0	0.2	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.2	0.0	7.4	0.0	3.6	0.0	5.0
%ile Storage Ratio (RQ%)	0.00	0.08	0.00	0.08	0.00	0.59	0.00	0.09
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	109.7
HCM 2010 LOS	F

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	943	1546	35	107	745	920	19	19	163	428	33	53
Future Volume (veh/h)	943	1546	35	107	745	920	19	19	163	428	33	53
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1696	1696	1900	1696	1696	1696	1900	1696	1696	1696	1696	1696
Adj Flow Rate, veh/h	982	1610	36	111	776	0	20	20	170	446	34	0
Adj No. of Lanes	2	3	0	1	2	1	0	1	1	2	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	12	12	12	12	12	12	12	12	12	12	12	12
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	1083	2654	59	134	989	443	0	167	142	132	320	272
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.35	0.57	0.57	0.08	0.31	0.00	0.00	0.10	0.10	0.04	0.19	0.00
Ln Grp Delay, s/veh	47.1	20.4	21.7	61.2	42.7	0.0	0.0	55.0	198.0	1153.5	44.8	0.0
Ln Grp LOS	D	C	C	E	D			E	F	F	D	
Approach Vol, veh/h		2628			887			190			480	
Approach Delay, s/veh		30.6			45.0			183.0			1075.0	
Approach LOS		C			D			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	4.0	0.0	3.0
Phs Duration (G+Y+Rc), s	53.1	47.9	12.0	20.0	18.2	82.8	0.0	32.0
Change Period (Y+Rc), s	7.1	7.1	6.4	6.9	7.1	7.1	6.9	* 6.9
Max Green (Gmax), s	67.9	18.9	5.6	13.1	30.9	55.9	13.1	* 5.6
Max Allow Headway (MAH), s	3.8	5.3	3.8	4.4	3.8	5.3	0.0	4.4
Max Q Clear (g_c+I1), s	41.7	31.2	7.6	15.1	11.0	32.2	0.0	4.2
Green Ext Time (g_e), s	4.3	0.0	0.0	0.0	0.3	18.4	0.0	0.1
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.98	1.00	0.00	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3134		3134		1616		0	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3223		1696		4661		1696

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1442		1442		104		1442

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)			

Lanes in Grp	2	0	2	0	1	0	0	0
Grp Vol (v), veh/h	982	0	446	0	111	0	0	0
Grp Sat Flow (s), veh/h/ln	1567	0	1567	0	1616	0	0	0
Q Serve Time (g_s), s	39.7	0.0	5.6	0.0	9.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	39.7	0.0	5.6	0.0	9.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	1083	0	132	0	134	0	0	0
V/C Ratio (X)	0.91	0.00	3.38	0.00	0.83	0.00	0.00	0.00
Avail Cap (c_a), veh/h	1600	0	132	0	375	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.09	0.00	0.00	0.00
Uniform Delay (d1), s/veh	41.5	0.0	63.7	0.0	60.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	5.6	0.0	1089.8	0.0	1.2	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	47.1	0.0	1153.5	0.0	61.2	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	17.2	0.0	2.4	0.0	4.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.8	0.0	20.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	18.0	0.0	22.4	0.0	4.1	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.57	0.00	0.99	0.00	0.33	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	78.5	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	776	0	20	0	1066	0	34
Grp Sat Flow (s), veh/h/ln	0	1612	0	1696	0	1544	0	1696
Q Serve Time (g_s), s	0.0	29.2	0.0	1.4	0.0	30.2	0.0	2.2
Cycle Q Clear Time (g_c), s	0.0	29.2	0.0	1.4	0.0	30.2	0.0	2.2
Lane Grp Cap (c), veh/h	0	989	0	167	0	1758	0	320
V/C Ratio (X)	0.00	0.78	0.00	0.12	0.00	0.61	0.00	0.11
Avail Cap (c_a), veh/h	0	989	0	167	0	1758	0	320
Upstream Filter (I)	0.00	0.09	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	42.1	0.0	54.7	0.0	18.8	0.0	44.7
Incr Delay (d2), s/veh	0.0	0.6	0.0	0.3	0.0	1.6	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	42.7	0.0	55.0	0.0	20.4	0.0	44.8
1st-Term Q (Q1), veh/ln	0.0	13.0	0.0	0.7	0.0	12.9	0.0	1.0

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.4	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	13.1	0.0	0.7	0.0	13.3	0.0	1.1
%ile Storage Ratio (RQ%)	0.00	0.18	0.00	0.04	0.00	0.12	0.00	0.05
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	170	0	580	0	0
Grp Sat Flow (s), veh/h/ln	0	1442	0	1442	0	1678	0	1442
Q Serve Time (g_s), s	0.0	0.0	0.0	13.1	0.0	30.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	13.1	0.0	30.2	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.06	0.00	1.00
Lane Grp Cap (c), veh/h	0	443	0	142	0	956	0	272
V/C Ratio (X)	0.00	0.00	0.00	1.20	0.00	0.61	0.00	0.00
Avail Cap (c_a), veh/h	0	443	0	142	0	956	0	272
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	60.0	0.0	18.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	138.1	0.0	2.9	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	198.0	0.0	21.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	5.2	0.0	14.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	5.4	0.0	0.8	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	10.7	0.0	14.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.69	0.00	0.13	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	7.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	160.4
HCM 2010 LOS	F

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	426	1505	2174	607	644	3098
Future Volume (veh/h)	426	1505	2174	607	644	3098
Number	3	18	2	12	1	6
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1845	1845	1845	1845
Adj Flow Rate, veh/h	444	1568	2265	0	671	3227
Adj No. of Lanes	2	3	3	1	2	3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	3	3	3	3
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	881	924	2306	718	741	3839
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.26	0.26	0.46	0.00	0.22	0.76
Ln Grp Delay, s/veh	22.2	344.1	29.6	0.0	41.1	7.8
Ln Grp LOS	C	F	C		D	A
Approach Vol, veh/h	2012		2265			3898
Approach Delay, s/veh	273.1		29.6			13.5
Approach LOS	F		C			B

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8			6		
Case No	2.0	7.0	9.0			4.0		
Phs Duration (G+Y+Rc), s	21.0	38.0	24.4			59.0		
Change Period (Y+Rc), s	6.0	6.0	6.4			6.0		
Max Green (Gmax), s	15.0	18.0	18.0			39.0		
Max Allow Headway (MAH), s	3.8	5.2	4.0			5.2		
Max Q Clear (g_c+I1), s	15.2	32.6	20.0			31.3		
Green Ext Time (g_e), s	0.0	0.0	0.0			7.7		
Prob of Phs Call (p_c)	1.00	1.00	1.00			1.00		
Prob of Max Out (p_x)	1.00	0.00	1.00			0.00		

Left-Turn Movement Data			
Assigned Mvmt	1	5	3
Mvmt Sat Flow, veh/h	3408	0	3375

Through Movement Data			
Assigned Mvmt		2	8	6
Mvmt Sat Flow, veh/h		5202	0	5202

Right-Turn Movement Data			
Assigned Mvmt		12	18	16
Mvmt Sat Flow, veh/h		1568	3541	0

Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	0	0
Lane Assignment	(Prot)							

Lanes in Grp	2	0	2	0	0	0	0	0
Grp Vol (v), veh/h	671	0	444	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1704	0	1688	0	0	0	0	0
Q Serve Time (g_s), s	13.2	0.0	7.7	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	13.2	0.0	7.7	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1688	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	31.6	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	741	0	881	0	0	0	0	0
V/C Ratio (X)	0.91	0.00	0.50	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	741	0	881	0	0	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	26.3	0.0	21.7	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	14.7	0.0	0.5	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	41.1	0.0	22.2	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	6.2	0.0	3.6	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	1.5	0.0	0.1	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	7.7	0.0	3.6	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.46	0.00	0.19	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	3	0	0	0	3	0	0
Grp Vol (v), veh/h	0	2265	0	0	0	3227	0	0
Grp Sat Flow (s), veh/h/ln	0	1679	0	0	0	1679	0	0
Q Serve Time (g_s), s	0.0	30.6	0.0	0.0	0.0	29.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	30.6	0.0	0.0	0.0	29.3	0.0	0.0
Lane Grp Cap (c), veh/h	0	2306	0	0	0	3839	0	0
V/C Ratio (X)	0.00	0.98	0.00	0.00	0.00	0.84	0.00	0.00
Avail Cap (c_a), veh/h	0	2306	0	0	0	3839	0	0
Upstream Filter (I)	0.00	0.62	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	18.4	0.0	0.0	0.0	5.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	11.2	0.0	0.0	0.0	2.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	29.6	0.0	0.0	0.0	7.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	14.1	0.0	0.0	0.0	12.8	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	2.4	0.0	0.0	0.0	0.9	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	16.4	0.0	0.0	0.0	13.7	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.26	0.00	0.00	0.00	0.33	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lane Assignment		R	R					
Lanes in Grp	0	1	3	0	0	0	0	0
Grp Vol (v), veh/h	0	0	1568	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1568	1180	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	18.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	18.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	718	924	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	1.70	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	718	924	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	25.5	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	318.6	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	344.1	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	5.8	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	27.2	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	33.1	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	1.31	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	161.1	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		81.9						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	711	1287	385	178	433	191	96	112	75	243	271	875
Future Volume (veh/h)	711	1287	385	178	433	191	96	112	75	243	271	875
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1712	1712	1712	1712	1712	1712	1900	1712	1712	1712
Adj Flow Rate, veh/h	741	1341	401	185	451	0	100	117	78	253	282	911
Adj No. of Lanes	1	3	1	1	3	1	1	2	0	1	1	2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	11	11	11	11	11	11	11	11	11	11	11	11
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	433	2041	636	208	1395	434	119	160	99	271	300	449
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.27	0.44	0.44	0.13	0.30	0.00	0.07	0.08	0.08	0.17	0.18	0.18
Ln Grp Delay, s/veh	379.7	35.7	35.5	81.0	44.2	0.0	87.4	78.7	82.3	102.0	101.6	537.6
Ln Grp LOS	F	D	D	F	D		F	E	F	F	F	F
Approach Vol, veh/h		2483			636			295			1446	
Approach Delay, s/veh		138.3			54.9			82.8			376.3	
Approach LOS		F			D			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	4.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	50.0	54.9	34.2	21.0	27.9	77.0	19.4	35.7
Change Period (Y+Rc), s	7.5	7.1	7.6	* 7.7	7.5	7.1	* 7.7	* 7.7
Max Green (Gmax), s	42.5	37.9	27.4	* 22	42.5	37.9	* 22	* 27
Max Allow Headway (MAH), s	3.8	5.1	3.8	4.5	3.8	5.1	3.8	4.5
Max Q Clear (g_c+I1), s	44.5	14.0	26.5	12.2	19.9	38.3	11.7	30.0
Green Ext Time (g_e), s	0.0	16.3	0.1	1.0	0.5	0.0	0.2	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.55	0.00	0.00	0.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1630		1630		1630		1630	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		4673		1927		4673		1712

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1455		1199		1455		2561

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	741	0	253	0	185	0	100	0
Grp Sat Flow (s), veh/h/ln	1630	0	1630	0	1630	0	1630	0
Q Serve Time (g_s), s	42.5	0.0	24.5	0.0	17.9	0.0	9.7	0.0
Cycle Q Clear Time (g_c), s	42.5	0.0	24.5	0.0	17.9	0.0	9.7	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	433	0	271	0	208	0	119	0
V/C Ratio (X)	1.71	0.00	0.93	0.00	0.89	0.00	0.84	0.00
Avail Cap (c_a), veh/h	433	0	279	0	433	0	227	0
Upstream Filter (I)	0.09	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	58.8	0.0	65.8	0.0	68.7	0.0	73.2	0.0
Incr Delay (d2), s/veh	321.0	0.0	36.2	0.0	12.3	0.0	14.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	379.7	0.0	102.0	0.0	81.0	0.0	87.4	0.0
1st-Term Q (Q1), veh/ln	19.1	0.0	11.0	0.0	8.1	0.0	4.4	0.0
2nd-Term Q (Q2), veh/ln	38.6	0.0	2.7	0.0	0.7	0.0	0.5	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	57.7	0.0	13.8	0.0	8.8	0.0	4.8	0.0
%ile Storage Ratio (RQ%)	2.14	0.00	3.40	0.00	0.57	0.00	0.26	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	77.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	1	0	3	0	1
Grp Vol (v), veh/h	0	451	0	97	0	1341	0	282
Grp Sat Flow (s), veh/h/ln	0	1558	0	1626	0	1558	0	1712
Q Serve Time (g_s), s	0.0	12.0	0.0	9.4	0.0	36.3	0.0	26.0
Cycle Q Clear Time (g_c), s	0.0	12.0	0.0	9.4	0.0	36.3	0.0	26.0
Lane Grp Cap (c), veh/h	0	1395	0	135	0	2041	0	300
V/C Ratio (X)	0.00	0.32	0.00	0.72	0.00	0.66	0.00	0.94
Avail Cap (c_a), veh/h	0	1395	0	227	0	2041	0	300
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	43.6	0.0	71.6	0.0	35.6	0.0	65.2
Incr Delay (d2), s/veh	0.0	0.6	0.0	7.1	0.0	0.2	0.0	36.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	44.2	0.0	78.7	0.0	35.7	0.0	101.6
1st-Term Q (Q1), veh/ln	0.0	5.2	0.0	4.2	0.0	15.6	0.0	12.3

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.3	0.0	0.0	0.0	3.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	5.3	0.0	4.5	0.0	15.7	0.0	15.3
%ile Storage Ratio (RQ%)	0.00	0.06	0.00	0.25	0.00	0.12	0.00	0.46
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	2
Grp Vol (v), veh/h	0	0	0	98	0	401	0	911
Grp Sat Flow (s), veh/h/ln	0	1455	0	1500	0	1455	0	1280
Q Serve Time (g_s), s	0.0	0.0	0.0	10.2	0.0	34.3	0.0	28.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	10.2	0.0	34.3	0.0	28.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.80	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	434	0	124	0	636	0	449
V/C Ratio (X)	0.00	0.00	0.00	0.79	0.00	0.63	0.00	2.03
Avail Cap (c_a), veh/h	0	434	0	209	0	636	0	449
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	72.0	0.0	35.0	0.0	66.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	10.3	0.0	0.4	0.0	471.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	82.3	0.0	35.5	0.0	537.6
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	4.2	0.0	13.7	0.0	9.9
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.4	0.0	0.1	0.0	29.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	4.6	0.0	13.8	0.0	39.3
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.25	0.00	0.77	0.00	1.17
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	115.6
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	194.9
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	207	1007	337	409	1074	259	132	561	166	676	1526	199
Future Volume (veh/h)	207	1007	337	409	1074	259	132	561	166	676	1526	199
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1776	1776	1776	1776	1776	1776	1776	1776	1776	1776	1776
Adj Flow Rate, veh/h	218	1060	355	431	1131	273	139	591	175	712	1606	209
Adj No. of Lanes	2	3	1	2	3	2	2	3	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	7	7	7	7	7	7	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	264	1326	413	213	1251	686	181	1727	538	374	1986	618
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.27	0.27	0.06	0.26	0.26	0.06	0.36	0.36	0.11	0.41	0.41
Ln Grp Delay, s/veh	80.4	56.1	72.3	547.6	65.0	48.0	84.8	35.8	35.7	484.1	41.7	30.9
Ln Grp LOS	F	E	E	F	E	D	F	D	D	F	D	C
Approach Vol, veh/h		1633			1835			905			2527	
Approach Delay, s/veh		62.9			175.8			43.3			165.5	
Approach LOS		E			F			D			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	19.3	46.3	24.0	61.4	17.0	48.6	15.9	69.5
Change Period (Y+Rc), s	7.2	* 7.3	6.8	* 7.6	7.2	* 7.3	* 7.6	* 7.6
Max Green (Gmax), s	15.8	* 31	17.2	* 59	9.8	* 37	* 9.4	* 65
Max Allow Headway (MAH), s	3.8	5.0	3.8	5.1	3.8	5.0	3.8	5.1
Max Q Clear (g_c+I1), s	11.9	36.1	19.2	15.5	11.8	35.7	8.3	46.2
Green Ext Time (g_e), s	0.3	0.0	0.0	29.2	0.0	0.9	0.0	15.7
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	0.93	0.00	1.00	0.52	1.00	0.00	1.00	0.79

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3281		3281		3281		3281	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		4848		4848		4848		4848

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		2656		1509		1509		1509

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	218	0	712	0	431	0	139	0
Grp Sat Flow (s), veh/h/ln	1640	0	1640	0	1640	0	1640	0
Q Serve Time (g_s), s	9.9	0.0	17.2	0.0	9.8	0.0	6.3	0.0
Cycle Q Clear Time (g_c), s	9.9	0.0	17.2	0.0	9.8	0.0	6.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	264	0	374	0	213	0	181	0
V/C Ratio (X)	0.83	0.00	1.91	0.00	2.02	0.00	0.77	0.00
Avail Cap (c_a), veh/h	343	0	374	0	213	0	204	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	68.4	0.0	66.9	0.0	70.6	0.0	70.4	0.0
Incr Delay (d2), s/veh	12.1	0.0	417.2	0.0	477.0	0.0	14.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	80.4	0.0	484.1	0.0	547.6	0.0	84.8	0.0
1st-Term Q (Q1), veh/ln	4.5	0.0	7.8	0.0	4.4	0.0	2.9	0.0
2nd-Term Q (Q2), veh/ln	0.4	0.0	21.7	0.0	14.1	0.0	0.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	4.9	0.0	29.4	0.0	18.5	0.0	3.2	0.0
%ile Storage Ratio (RQ%)	0.28	0.00	0.59	0.00	0.94	0.00	0.09	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	84.6	0.0	54.5	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.5	0.0	0.5	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	3	0	3	0	3
Grp Vol (v), veh/h	0	1131	0	591	0	1060	0	1606
Grp Sat Flow (s), veh/h/ln	0	1616	0	1616	0	1616	0	1616
Q Serve Time (g_s), s	0.0	34.1	0.0	13.5	0.0	30.7	0.0	44.2
Cycle Q Clear Time (g_c), s	0.0	34.1	0.0	13.5	0.0	30.7	0.0	44.2
Lane Grp Cap (c), veh/h	0	1251	0	1727	0	1326	0	1986
V/C Ratio (X)	0.00	0.90	0.00	0.34	0.00	0.80	0.00	0.81
Avail Cap (c_a), veh/h	0	1251	0	1901	0	1326	0	2100
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	54.2	0.0	35.6	0.0	51.0	0.0	39.4
Incr Delay (d2), s/veh	0.0	10.8	0.0	0.1	0.0	5.1	0.0	2.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	65.0	0.0	35.8	0.0	56.1	0.0	41.7
1st-Term Q (Q1), veh/ln	0.0	15.2	0.0	6.0	0.0	13.7	0.0	19.6

2nd-Term Q (Q2), veh/ln	0.0	1.3	0.0	0.0	0.0	0.6	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	16.4	0.0	6.0	0.0	14.4	0.0	20.1
%ile Storage Ratio (RQ%)	0.00	0.09	0.00	0.16	0.00	0.13	0.00	0.40
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	2	0	1	0	1	0	1
Grp Vol (v), veh/h	0	273	0	175	0	355	0	209
Grp Sat Flow (s), veh/h/ln	0	1328	0	1509	0	1509	0	1509
Q Serve Time (g_s), s	0.0	12.8	0.0	12.8	0.0	33.7	0.0	14.3
Cycle Q Clear Time (g_c), s	0.0	12.8	0.0	12.8	0.0	33.7	0.0	14.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	686	0	538	0	413	0	618
V/C Ratio (X)	0.00	0.40	0.00	0.33	0.00	0.86	0.00	0.34
Avail Cap (c_a), veh/h	0	686	0	592	0	413	0	654
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	46.3	0.0	35.4	0.0	52.1	0.0	30.5
Incr Delay (d2), s/veh	0.0	1.7	0.0	0.3	0.0	20.2	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	48.0	0.0	35.7	0.0	72.3	0.0	30.9
1st-Term Q (Q1), veh/ln	0.0	4.7	0.0	5.3	0.0	14.1	0.0	6.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.1	0.0	2.3	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	4.9	0.0	5.4	0.0	16.4	0.0	6.0
%ile Storage Ratio (RQ%)	0.00	0.19	0.00	0.14	0.00	1.03	0.00	0.12
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	127.9
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	945	3317	0	0	2787	1309	0	0	593	0	0	441
Future Volume (veh/h)	945	3317	0	0	2787	1309	0	0	593	0	0	441
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	0	0	1863	0	0	1863
Adj Flow Rate, veh/h	1038	3645	0	0	3063	1438	0	0	652	0	0	485
Adj No. of Lanes	2	3	0	0	3	2	0	0	3	0	0	3
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	0	0	2	2	0	0	2	0	0	2
Opposing Right Turn Influence	Yes			No			No			No		
Cap, veh/h	817	4795	0	0	3296	1806	0	0	0	0	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.24	0.94	0.00	0.00	0.65	0.65	0.00	0.00	0.00	0.00	0.00	0.00
Ln Grp Delay, s/veh	165.1	0.8	0.0	0.0	23.5	18.1	0.0	0.0	0.0	0.0	0.0	0.0
Ln Grp LOS	F	A			C	B						
Approach Vol, veh/h		4683			4501			0			0	
Approach Delay, s/veh		37.2			21.7			0.0			0.0	
Approach LOS		D			C							

Timer:	1	2	3	4	5	6	7	8
Assigned Phs				4			7	8
Case No				4.0			2.0	7.0
Phs Duration (G+Y+Rc), s				112.0			33.0	79.0
Change Period (Y+Rc), s				6.4			6.4	6.4
Max Green (Gmax), s				81.6			26.6	48.6
Max Allow Headway (MAH), s				5.1			3.8	5.1
Max Q Clear (g_c+I1), s				18.2			28.6	61.7
Green Ext Time (g_e), s				62.9			0.0	0.0
Prob of Phs Call (p_c)				1.00			1.00	1.00
Prob of Max Out (p_x)				0.00			1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt							7	3
Mvmt Sat Flow, veh/h							3442	0

Through Movement Data								
Assigned Mvmt				4				8
Mvmt Sat Flow, veh/h				5253				5253

Right-Turn Movement Data								
Assigned Mvmt				14				18
Mvmt Sat Flow, veh/h				0				2787

Left Lane Group Data								
Assigned Mvmt	0	0	0	0	0	0	7	3
Lane Assignment							(Prot)	

Lanes in Grp	0	0	0	0	0	0	2	0
Grp Vol (v), veh/h	0	0	0	0	0	0	1038	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	1721	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	26.6	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	26.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	72.6
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	817	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	1.27	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	817	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	42.7	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	122.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	165.1	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	12.6	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	13.9	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	26.5	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	1.27	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	55.2	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	3	0	0	0	3
Grp Vol (v), veh/h	0	0	0	3645	0	0	0	3063
Grp Sat Flow (s), veh/h/ln	0	0	0	1695	0	0	0	1695
Q Serve Time (g_s), s	0.0	0.0	0.0	16.2	0.0	0.0	0.0	59.7
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	16.2	0.0	0.0	0.0	59.7
Lane Grp Cap (c), veh/h	0	0	0	4795	0	0	0	3296
V/C Ratio (X)	0.00	0.00	0.00	0.76	0.00	0.00	0.00	0.93
Avail Cap (c_a), veh/h	0	0	0	4795	0	0	0	3296
Upstream Filter (I)	0.00	0.00	0.00	0.09	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.6	0.0	0.0	0.0	17.4
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.0	0.0	6.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.8	0.0	0.0	0.0	23.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	6.8	0.0	0.0	0.0	27.5

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	6.8	0.0	0.0	0.0	29.3
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.47
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	0	0	18
Lane Assignment								R
Lanes in Grp	0	0	0	0	0	0	0	2
Grp Vol (v), veh/h	0	0	0	0	0	0	0	1438
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	1393
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	1806
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.80
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	1806
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.1
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.17
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		29.6						
HCM 2010 LOS		C						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	3170	1148	1178	1906	1	0	0	1208	0	0	313
Future Volume (veh/h)	0	3170	1148	1178	1906	1	0	0	1208	0	0	313
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	1900	0	0	1863	0	0	1863
Adj Flow Rate, veh/h	0	3268	1184	1214	1965	1	0	0	1245	0	0	323
Adj No. of Lanes	0	3	2	2	3	0	0	0	3	0	0	3
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	2	2	2	2	2	0	0	2	0	0	2
Opposing Right Turn Influence	No			Yes			No			No		
Cap, veh/h	0	3320	1819	942	5057	3	0	0	0	0	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.00	0.65	0.65	0.27	0.96	0.96	0.00	0.00	0.00	0.00	0.00	0.00
Ln Grp Delay, s/veh	0.0	41.7	20.1	194.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Ln Grp LOS		D	C	F	A	A						
Approach Vol, veh/h		4452			3180			0			0	
Approach Delay, s/veh		35.9			74.3			0.0			0.0	
Approach LOS		D			E							

Timer:	1	2	3	4	5	6	7	8
Assigned Phs			3	4				8
Case No			2.0	7.0				4.0
Phs Duration (G+Y+Rc), s			54.0	120.0				174.0
Change Period (Y+Rc), s			6.4	6.4				6.4
Max Green (Gmax), s			47.6	93.6				147.6
Max Allow Headway (MAH), s			3.8	5.0				5.0
Max Q Clear (g_c+I1), s			49.6	110.6				5.8
Green Ext Time (g_e), s			0.0	0.0				140.0
Prob of Phs Call (p_c)			1.00	1.00				1.00
Prob of Max Out (p_x)			1.00	0.00				0.00

Left-Turn Movement Data								
Assigned Mvmt			3	7				
Mvmt Sat Flow, veh/h			3442	0				

Through Movement Data								
Assigned Mvmt				4				8
Mvmt Sat Flow, veh/h				5253				5250

Right-Turn Movement Data								
Assigned Mvmt				14				18
Mvmt Sat Flow, veh/h				2787				3

Left Lane Group Data								
Assigned Mvmt	0	0	3	7	0	0	0	0
Lane Assignment			(Prot)					

Lanes in Grp	0	0	2	0	0	0	0	0
Grp Vol (v), veh/h	0	0	1214	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1721	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	47.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	47.6	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	113.6	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	942	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	1.29	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	942	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	63.2	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	131.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	194.2	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	22.6	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	17.1	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	39.8	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	1.71	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	68.1	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	3	0	0	0	2
Grp Vol (v), veh/h	0	0	0	3268	0	0	0	1269
Grp Sat Flow (s), veh/h/ln	0	0	0	1695	0	0	0	1695
Q Serve Time (g_s), s	0.0	0.0	0.0	108.6	0.0	0.0	0.0	3.8
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	108.6	0.0	0.0	0.0	3.8
Lane Grp Cap (c), veh/h	0	0	0	3320	0	0	0	3265
V/C Ratio (X)	0.00	0.00	0.00	0.98	0.00	0.00	0.00	0.39
Avail Cap (c_a), veh/h	0	0	0	3320	0	0	0	3265
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	0.0	0.0	29.3	0.0	0.0	0.0	0.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	12.4	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	41.7	0.0	0.0	0.0	0.2
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	50.5	0.0	0.0	0.0	1.6

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	54.3	0.0	0.0	0.0	1.6
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.90	0.00	0.00	0.00	0.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	0	0	18
Lane Assignment				R				T+R
Lanes in Grp	0	0	0	2	0	0	0	1
Grp Vol (v), veh/h	0	0	0	1184	0	0	0	697
Grp Sat Flow (s), veh/h/ln	0	0	0	1393	0	0	0	1862
Q Serve Time (g_s), s	0.0	0.0	0.0	44.6	0.0	0.0	0.0	3.8
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	44.6	0.0	0.0	0.0	3.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	1819	0	0	0	1794
V/C Ratio (X)	0.00	0.00	0.00	0.65	0.00	0.00	0.00	0.39
Avail Cap (c_a), veh/h	0	0	0	1819	0	0	0	1794
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	0.0	0.0	18.2	0.0	0.0	0.0	0.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	20.1	0.0	0.0	0.0	0.2
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	17.0	0.0	0.0	0.0	1.7
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	17.5	0.0	0.0	0.0	1.8
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.62	0.00	0.00	0.00	0.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		51.9						
HCM 2010 LOS		D						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	343	262	381	381	317	127	755	353	204	1448	12
Future Volume (veh/h)	27	343	262	381	381	317	127	755	353	204	1448	12
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	31	390	298	433	433	360	144	858	401	232	1645	14
Adj No. of Lanes	1	2	1	2	2	0	1	2	0	1	2	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	38	758	339	140	430	356	90	1070	497	90	1639	14
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.02	0.22	0.22	0.04	0.24	0.24	0.05	0.48	0.48	0.05	0.48	0.48
Ln Grp Delay, s/veh	75.6	29.9	52.7	997.8	78.4	82.1	359.6	26.9	27.8	787.7	54.7	54.3
Ln Grp LOS	E	C	D	F	F	F	F	C	C	F	F	F
Approach Vol, veh/h		719			1226			1403			1891	
Approach Delay, s/veh		41.4			404.2			61.5			144.4	
Approach LOS		D			F			E			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	3.0	2.0	4.0	2.0	4.0
Phs Duration (G+Y+Rc), s	9.0	45.1	8.0	22.9	9.0	45.1	6.3	24.6
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green (Gmax), s	4.5	39.5	3.5	19.5	4.5	39.5	3.5	19.5
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.1	3.8	5.3	3.8	5.1
Max Q Clear (g_c+I1), s	6.5	29.9	5.5	17.6	6.5	42.6	3.5	22.1
Green Ext Time (g_e), s	0.0	9.0	0.0	0.7	0.0	0.0	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.97	1.00	0.52	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1691		3408		1691		1757	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2240		3505		3428		1823

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1040		1568		29		1508

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	2	0	1	0	1	0
Grp Vol (v), veh/h	232	0	433	0	144	0	31	0
Grp Sat Flow (s), veh/h/ln	1691	0	1704	0	1691	0	1757	0
Q Serve Time (g_s), s	4.5	0.0	3.5	0.0	4.5	0.0	1.5	0.0
Cycle Q Clear Time (g_c), s	4.5	0.0	3.5	0.0	4.5	0.0	1.5	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	90	0	140	0	90	0	38	0
V/C Ratio (X)	2.59	0.00	3.09	0.00	1.61	0.00	0.83	0.00
Avail Cap (c_a), veh/h	90	0	140	0	90	0	72	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	40.3	0.0	40.8	0.0	40.3	0.0	41.4	0.0
Incr Delay (d2), s/veh	747.4	0.0	957.0	0.0	319.3	0.0	34.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	787.7	0.0	997.8	0.0	359.6	0.0	75.6	0.0
1st-Term Q (Q1), veh/ln	2.1	0.0	1.6	0.0	2.1	0.0	0.7	0.0
2nd-Term Q (Q2), veh/ln	18.6	0.0	18.7	0.0	7.9	0.0	0.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	20.7	0.0	20.3	0.0	10.0	0.0	1.1	0.0
%ile Storage Ratio (RQ%)	1.68	0.00	2.21	0.00	1.60	0.00	0.22	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	35.6	0.0	73.2	0.0	13.6	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.6	0.0	0.8	0.0	0.4	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	1	0	1
Grp Vol (v), veh/h	0	645	0	390	0	809	0	416
Grp Sat Flow (s), veh/h/ln	0	1687	0	1752	0	1687	0	1752
Q Serve Time (g_s), s	0.0	27.5	0.0	8.3	0.0	40.6	0.0	20.1
Cycle Q Clear Time (g_c), s	0.0	27.5	0.0	8.3	0.0	40.6	0.0	20.1
Lane Grp Cap (c), veh/h	0	806	0	758	0	806	0	414
V/C Ratio (X)	0.00	0.80	0.00	0.51	0.00	1.00	0.00	1.01
Avail Cap (c_a), veh/h	0	806	0	804	0	806	0	414
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	18.8	0.0	29.4	0.0	22.2	0.0	32.5
Incr Delay (d2), s/veh	0.0	8.2	0.0	0.5	0.0	32.5	0.0	45.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	26.9	0.0	29.9	0.0	54.7	0.0	78.4
1st-Term Q (Q1), veh/ln	0.0	12.7	0.0	4.0	0.0	18.8	0.0	9.6

2nd-Term Q (Q2), veh/ln	0.0	1.8	0.0	0.1	0.0	7.3	0.0	5.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	14.5	0.0	4.1	0.0	26.1	0.0	14.9
%ile Storage Ratio (RQ%)	0.00	1.22	0.00	0.09	0.00	2.05	0.00	0.30
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.7
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	614	0	298	0	850	0	377
Grp Sat Flow (s), veh/h/ln	0	1592	0	1568	0	1771	0	1579
Q Serve Time (g_s), s	0.0	27.9	0.0	15.6	0.0	40.6	0.0	20.1
Cycle Q Clear Time (g_c), s	0.0	27.9	0.0	15.6	0.0	40.6	0.0	20.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.65	0.00	1.00	0.00	0.02	0.00	0.96
Lane Grp Cap (c), veh/h	0	761	0	339	0	846	0	372
V/C Ratio (X)	0.00	0.81	0.00	0.88	0.00	1.00	0.00	1.01
Avail Cap (c_a), veh/h	0	761	0	360	0	846	0	372
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	18.9	0.0	32.2	0.0	22.2	0.0	32.5
Incr Delay (d2), s/veh	0.0	9.0	0.0	20.5	0.0	32.1	0.0	49.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Control Delay (d), s/veh	0.0	27.8	0.0	52.7	0.0	54.3	0.0	82.1
1st-Term Q (Q1), veh/ln	0.0	12.1	0.0	6.8	0.0	19.7	0.0	8.7
2nd-Term Q (Q2), veh/ln	0.0	1.9	0.0	1.9	0.0	7.5	0.0	5.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	14.0	0.0	8.7	0.0	27.3	0.0	13.8
%ile Storage Ratio (RQ%)	0.00	1.17	0.00	0.20	0.00	2.14	0.00	0.28
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	1.0	0.0	1.1
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3
Intersection Summary								
HCM 2010 Ctrl Delay		168.9						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	210	337	409	76	305	84	506	358	124	538	9
Future Volume (veh/h)	45	210	337	409	76	305	84	506	358	124	538	9
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1712	1712	1712	1712	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	47	221	355	431	80	321	88	533	377	131	566	9
Adj No. of Lanes	1	1	1	2	1	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	11	11	11	11	11	11	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	62	441	375	196	482	410	74	699	494	74	1256	20
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.04	0.26	0.26	0.06	0.28	0.28	0.04	0.37	0.37	0.04	0.37	0.37
Ln Grp Delay, s/veh	60.9	30.0	66.6	599.3	25.1	40.0	211.4	34.1	34.8	444.7	24.3	24.2
Ln Grp LOS	E	C	E	F	C	D	F	C	C	F	C	C
Approach Vol, veh/h		623			832			998			706	
Approach Delay, s/veh		53.2			328.3			50.0			102.2	
Approach LOS		D			F			D			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	3.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	10.0	40.0	12.0	30.0	10.0	40.0	9.8	32.2
Change Period (Y+Rc), s	6.0	6.0	* 6.3	* 6.3	6.0	6.0	* 6.3	* 6.3
Max Green (Gmax), s	4.0	34.0	* 5.7	* 24	4.0	34.0	* 5.7	* 24
Max Allow Headway (MAH), s	3.8	5.3	3.8	4.4	3.8	5.3	3.8	4.4
Max Q Clear (g_c+I1), s	6.0	24.8	7.7	24.0	6.0	13.6	4.6	20.7
Green Ext Time (g_e), s	0.0	5.9	0.0	0.0	0.0	10.1	0.0	1.4
Prob of Phs Call (p_c)	0.96	1.00	1.00	1.00	0.89	1.00	0.70	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt		1		3		5		7
Mvmt Sat Flow, veh/h		1691		3163		1691		1630

Through Movement Data								
Assigned Mvmt			2		4		6		8
Mvmt Sat Flow, veh/h			1890		1712		3399		1712

Right-Turn Movement Data								
Assigned Mvmt			12		14		16		18
Mvmt Sat Flow, veh/h			1336		1455		54		1455

Left Lane Group Data								
Assigned Mvmt		1	0	3	0	5	0	7	0
Lane Assignment		(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	2	0	1	0	1	0
Grp Vol (v), veh/h	131	0	431	0	88	0	47	0
Grp Sat Flow (s), veh/h/ln	1691	0	1581	0	1691	0	1630	0
Q Serve Time (g_s), s	4.0	0.0	5.7	0.0	4.0	0.0	2.6	0.0
Cycle Q Clear Time (g_c), s	4.0	0.0	5.7	0.0	4.0	0.0	2.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	74	0	196	0	74	0	62	0
V/C Ratio (X)	1.78	0.00	2.20	0.00	1.20	0.00	0.76	0.00
Avail Cap (c_a), veh/h	74	0	196	0	74	0	101	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	44.0	0.0	43.2	0.0	44.0	0.0	43.8	0.0
Incr Delay (d2), s/veh	400.7	0.0	556.2	0.0	167.4	0.0	17.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	444.7	0.0	599.3	0.0	211.4	0.0	60.9	0.0
1st-Term Q (Q1), veh/ln	1.9	0.0	2.5	0.0	1.9	0.0	1.2	0.0
2nd-Term Q (Q2), veh/ln	8.2	0.0	15.1	0.0	3.4	0.0	0.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	10.0	0.0	17.6	0.0	5.3	0.0	1.5	0.0
%ile Storage Ratio (RQ%)	1.17	0.00	3.42	0.00	0.44	0.00	0.27	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	14.4	0.0	58.8	0.0	3.6	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.4	0.0	0.5	0.0	0.3	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	476	0	221	0	281	0	80
Grp Sat Flow (s), veh/h/ln	0	1687	0	1712	0	1687	0	1712
Q Serve Time (g_s), s	0.0	22.8	0.0	10.1	0.0	11.6	0.0	3.2
Cycle Q Clear Time (g_c), s	0.0	22.8	0.0	10.1	0.0	11.6	0.0	3.2
Lane Grp Cap (c), veh/h	0	623	0	441	0	623	0	482
V/C Ratio (X)	0.00	0.76	0.00	0.50	0.00	0.45	0.00	0.17
Avail Cap (c_a), veh/h	0	623	0	441	0	623	0	482
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	25.5	0.0	29.1	0.0	21.9	0.0	24.9
Incr Delay (d2), s/veh	0.0	8.6	0.0	0.9	0.0	2.3	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	34.1	0.0	30.0	0.0	24.3	0.0	25.1
1st-Term Q (Q1), veh/ln	0.0	10.6	0.0	4.8	0.0	5.4	0.0	1.5

2nd-Term Q (Q2), veh/ln	0.0	1.5	0.0	0.1	0.0	0.4	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	12.1	0.0	4.9	0.0	5.8	0.0	1.6
%ile Storage Ratio (RQ%)	0.00	0.40	0.00	0.12	0.00	0.17	0.00	0.05
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	434	0	355	0	294	0	321
Grp Sat Flow (s), veh/h/ln	0	1540	0	1455	0	1766	0	1455
Q Serve Time (g_s), s	0.0	22.8	0.0	22.0	0.0	11.6	0.0	18.7
Cycle Q Clear Time (g_c), s	0.0	22.8	0.0	22.0	0.0	11.6	0.0	18.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.87	0.00	1.00	0.00	0.03	0.00	1.00
Lane Grp Cap (c), veh/h	0	569	0	375	0	653	0	410
V/C Ratio (X)	0.00	0.76	0.00	0.95	0.00	0.45	0.00	0.78
Avail Cap (c_a), veh/h	0	569	0	375	0	653	0	410
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	25.5	0.0	33.5	0.0	21.9	0.0	30.5
Incr Delay (d2), s/veh	0.0	9.4	0.0	33.0	0.0	2.2	0.0	9.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	34.8	0.0	66.6	0.0	24.2	0.0	40.0
1st-Term Q (Q1), veh/ln	0.0	9.7	0.0	8.8	0.0	5.6	0.0	7.5
2nd-Term Q (Q2), veh/ln	0.0	1.5	0.0	3.4	0.0	0.4	0.0	1.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	11.1	0.0	12.2	0.0	6.0	0.0	8.6
%ile Storage Ratio (RQ%)	0.00	0.37	0.00	0.30	0.00	0.18	0.00	1.51
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		135.6						
HCM 2010 LOS		F						

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	123	246	50	208	163	219	77	663	149	281	1012	48
Future Volume (veh/h)	123	246	50	208	163	219	77	663	149	281	1012	48
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	126	251	51	212	166	223	79	677	152	287	1033	49
Adj No. of Lanes	1	2	0	2	1	1	1	2	0	2	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	61	545	109	119	345	293	39	1303	292	76	1560	74
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.19	0.19	0.03	0.19	0.19	0.02	0.48	0.48	0.02	0.48	0.48
Ln Grp Delay, s/veh	568.3	32.0	32.2	425.5	32.3	38.1	573.7	18.1	18.1	1297.1	19.0	18.9
Ln Grp LOS	F	C	C	F	C	D	F	B	B	F	B	B
Approach Vol, veh/h		428			601			908			1369	
Approach Delay, s/veh		190.0			173.1			66.5			286.9	
Approach LOS		F			F			E			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	8.0	46.9	9.0	22.1	8.0	46.9	9.0	22.1
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green (Gmax), s	2.0	34.0	3.0	23.0	2.0	34.0	3.0	23.0
Max Allow Headway (MAH), s	3.8	5.3	3.8	4.9	3.8	5.3	3.8	4.9
Max Q Clear (g_c+I1), s	4.0	16.8	5.0	8.7	4.0	22.7	5.0	13.6
Green Ext Time (g_e), s	0.0	11.5	0.0	3.1	0.0	8.3	0.0	2.5
Prob of Phs Call (p_c)	1.00	1.00	0.99	1.00	0.85	1.00	0.95	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.13	1.00	0.00	1.00	0.37

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3281		3408		1691		1757	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2740		2912		3280		1845

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		615		582		156		1568

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	1	0	1	0
Grp Vol (v), veh/h	287	0	212	0	79	0	126	0
Grp Sat Flow (s), veh/h/ln	1640	0	1704	0	1691	0	1757	0
Q Serve Time (g_s), s	2.0	0.0	3.0	0.0	2.0	0.0	3.0	0.0
Cycle Q Clear Time (g_c), s	2.0	0.0	3.0	0.0	2.0	0.0	3.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	76	0	119	0	39	0	61	0
V/C Ratio (X)	3.76	0.00	1.78	0.00	2.01	0.00	2.06	0.00
Avail Cap (c_a), veh/h	76	0	119	0	39	0	61	0
Upstream Filter (I)	0.39	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	42.0	0.0	41.5	0.0	42.0	0.0	41.5	0.0
Incr Delay (d2), s/veh	1255.1	0.0	384.0	0.0	531.7	0.0	526.8	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	1297.1	0.0	425.5	0.0	573.7	0.0	568.3	0.0
1st-Term Q (Q1), veh/ln	0.9	0.0	1.4	0.0	0.9	0.0	1.4	0.0
2nd-Term Q (Q2), veh/ln	13.3	0.0	6.3	0.0	5.8	0.0	9.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	14.2	0.0	7.7	0.0	6.7	0.0	10.4	0.0
%ile Storage Ratio (RQ%)	1.50	0.00	1.47	0.00	0.83	0.00	1.62	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	52.7	0.0	23.3	0.0	9.9	0.0	16.2	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.9	0.0	0.4	0.0	0.5	0.0	0.5	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	417	0	149	0	531	0	166
Grp Sat Flow (s), veh/h/ln	0	1687	0	1752	0	1687	0	1845
Q Serve Time (g_s), s	0.0	14.8	0.0	6.5	0.0	20.7	0.0	6.9
Cycle Q Clear Time (g_c), s	0.0	14.8	0.0	6.5	0.0	20.7	0.0	6.9
Lane Grp Cap (c), veh/h	0	802	0	328	0	802	0	345
V/C Ratio (X)	0.00	0.52	0.00	0.46	0.00	0.66	0.00	0.48
Avail Cap (c_a), veh/h	0	802	0	469	0	802	0	493
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.39	0.00	1.00
Uniform Delay (d1), s/veh	0.0	15.7	0.0	31.1	0.0	17.3	0.0	31.2
Incr Delay (d2), s/veh	0.0	2.4	0.0	1.0	0.0	1.7	0.0	1.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	18.1	0.0	32.0	0.0	19.0	0.0	32.3
1st-Term Q (Q1), veh/ln	0.0	6.8	0.0	3.2	0.0	9.6	0.0	3.5

2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.1	0.0	0.4	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.4	0.0	3.2	0.0	10.0	0.0	3.6
%ile Storage Ratio (RQ%)	0.00	0.38	0.00	0.09	0.00	0.21	0.00	0.10
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	412	0	153	0	551	0	223
Grp Sat Flow (s), veh/h/ln	0	1667	0	1742	0	1748	0	1568
Q Serve Time (g_s), s	0.0	14.8	0.0	6.7	0.0	20.7	0.0	11.6
Cycle Q Clear Time (g_c), s	0.0	14.8	0.0	6.7	0.0	20.7	0.0	11.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.37	0.00	0.33	0.00	0.09	0.00	1.00
Lane Grp Cap (c), veh/h	0	793	0	326	0	831	0	293
V/C Ratio (X)	0.00	0.52	0.00	0.47	0.00	0.66	0.00	0.76
Avail Cap (c_a), veh/h	0	793	0	466	0	831	0	419
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.39	0.00	1.00
Uniform Delay (d1), s/veh	0.0	15.7	0.0	31.1	0.0	17.3	0.0	33.1
Incr Delay (d2), s/veh	0.0	2.4	0.0	1.0	0.0	1.6	0.0	4.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	18.1	0.0	32.2	0.0	18.9	0.0	38.1
1st-Term Q (Q1), veh/ln	0.0	6.8	0.0	3.2	0.0	9.9	0.0	5.0
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.1	0.0	0.4	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.3	0.0	3.3	0.0	10.3	0.0	5.4
%ile Storage Ratio (RQ%)	0.00	0.38	0.00	0.09	0.00	0.22	0.00	0.15
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		193.1						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	132	326	131	84	257	287	81	1023	61	282	1455	63
Future Volume (veh/h)	132	326	131	84	257	287	81	1023	61	282	1455	63
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	142	351	141	90	276	309	87	1100	66	303	1565	68
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	2	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	212	531	452	186	531	452	110	1465	88	368	1648	71
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.07	0.45	0.45	0.11	0.50	0.50
Ln Grp Delay, s/veh	47.0	31.8	26.0	41.5	28.3	33.3	49.2	24.6	24.5	42.8	27.6	28.1
Ln Grp LOS	D	C	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		634			675			1253			1936	
Approach Delay, s/veh		33.9			32.3			26.3			30.2	
Approach LOS		C			C			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Case No	2.0	4.0		5.0	2.0	4.0		5.0
Phs Duration (G+Y+Rc), s	14.8	46.2		31.0	10.5	50.5		31.0
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green (Gmax), s	10.5	41.5		26.5	10.5	41.5		26.5
Max Allow Headway (MAH), s	3.8	5.3		4.9	3.8	5.3		4.9
Max Q Clear (g_c+I1), s	10.3	28.0		28.5	6.7	43.9		26.5
Green Ext Time (g_e), s	0.0	12.3		0.0	0.1	0.0		0.0
Prob of Phs Call (p_c)	1.00	1.00		1.00	0.89	1.00		1.00
Prob of Max Out (p_x)	1.00	0.00		1.00	0.99	0.00		1.00

Left-Turn Movement Data								
Assigned Mvmt	1			7	5			3
Mvmt Sat Flow, veh/h	3281			819	1691			892

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3234		1845		3295		1845

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		194		1568		143		1568

Left Lane Group Data								
Assigned Mvmt	1	0	0	7	5	0	0	3
Lane Assignment	(Prot)				(Prot)			

Lanes in Grp	2	0	0	1	1	0	0	1
Grp Vol (v), veh/h	303	0	0	142	87	0	0	90
Grp Sat Flow (s), veh/h/ln	1640	0	0	819	1691	0	0	892
Q Serve Time (g_s), s	8.3	0.0	0.0	15.0	4.7	0.0	0.0	9.1
Cycle Q Clear Time (g_c), s	8.3	0.0	0.0	26.5	4.7	0.0	0.0	24.5
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	819	0	0	0	892
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	26.5	0.0	0.0	0.0	26.5
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	15.0	0.0	0.0	0.0	11.1
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	15.0	0.0	0.0	0.0	9.1
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	368	0	0	212	110	0	0	186
V/C Ratio (X)	0.82	0.00	0.00	0.67	0.79	0.00	0.00	0.48
Avail Cap (c_a), veh/h	374	0	0	212	193	0	0	186
Upstream Filter (I)	0.19	0.00	0.00	1.00	0.55	0.00	0.00	1.00
Uniform Delay (d1), s/veh	39.9	0.0	0.0	39.0	42.4	0.0	0.0	39.6
Incr Delay (d2), s/veh	2.9	0.0	0.0	8.0	6.8	0.0	0.0	1.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	42.8	0.0	0.0	47.0	49.2	0.0	0.0	41.5
1st-Term Q (Q1), veh/ln	3.7	0.0	0.0	3.6	2.2	0.0	0.0	2.2
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.0	0.5	0.2	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	3.9	0.0	0.0	4.1	2.4	0.0	0.0	2.3
%ile Storage Ratio (RQ%)	0.38	0.00	0.00	0.61	0.32	0.00	0.00	0.32
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	574	0	351	0	799	0	276
Grp Sat Flow (s), veh/h/ln	0	1687	0	1845	0	1687	0	1845
Q Serve Time (g_s), s	0.0	25.9	0.0	15.4	0.0	41.4	0.0	11.5
Cycle Q Clear Time (g_c), s	0.0	25.9	0.0	15.4	0.0	41.4	0.0	11.5
Lane Grp Cap (c), veh/h	0	764	0	531	0	844	0	531
V/C Ratio (X)	0.00	0.75	0.00	0.66	0.00	0.95	0.00	0.52
Avail Cap (c_a), veh/h	0	764	0	531	0	844	0	531
Upstream Filter (I)	0.00	0.55	0.00	1.00	0.00	0.19	0.00	1.00
Uniform Delay (d1), s/veh	0.0	20.9	0.0	28.8	0.0	21.8	0.0	27.4
Incr Delay (d2), s/veh	0.0	3.8	0.0	3.0	0.0	5.8	0.0	0.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	24.6	0.0	31.8	0.0	27.6	0.0	28.3
1st-Term Q (Q1), veh/ln	0.0	11.9	0.0	7.8	0.0	19.1	0.0	5.8

2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	0.4	0.0	1.4	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	12.8	0.0	8.2	0.0	20.4	0.0	6.0
%ile Storage Ratio (RQ%)	0.00	0.27	0.00	0.25	0.00	0.91	0.00	0.14
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	592	0	141	0	834	0	309
Grp Sat Flow (s), veh/h/ln	0	1741	0	1568	0	1751	0	1568
Q Serve Time (g_s), s	0.0	26.0	0.0	6.5	0.0	41.9	0.0	16.1
Cycle Q Clear Time (g_c), s	0.0	26.0	0.0	6.5	0.0	41.9	0.0	16.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.11	0.00	1.00	0.00	0.08	0.00	1.00
Lane Grp Cap (c), veh/h	0	789	0	452	0	875	0	452
V/C Ratio (X)	0.00	0.75	0.00	0.31	0.00	0.95	0.00	0.68
Avail Cap (c_a), veh/h	0	789	0	452	0	875	0	452
Upstream Filter (I)	0.00	0.55	0.00	1.00	0.00	0.19	0.00	1.00
Uniform Delay (d1), s/veh	0.0	20.9	0.0	25.6	0.0	22.0	0.0	29.0
Incr Delay (d2), s/veh	0.0	3.7	0.0	0.4	0.0	6.1	0.0	4.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	24.5	0.0	26.0	0.0	28.1	0.0	33.3
1st-Term Q (Q1), veh/ln	0.0	12.3	0.0	2.8	0.0	19.9	0.0	6.9
2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	0.0	0.0	1.5	0.0	0.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	13.2	0.0	2.8	0.0	21.4	0.0	7.4
%ile Storage Ratio (RQ%)	0.00	0.28	0.00	0.50	0.00	0.96	0.00	1.06
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		30.0						
HCM 2010 LOS		C						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	158	55	29	100	16	647	21	1389	40	608	1710	64
Future Volume (veh/h)	158	55	29	100	16	647	21	1389	40	608	1710	64
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	165	57	30	104	17	674	22	1447	42	633	1781	67
Adj No. of Lanes	1	1	0	1	1	1	1	3	0	2	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	238	253	133	130	659	560	73	1383	40	569	1726	65
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.22	0.22	0.22	0.07	0.36	0.36	0.29	0.29	0.29	0.17	0.52	0.52
Ln Grp Delay, s/veh	46.5	0.0	31.5	69.2	20.5	139.3	55.8	72.0	80.3	93.7	40.6	44.2
Ln Grp LOS	D		C	E	C	F	E	F	F	F	F	F
Approach Vol, veh/h		252			795			1511			2481	
Approach Delay, s/veh		41.3			127.6			74.6			55.5	
Approach LOS		D			F			E			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4		6		8
Case No	2.0	6.0	2.0	6.0		4.0		3.0
Phs Duration (G+Y+Rc), s	23.0	34.0	13.3	27.7		57.0		41.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0		6.0		6.0
Max Green (Gmax), s	17.0	28.0	8.0	15.0		51.0		35.0
Max Allow Headway (MAH), s	3.8	5.3	3.8	4.5		5.3		4.5
Max Q Clear (g_c+I1), s	19.0	30.0	7.7	23.7		53.0		37.0
Green Ext Time (g_e), s	0.0	0.0	0.0	0.0		0.0		0.0
Prob of Phs Call (p_c)	1.00	1.00	0.94	1.00		1.00		1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00		0.00		1.00

Left-Turn Movement Data				
Assigned Mvmt	1	5	3	7
Mvmt Sat Flow, veh/h	3281	237	1757	742

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	4842	1139	3317	1845

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	141	600	124	1568

Left Lane Group Data								
Assigned Mvmt	1	5	3	7	0	0	0	0
Lane Assignment	(Prot)		(Prot)					

Lanes in Grp	2	1	1	1	0	0	0	0
Grp Vol (v), veh/h	633	22	104	165	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1640	237	1757	742	0	0	0	0
Q Serve Time (g_s), s	17.0	0.0	5.7	21.7	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	17.0	28.0	5.7	21.7	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	237	0	742	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	28.0	0.0	21.7	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	21.7	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	21.7	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	569	73	130	238	0	0	0	0
V/C Ratio (X)	1.11	0.30	0.80	0.69	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	569	73	143	238	0	0	0	0
Upstream Filter (I)	0.09	0.66	1.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	40.5	49.0	44.7	38.2	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	53.2	6.8	24.6	8.3	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	93.7	55.8	69.2	46.5	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	7.7	0.6	2.8	4.4	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	4.2	0.1	0.9	0.6	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	11.9	0.7	3.7	5.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	1.25	0.09	0.42	1.60	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	16.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	2	0	0	0	1	0	1
Grp Vol (v), veh/h	0	966	0	0	0	901	0	17
Grp Sat Flow (s), veh/h/ln	0	1616	0	0	0	1687	0	1845
Q Serve Time (g_s), s	0.0	28.0	0.0	0.0	0.0	51.0	0.0	0.6
Cycle Q Clear Time (g_c), s	0.0	28.0	0.0	0.0	0.0	51.0	0.0	0.6
Lane Grp Cap (c), veh/h	0	923	0	0	0	878	0	659
V/C Ratio (X)	0.00	1.05	0.00	0.00	0.00	1.03	0.00	0.03
Avail Cap (c_a), veh/h	0	923	0	0	0	878	0	659
Upstream Filter (I)	0.00	0.66	0.00	0.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	35.0	0.0	0.0	0.0	23.5	0.0	20.4
Incr Delay (d2), s/veh	0.0	37.0	0.0	0.0	0.0	17.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	72.0	0.0	0.0	0.0	40.6	0.0	20.5
1st-Term Q (Q1), veh/ln	0.0	12.4	0.0	0.0	0.0	23.4	0.0	0.3

2nd-Term Q (Q2), veh/ln	0.0	4.7	0.0	0.0	0.0	4.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	17.2	0.0	0.0	0.0	27.6	0.0	0.3
%ile Storage Ratio (RQ%)	0.00	0.77	0.00	0.00	0.00	1.48	0.00	0.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	10.6	0.0	0.0	0.0	5.9	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	523	0	87	0	947	0	674
Grp Sat Flow (s), veh/h/ln	0	1751	0	1739	0	1754	0	1568
Q Serve Time (g_s), s	0.0	28.0	0.0	4.0	0.0	51.0	0.0	35.0
Cycle Q Clear Time (g_c), s	0.0	28.0	0.0	4.0	0.0	51.0	0.0	35.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.08	0.00	0.34	0.00	0.07	0.00	1.00
Lane Grp Cap (c), veh/h	0	500	0	386	0	913	0	560
V/C Ratio (X)	0.00	1.05	0.00	0.23	0.00	1.04	0.00	1.20
Avail Cap (c_a), veh/h	0	500	0	386	0	913	0	560
Upstream Filter (I)	0.00	0.66	0.00	1.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	35.0	0.0	31.2	0.0	23.5	0.0	31.5
Incr Delay (d2), s/veh	0.0	45.3	0.0	0.3	0.0	20.7	0.0	107.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	80.3	0.0	31.5	0.0	44.2	0.0	139.3
1st-Term Q (Q1), veh/ln	0.0	13.5	0.0	1.9	0.0	24.3	0.0	15.1
2nd-Term Q (Q2), veh/ln	0.0	6.3	0.0	0.0	0.0	5.3	0.0	16.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	19.8	0.0	2.0	0.0	29.6	0.0	31.9
%ile Storage Ratio (RQ%)	0.00	0.88	0.00	0.26	0.00	1.59	0.00	3.66
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	5.7	0.0	0.0	0.0	8.5	0.0	28.5
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	71.9
HCM 2010 LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	339	648	381	640	843	5	255	1170	3	3	1336	683
Future Volume (veh/h)	339	648	381	640	843	5	255	1170	3	3	1336	683
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1759	1759	1759	1900	1776	1776	1776	1776	1776	1776
Adj Flow Rate, veh/h	349	668	393	660	869	5	263	1206	0	3	1377	0
Adj No. of Lanes	2	3	1	2	3	0	2	2	1	1	3	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	8	8	8	8	8	8	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	434	663	206	765	1182	7	321	1432	641	124	1267	394
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.13	0.14	0.14	0.24	0.24	0.24	0.10	0.42	0.00	0.26	0.26	0.00
Ln Grp Delay, s/veh	43.4	76.5	464.0	40.2	35.8	38.5	42.6	24.4	0.0	37.5	86.3	0.0
Ln Grp LOS	D	F	F	D	D	D	D	C		D	F	
Approach Vol, veh/h		1410			1534			1469			1380	
Approach Delay, s/veh		176.3			38.2			27.7			86.2	
Approach LOS		F			D			C			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Case No		3.0	2.0	3.0	2.0	5.0	2.0	4.0
Phs Duration (G+Y+Rc), s		45.3	27.7	19.0	15.0	30.3	18.3	28.4
Change Period (Y+Rc), s		6.3	6.0	6.3	6.0	6.3	6.0	6.3
Max Green (Gmax), s		32.7	28.0	12.7	9.0	17.7	18.0	22.7
Max Allow Headway (MAH), s		5.3	3.8	5.0	3.8	5.3	3.8	5.0
Max Q Clear (g_c+I1), s		31.5	19.9	14.7	9.2	26.0	11.6	17.0
Green Ext Time (g_e), s		1.2	1.7	0.0	0.0	0.0	0.7	4.6
Prob of Phs Call (p_c)		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)		0.00	0.20	1.00	1.00	0.00	0.20	0.97

Left-Turn Movement Data								
Assigned Mvmt			3		5	1	7	
Mvmt Sat Flow, veh/h			3250		3281	440	3250	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3374		4803		4848		4928

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1509		1495		1509		28

Left Lane Group Data								
Assigned Mvmt	0	0	3	0	5	1	7	0
Lane Assignment			(Prot)		(Prot)		(Prot)	

Lanes in Grp	0	0	2	0	2	1	2	0
Grp Vol (v), veh/h	0	0	660	0	263	3	349	0
Grp Sat Flow (s), veh/h/ln	0	0	1625	0	1640	440	1625	0
Q Serve Time (g_s), s	0.0	0.0	17.9	0.0	7.2	0.6	9.6	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	17.9	0.0	7.2	15.0	9.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	440	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	24.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	9.6	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	765	0	321	124	434	0
V/C Ratio (X)	0.00	0.00	0.86	0.00	0.82	0.02	0.80	0.00
Avail Cap (c_a), veh/h	0	0	989	0	321	124	636	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.11	1.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	33.7	0.0	40.7	37.2	38.7	0.0
Incr Delay (d2), s/veh	0.0	0.0	6.4	0.0	1.9	0.4	4.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	40.2	0.0	42.6	37.5	43.4	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	8.1	0.0	3.3	0.1	4.3	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.7	0.0	0.1	0.0	0.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	8.7	0.0	3.4	0.1	4.6	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.58	0.00	0.38	0.00	0.44	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	3	0	3	0	2
Grp Vol (v), veh/h	0	1206	0	668	0	1377	0	565
Grp Sat Flow (s), veh/h/ln	0	1687	0	1601	0	1616	0	1601
Q Serve Time (g_s), s	0.0	29.5	0.0	12.7	0.0	24.0	0.0	15.0
Cycle Q Clear Time (g_c), s	0.0	29.5	0.0	12.7	0.0	24.0	0.0	15.0
Lane Grp Cap (c), veh/h	0	1432	0	663	0	1267	0	768
V/C Ratio (X)	0.00	0.84	0.00	1.01	0.00	1.09	0.00	0.73
Avail Cap (c_a), veh/h	0	1432	0	663	0	1267	0	790
Upstream Filter (I)	0.00	0.11	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	23.7	0.0	39.7	0.0	34.0	0.0	32.3
Incr Delay (d2), s/veh	0.0	0.7	0.0	36.8	0.0	52.3	0.0	3.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	24.4	0.0	76.5	0.0	86.3	0.0	35.8
1st-Term Q (Q1), veh/ln	0.0	13.6	0.0	5.6	0.0	10.7	0.0	6.6

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	2.3	0.0	6.1	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	13.7	0.0	7.8	0.0	16.8	0.0	7.0
%ile Storage Ratio (RQ%)	0.00	0.74	0.00	0.28	0.00	0.57	0.00	0.21
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	1.3	0.0	27.5	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.3	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	393	0	0	0	309
Grp Sat Flow (s), veh/h/ln	0	1509	0	1495	0	1509	0	1754
Q Serve Time (g_s), s	0.0	0.0	0.0	12.7	0.0	0.0	0.0	15.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	12.7	0.0	0.0	0.0	15.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.02
Lane Grp Cap (c), veh/h	0	641	0	206	0	394	0	421
V/C Ratio (X)	0.00	0.00	0.00	1.90	0.00	0.00	0.00	0.74
Avail Cap (c_a), veh/h	0	641	0	206	0	394	0	433
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	39.7	0.0	0.0	0.0	32.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	424.3	0.0	0.0	0.0	6.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	464.0	0.0	0.0	0.0	38.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	5.2	0.0	0.0	0.0	7.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	24.3	0.0	0.0	0.0	0.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	29.6	0.0	0.0	0.0	8.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	1.04	0.00	0.00	0.00	0.24
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	46.6	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	80.6
HCM 2010 LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

APPENDIX I-P3:
Year 2040 Zoning Intersection Background LOS PM Analysis without Mitigation

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	735	1343	726	236	750	92	363	335	229	186	224	239
Future Volume (veh/h)	735	1343	726	236	750	92	363	335	229	186	224	239
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1743	1743	1900	1743	1743	1743
Adj Flow Rate, veh/h	782	1429	772	251	798	98	386	356	244	198	238	254
Adj No. of Lanes	2	2	1	1	3	0	1	2	0	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	9	9	9	9	9	9
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	827	1615	723	193	1493	182	109	469	316	33	352	299
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.24	0.45	0.45	0.11	0.32	0.32	0.07	0.25	0.25	0.02	0.20	0.20
Ln Grp Delay, s/veh	76.5	46.0	95.4	236.1	44.6	46.4	1239.9	66.0	68.1	2354.7	66.8	84.0
Ln Grp LOS	E	D	F	F	D	D	F	E	E	F	E	F
Approach Vol, veh/h		2983			1147			986			690	
Approach Delay, s/veh		66.8			87.0			526.2			729.6	
Approach LOS		E			F			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	3.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	10.0	45.0	23.0	76.0	17.0	38.0	43.0	56.0
Change Period (Y+Rc), s	6.9	6.9	6.4	6.4	6.9	6.9	6.4	6.4
Max Green (Gmax), s	3.1	38.1	16.6	69.6	10.1	31.1	37.6	48.6
Max Allow Headway (MAH), s	3.8	5.1	3.7	4.8	3.8	5.1	3.8	4.8
Max Q Clear (g_c+I1), s	5.1	29.4	18.6	71.6	12.1	27.4	36.1	23.9
Green Ext Time (g_e), s	0.0	4.1	0.0	0.0	0.0	2.1	0.6	20.8
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1660		1792		1660		3476	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1896		3574		1743		4639

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1278		1599		1482		566

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	2	0
Grp Vol (v), veh/h	198	0	251	0	386	0	782	0
Grp Sat Flow (s), veh/h/ln	1660	0	1792	0	1660	0	1738	0
Q Serve Time (g_s), s	3.1	0.0	16.6	0.0	10.1	0.0	34.1	0.0
Cycle Q Clear Time (g_c), s	3.1	0.0	16.6	0.0	10.1	0.0	34.1	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	33	0	193	0	109	0	827	0
V/C Ratio (X)	5.92	0.00	1.30	0.00	3.55	0.00	0.95	0.00
Avail Cap (c_a), veh/h	33	0	193	0	109	0	849	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	75.4	0.0	68.7	0.0	72.0	0.0	57.7	0.0
Incr Delay (d2), s/veh	2279.2	0.0	167.4	0.0	1168.0	0.0	18.8	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	2354.7	0.0	236.1	0.0	1239.9	0.0	76.5	0.0
1st-Term Q (Q1), veh/ln	1.4	0.0	8.2	0.0	4.6	0.0	16.4	0.0
2nd-Term Q (Q2), veh/ln	21.2	0.0	9.0	0.0	35.3	0.0	2.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	22.6	0.0	17.2	0.0	40.0	0.0	18.6	0.0
%ile Storage Ratio (RQ%)	1.89	0.00	1.35	0.00	3.35	0.00	0.75	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	41.1	0.0	14.5	0.0	69.3	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	1.5	0.0	0.3	0.0	0.9	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	1	0	2
Grp Vol (v), veh/h	0	310	0	1429	0	238	0	588
Grp Sat Flow (s), veh/h/ln	0	1656	0	1787	0	1743	0	1712
Q Serve Time (g_s), s	0.0	26.7	0.0	56.2	0.0	19.4	0.0	21.6
Cycle Q Clear Time (g_c), s	0.0	26.7	0.0	56.2	0.0	19.4	0.0	21.6
Lane Grp Cap (c), veh/h	0	410	0	1615	0	352	0	1102
V/C Ratio (X)	0.00	0.76	0.00	0.88	0.00	0.68	0.00	0.53
Avail Cap (c_a), veh/h	0	410	0	1615	0	352	0	1102
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	53.7	0.0	38.5	0.0	56.8	0.0	42.8
Incr Delay (d2), s/veh	0.0	12.3	0.0	7.5	0.0	10.0	0.0	1.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	66.0	0.0	46.0	0.0	66.8	0.0	44.6
1st-Term Q (Q1), veh/ln	0.0	12.2	0.0	27.6	0.0	9.4	0.0	10.2

2nd-Term Q (Q2), veh/ln	0.0	1.4	0.0	1.7	0.0	1.0	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	13.6	0.0	29.3	0.0	10.4	0.0	10.5
%ile Storage Ratio (RQ%)	0.00	0.49	0.00	0.64	0.00	0.40	0.00	0.48
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	290	0	772	0	254	0	308
Grp Sat Flow (s), veh/h/ln	0	1518	0	1599	0	1482	0	1781
Q Serve Time (g_s), s	0.0	27.4	0.0	69.6	0.0	25.4	0.0	21.9
Cycle Q Clear Time (g_c), s	0.0	27.4	0.0	69.6	0.0	25.4	0.0	21.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.84	0.00	1.00	0.00	1.00	0.00	0.32
Lane Grp Cap (c), veh/h	0	375	0	723	0	299	0	573
V/C Ratio (X)	0.00	0.77	0.00	1.07	0.00	0.85	0.00	0.54
Avail Cap (c_a), veh/h	0	375	0	723	0	299	0	573
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	53.9	0.0	42.2	0.0	59.2	0.0	42.8
Incr Delay (d2), s/veh	0.0	14.2	0.0	53.2	0.0	24.8	0.0	3.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	68.1	0.0	95.4	0.0	84.0	0.0	46.4
1st-Term Q (Q1), veh/ln	0.0	11.5	0.0	30.6	0.0	10.4	0.0	10.8
2nd-Term Q (Q2), veh/ln	0.0	1.5	0.0	10.7	0.0	2.1	0.0	0.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	13.0	0.0	41.3	0.0	12.5	0.0	11.4
%ile Storage Ratio (RQ%)	0.00	0.47	0.00	4.33	0.00	1.40	0.00	0.52
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	12.3	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		227.6						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	166	1530	188	155	910	149	216	136	211	164	73	71
Future Volume (veh/h)	166	1530	188	155	910	149	216	136	211	164	73	71
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	177	1628	200	165	968	159	230	145	224	174	78	76
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	99	1501	182	99	1437	236	255	125	192	199	292	248
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.47	0.47	0.06	0.47	0.47	0.14	0.19	0.19	0.11	0.16	0.16
Ln Grp Delay, s/veh	464.0	92.6	103.3	396.1	33.9	34.0	83.6	0.0	165.0	78.7	59.2	60.5
Ln Grp LOS	F	F	F	F	C	C	F		F	E	E	E
Approach Vol, veh/h		2005			1292			599			328	
Approach Delay, s/veh		130.4			80.2			133.8			69.9	
Approach LOS		F			F			F			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	24.0	35.9	15.0	79.1	28.9	31.0	15.0	79.1
Change Period (Y+Rc), s	6.6	6.6	6.4	6.4	6.6	6.6	6.4	6.4
Max Green (Gmax), s	32.4	24.4	8.6	62.6	32.4	24.4	8.6	62.6
Max Allow Headway (MAH), s	3.8	5.2	3.7	5.0	3.8	5.2	3.7	5.0
Max Q Clear (g_c+I1), s	17.0	31.3	10.6	74.7	21.8	8.6	10.6	39.9
Green Ext Time (g_e), s	0.4	0.0	0.0	0.0	0.5	2.8	0.0	19.6
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.00	0.01	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1757		1774		1757		1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		655		3180		1845		3044

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1011		385		1568		500

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	174	0	165	0	230	0	177	0
Grp Sat Flow (s), veh/h/ln	1757	0	1774	0	1757	0	1774	0
Q Serve Time (g_s), s	15.0	0.0	8.6	0.0	19.8	0.0	8.6	0.0
Cycle Q Clear Time (g_c), s	15.0	0.0	8.6	0.0	19.8	0.0	8.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	199	0	99	0	255	0	99	0
V/C Ratio (X)	0.88	0.00	1.67	0.00	0.90	0.00	1.79	0.00
Avail Cap (c_a), veh/h	370	0	99	0	370	0	99	0
Upstream Filter (I)	1.00	0.00	0.57	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	67.2	0.0	72.7	0.0	64.8	0.0	72.7	0.0
Incr Delay (d2), s/veh	11.5	0.0	323.4	0.0	18.9	0.0	391.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	78.7	0.0	396.1	0.0	83.6	0.0	464.0	0.0
1st-Term Q (Q1), veh/ln	7.3	0.0	4.2	0.0	9.6	0.0	4.2	0.0
2nd-Term Q (Q2), veh/ln	0.6	0.0	8.9	0.0	1.3	0.0	10.8	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	7.9	0.0	13.1	0.0	11.0	0.0	15.0	0.0
%ile Storage Ratio (RQ%)	1.50	0.00	1.23	0.00	2.08	0.00	1.19	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	16.5	0.0	0.0	0.0	19.5	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.4	0.0	0.0	0.0	0.4	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T		T		T
Lanes in Grp	0	0	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	894	0	78	0	562
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	1845	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	72.7	0.0	5.7	0.0	37.9
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	72.7	0.0	5.7	0.0	37.9
Lane Grp Cap (c), veh/h	0	0	0	835	0	292	0	835
V/C Ratio (X)	0.00	0.00	0.00	1.07	0.00	0.27	0.00	0.67
Avail Cap (c_a), veh/h	0	0	0	835	0	292	0	835
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.57
Uniform Delay (d1), s/veh	0.0	0.0	0.0	40.7	0.0	56.9	0.0	31.5
Incr Delay (d2), s/veh	0.0	0.0	0.0	51.9	0.0	2.2	0.0	2.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	92.6	0.0	59.2	0.0	33.9
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	35.5	0.0	2.9	0.0	18.4

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	12.0	0.0	0.2	0.0	0.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	47.5	0.0	3.1	0.0	19.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.49	0.00	0.11	0.00	0.35
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	14.8	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	369	0	934	0	76	0	565
Grp Sat Flow (s), veh/h/ln	0	1666	0	1795	0	1568	0	1775
Q Serve Time (g_s), s	0.0	29.3	0.0	72.7	0.0	6.6	0.0	37.9
Cycle Q Clear Time (g_c), s	0.0	29.3	0.0	72.7	0.0	6.6	0.0	37.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.61	0.00	0.21	0.00	1.00	0.00	0.28
Lane Grp Cap (c), veh/h	0	317	0	847	0	248	0	838
V/C Ratio (X)	0.00	1.16	0.00	1.10	0.00	0.31	0.00	0.67
Avail Cap (c_a), veh/h	0	317	0	847	0	248	0	838
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.57
Uniform Delay (d1), s/veh	0.0	62.3	0.0	40.7	0.0	57.3	0.0	31.5
Incr Delay (d2), s/veh	0.0	102.6	0.0	62.7	0.0	3.2	0.0	2.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	165.0	0.0	103.3	0.0	60.5	0.0	34.0
1st-Term Q (Q1), veh/ln	0.0	13.5	0.0	36.0	0.0	2.9	0.0	18.5
2nd-Term Q (Q2), veh/ln	0.0	9.0	0.0	14.7	0.0	0.2	0.0	0.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	22.5	0.0	50.8	0.0	3.1	0.0	19.1
%ile Storage Ratio (RQ%)	0.00	0.75	0.00	0.53	0.00	0.11	0.00	0.35
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	13.0	0.0	21.6	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		110.8						
HCM 2010 LOS		F						

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	197	1685	1080	325	255	62
Future Volume (veh/h)	197	1685	1080	325	255	62
Number	7	4	8	18	1	16
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00			1.00	1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1676	1676	1676	1710	1660	1660
Adj Flow Rate, veh/h	203	1737	1113	335	263	64
Adj No. of Lanes	1	2	2	0	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	3	3
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	140	2300	1444	430	317	283
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.09	0.72	0.60	0.60	0.20	0.20
Ln Grp Delay, s/veh	284.3	14.4	29.8	30.7	85.5	57.7
Ln Grp LOS	F	B	C	C	F	E
Approach Vol, veh/h		1940	1448		327	
Approach Delay, s/veh		42.6	30.3		80.1	
Approach LOS		D	C		F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	6			4			7	8
Case No	9.0			4.0			2.0	8.0
Phs Duration (G+Y+Rc), s	40.0			127.0			21.0	106.0
Change Period (Y+Rc), s	6.5			6.4			6.4	6.4
Max Green (Gmax), s	33.5			120.6			14.6	99.6
Max Allow Headway (MAH), s	3.9			5.0			3.7	5.0
Max Q Clear (g_c+I1), s	28.6			57.6			16.6	60.6
Green Ext Time (g_e), s	0.5			49.2			0.0	33.2
Prob of Phs Call (p_c)	1.00			1.00			1.00	1.00
Prob of Max Out (p_x)	0.00			0.00			1.00	0.00
Left-Turn Movement Data								
Assigned Mvmt	1						7	3
Mvmt Sat Flow, veh/h	1581						1597	0
Through Movement Data								
Assigned Mvmt	6			4				8
Mvmt Sat Flow, veh/h	0			3269				2506
Right-Turn Movement Data								
Assigned Mvmt	16			14				18
Mvmt Sat Flow, veh/h	1411			0				720
Left Lane Group Data								
Assigned Mvmt	1	0	0	0	0	0	7	3
Lane Assignment							(Prot)	

Lanes in Grp	1	0	0	0	0	0	1	0
Grp Vol (v), veh/h	263	0	0	0	0	0	203	0
Grp Sat Flow (s), veh/h/ln	1581	0	0	0	0	0	1597	0
Q Serve Time (g_s), s	26.6	0.0	0.0	0.0	0.0	0.0	14.6	0.0
Cycle Q Clear Time (g_c), s	26.6	0.0	0.0	0.0	0.0	0.0	14.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1581	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	99.6
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	317	0	0	0	0	0	140	0
V/C Ratio (X)	0.83	0.00	0.00	0.00	0.00	0.00	1.45	0.00
Avail Cap (c_a), veh/h	317	0	0	0	0	0	140	0
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00
Uniform Delay (d1), s/veh	64.0	0.0	0.0	0.0	0.0	0.0	76.2	0.0
Incr Delay (d2), s/veh	21.5	0.0	0.0	0.0	0.0	0.0	208.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	85.5	0.0	0.0	0.0	0.0	0.0	284.3	0.0
1st-Term Q (Q1), veh/ln	11.6	0.0	0.0	0.0	0.0	0.0	6.4	0.0
2nd-Term Q (Q2), veh/ln	1.9	0.0	0.0	0.0	0.0	0.0	8.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	13.5	0.0	0.0	0.0	0.0	0.0	14.5	0.0
%ile Storage Ratio (RQ%)	0.67	0.00	0.00	0.00	0.00	0.00	1.67	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	15.9	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0
Middle Lane Group Data								
Assigned Mvmt	6	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	1
Grp Vol (v), veh/h	0	0	0	1737	0	0	0	727
Grp Sat Flow (s), veh/h/ln	0	0	0	1593	0	0	0	1593
Q Serve Time (g_s), s	0.0	0.0	0.0	55.6	0.0	0.0	0.0	56.7
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	55.6	0.0	0.0	0.0	56.7
Lane Grp Cap (c), veh/h	0	0	0	2300	0	0	0	950
V/C Ratio (X)	0.00	0.00	0.00	0.76	0.00	0.00	0.00	0.77
Avail Cap (c_a), veh/h	0	0	0	2300	0	0	0	950
Upstream Filter (I)	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.81
Uniform Delay (d1), s/veh	0.0	0.0	0.0	14.2	0.0	0.0	0.0	25.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	4.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	14.4	0.0	0.0	0.0	29.8
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	24.1	0.0	0.0	0.0	24.9

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	1.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	24.2	0.0	0.0	0.0	26.1
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.44	0.00	0.00	0.00	0.40
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	16	0	0	14	0	0	0	18
Lane Assignment	R							T+R
Lanes in Grp	1	0	0	0	0	0	0	1
Grp Vol (v), veh/h	64	0	0	0	0	0	0	721
Grp Sat Flow (s), veh/h/ln	1411	0	0	0	0	0	0	1549
Q Serve Time (g_s), s	6.3	0.0	0.0	0.0	0.0	0.0	0.0	58.6
Cycle Q Clear Time (g_c), s	6.3	0.0	0.0	0.0	0.0	0.0	0.0	58.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46
Lane Grp Cap (c), veh/h	283	0	0	0	0	0	0	924
V/C Ratio (X)	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.78
Avail Cap (c_a), veh/h	283	0	0	0	0	0	0	924
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81
Uniform Delay (d1), s/veh	55.9	0.0	0.0	0.0	0.0	0.0	0.0	25.4
Incr Delay (d2), s/veh	1.8	0.0	0.0	0.0	0.0	0.0	0.0	5.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	57.7	0.0	0.0	0.0	0.0	0.0	0.0	30.7
1st-Term Q (Q1), veh/ln	5.3	0.0	0.0	0.0	0.0	0.0	0.0	25.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.0	0.0	0.0	0.0	0.0	1.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	5.5	0.0	0.0	0.0	0.0	0.0	0.0	26.4
%ile Storage Ratio (RQ%)	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.40
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		41.1						
HCM 2010 LOS		D						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	1732	52	87	1303	105	78	20	81	72	7	36
Future Volume (veh/h)	42	1732	52	87	1303	105	78	20	81	72	7	36
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1845	1845	1900	1845	1845
Adj Flow Rate, veh/h	43	1767	57	89	1330	107	80	20	83	73	7	37
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.98	0.98	0.92	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	55	2480	80	77	2391	192	47	12	52	66	6	65
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.71	0.71	0.04	0.72	0.72	0.03	0.03	0.03	0.04	0.04	0.04
Ln Grp Delay, s/veh	90.5	15.0	15.1	215.7	11.4	11.4	447.2	0.0	411.5	209.8	0.0	104.1
Ln Grp LOS	F	B	B	F	B	B	F		F	F		F
Approach Vol, veh/h		1867			1526			183			117	
Approach Delay, s/veh		16.8			23.3			431.0			176.4	
Approach LOS		B			C			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	6	2	3	4			7	8
Case No	11.0	11.0	2.0	4.0			2.0	4.0
Phs Duration (G+Y+Rc), s	13.0	12.0	13.0	115.0			11.2	116.8
Change Period (Y+Rc), s	6.7	6.9	6.4	* 6.6			6.4	* 6.6
Max Green (Gmax), s	6.3	5.1	6.6	* 1.1E2			6.6	* 1.1E2
Max Allow Headway (MAH), s	4.9	4.7	3.8	5.1			3.7	5.1
Max Q Clear (g_c+I1), s	8.3	7.1	8.6	47.9			5.7	30.7
Green Ext Time (g_e), s	0.0	0.0	0.0	49.1			0.0	59.6
Prob of Phs Call (p_c)	1.00	1.00	0.98	1.00			0.84	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.00			1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1	5	3				7	
Mvmt Sat Flow, veh/h	1610	1419	1774				1774	

Through Movement Data								
Assigned Mvmt	6	2		4				8
Mvmt Sat Flow, veh/h	154	355		3500				3319

Right-Turn Movement Data								
Assigned Mvmt	16	12		14				18
Mvmt Sat Flow, veh/h	1568	1568		112				266

Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	7	0
Lane Assignment	L+T	L+T	(Prot)				(Prot)	

Lanes in Grp	1	1	1	0	0	0	1	0
Grp Vol (v), veh/h	80	100	89	0	0	0	43	0
Grp Sat Flow (s), veh/h/ln	1764	1774	1774	0	0	0	1774	0
Q Serve Time (g_s), s	6.3	5.1	6.6	0.0	0.0	0.0	3.7	0.0
Cycle Q Clear Time (g_c), s	6.3	5.1	6.6	0.0	0.0	0.0	3.7	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.91	0.80	1.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	73	59	77	0	0	0	55	0
V/C Ratio (X)	1.10	1.69	1.16	0.00	0.00	0.00	0.78	0.00
Avail Cap (c_a), veh/h	73	59	77	0	0	0	77	0
Upstream Filter (I)	1.00	1.00	0.80	0.00	0.00	0.00	0.56	0.00
Uniform Delay (d1), s/veh	73.4	74.0	73.2	0.0	0.0	0.0	73.6	0.0
Incr Delay (d2), s/veh	135.9	373.2	142.5	0.0	0.0	0.0	16.9	0.0
Initial Q Delay (d3), s/veh	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	209.8	447.2	215.7	0.0	0.0	0.0	90.5	0.0
1st-Term Q (Q1), veh/ln	3.1	2.5	3.2	0.0	0.0	0.0	1.8	0.0
2nd-Term Q (Q2), veh/ln	2.7	6.1	3.0	0.0	0.0	0.0	0.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	5.8	8.6	6.3	0.0	0.0	0.0	2.1	0.0
%ile Storage Ratio (RQ%)	0.30	0.48	0.47	0.00	0.00	0.00	0.29	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	1.8	10.2	3.1	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.4	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	6	2	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	890	0	0	0	707
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	45.1	0.0	0.0	0.0	28.5
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	45.1	0.0	0.0	0.0	28.5
Lane Grp Cap (c), veh/h	0	0	0	1254	0	0	0	1275
V/C Ratio (X)	0.00	0.00	0.00	0.71	0.00	0.00	0.00	0.55
Avail Cap (c_a), veh/h	0	0	0	1254	0	0	0	1275
Upstream Filter (I)	0.00	0.00	0.00	0.56	0.00	0.00	0.00	0.80
Uniform Delay (d1), s/veh	0.0	0.0	0.0	13.1	0.0	0.0	0.0	10.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.9	0.0	0.0	0.0	1.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	15.0	0.0	0.0	0.0	11.4
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	21.7	0.0	0.0	0.0	13.8

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	22.4	0.0	0.0	0.0	14.2
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.32	0.00	0.00	0.00	0.84
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	16	12	0	14	0	0	0	18
Lane Assignment	R	R		T+R				T+R
Lanes in Grp	1	1	0	1	0	0	0	1
Grp Vol (v), veh/h	37	83	0	934	0	0	0	730
Grp Sat Flow (s), veh/h/ln	1568	1568	0	1843	0	0	0	1816
Q Serve Time (g_s), s	3.5	5.1	0.0	45.9	0.0	0.0	0.0	28.7
Cycle Q Clear Time (g_c), s	3.5	5.1	0.0	45.9	0.0	0.0	0.0	28.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	1.00	0.00	0.06	0.00	0.00	0.00	0.15
Lane Grp Cap (c), veh/h	65	52	0	1306	0	0	0	1308
V/C Ratio (X)	0.57	1.59	0.00	0.72	0.00	0.00	0.00	0.56
Avail Cap (c_a), veh/h	65	52	0	1306	0	0	0	1308
Upstream Filter (I)	1.00	1.00	0.00	0.56	0.00	0.00	0.00	0.80
Uniform Delay (d1), s/veh	72.0	73.9	0.0	13.2	0.0	0.0	0.0	10.0
Incr Delay (d2), s/veh	32.1	337.5	0.0	1.9	0.0	0.0	0.0	1.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	104.1	411.5	0.0	15.1	0.0	0.0	0.0	11.4
1st-Term Q (Q1), veh/ln	1.5	2.2	0.0	23.1	0.0	0.0	0.0	14.2
2nd-Term Q (Q2), veh/ln	0.6	4.9	0.0	0.7	0.0	0.0	0.0	0.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	2.1	7.1	0.0	23.8	0.0	0.0	0.0	14.7
%ile Storage Ratio (RQ%)	1.35	1.66	0.00	0.34	0.00	0.00	0.00	0.86
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	7.7	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	45.0
HCM 2010 LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1619	248	308	1190	289	324
Future Volume (veh/h)	1619	248	308	1190	289	324
Number	4	14	3	8	5	12
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)		1.00	1.00		1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1845	1845
Adj Flow Rate, veh/h	1686	258	321	1240	301	338
Adj No. of Lanes	2	0	1	2	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	3	3
Opposing Right Turn Influence			Yes		Yes	
Cap, veh/h	1806	269	219	2641	310	277
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.58	0.58	0.12	0.75	0.18	0.18
Ln Grp Delay, s/veh	40.5	46.7	300.5	8.7	112.3	196.0
Ln Grp LOS	D	D	F	A	F	F
Approach Vol, veh/h	1944			1561	639	
Approach Delay, s/veh	43.7			68.7	156.6	
Approach LOS	D			E	F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Case No		9.0	2.0	8.0				4.0
Phs Duration (G+Y+Rc), s		36.0	27.0	104.0				131.0
Change Period (Y+Rc), s		6.5	6.4	6.4				6.4
Max Green (Gmax), s		29.5	20.6	97.6				124.6
Max Allow Headway (MAH), s		3.9	3.8	5.3				5.3
Max Q Clear (g_c+I1), s		31.5	22.6	90.2				24.9
Green Ext Time (g_e), s		0.0	0.0	7.2				75.9
Prob of Phs Call (p_c)		1.00	1.00	1.00				1.00
Prob of Max Out (p_x)		0.00	1.00	0.00				0.00

Left-Turn Movement Data			
Assigned Mvmt	5	3	7
Mvmt Sat Flow, veh/h	1757	1774	0

Through Movement Data			
Assigned Mvmt	2	4	8
Mvmt Sat Flow, veh/h	0	3183	3632

Right-Turn Movement Data			
Assigned Mvmt	12	14	18
Mvmt Sat Flow, veh/h	1568	461	0

Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	0	0	0
Lane Assignment			(Prot)					

Lanes in Grp	0	1	1	0	0	0	0	0
Grp Vol (v), veh/h	0	301	321	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1757	1774	0	0	0	0	0
Q Serve Time (g_s), s	0.0	28.4	20.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	28.4	20.6	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1757	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	97.6	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	310	219	0	0	0	0	0
V/C Ratio (X)	0.00	0.97	1.47	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	310	219	0	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.72	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	68.3	73.2	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	44.0	227.3	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	112.3	300.5	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	13.8	10.1	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	3.8	13.8	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	17.6	23.9	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.73	2.64	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	25.5	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	2
Grp Vol (v), veh/h	0	0	0	947	0	0	0	1240
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	79.9	0.0	0.0	0.0	22.9
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	79.9	0.0	0.0	0.0	22.9
Lane Grp Cap (c), veh/h	0	0	0	1034	0	0	0	2641
V/C Ratio (X)	0.00	0.00	0.00	0.92	0.00	0.00	0.00	0.47
Avail Cap (c_a), veh/h	0	0	0	1034	0	0	0	2641
Upstream Filter (I)	0.00	0.00	0.00	0.62	0.00	0.00	0.00	0.72
Uniform Delay (d1), s/veh	0.0	0.0	0.0	31.0	0.0	0.0	0.0	8.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	9.4	0.0	0.0	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	40.5	0.0	0.0	0.0	8.7
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	38.9	0.0	0.0	0.0	11.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	2.7	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	41.6	0.0	0.0	0.0	11.2
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	2.45	0.00	0.00	0.00	0.29
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	0	0	18
Lane Assignment		R		T+R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	338	0	997	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1568	0	1781	0	0	0	0
Q Serve Time (g_s), s	0.0	29.5	0.0	88.2	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	29.5	0.0	88.2	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.26	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	277	0	1041	0	0	0	0
V/C Ratio (X)	0.00	1.22	0.00	0.96	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	277	0	1041	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.62	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	68.8	0.0	32.7	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	127.2	0.0	14.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	196.0	0.0	46.7	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	12.8	0.0	43.2	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	9.8	0.0	4.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	22.6	0.0	47.2	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.94	0.00	2.78	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	15.3	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		70.5						
HCM 2010 LOS		E						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	1714	316	104	1402	22	125	4	84	14	4	25
Future Volume (veh/h)	48	1714	316	104	1402	22	125	4	84	14	4	25
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1900	1900	1845	1900
Adj Flow Rate, veh/h	51	1804	333	109	1476	23	132	4	88	15	4	26
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	55	2203	394	55	2619	41	300	14	302	104	37	153
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.73	0.73	0.03	0.73	0.73	0.20	0.20	0.20	0.20	0.20	0.20
Ln Grp Delay, s/veh	119.3	15.2	16.9	564.9	11.1	11.0	63.1	0.0	57.0	54.1	0.0	0.0
Ln Grp LOS	F	B	B	F	B	B	E		E	D		
Approach Vol, veh/h		2188			1608			224			45	
Approach Delay, s/veh		18.5			48.6			60.6			54.1	
Approach LOS		B			D			E			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		6.0	2.0	4.0		8.0	2.0	4.0
Phs Duration (G+Y+Rc), s		39.0	11.4	125.0		39.0	11.4	125.0
Change Period (Y+Rc), s		* 6.8	6.4	6.4		* 6.8	6.4	6.4
Max Green (Gmax), s		* 32	5.0	104.6		* 32	5.0	104.6
Max Allow Headway (MAH), s		4.7	3.8	5.3		4.7	3.8	5.3
Max Q Clear (g_c+I1), s		18.0	7.0	71.8		10.1	6.6	32.3
Green Ext Time (g_e), s		1.0	0.0	31.2		1.2	0.0	65.3
Prob of Phs Call (p_c)		1.00	0.99	1.00		1.00	0.90	1.00
Prob of Max Out (p_x)		0.00	1.00	0.00		0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		1361	1774			371	1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		69		3000		187		3567

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1510		537		763		56

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0
Lane Assignment			(Prot)			L+T+R	(Prot)	

Lanes in Grp	0	1	1	0	0	1	1	0
Grp Vol (v), veh/h	0	132	109	0	0	45	51	0
Grp Sat Flow (s), veh/h/ln	0	1361	1774	0	0	1321	1774	0
Q Serve Time (g_s), s	0.0	7.9	5.0	0.0	0.0	0.1	4.6	0.0
Cycle Q Clear Time (g_c), s	0.0	16.0	5.0	0.0	0.0	8.1	4.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1361	0	0	0	1325	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	1028	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	32.2	0.0	0.0	0.0	32.2	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	24.1	0.0	0.0	0.0	24.2	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	7.9	0.0	0.0	0.0	0.1	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	3.6	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	0.00	0.33	1.00	0.00
Lane Grp Cap (c), veh/h	0	300	55	0	0	294	55	0
V/C Ratio (X)	0.00	0.44	1.98	0.00	0.00	0.15	0.93	0.00
Avail Cap (c_a), veh/h	0	300	55	0	0	294	55	0
Upstream Filter (I)	0.00	1.00	0.78	0.00	0.00	1.00	0.26	0.00
Uniform Delay (d1), s/veh	0.0	58.4	78.0	0.0	0.0	53.0	77.8	0.0
Incr Delay (d2), s/veh	0.0	4.6	486.9	0.0	0.0	1.1	41.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	63.1	564.9	0.0	0.0	54.1	119.3	0.0
1st-Term Q (Q1), veh/ln	0.0	5.3	2.4	0.0	0.0	1.7	2.3	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	7.5	0.0	0.0	0.1	0.6	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	5.7	9.9	0.0	0.0	1.7	2.9	0.0
%ile Storage Ratio (RQ%)	0.00	0.66	1.05	0.00	0.00	0.14	0.39	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	13.5	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	1041	0	0	0	732
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	61.2	0.0	0.0	0.0	30.2
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	61.2	0.0	0.0	0.0	30.2
Lane Grp Cap (c), veh/h	0	0	0	1299	0	0	0	1299
V/C Ratio (X)	0.00	0.00	0.00	0.80	0.00	0.00	0.00	0.56
Avail Cap (c_a), veh/h	0	0	0	1299	0	0	0	1299
Upstream Filter (I)	0.00	0.00	0.00	0.26	0.00	0.00	0.00	0.78
Uniform Delay (d1), s/veh	0.0	0.0	0.0	13.8	0.0	0.0	0.0	9.7
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.4	0.0	0.0	0.0	1.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	15.2	0.0	0.0	0.0	11.1
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	29.5	0.0	0.0	0.0	14.6

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	30.0	0.0	0.0	0.0	15.1
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.97	0.00	0.00	0.00	0.22
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R				T+R
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	92	0	1096	0	0	0	767
Grp Sat Flow (s), veh/h/ln	0	1578	0	1768	0	0	0	1853
Q Serve Time (g_s), s	0.0	8.0	0.0	69.8	0.0	0.0	0.0	30.3
Cycle Q Clear Time (g_c), s	0.0	8.0	0.0	69.8	0.0	0.0	0.0	30.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.96	0.00	0.30	0.00	0.58	0.00	0.03
Lane Grp Cap (c), veh/h	0	316	0	1298	0	0	0	1360
V/C Ratio (X)	0.00	0.29	0.00	0.84	0.00	0.00	0.00	0.56
Avail Cap (c_a), veh/h	0	316	0	1298	0	0	0	1360
Upstream Filter (I)	0.00	1.00	0.00	0.26	0.00	0.00	0.00	0.78
Uniform Delay (d1), s/veh	0.0	54.7	0.0	15.0	0.0	0.0	0.0	9.7
Incr Delay (d2), s/veh	0.0	2.3	0.0	1.9	0.0	0.0	0.0	1.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	57.0	0.0	16.9	0.0	0.0	0.0	11.0
1st-Term Q (Q1), veh/ln	0.0	3.5	0.0	33.5	0.0	0.0	0.0	15.3
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.7	0.0	0.0	0.0	0.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	3.7	0.0	34.2	0.0	0.0	0.0	15.8
%ile Storage Ratio (RQ%)	0.00	0.33	0.00	1.10	0.00	0.00	0.00	0.23
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	33.1
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	1572	268	306	1430	6	203	0	238	4	5	5
Future Volume (veh/h)	7	1572	268	306	1430	6	203	0	238	4	5	5
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1845	1900	1845	1900
Adj Flow Rate, veh/h	7	1638	279	319	1490	6	211	0	248	4	5	5
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	0	1	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	256	1920	318	280	2782	11	290	326	277	90	111	96
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.63	0.63	0.63	0.11	0.77	0.77	0.18	0.00	0.18	0.18	0.18	0.18
Ln Grp Delay, s/veh	13.1	25.7	27.6	123.5	7.7	7.7	81.2	0.0	100.0	57.4	0.0	0.0
Ln Grp LOS	B	C	C	F	A	A	F		F	E		
Approach Vol, veh/h		1924			1815			459			14	
Approach Delay, s/veh		26.6			28.0			91.4			57.4	
Approach LOS		C			C			F			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Case No		5.0	1.2	6.0		8.0		4.0
Phs Duration (G+Y+Rc), s		34.0	23.0	110.0		34.0		133.0
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5		4.5
Max Green (Gmax), s		29.5	18.5	105.5		29.5		128.5
Max Allow Headway (MAH), s		4.0	3.8	5.3		4.0		5.3
Max Q Clear (g_c+I1), s		27.8	20.5	78.2		3.1		29.0
Green Ext Time (g_e), s		0.3	0.0	25.6		1.6		80.3
Prob of Phs Call (p_c)		1.00	1.00	1.00		1.00		1.00
Prob of Max Out (p_x)		0.00	1.00	0.00		0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3	7		1		
Mvmt Sat Flow, veh/h		1385	1774	350		351		

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1845		3039		626		3615

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		504		543		15

Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	1	0	0
Lane Assignment			(Pr/Pm)			L+T+R		

Lanes in Grp	0	1	1	1	0	1	0	0
Grp Vol (v), veh/h	0	211	319	7	0	14	0	0
Grp Sat Flow (s), veh/h/ln	0	1385	1774	350	0	1520	0	0
Q Serve Time (g_s), s	0.0	23.2	18.5	1.3	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	24.3	18.5	5.3	0.0	1.1	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1385	233	350	0	1150	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	1757	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	29.5	107.5	105.5	0.0	29.5	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	28.4	29.3	101.5	0.0	29.5	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	23.2	29.3	1.3	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	1.00	0.00	0.29	0.00	0.00
Lane Grp Cap (c), veh/h	0	290	280	256	0	296	0	0
V/C Ratio (X)	0.00	0.73	1.14	0.03	0.00	0.05	0.00	0.00
Avail Cap (c_a), veh/h	0	290	280	256	0	296	0	0
Upstream Filter (I)	0.00	1.00	0.09	0.21	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	66.5	57.1	13.1	0.0	57.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	14.7	66.4	0.0	0.0	0.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	81.2	123.5	13.1	0.0	57.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	9.4	12.9	0.1	0.0	0.5	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.2	5.2	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	10.6	18.1	0.1	0.0	0.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.94	1.44	0.01	0.00	0.05	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	9.6	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T				T
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	935	0	0	0	729
Grp Sat Flow (s), veh/h/ln	0	1845	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	68.9	0.0	0.0	0.0	27.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	68.9	0.0	0.0	0.0	27.0
Lane Grp Cap (c), veh/h	0	326	0	1118	0	0	0	1362
V/C Ratio (X)	0.00	0.00	0.00	0.84	0.00	0.00	0.00	0.54
Avail Cap (c_a), veh/h	0	326	0	1118	0	0	0	1362
Upstream Filter (I)	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	0.0	0.0	24.0	0.0	0.0	0.0	7.5
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	25.7	0.0	0.0	0.0	7.7
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	33.5	0.0	0.0	0.0	13.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	34.0	0.0	0.0	0.0	13.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.49	0.00	0.00	0.00	0.34
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R				T+R
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	248	0	982	0	0	0	767
Grp Sat Flow (s), veh/h/ln	0	1568	0	1774	0	0	0	1860
Q Serve Time (g_s), s	0.0	25.8	0.0	76.2	0.0	0.0	0.0	27.0
Cycle Q Clear Time (g_c), s	0.0	25.8	0.0	76.2	0.0	0.0	0.0	27.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.28	0.00	0.36	0.00	0.01
Lane Grp Cap (c), veh/h	0	277	0	1121	0	0	0	1431
V/C Ratio (X)	0.00	0.90	0.00	0.88	0.00	0.00	0.00	0.54
Avail Cap (c_a), veh/h	0	277	0	1121	0	0	0	1431
Upstream Filter (I)	0.00	1.00	0.00	0.21	0.00	0.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	67.2	0.0	25.4	0.0	0.0	0.0	7.6
Incr Delay (d2), s/veh	0.0	32.8	0.0	2.3	0.0	0.0	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	100.0	0.0	27.6	0.0	0.0	0.0	7.7
1st-Term Q (Q1), veh/ln	0.0	11.2	0.0	37.1	0.0	0.0	0.0	13.6
2nd-Term Q (Q2), veh/ln	0.0	2.5	0.0	0.7	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	13.7	0.0	37.8	0.0	0.0	0.0	13.7
%ile Storage Ratio (RQ%)	0.00	1.11	0.00	0.54	0.00	0.00	0.00	0.36
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		34.4						
HCM 2010 LOS		C						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	62	1824	0	27	1800	182	0	0	33	126	0	40
Future Volume (veh/h)	62	1824	0	27	1800	182	0	0	33	126	0	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	0	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	63	1861	0	28	1837	186	0	0	34	129	0	41
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	1	1	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	0	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			No			Yes		
Cap, veh/h	96	1259	0	55	1081	108	0	0	470	506	0	470
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.36	0.00	0.03	0.33	0.33	0.00	0.00	0.30	0.30	0.00	0.30
Ln Grp Delay, s/veh	31.1	236.6	0.0	35.7	331.2	354.6	0.0	0.0	15.3	18.2	0.0	15.5
Ln Grp LOS	C	F		D	F	F			B	B		B
Approach Vol, veh/h		1924			2051			34			170	
Approach Delay, s/veh		229.9			339.0			15.3			17.5	
Approach LOS		F			F			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		8.0	2.0	4.0		6.0	2.0	4.0
Phs Duration (G+Y+Rc), s		24.0	8.3	27.7		24.0	9.7	26.3
Change Period (Y+Rc), s		6.0	6.4	6.4		6.0	6.4	6.4
Max Green (Gmax), s		18.0	5.0	18.6		18.0	5.0	18.6
Max Allow Headway (MAH), s		4.5	3.8	5.3		4.5	3.8	5.3
Max Q Clear (g_c+I1), s		2.9	2.9	23.3		7.4	4.1	21.9
Green Ext Time (g_e), s		0.7	0.0	0.0		0.5	0.0	0.0
Prob of Phs Call (p_c)		1.00	0.37	1.00		1.00	0.65	1.00
Prob of Max Out (p_x)		0.00	1.00	0.00		0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		0	1774			1356	1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		0		3632		0		3251

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		0		1568		324

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0
Lane Assignment			(Prot)				(Prot)	

Lanes in Grp	0	0	1	0	0	1	1	0
Grp Vol (v), veh/h	0	0	28	0	0	129	63	0
Grp Sat Flow (s), veh/h/ln	0	0	1774	0	0	1356	1774	0
Q Serve Time (g_s), s	0.0	0.0	0.9	0.0	0.0	4.5	2.1	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.9	0.0	0.0	5.4	2.1	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	1356	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	18.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	17.1	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	4.5	0.0	0.0
Time to First Blk (g_f), s	0.0	18.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	55	0	0	506	96	0
V/C Ratio (X)	0.00	0.00	0.51	0.00	0.00	0.26	0.66	0.00
Avail Cap (c_a), veh/h	0	0	148	0	0	506	148	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	1.00	0.43	0.00
Uniform Delay (d1), s/veh	0.0	0.0	28.6	0.0	0.0	17.0	27.8	0.0
Incr Delay (d2), s/veh	0.0	0.0	7.1	0.0	0.0	1.2	3.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	35.7	0.0	0.0	18.2	31.1	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.5	0.0	0.0	1.7	1.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.1	0.0	0.0	0.2	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.6	0.0	0.0	1.9	1.1	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.08	0.00	0.00	0.32	0.16	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	1
Grp Vol (v), veh/h	0	0	0	1861	0	0	0	986
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	21.3	0.0	0.0	0.0	19.9
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	21.3	0.0	0.0	0.0	19.9
Lane Grp Cap (c), veh/h	0	0	0	1259	0	0	0	588
V/C Ratio (X)	0.00	0.00	0.00	1.48	0.00	0.00	0.00	1.68
Avail Cap (c_a), veh/h	0	0	0	1259	0	0	0	588
Upstream Filter (I)	0.00	0.00	0.00	0.43	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	19.3	0.0	0.0	0.0	20.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	217.3	0.0	0.0	0.0	311.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	236.6	0.0	0.0	0.0	331.2
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	10.3	0.0	0.0	0.0	9.6

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	38.0	0.0	0.0	0.0	50.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	48.3	0.0	0.0	0.0	60.5
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	1.26	0.00	0.00	0.00	4.99
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	150.6	0.0	0.0	0.0	99.3
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.4
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R				T+R		T+R
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	34	0	0	0	41	0	1037
Grp Sat Flow (s), veh/h/ln	0	1568	0	0	0	1568	0	1806
Q Serve Time (g_s), s	0.0	0.9	0.0	0.0	0.0	1.1	0.0	19.9
Cycle Q Clear Time (g_c), s	0.0	0.9	0.0	0.0	0.0	1.1	0.0	19.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.18
Lane Grp Cap (c), veh/h	0	470	0	0	0	470	0	600
V/C Ratio (X)	0.00	0.07	0.00	0.00	0.00	0.09	0.00	1.73
Avail Cap (c_a), veh/h	0	470	0	0	0	470	0	600
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	15.0	0.0	0.0	0.0	15.1	0.0	20.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.0	0.0	0.4	0.0	334.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	15.3	0.0	0.0	0.0	15.5	0.0	354.6
1st-Term Q (Q1), veh/ln	0.0	0.4	0.0	0.0	0.0	0.5	0.0	9.8
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.4	0.0	0.0	0.0	0.5	0.0	65.6
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.00	0.00	0.04	0.00	5.41
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	109.3
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
Intersection Summary								
HCM 2010 Ctrl Delay		273.1						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	552	1115	258	413	968	136	374	1197	365	293	1146	548
Future Volume (veh/h)	552	1115	258	413	968	136	374	1197	365	293	1146	548
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	587	1186	274	439	1030	145	398	1273	388	312	1219	583
Adj No. of Lanes	2	3	0	2	3	0	2	3	0	2	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	522	1090	252	463	1111	156	353	1070	325	370	955	446
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.15	0.26	0.26	0.13	0.25	0.25	0.10	0.28	0.28	0.11	0.28	0.28
Ln Grp Delay, s/veh	127.4	99.8	111.3	79.0	60.3	71.3	139.6	137.9	148.2	64.3	174.0	195.1
Ln Grp LOS	F	F	F	E	E	E	F	F	F	E	F	F
Approach Vol, veh/h		2047			1614			2059			2114	
Approach Delay, s/veh		110.4			68.1			140.9			163.6	
Approach LOS		F			E			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	4.0
Phs Duration (G+Y+Rc), s	18.6	38.4	22.0	37.0	18.0	39.0	24.0	35.0
Change Period (Y+Rc), s	6.0	6.0	6.4	6.4	6.0	6.0	6.4	6.4
Max Green (Gmax), s	14.0	31.0	15.6	30.6	12.0	33.0	17.6	28.6
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.3	3.8	5.3	3.8	5.3
Max Q Clear (g_c+I1), s	12.4	34.4	16.7	32.6	14.0	35.0	19.6	27.9
Green Ext Time (g_e), s	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.6
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3408		3442		3408		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3831		4130		3357		4508

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1165		954		1568		633

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	312	0	439	0	398	0	587	0
Grp Sat Flow (s), veh/h/ln	1704	0	1721	0	1704	0	1721	0
Q Serve Time (g_s), s	10.4	0.0	14.7	0.0	12.0	0.0	17.6	0.0
Cycle Q Clear Time (g_c), s	10.4	0.0	14.7	0.0	12.0	0.0	17.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	370	0	463	0	353	0	522	0
V/C Ratio (X)	0.84	0.00	0.95	0.00	1.13	0.00	1.12	0.00
Avail Cap (c_a), veh/h	411	0	463	0	353	0	522	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	50.7	0.0	49.8	0.0	52.0	0.0	49.2	0.0
Incr Delay (d2), s/veh	13.5	0.0	29.2	0.0	87.6	0.0	78.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	64.3	0.0	79.0	0.0	139.6	0.0	127.4	0.0
1st-Term Q (Q1), veh/ln	4.9	0.0	7.0	0.0	5.6	0.0	8.3	0.0
2nd-Term Q (Q2), veh/ln	0.7	0.0	1.9	0.0	4.3	0.0	5.7	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	5.6	0.0	8.8	0.0	9.9	0.0	14.0	0.0
%ile Storage Ratio (RQ%)	0.45	0.00	1.32	0.00	0.79	0.00	1.19	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	11.4	0.0	16.2	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.3	0.0	0.3	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	2	0	2
Grp Vol (v), veh/h	0	1115	0	973	0	1219	0	774
Grp Sat Flow (s), veh/h/ln	0	1679	0	1695	0	1679	0	1695
Q Serve Time (g_s), s	0.0	32.4	0.0	30.6	0.0	33.0	0.0	25.9
Cycle Q Clear Time (g_c), s	0.0	32.4	0.0	30.6	0.0	33.0	0.0	25.9
Lane Grp Cap (c), veh/h	0	937	0	894	0	955	0	836
V/C Ratio (X)	0.00	1.19	0.00	1.09	0.00	1.28	0.00	0.93
Avail Cap (c_a), veh/h	0	937	0	894	0	955	0	836
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	41.8	0.0	42.7	0.0	41.5	0.0	42.7
Incr Delay (d2), s/veh	0.0	96.1	0.0	57.1	0.0	132.5	0.0	17.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	137.9	0.0	99.8	0.0	174.0	0.0	60.3
1st-Term Q (Q1), veh/ln	0.0	15.0	0.0	14.3	0.0	15.3	0.0	12.0

2nd-Term Q (Q2), veh/ln	0.0	12.5	0.0	7.1	0.0	17.6	0.0	2.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	27.5	0.0	21.4	0.0	32.8	0.0	14.1
%ile Storage Ratio (RQ%)	0.00	1.54	0.00	0.86	0.00	1.26	0.00	2.24
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	44.5	0.0	19.8	0.0	66.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.3	0.0	0.3	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	546	0	487	0	583	0	401
Grp Sat Flow (s), veh/h/ln	0	1639	0	1694	0	1568	0	1751
Q Serve Time (g_s), s	0.0	32.4	0.0	30.6	0.0	33.0	0.0	25.9
Cycle Q Clear Time (g_c), s	0.0	32.4	0.0	30.6	0.0	33.0	0.0	25.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.71	0.00	0.56	0.00	1.00	0.00	0.36
Lane Grp Cap (c), veh/h	0	458	0	447	0	446	0	432
V/C Ratio (X)	0.00	1.19	0.00	1.09	0.00	1.31	0.00	0.93
Avail Cap (c_a), veh/h	0	458	0	447	0	446	0	432
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	41.8	0.0	42.7	0.0	41.5	0.0	42.7
Incr Delay (d2), s/veh	0.0	106.3	0.0	68.6	0.0	153.6	0.0	28.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	148.2	0.0	111.3	0.0	195.1	0.0	71.3
1st-Term Q (Q1), veh/ln	0.0	14.6	0.0	14.3	0.0	14.2	0.0	12.6
2nd-Term Q (Q2), veh/ln	0.0	13.5	0.0	8.5	0.0	19.0	0.0	3.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	28.1	0.0	22.8	0.0	33.3	0.0	16.0
%ile Storage Ratio (RQ%)	0.00	1.57	0.00	0.91	0.00	1.27	0.00	2.54
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	22.0	0.0	9.9	0.0	34.2	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.3	0.0	0.3	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		124.1						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	192	1500	51	0	1388	159	148	56	4	109	42	83
Future Volume (veh/h)	192	1500	51	0	1388	159	148	56	4	109	42	83
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	0	1863	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	198	1546	53	0	1431	164	153	58	4	112	43	86
Adj No. of Lanes	1	2	0	0	2	0	1	1	1	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	0	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			No			Yes			Yes		
Cap, veh/h	96	2391	82	0	1906	217	49	337	286	49	337	286
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.68	0.68	0.00	0.59	0.59	0.03	0.18	0.18	0.03	0.18	0.18
Ln Grp Delay, s/veh	599.4	18.5	18.5	0.0	31.1	31.6	1082.7	62.5	59.7	716.9	61.7	65.6
Ln Grp LOS	F	B	B		C	C	F	E	E	F	E	E
Approach Vol, veh/h		1797			1595			215			241	
Approach Delay, s/veh		82.5			31.3			788.5			367.6	
Approach LOS		F			C			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6	7	8
Case No	2.0	3.0		4.0	2.0	3.0	2.0	8.0
Phs Duration (G+Y+Rc), s	10.7	39.0		128.3	10.7	39.0	16.0	112.3
Change Period (Y+Rc), s	* 5.7	6.5		6.4	* 5.7	6.5	6.4	6.4
Max Green (Gmax), s	* 5	32.5		121.6	* 5	32.5	9.6	105.6
Max Allow Headway (MAH), s	3.8	4.7		5.3	3.8	4.7	3.8	5.3
Max Q Clear (g_c+I1), s	7.0	6.7		46.8	7.0	10.4	11.6	61.0
Green Ext Time (g_e), s	0.0	0.8		58.3	0.0	0.8	0.0	38.1
Prob of Phs Call (p_c)	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	0.00	0.00		0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1				5		7	3
Mvmt Sat Flow, veh/h	1757				1757		1774	0

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1845		3492		1845		3297

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		119		1568		364

Left Lane Group Data								
Assigned Mvmt	1	0	0	0	5	0	7	3
Lane Assignment	(Prot)				(Prot)		(Prot)	

Lanes in Grp	1	0	0	0	1	0	1	0
Grp Vol (v), veh/h	112	0	0	0	153	0	198	0
Grp Sat Flow (s), veh/h/ln	1757	0	0	0	1757	0	1774	0
Q Serve Time (g_s), s	5.0	0.0	0.0	0.0	5.0	0.0	9.6	0.0
Cycle Q Clear Time (g_c), s	5.0	0.0	0.0	0.0	5.0	0.0	9.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	105.9
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	49	0	0	0	49	0	96	0
V/C Ratio (X)	2.27	0.00	0.00	0.00	3.10	0.00	2.07	0.00
Avail Cap (c_a), veh/h	49	0	0	0	49	0	96	0
Upstream Filter (I)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	86.5	0.0	0.0	0.0	86.5	0.0	84.2	0.0
Incr Delay (d2), s/veh	630.4	0.0	0.0	0.0	996.2	0.0	515.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	716.9	0.0	0.0	0.0	1082.7	0.0	599.4	0.0
1st-Term Q (Q1), veh/ln	2.4	0.0	0.0	0.0	2.4	0.0	4.7	0.0
2nd-Term Q (Q2), veh/ln	8.6	0.0	0.0	0.0	13.7	0.0	13.7	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	11.1	0.0	0.0	0.0	16.1	0.0	18.4	0.0
%ile Storage Ratio (RQ%)	2.83	0.00	0.00	0.00	2.94	0.00	1.11	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	15.7	0.0	0.0	0.0	25.9	0.0	25.6	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.6	0.0	0.0	0.0	0.8	0.0	0.5	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	58	0	782	0	43	0	785
Grp Sat Flow (s), veh/h/ln	0	1845	0	1770	0	1845	0	1770
Q Serve Time (g_s), s	0.0	4.7	0.0	44.4	0.0	3.5	0.0	57.5
Cycle Q Clear Time (g_c), s	0.0	4.7	0.0	44.4	0.0	3.5	0.0	57.5
Lane Grp Cap (c), veh/h	0	337	0	1212	0	337	0	1053
V/C Ratio (X)	0.00	0.17	0.00	0.65	0.00	0.13	0.00	0.75
Avail Cap (c_a), veh/h	0	337	0	1212	0	337	0	1053
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	61.4	0.0	15.8	0.0	60.9	0.0	26.3
Incr Delay (d2), s/veh	0.0	1.1	0.0	2.7	0.0	0.8	0.0	4.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	62.5	0.0	18.5	0.0	61.7	0.0	31.1
1st-Term Q (Q1), veh/ln	0.0	2.4	0.0	21.5	0.0	1.8	0.0	27.9

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.9	0.0	0.1	0.0	1.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.5	0.0	22.4	0.0	1.8	0.0	29.3
%ile Storage Ratio (RQ%)	0.00	0.25	0.00	0.26	0.00	0.10	0.00	0.58
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	4	0	817	0	86	0	810
Grp Sat Flow (s), veh/h/ln	0	1568	0	1842	0	1568	0	1798
Q Serve Time (g_s), s	0.0	0.4	0.0	44.8	0.0	8.4	0.0	59.0
Cycle Q Clear Time (g_c), s	0.0	0.4	0.0	44.8	0.0	8.4	0.0	59.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.06	0.00	1.00	0.00	0.20
Lane Grp Cap (c), veh/h	0	286	0	1261	0	286	0	1070
V/C Ratio (X)	0.00	0.01	0.00	0.65	0.00	0.30	0.00	0.76
Avail Cap (c_a), veh/h	0	286	0	1261	0	286	0	1070
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	59.6	0.0	15.9	0.0	62.9	0.0	26.6
Incr Delay (d2), s/veh	0.0	0.1	0.0	2.6	0.0	2.7	0.0	5.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	59.7	0.0	18.5	0.0	65.6	0.0	31.6
1st-Term Q (Q1), veh/ln	0.0	0.2	0.0	22.7	0.0	7.7	0.0	29.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.9	0.0	0.2	0.0	1.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.2	0.0	23.6	0.0	7.9	0.0	30.7
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.28	0.00	0.42	0.00	0.61
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	118.6
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	476	935	192	283	797	283	485	1953	259	434	1216	254
Future Volume (veh/h)	476	935	192	283	797	283	485	1953	259	434	1216	254
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	486	954	196	289	813	289	495	1993	264	443	1241	259
Adj No. of Lanes	2	3	0	2	3	1	2	3	0	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	327	855	175	159	779	243	533	2016	264	489	1813	378
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.10	0.20	0.20	0.05	0.15	0.15	0.16	0.45	0.45	0.14	0.43	0.43
Ln Grp Delay, s/veh	308.0	135.8	150.0	467.3	113.5	188.7	90.4	64.6	77.9	86.8	40.0	42.5
Ln Grp LOS	F	F	F	F	F	F	F	E	F	F	D	D
Approach Vol, veh/h		1636			1391			2752			1943	
Approach Delay, s/veh		190.3			202.6			73.0			51.3	
Approach LOS		F			F			E			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	30.3	80.1	14.0	39.5	32.5	78.0	22.0	31.5
Change Period (Y+Rc), s	6.8	6.8	6.4	6.4	6.8	6.8	6.4	6.4
Max Green (Gmax), s	26.2	71.2	7.6	32.6	26.2	71.2	15.6	24.6
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.1	3.8	5.3	3.8	5.1
Max Q Clear (g_c+I1), s	23.0	75.3	9.6	35.1	25.5	41.2	17.6	27.1
Green Ext Time (g_e), s	0.6	0.0	0.0	0.0	0.2	28.4	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3408		3442		3408		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		4508		4233		4177		5085

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		590		867		872		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	443	0	289	0	495	0	486	0
Grp Sat Flow (s), veh/h/ln	1704	0	1721	0	1704	0	1721	0
Q Serve Time (g_s), s	21.0	0.0	7.6	0.0	23.5	0.0	15.6	0.0
Cycle Q Clear Time (g_c), s	21.0	0.0	7.6	0.0	23.5	0.0	15.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	489	0	159	0	533	0	327	0
V/C Ratio (X)	0.91	0.00	1.81	0.00	0.93	0.00	1.48	0.00
Avail Cap (c_a), veh/h	544	0	159	0	544	0	327	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	69.1	0.0	78.2	0.0	68.3	0.0	74.2	0.0
Incr Delay (d2), s/veh	17.6	0.0	389.1	0.0	22.2	0.0	233.8	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	86.8	0.0	467.3	0.0	90.4	0.0	308.0	0.0
1st-Term Q (Q1), veh/ln	9.9	0.0	3.6	0.0	11.1	0.0	7.4	0.0
2nd-Term Q (Q2), veh/ln	1.2	0.0	8.6	0.0	1.6	0.0	10.6	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	11.1	0.0	12.2	0.0	12.7	0.0	18.0	0.0
%ile Storage Ratio (RQ%)	0.49	0.00	0.63	0.00	0.81	0.00	0.92	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	32.4	0.0	0.0	0.0	39.7	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.5	0.0	0.0	0.0	0.4	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	2	0	3
Grp Vol (v), veh/h	0	1478	0	764	0	998	0	813
Grp Sat Flow (s), veh/h/ln	0	1679	0	1695	0	1679	0	1695
Q Serve Time (g_s), s	0.0	71.3	0.0	33.1	0.0	39.2	0.0	25.1
Cycle Q Clear Time (g_c), s	0.0	71.3	0.0	33.1	0.0	39.2	0.0	25.1
Lane Grp Cap (c), veh/h	0	1501	0	685	0	1458	0	779
V/C Ratio (X)	0.00	0.98	0.00	1.11	0.00	0.68	0.00	1.04
Avail Cap (c_a), veh/h	0	1501	0	685	0	1458	0	779
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	44.8	0.0	65.4	0.0	37.4	0.0	69.4
Incr Delay (d2), s/veh	0.0	19.8	0.0	70.4	0.0	2.6	0.0	44.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	64.6	0.0	135.8	0.0	40.0	0.0	113.5
1st-Term Q (Q1), veh/ln	0.0	33.0	0.0	15.5	0.0	18.2	0.0	11.8

2nd-Term Q (Q2), veh/ln	0.0	4.1	0.0	6.7	0.0	0.5	0.0	3.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	37.2	0.0	22.2	0.0	18.7	0.0	14.9
%ile Storage Ratio (RQ%)	0.00	1.69	0.00	1.05	0.00	0.72	0.00	0.25
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	19.6	0.0	0.0	0.0	8.4
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	779	0	386	0	502	0	289
Grp Sat Flow (s), veh/h/ln	0	1741	0	1710	0	1691	0	1583
Q Serve Time (g_s), s	0.0	73.3	0.0	33.1	0.0	39.2	0.0	25.1
Cycle Q Clear Time (g_c), s	0.0	73.3	0.0	33.1	0.0	39.2	0.0	25.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.34	0.00	0.51	0.00	0.52	0.00	1.00
Lane Grp Cap (c), veh/h	0	778	0	345	0	734	0	243
V/C Ratio (X)	0.00	1.00	0.00	1.12	0.00	0.68	0.00	1.19
Avail Cap (c_a), veh/h	0	778	0	345	0	734	0	243
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	45.3	0.0	65.4	0.0	37.4	0.0	69.4
Incr Delay (d2), s/veh	0.0	32.6	0.0	84.5	0.0	5.1	0.0	119.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	77.9	0.0	150.0	0.0	42.5	0.0	188.7
1st-Term Q (Q1), veh/ln	0.0	35.2	0.0	15.6	0.0	18.3	0.0	11.0
2nd-Term Q (Q2), veh/ln	0.0	7.0	0.0	8.1	0.0	1.0	0.0	8.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	42.3	0.0	23.8	0.0	19.3	0.0	19.0
%ile Storage Ratio (RQ%)	0.00	1.92	0.00	1.12	0.00	0.75	0.00	0.68
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.3	0.0	10.3	0.0	0.0	0.0	11.6
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.3
Intersection Summary								
HCM 2010 Ctrl Delay		115.7						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	1268	234	335	1045	148	76	61	151	168	72	60
Future Volume (veh/h)	56	1268	234	335	1045	148	76	61	151	168	72	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1900	1712	1712	1712	1776	1776	1900	1776	1776	1776
Adj Flow Rate, veh/h	59	1335	246	353	1100	156	80	64	159	177	76	63
Adj No. of Lanes	2	3	0	2	3	1	1	2	0	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	11	11	11	11	11	11	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	90	1431	264	90	1686	525	101	679	608	234	1398	626
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.36	0.36	0.03	0.36	0.36	0.06	0.40	0.40	0.07	0.41	0.41
Ln Grp Delay, s/veh	84.0	57.1	65.9	1415.4	38.6	32.6	78.3	26.4	29.2	69.2	24.8	25.5
Ln Grp LOS	F	E	E	F	D	C	E	C	C	E	C	C
Approach Vol, veh/h		1640			1609			303			316	
Approach Delay, s/veh		60.9			340.1			41.5			49.8	
Approach LOS		E			F			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	14.1	62.1	8.0	56.9	12.4	63.7	8.0	56.9
Change Period (Y+Rc), s	4.0	5.3	4.0	* 6	4.0	5.3	4.0	* 6
Max Green (Gmax), s	42.0	24.7	4.0	* 51	42.0	24.7	4.0	* 51
Max Allow Headway (MAH), s	3.8	5.2	3.8	5.2	3.8	5.2	3.8	5.2
Max Q Clear (g_c+I1), s	9.5	11.9	6.0	47.7	8.6	5.6	4.6	29.8
Green Ext Time (g_e), s	0.6	1.6	0.0	3.1	0.2	1.9	0.0	18.3
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.96	1.00	0.90	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	1.00	0.00	0.00	1.00	0.85

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3281		3163		1691		3163	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1687		3967		3374		4673

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1509		731		1509		1455

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	1	0	2	0
Grp Vol (v), veh/h	177	0	353	0	80	0	59	0
Grp Sat Flow (s), veh/h/ln	1640	0	1581	0	1691	0	1581	0
Q Serve Time (g_s), s	7.5	0.0	4.0	0.0	6.6	0.0	2.6	0.0
Cycle Q Clear Time (g_c), s	7.5	0.0	4.0	0.0	6.6	0.0	2.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	234	0	90	0	101	0	90	0
V/C Ratio (X)	0.76	0.00	3.93	0.00	0.79	0.00	0.66	0.00
Avail Cap (c_a), veh/h	977	0	90	0	504	0	90	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.99	0.00	1.00	0.00
Uniform Delay (d1), s/veh	64.3	0.0	68.5	0.0	65.4	0.0	67.8	0.0
Incr Delay (d2), s/veh	4.9	0.0	1346.9	0.0	12.8	0.0	16.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	69.2	0.0	1415.4	0.0	78.3	0.0	84.0	0.0
1st-Term Q (Q1), veh/ln	3.4	0.0	1.7	0.0	3.1	0.0	1.1	0.0
2nd-Term Q (Q2), veh/ln	0.2	0.0	16.8	0.0	0.4	0.0	0.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	3.6	0.0	18.5	0.0	3.4	0.0	1.3	0.0
%ile Storage Ratio (RQ%)	0.48	0.00	2.58	0.00	0.57	0.00	0.11	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	65.8	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	2	0	3
Grp Vol (v), veh/h	0	64	0	1048	0	76	0	1100
Grp Sat Flow (s), veh/h/ln	0	1687	0	1558	0	1687	0	1558
Q Serve Time (g_s), s	0.0	3.3	0.0	45.7	0.0	1.9	0.0	27.8
Cycle Q Clear Time (g_c), s	0.0	3.3	0.0	45.7	0.0	1.9	0.0	27.8
Lane Grp Cap (c), veh/h	0	679	0	1124	0	1398	0	1686
V/C Ratio (X)	0.00	0.09	0.00	0.93	0.00	0.05	0.00	0.65
Avail Cap (c_a), veh/h	0	679	0	1127	0	1398	0	1690
Upstream Filter (I)	0.00	0.99	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	26.2	0.0	43.4	0.0	24.7	0.0	37.7
Incr Delay (d2), s/veh	0.0	0.3	0.0	13.6	0.0	0.1	0.0	0.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	26.4	0.0	57.1	0.0	24.8	0.0	38.6
1st-Term Q (Q1), veh/ln	0.0	1.5	0.0	19.7	0.0	0.9	0.0	11.9

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	2.1	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.6	0.0	21.8	0.0	0.9	0.0	12.1
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.23	0.00	0.01	0.00	0.21
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	159	0	533	0	63	0	156
Grp Sat Flow (s), veh/h/ln	0	1509	0	1583	0	1509	0	1455
Q Serve Time (g_s), s	0.0	9.9	0.0	45.7	0.0	3.6	0.0	10.8
Cycle Q Clear Time (g_c), s	0.0	9.9	0.0	45.7	0.0	3.6	0.0	10.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.46	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	608	0	571	0	626	0	525
V/C Ratio (X)	0.00	0.26	0.00	0.93	0.00	0.10	0.00	0.30
Avail Cap (c_a), veh/h	0	608	0	572	0	626	0	526
Upstream Filter (I)	0.00	0.99	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	28.1	0.0	43.4	0.0	25.2	0.0	32.3
Incr Delay (d2), s/veh	0.0	1.0	0.0	22.5	0.0	0.3	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	29.2	0.0	65.9	0.0	25.5	0.0	32.6
1st-Term Q (Q1), veh/ln	0.0	4.2	0.0	20.0	0.0	1.5	0.0	4.3
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	3.6	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	4.3	0.0	23.5	0.0	1.6	0.0	4.4
%ile Storage Ratio (RQ%)	0.00	0.05	0.00	0.25	0.00	0.26	0.00	0.07
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	174.6
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	94	394	56	51	373	164	39	91	27	158	84	106
Future Volume (veh/h)	94	394	56	51	373	164	39	91	27	158	84	106
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1900	1900	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	100	419	60	54	397	174	41	97	29	168	89	113
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	145	384	50	134	626	627	512	525	157	583	285	362
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Ln Grp Delay, s/veh	52.6	0.0	0.0	12.0	0.0	9.3	11.3	0.0	9.3	11.1	0.0	9.4
Ln Grp LOS	F			B		A	B		A	B		A
Approach Vol, veh/h		579			625			167			370	
Approach Delay, s/veh		52.6			11.2			9.8			10.2	
Approach LOS		D			B			A			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		8.0		6.0		7.0
Phs Duration (G+Y+Rc), s		22.5		22.5		22.5		22.5
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green (Gmax), s		18.0		18.0		18.0		18.0
Max Allow Headway (MAH), s		5.0		5.3		5.0		5.3
Max Q Clear (g_c+I1), s		7.0		20.0		8.9		11.1
Green Ext Time (g_e), s		2.1		0.0		1.9		4.1
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		1.00		0.00		0.88

Left-Turn Movement Data				
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		1121		128		1201		112

Through Movement Data				
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1314		959		712		1565

Right-Turn Movement Data				
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		393		126		904		1568

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment				L+T+R				L+T

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	41	0	579	0	168	0	451
Grp Sat Flow (s), veh/h/ln	0	1121	0	1213	0	1201	0	1677
Q Serve Time (g_s), s	0.0	1.2	0.0	8.9	0.0	4.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	5.0	0.0	18.0	0.0	6.9	0.0	9.1
Perm LT Sat Flow (s_l), veh/h/ln	0	1121	0	854	0	1201	0	930
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	1563
Perm LT Eff Green (g_p), s	0.0	18.0	0.0	18.0	0.0	18.0	0.0	18.0
Perm LT Serve Time (g_u), s	0.0	14.1	0.0	8.9	0.0	15.8	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	1.2	0.0	8.9	0.0	4.7	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	4.7	0.0	0.0	0.0	7.3
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	4.7	0.0	0.0	0.0	7.3
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	0.17	0.00	1.00	0.00	0.12
Lane Grp Cap (c), veh/h	0	512	0	579	0	583	0	760
V/C Ratio (X)	0.00	0.08	0.00	1.00	0.00	0.29	0.00	0.59
Avail Cap (c_a), veh/h	0	512	0	579	0	583	0	760
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	11.0	0.0	15.1	0.0	11.0	0.0	10.7
Incr Delay (d2), s/veh	0.0	0.3	0.0	37.4	0.0	0.1	0.0	1.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	11.3	0.0	52.6	0.0	11.1	0.0	12.0
1st-Term Q (Q1), veh/ln	0.0	0.4	0.0	7.1	0.0	1.5	0.0	4.4
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.4	0.0	13.1	0.0	1.6	0.0	4.6
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.56	0.00	0.02	0.00	0.17
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment								
Lanes in Grp	0	0	0	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R				T+R		R
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	126	0	0	0	202	0	174
Grp Sat Flow (s), veh/h/ln	0	1706	0	0	0	1616	0	1568
Q Serve Time (g_s), s	0.0	2.2	0.0	0.0	0.0	3.9	0.0	3.4
Cycle Q Clear Time (g_c), s	0.0	2.2	0.0	0.0	0.0	3.9	0.0	3.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.23	0.00	0.10	0.00	0.56	0.00	1.00
Lane Grp Cap (c), veh/h	0	683	0	0	0	646	0	627
V/C Ratio (X)	0.00	0.18	0.00	0.00	0.00	0.31	0.00	0.28
Avail Cap (c_a), veh/h	0	683	0	0	0	646	0	627
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	8.7	0.0	0.0	0.0	9.3	0.0	9.1
Incr Delay (d2), s/veh	0.0	0.6	0.0	0.0	0.0	0.1	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.3	0.0	0.0	0.0	9.4	0.0	9.3
1st-Term Q (Q1), veh/ln	0.0	1.0	0.0	0.0	0.0	1.7	0.0	1.5
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.1	0.0	0.0	0.0	1.7	0.0	1.5
%ile Storage Ratio (RQ%)	0.00	0.05	0.00	0.00	0.00	0.02	0.00	0.06
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		24.6						
HCM 2010 LOS		C						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	188	828	4	22	1678	616	3	17	29	271	1	114
Future Volume (veh/h)	188	828	4	22	1678	616	3	17	29	271	1	114
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1696	1696	1696	1696	1696	1696	1900	1696	1900	1696	1696	1696
Adj Flow Rate, veh/h	198	872	4	23	1766	0	3	18	31	285	1	0
Adj No. of Lanes	1	2	1	1	2	1	0	1	0	2	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	12	12	12	12	12	12	12	12	12	12	12	12
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	226	2235	1000	27	1840	823	0	23	39	132	222	189
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.14	0.69	0.69	0.02	0.57	0.00	0.00	0.04	0.04	0.04	0.13	0.00
Ln Grp Delay, s/veh	66.5	9.1	6.3	71.5	29.0	0.0	0.0	0.0	82.6	609.8	50.3	0.0
Ln Grp LOS	E	A	A	E	C				F	F	D	
Approach Vol, veh/h		1074			1789			49			286	
Approach Delay, s/veh		19.6			29.6			82.6			607.8	
Approach LOS		B			C			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	4.0	2.0	3.0	0.0	3.0
Phs Duration (G+Y+Rc), s	25.7	83.0	12.0	12.3	9.3	99.3	0.0	24.3
Change Period (Y+Rc), s	7.1	7.1	6.4	6.9	7.1	7.1	6.9	* 6.9
Max Green (Gmax), s	67.9	18.9	5.6	13.1	30.9	55.9	13.1	* 5.6
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.5	3.8	5.3	0.0	5.5
Max Q Clear (g_c+I1), s	18.0	71.2	7.6	6.2	3.9	17.1	0.0	2.1
Green Ext Time (g_e), s	0.6	0.0	0.0	0.1	0.0	30.6	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	0.86	0.57	1.00	0.00	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.30	0.00	0.00	0.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1616		3134		1616		0	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3223		561		3223		1696

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1442		965		1442		1442

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)			

Lanes in Grp	1	0	2	0	1	0	0	0
Grp Vol (v), veh/h	198	0	285	0	23	0	0	0
Grp Sat Flow (s), veh/h/ln	1616	0	1567	0	1616	0	0	0
Q Serve Time (g_s), s	16.0	0.0	5.6	0.0	1.9	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	16.0	0.0	5.6	0.0	1.9	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	226	0	132	0	27	0	0	0
V/C Ratio (X)	0.88	0.00	2.16	0.00	0.84	0.00	0.00	0.00
Avail Cap (c_a), veh/h	825	0	132	0	375	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.09	0.00	0.00	0.00
Uniform Delay (d1), s/veh	56.1	0.0	63.7	0.0	65.2	0.0	0.0	0.0
Incr Delay (d2), s/veh	10.4	0.0	546.1	0.0	6.3	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	66.5	0.0	609.8	0.0	71.5	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	7.1	0.0	2.4	0.0	0.8	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.7	0.0	10.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	7.8	0.0	12.4	0.0	0.9	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.25	0.00	0.54	0.00	0.07	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	38.3	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	2	0	0	0	2	0	1
Grp Vol (v), veh/h	0	1766	0	0	0	872	0	1
Grp Sat Flow (s), veh/h/ln	0	1612	0	0	0	1612	0	1696
Q Serve Time (g_s), s	0.0	69.2	0.0	0.0	0.0	15.1	0.0	0.1
Cycle Q Clear Time (g_c), s	0.0	69.2	0.0	0.0	0.0	15.1	0.0	0.1
Lane Grp Cap (c), veh/h	0	1840	0	0	0	2235	0	222
V/C Ratio (X)	0.00	0.96	0.00	0.00	0.00	0.39	0.00	0.00
Avail Cap (c_a), veh/h	0	1840	0	0	0	2235	0	222
Upstream Filter (I)	0.00	0.09	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	27.1	0.0	0.0	0.0	8.6	0.0	50.3
Incr Delay (d2), s/veh	0.0	1.9	0.0	0.0	0.0	0.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	29.0	0.0	0.0	0.0	9.1	0.0	50.3
1st-Term Q (Q1), veh/ln	0.0	30.7	0.0	0.0	0.0	6.7	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	31.1	0.0	0.0	0.0	6.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.43	0.00	0.00	0.00	0.06	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	49	0	4	0	0
Grp Sat Flow (s), veh/h/ln	0	1442	0	1526	0	1442	0	1442
Q Serve Time (g_s), s	0.0	0.0	0.0	4.2	0.0	0.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	4.2	0.0	0.1	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.63	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	823	0	62	0	1000	0	189
V/C Ratio (X)	0.00	0.00	0.00	0.79	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	823	0	150	0	1000	0	189
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	63.2	0.0	6.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	19.4	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	82.6	0.0	6.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	2.1	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.14	0.00	0.01	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	78.8
HCM 2010 LOS	E

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	129	1020	2143	379	617	353
Future Volume (veh/h)	129	1020	2143	379	617	353
Number	1	6	2	12	3	18
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00			1.00	1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1696	1696	1696	1696	1696	1696
Adj Flow Rate, veh/h	136	1074	2256	0	649	0
Adj No. of Lanes	1	2	2	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	12	12	12	12	12	12
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	160	1918	1314	588	756	348
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.10	0.60	0.41	0.00	0.24	0.00
Ln Grp Delay, s/veh	52.5	10.3	346.8	0.0	35.8	0.0
Ln Grp LOS	D	B	F		D	
Approach Vol, veh/h		1210	2256		649	
Approach Delay, s/veh		15.1	346.8		35.8	
Approach LOS		B	F		D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8			6		
Case No	2.0	7.0	9.0			4.0		
Phs Duration (G+Y+Rc), s	15.0	39.7	25.3			54.7		
Change Period (Y+Rc), s	7.1	7.1	6.0			7.1		
Max Green (Gmax), s	7.9	27.9	24.0			42.9		
Max Allow Headway (MAH), s	3.8	5.3	3.8			5.3		
Max Q Clear (g_c+I1), s	8.6	34.6	17.9			18.2		
Green Ext Time (g_e), s	0.0	0.0	1.4			23.5		
Prob of Phs Call (p_c)	0.95	1.00	1.00			1.00		
Prob of Max Out (p_x)	1.00	0.00	0.42			0.00		

Left-Turn Movement Data			
Assigned Mvmt	1	5	3
Mvmt Sat Flow, veh/h	1616	0	3134

Through Movement Data			
Assigned Mvmt		2	8			6
Mvmt Sat Flow, veh/h		3308	0			3308

Right-Turn Movement Data			
Assigned Mvmt		12	18			16
Mvmt Sat Flow, veh/h		1442	1442			0

Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	0	0
Lane Assignment	(Prot)							

Lanes in Grp	1	0	2	0	0	0	0	0
Grp Vol (v), veh/h	136	0	649	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1616	0	1567	0	0	0	0	0
Q Serve Time (g_s), s	6.6	0.0	15.9	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	6.6	0.0	15.9	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1567	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	32.6	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	160	0	756	0	0	0	0	0
V/C Ratio (X)	0.85	0.00	0.86	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	160	0	940	0	0	0	0	0
Upstream Filter (I)	0.43	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	35.5	0.0	29.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	17.0	0.0	6.7	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	52.5	0.0	35.8	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	2.9	0.0	6.9	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.8	0.0	0.7	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	3.7	0.0	7.6	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.22	0.00	0.47	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	2256	0	0	0	1074	0	0
Grp Sat Flow (s), veh/h/ln	0	1612	0	0	0	1612	0	0
Q Serve Time (g_s), s	0.0	32.6	0.0	0.0	0.0	16.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	32.6	0.0	0.0	0.0	16.2	0.0	0.0
Lane Grp Cap (c), veh/h	0	1314	0	0	0	1918	0	0
V/C Ratio (X)	0.00	1.72	0.00	0.00	0.00	0.56	0.00	0.00
Avail Cap (c_a), veh/h	0	1314	0	0	0	1918	0	0
Upstream Filter (I)	0.00	0.09	0.00	0.00	0.00	0.43	0.00	0.00
Uniform Delay (d1), s/veh	0.0	23.7	0.0	0.0	0.0	9.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	323.1	0.0	0.0	0.0	0.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	346.8	0.0	0.0	0.0	10.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	14.4	0.0	0.0	0.0	7.2	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	59.0	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	73.4	0.0	0.0	0.0	7.3	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.58	0.00	0.00	0.00	0.10	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	235.6	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lane Assignment		R	R					
Lanes in Grp	0	1	1	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1442	1442	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	588	348	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	588	433	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		200.2						
HCM 2010 LOS		F						

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	525	320	345	1810	2532	876
Future Volume (veh/h)	525	320	345	1810	2532	876
Number	7	14	5	2	6	16
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00	1.00			1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1827	1827	1827	1827
Adj Flow Rate, veh/h	577	0	379	1989	2782	0
Adj No. of Lanes	2	1	2	3	3	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	4	4	4	4
Opposing Right Turn Influence	Yes		Yes			
Cap, veh/h	544	250	451	3767	2891	900
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.16	0.00	0.13	0.76	0.58	0.00
Ln Grp Delay, s/veh	115.9	0.0	64.8	7.7	29.9	0.0
Ln Grp LOS	F		E	A	C	
Approach Vol, veh/h	577			2368	2782	
Approach Delay, s/veh	115.9			16.8	29.9	
Approach LOS	F			B	C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Case No		4.0		9.0	2.0	7.0		
Phs Duration (G+Y+Rc), s		114.0		29.0	25.1	88.9		
Change Period (Y+Rc), s		6.0		6.4	6.0	6.0		
Max Green (Gmax), s		108.0		22.6	84.0	18.0		
Max Allow Headway (MAH), s		5.2		3.8	3.8	5.2		
Max Q Clear (g_c+I1), s		25.2		24.6	17.7	77.8		
Green Ext Time (g_e), s		80.9		0.0	1.4	0.0		
Prob of Phs Call (p_c)		1.00		1.00	1.00	1.00		
Prob of Max Out (p_x)		0.00		1.00	0.00	0.00		

Left-Turn Movement Data								
Assigned Mvmt				7	5	1		
Mvmt Sat Flow, veh/h				3442	3375	0		

Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		5152		0		5152		

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		0		1583		1553		

Left Lane Group Data								
Assigned Mvmt	0	0	0	7	5	1	0	0
Lane Assignment					(Prot)			

Lanes in Grp	0	0	0	2	2	0	0	0
Grp Vol (v), veh/h	0	0	0	577	379	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1721	1688	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	22.6	15.7	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	22.6	15.7	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1721	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	82.9	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	544	451	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	1.06	0.84	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	544	1983	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	60.2	60.5	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	55.7	4.3	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	115.9	64.8	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	10.7	7.3	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	4.2	0.3	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	14.9	7.6	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	1.16	0.46	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	8.3	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	3	0	0	0	3	0	0
Grp Vol (v), veh/h	0	1989	0	0	0	2782	0	0
Grp Sat Flow (s), veh/h/ln	0	1663	0	0	0	1663	0	0
Q Serve Time (g_s), s	0.0	23.2	0.0	0.0	0.0	75.8	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	23.2	0.0	0.0	0.0	75.8	0.0	0.0
Lane Grp Cap (c), veh/h	0	3767	0	0	0	2891	0	0
V/C Ratio (X)	0.00	0.53	0.00	0.00	0.00	0.96	0.00	0.00
Avail Cap (c_a), veh/h	0	3767	0	0	0	2891	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.09	0.00	0.00
Uniform Delay (d1), s/veh	0.0	7.1	0.0	0.0	0.0	28.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	0.0	0.0	0.0	1.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	7.7	0.0	0.0	0.0	29.9	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	10.5	0.0	0.0	0.0	34.5	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.4	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	10.7	0.0	0.0	0.0	34.9	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.33	0.00	0.00	0.00	0.61	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment				R		R		
Lanes in Grp	0	0	0	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1583	0	1553	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	250	0	900	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	250	0	900	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		33.1						
HCM 2010 LOS		C						

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	766	1593	2156	91	538	3225
Future Volume (veh/h)	766	1593	2156	91	538	3225
Number	3	18	2	12	1	6
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1845	1845	1845	1845
Adj Flow Rate, veh/h	806	1677	2269	0	566	3395
Adj No. of Lanes	2	2	3	1	2	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	4	3	3	3	3
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	881	713	2413	751	669	3839
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.26	0.26	0.48	0.00	0.20	0.76
Ln Grp Delay, s/veh	38.8	638.3	23.8	0.0	35.1	9.3
Ln Grp LOS	D	F	C		D	A
Approach Vol, veh/h	2483		2269			3961
Approach Delay, s/veh	443.7		23.8			13.0
Approach LOS	F		C			B

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8			6		
Case No	2.0	7.0	9.0			4.0		
Phs Duration (G+Y+Rc), s	19.5	39.5	24.4			59.0		
Change Period (Y+Rc), s	6.0	6.0	6.4			6.0		
Max Green (Gmax), s	15.0	18.0	18.0			39.0		
Max Allow Headway (MAH), s	3.8	5.2	4.0			5.2		
Max Q Clear (g_c+I1), s	13.0	31.5	20.0			35.9		
Green Ext Time (g_e), s	0.5	0.0	0.0			3.1		
Prob of Phs Call (p_c)	1.00	1.00	1.00			1.00		
Prob of Max Out (p_x)	1.00	0.00	1.00			0.00		

Left-Turn Movement Data			
Assigned Mvmt	1	5	3
Mvmt Sat Flow, veh/h	3408	0	3375

Through Movement Data			
Assigned Mvmt		2	8			6
Mvmt Sat Flow, veh/h		5202	0			5202

Right-Turn Movement Data			
Assigned Mvmt		12	18			16
Mvmt Sat Flow, veh/h		1568	2733			0

Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	0	0
Lane Assignment	(Prot)							

Lanes in Grp	2	0	2	0	0	0	0	0
Grp Vol (v), veh/h	566	0	806	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1704	0	1688	0	0	0	0	0
Q Serve Time (g_s), s	11.0	0.0	16.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	11.0	0.0	16.0	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1688	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	33.1	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	669	0	881	0	0	0	0	0
V/C Ratio (X)	0.85	0.00	0.92	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	741	0	881	0	0	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	26.7	0.0	24.8	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	8.3	0.0	14.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	35.1	0.0	38.8	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	5.2	0.0	7.4	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.8	0.0	1.7	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	6.0	0.0	9.1	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.48	0.00	0.49	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	3	0	0	0	3	0	0
Grp Vol (v), veh/h	0	2269	0	0	0	3395	0	0
Grp Sat Flow (s), veh/h/ln	0	1679	0	0	0	1679	0	0
Q Serve Time (g_s), s	0.0	29.5	0.0	0.0	0.0	33.9	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	29.5	0.0	0.0	0.0	33.9	0.0	0.0
Lane Grp Cap (c), veh/h	0	2413	0	0	0	3839	0	0
V/C Ratio (X)	0.00	0.94	0.00	0.00	0.00	0.88	0.00	0.00
Avail Cap (c_a), veh/h	0	2413	0	0	0	3839	0	0
Upstream Filter (I)	0.00	0.71	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	17.0	0.0	0.0	0.0	6.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	6.7	0.0	0.0	0.0	3.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	23.8	0.0	0.0	0.0	9.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	13.4	0.0	0.0	0.0	15.1	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	1.5	0.0	0.0	0.0	1.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	14.9	0.0	0.0	0.0	16.3	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.24	0.00	0.00	0.00	0.39	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lane Assignment		R	R					
Lanes in Grp	0	1	2	0	0	0	0	0
Grp Vol (v), veh/h	0	0	1677	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1568	1367	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	18.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	18.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	751	713	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	2.35	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	751	713	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	25.5	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	612.8	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	638.3	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	6.7	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	60.7	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	67.4	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	7.25	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	241.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		138.5						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	754	704	75	51	1015	325	409	367	234	175	73	965
Future Volume (veh/h)	754	704	75	51	1015	325	409	367	234	175	73	965
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1712	1712	1712	1712	1712	1712	1900	1900	1712	1712
Adj Flow Rate, veh/h	762	711	76	52	1025	0	413	371	236	177	74	975
Adj No. of Lanes	1	3	1	1	3	1	1	2	0	0	1	2
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	11	11	11	11	11	11	11	11	11	11	11	11
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	433	2256	702	66	1203	375	227	689	432	0	293	439
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.27	0.48	0.48	0.04	0.26	0.00	0.14	0.36	0.36	0.00	0.17	0.17
Ln Grp Delay, s/veh	407.3	25.5	22.8	94.6	64.2	0.0	453.7	41.7	42.1	0.0	57.9	624.2
Ln Grp LOS	F	C	C	F	E		F	D	D		E	F
Approach Vol, veh/h		1549			1077			1020			1049	
Approach Delay, s/veh		213.2			65.7			208.6			584.2	
Approach LOS		F			E			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	0.0	4.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	50.0	48.4	0.0	65.1	14.0	84.4	30.0	35.1
Change Period (Y+Rc), s	7.5	7.1	7.6	* 7.7	7.5	7.1	* 7.7	* 7.7
Max Green (Gmax), s	42.5	37.9	27.4	* 22	42.5	37.9	* 22	* 27
Max Allow Headway (MAH), s	3.8	5.2	0.0	4.6	3.8	5.2	3.8	4.6
Max Q Clear (g_c+I1), s	44.5	35.4	0.0	27.0	7.1	16.9	24.3	29.4
Green Ext Time (g_e), s	0.0	2.2	0.0	0.0	0.1	13.1	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	0.00	1.00	0.90	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1630		0		1630		1630	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		4673		1921		4673		1712

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1455		1204		1455		2561

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)				(Prot)		(Prot)	

Lanes in Grp	1	0	0	0	1	0	1	0
Grp Vol (v), veh/h	762	0	0	0	52	0	413	0
Grp Sat Flow (s), veh/h/ln	1630	0	0	0	1630	0	1630	0
Q Serve Time (g_s), s	42.5	0.0	0.0	0.0	5.1	0.0	22.3	0.0
Cycle Q Clear Time (g_c), s	42.5	0.0	0.0	0.0	5.1	0.0	22.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	433	0	0	0	66	0	227	0
V/C Ratio (X)	1.76	0.00	0.00	0.00	0.79	0.00	1.82	0.00
Avail Cap (c_a), veh/h	433	0	0	0	433	0	227	0
Upstream Filter (I)	0.70	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	58.8	0.0	0.0	0.0	76.1	0.0	68.8	0.0
Incr Delay (d2), s/veh	348.5	0.0	0.0	0.0	18.5	0.0	384.8	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	407.3	0.0	0.0	0.0	94.6	0.0	453.7	0.0
1st-Term Q (Q1), veh/ln	19.1	0.0	0.0	0.0	2.3	0.0	10.0	0.0
2nd-Term Q (Q2), veh/ln	41.9	0.0	0.0	0.0	0.3	0.0	24.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	61.0	0.0	0.0	0.0	2.6	0.0	34.3	0.0
%ile Storage Ratio (RQ%)	2.26	0.00	0.00	0.00	0.17	0.00	1.88	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	82.2	0.0	0.0	0.0	0.0	0.0	46.4	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.4	0.0	0.0	0.0	0.0	0.0	0.5	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	1	0	3	0	1
Grp Vol (v), veh/h	0	1025	0	313	0	711	0	74
Grp Sat Flow (s), veh/h/ln	0	1558	0	1626	0	1558	0	1712
Q Serve Time (g_s), s	0.0	33.4	0.0	24.5	0.0	14.9	0.0	6.0
Cycle Q Clear Time (g_c), s	0.0	33.4	0.0	24.5	0.0	14.9	0.0	6.0
Lane Grp Cap (c), veh/h	0	1203	0	583	0	2256	0	293
V/C Ratio (X)	0.00	0.85	0.00	0.54	0.00	0.32	0.00	0.25
Avail Cap (c_a), veh/h	0	1203	0	583	0	2256	0	293
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.70	0.00	1.00
Uniform Delay (d1), s/veh	0.0	56.5	0.0	40.7	0.0	25.3	0.0	57.4
Incr Delay (d2), s/veh	0.0	7.7	0.0	1.0	0.0	0.3	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	64.2	0.0	41.7	0.0	25.5	0.0	57.9
1st-Term Q (Q1), veh/ln	0.0	14.3	0.0	11.0	0.0	6.4	0.0	2.8

2nd-Term Q (Q2), veh/ln	0.0	0.9	0.0	0.2	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	15.2	0.0	11.1	0.0	6.4	0.0	2.9
%ile Storage Ratio (RQ%)	0.00	0.17	0.00	0.61	0.00	0.05	0.00	0.09
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	2
Grp Vol (v), veh/h	0	0	0	294	0	76	0	975
Grp Sat Flow (s), veh/h/ln	0	1455	0	1499	0	1455	0	1280
Q Serve Time (g_s), s	0.0	0.0	0.0	25.0	0.0	4.6	0.0	27.4
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	25.0	0.0	4.6	0.0	27.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.80	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	375	0	538	0	702	0	439
V/C Ratio (X)	0.00	0.00	0.00	0.55	0.00	0.11	0.00	2.22
Avail Cap (c_a), veh/h	0	375	0	538	0	702	0	439
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.70	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	40.9	0.0	22.6	0.0	66.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.2	0.0	0.2	0.0	557.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	42.1	0.0	22.8	0.0	624.2
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	10.4	0.0	1.8	0.0	9.7
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	34.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	10.5	0.0	1.9	0.0	43.7
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.58	0.00	0.10	0.00	1.30
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	134.1
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay	261.3
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	529	1019	21	95	875	895	178	1380	295	290	774	226
Future Volume (veh/h)	529	1019	21	95	875	895	178	1380	295	290	774	226
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1776	1776	1776	1776	1776	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	534	1029	21	96	884	904	180	1394	298	293	782	228
Adj No. of Lanes	2	3	1	2	3	2	2	2	0	2	2	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	7	7	7	7	7	7	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	80	1491	464	80	1491	817	254	616	129	370	638	186
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.02	0.31	0.31	0.02	0.31	0.31	0.08	0.22	0.22	0.11	0.25	0.25
Ln Grp Delay, s/veh	2619.2	27.6	20.1	203.9	25.8	93.1	43.3	595.2	627.8	44.8	151.7	152.2
Ln Grp LOS	F	C	C	F	C	F	D	F	F	D	F	F
Approach Vol, veh/h		1584			1884			1872			1303	
Approach Delay, s/veh		901.2			67.2			557.0			127.9	
Approach LOS		F			E			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	4.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	9.2	32.6	16.0	25.8	9.2	32.6	13.9	27.9
Change Period (Y+Rc), s	7.2	* 7.3	6.8	* 7.6	7.2	* 7.3	* 7.6	* 7.6
Max Green (Gmax), s	2.0	* 24	10.2	* 18	2.0	* 24	* 7.4	* 19
Max Allow Headway (MAH), s	3.8	4.9	3.8	5.3	3.8	4.9	3.8	5.3
Max Q Clear (g_c+I1), s	4.0	27.2	9.1	20.2	4.0	17.3	6.4	22.3
Green Ext Time (g_e), s	0.0	0.0	0.1	0.0	0.0	5.9	0.1	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.89	1.00	0.98	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3281		3281		3281		3281	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		4848		2777		4848		2578

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		2656		582		1509		752

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	534	0	293	0	96	0	180	0
Grp Sat Flow (s), veh/h/ln	1640	0	1640	0	1640	0	1640	0
Q Serve Time (g_s), s	2.0	0.0	7.1	0.0	2.0	0.0	4.4	0.0
Cycle Q Clear Time (g_c), s	2.0	0.0	7.1	0.0	2.0	0.0	4.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	80	0	370	0	80	0	254	0
V/C Ratio (X)	6.67	0.00	0.79	0.00	1.20	0.00	0.71	0.00
Avail Cap (c_a), veh/h	80	0	408	0	80	0	296	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	40.0	0.0	35.4	0.0	40.0	0.0	36.9	0.0
Incr Delay (d2), s/veh	2579.2	0.0	9.4	0.0	163.9	0.0	6.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	2619.2	0.0	44.8	0.0	203.9	0.0	43.3	0.0
1st-Term Q (Q1), veh/ln	0.9	0.0	3.2	0.0	0.9	0.0	2.0	0.0
2nd-Term Q (Q2), veh/ln	28.7	0.0	0.5	0.0	1.8	0.0	0.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	29.6	0.0	3.7	0.0	2.7	0.0	2.2	0.0
%ile Storage Ratio (RQ%)	1.70	0.00	0.07	0.00	0.14	0.00	0.06	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	113.5	0.0	0.0	0.0	4.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	1.7	0.0	0.0	0.0	0.3	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	1	0	3	0	1
Grp Vol (v), veh/h	0	884	0	836	0	1029	0	512
Grp Sat Flow (s), veh/h/ln	0	1616	0	1687	0	1616	0	1687
Q Serve Time (g_s), s	0.0	12.7	0.0	18.2	0.0	15.3	0.0	20.3
Cycle Q Clear Time (g_c), s	0.0	12.7	0.0	18.2	0.0	15.3	0.0	20.3
Lane Grp Cap (c), veh/h	0	1491	0	374	0	1491	0	418
V/C Ratio (X)	0.00	0.59	0.00	2.23	0.00	0.69	0.00	1.22
Avail Cap (c_a), veh/h	0	1491	0	374	0	1491	0	418
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	24.0	0.0	31.9	0.0	24.9	0.0	30.8
Incr Delay (d2), s/veh	0.0	1.7	0.0	563.3	0.0	2.6	0.0	120.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	25.8	0.0	595.2	0.0	27.6	0.0	151.7
1st-Term Q (Q1), veh/ln	0.0	5.6	0.0	8.4	0.0	6.8	0.0	9.4

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	58.6	0.0	0.4	0.0	14.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	5.9	0.0	67.0	0.0	7.1	0.0	23.4
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	1.79	0.00	0.08	0.00	0.46
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	115.4	0.0	0.0	0.0	23.5
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.3

Right Lane Group Data

Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		T+R
Lanes in Grp	0	2	0	1	0	1	0	1
Grp Vol (v), veh/h	0	904	0	856	0	21	0	498
Grp Sat Flow (s), veh/h/ln	0	1328	0	1673	0	1509	0	1643
Q Serve Time (g_s), s	0.0	25.2	0.0	18.2	0.0	0.8	0.0	20.3
Cycle Q Clear Time (g_c), s	0.0	25.2	0.0	18.2	0.0	0.8	0.0	20.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.35	0.00	1.00	0.00	0.46
Lane Grp Cap (c), veh/h	0	817	0	371	0	464	0	407
V/C Ratio (X)	0.00	1.11	0.00	2.31	0.00	0.05	0.00	1.23
Avail Cap (c_a), veh/h	0	817	0	371	0	464	0	407
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	28.4	0.0	31.9	0.0	19.9	0.0	30.8
Incr Delay (d2), s/veh	0.0	64.7	0.0	595.9	0.0	0.2	0.0	121.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	93.1	0.0	627.8	0.0	20.1	0.0	152.2
1st-Term Q (Q1), veh/ln	0.0	9.2	0.0	8.4	0.0	0.3	0.0	9.2
2nd-Term Q (Q2), veh/ln	0.0	7.3	0.0	61.5	0.0	0.0	0.0	13.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	16.5	0.0	69.8	0.0	0.4	0.0	22.9
%ile Storage Ratio (RQ%)	0.00	0.65	0.00	1.86	0.00	0.02	0.00	0.45
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	21.7	0.0	121.2	0.0	0.0	0.0	22.9
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.6	0.0	0.0	0.0	0.3

Intersection Summary

HCM 2010 Ctrl Delay	416.0
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	568	1974	0	0	2633	986	0	0	1151	0	0	0
Future Volume (veh/h)	568	1974	0	0	2633	986	0	0	1151	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q, veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1845	1845	0	0	1845	1845	0	0	1845			
Adj Flow Rate, veh/h	580	2014	0	0	2687	0	0	0	1174			
Adj No. of Lanes	2	3	0	0	3	1	0	0	2			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98			
Percent Heavy Veh, %	3	3	0	0	3	3	0	0	3			
Opposing Right Turn Influence	Yes			No			No					
Cap, veh/h	562	4811	0	0	3754	1169	0	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Prop Arrive On Green	0.17	0.96	0.00	0.00	0.75	0.00	0.00	0.00	0.00			
Ln Grp Delay, s/veh	105.9	0.5	0.0	0.0	11.1	0.0	0.0	0.0	0.0			
Ln Grp LOS	F	A			B							

Approach Vol, veh/h		2594			2687			0				Timer:
Approach Delay, s/veh		24.1			11.1			0.0				Assigned Phs
Approach LOS		C			B							Case No
Phs Duration (G+Y+Rc), s					143.0			30.0	113.0			
Change Period (Y+Rc), s					6.4			6.4	6.4			
Max Green (Gmax), s					76.6			23.6	46.6			
Max Allow Headway (MAH), s					5.2			3.8	5.2			
Max Q Clear (g_c+I1), s					6.3			25.6	43.6			
Green Ext Time (g_e), s					68.8			0.0	3.0			
Prob of Phs Call (p_c)					1.00			1.00	1.00			
Prob of Max Out (p_x)					0.00			1.00	0.00			

Left-Turn Movement Data												
Assigned Mvmt								7	3			
Mvmt Sat Flow, veh/h								3408	0			

Through Movement Data												
Assigned Mvmt					4				8			
Mvmt Sat Flow, veh/h					5202				5202			

Right-Turn Movement Data												
Assigned Mvmt					14				18			
Mvmt Sat Flow, veh/h					0				1568			

Left Lane Group Data												
Assigned Mvmt		0	0	0	0	0	0	7	3			
Lane Assignment								(Prot)				
Lanes in Grp		0	0	0	0	0	0	2	0			
Grp Vol (v), veh/h		0	0	0	0	0	0	580	0			
Grp Sat Flow (s), veh/h/ln		0	0	0	0	0	0	1704	0			

Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	23.6	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	23.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	106.6
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	562	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	1.03	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	562	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	59.7	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	46.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	105.9	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	11.1	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	3.6	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	14.7	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	2.51	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	4.4	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	3	0	0	0	3
Grp Vol (v), veh/h	0	0	0	2014	0	0	0	2687
Grp Sat Flow (s), veh/h/ln	0	0	0	1679	0	0	0	1679
Q Serve Time (g_s), s	0.0	0.0	0.0	4.3	0.0	0.0	0.0	41.6
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	4.3	0.0	0.0	0.0	41.6
Lane Grp Cap (c), veh/h	0	0	0	4811	0	0	0	3754
V/C Ratio (X)	0.00	0.00	0.00	0.42	0.00	0.00	0.00	0.72
Avail Cap (c_a), veh/h	0	0	0	4811	0	0	0	3754
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	9.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.3	0.0	0.0	0.0	1.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.5	0.0	0.0	0.0	11.1
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.7	0.0	0.0	0.0	18.9
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00

%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	1.8	0.0	0.0	0.0	19.3
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.24	0.00	0.00	0.00	1.43
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	0	0	18
Lane Assignment								R
Lanes in Grp	0	0	0	0	0	0	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	1568
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	1169
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	1169
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		17.5						
HCM 2010 LOS		B						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1711	872	1077	2973	0	0	0	0	0	0	771
Future Volume (veh/h)	0	1711	872	1077	2973	0	0	0	0	0	0	771
Number	7	4	14	3	8	18				1	6	16
Initial Q, veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1845	1845	1845	1845	0				0	0	1845
Adj Flow Rate, veh/h	0	1746	0	1099	3034	0				0	0	787
Adj No. of Lanes	0	3	1	2	3	0				0	0	2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98				0.98	0.98	0.98
Percent Heavy Veh, %	0	3	3	3	3	0				0	0	3
Opposing Right Turn Influence	No			Yes						No		
Cap, veh/h	0	2273	708	1199	4540	0				0	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Prop Arrive On Green	0.00	0.45	0.00	0.35	0.90	0.00				0.00	0.00	0.00
Ln Grp Delay, s/veh	0.0	17.5	0.0	30.8	1.6	0.0				0.0	0.0	0.0
Ln Grp LOS		B		C	A							
Approach Vol, veh/h		1746			4133						0	
Approach Delay, s/veh		17.5			9.3						0.0	
Approach LOS		B			A							

Timer:	1	2	3	4	5	6	7	8
Assigned Phs			3	4				8
Case No			2.0	7.0				4.0
Phs Duration (G+Y+Rc), s			29.3	35.7				65.0
Change Period (Y+Rc), s			6.4	6.4				6.4
Max Green (Gmax), s			23.6	18.0				48.0
Max Allow Headway (MAH), s			3.8	5.2				5.2
Max Q Clear (g_c+I1), s			22.1	20.9				11.7
Green Ext Time (g_e), s			0.8	0.0				36.0
Prob of Phs Call (p_c)			1.00	1.00				1.00
Prob of Max Out (p_x)			1.00	0.00				0.00

Left-Turn Movement Data		
Assigned Mvmt	3	7
Mvmt Sat Flow, veh/h	3408	0

Through Movement Data		
Assigned Mvmt	4	8
Mvmt Sat Flow, veh/h	5202	5202

Right-Turn Movement Data		
Assigned Mvmt	14	18
Mvmt Sat Flow, veh/h	1568	0

Left Lane Group Data								
Assigned Mvmt	0	0	3	7	0	0	0	0
Lane Assignment			(Prot)					

Lanes in Grp	0	0	2	0	0	0	0	0
Grp Vol (v), veh/h	0	0	1099	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1704	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	20.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	20.1	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	29.3	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	1199	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.92	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	1237	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	20.2	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	10.6	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	30.8	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	9.3	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	11.1	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.89	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	3	0	0	0	3
Grp Vol (v), veh/h	0	0	0	1746	0	0	0	3034
Grp Sat Flow (s), veh/h/ln	0	0	0	1679	0	0	0	1679
Q Serve Time (g_s), s	0.0	0.0	0.0	18.9	0.0	0.0	0.0	9.7
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	18.9	0.0	0.0	0.0	9.7
Lane Grp Cap (c), veh/h	0	0	0	2273	0	0	0	4540
V/C Ratio (X)	0.00	0.00	0.00	0.77	0.00	0.00	0.00	0.67
Avail Cap (c_a), veh/h	0	0	0	2273	0	0	0	4540
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	15.0	0.0	0.0	0.0	0.8
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	17.5	0.0	0.0	0.0	1.6
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	8.7	0.0	0.0	0.0	3.9

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	9.3	0.0	0.0	0.0	4.3
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.41	0.00	0.00	0.00	0.27
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	0	0	18
Lane Assignment				R				
Lanes in Grp	0	0	0	1	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1568	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	708	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	708	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		11.8						
HCM 2010 LOS		B						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	547	3098	0	0	2871	784	0	0	931	0	0	950
Future Volume (veh/h)	547	3098	0	0	2871	784	0	0	931	0	0	950
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	0	0	1863	0	0	1863
Adj Flow Rate, veh/h	570	3227	0	0	2991	817	0	0	970	0	0	990
Adj No. of Lanes	2	3	0	0	3	2	0	0	3	0	0	3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	0	0	2	2	0	0	2	0	0	2
Opposing Right Turn Influence	Yes			No			No			No		
Cap, veh/h	654	4795	0	0	3538	1939	0	0	0	0	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.19	0.94	0.00	0.00	0.70	0.70	0.00	0.00	0.00	0.00	0.00	0.00
Ln Grp Delay, s/veh	46.0	0.7	0.0	0.0	15.3	8.0	0.0	0.0	0.0	0.0	0.0	0.0
Ln Grp LOS	D	A			B	A						
Approach Vol, veh/h		3797			3808			0			0	
Approach Delay, s/veh		7.5			13.7			0.0			0.0	
Approach LOS		A			B							

Timer:	1	2	3	4	5	6	7	8
Assigned Phs				4			7	8
Case No				4.0			2.0	7.0
Phs Duration (G+Y+Rc), s				112.0			27.7	84.3
Change Period (Y+Rc), s				6.4			6.4	6.4
Max Green (Gmax), s				81.6			26.6	48.6
Max Allow Headway (MAH), s				5.1			3.8	5.1
Max Q Clear (g_c+I1), s				13.1			20.0	50.7
Green Ext Time (g_e), s				68.0			1.3	0.0
Prob of Phs Call (p_c)				1.00			1.00	1.00
Prob of Max Out (p_x)				0.00			0.30	0.00

Left-Turn Movement Data									
Assigned Mvmt							7	3	
Mvmt Sat Flow, veh/h							3442	0	

Through Movement Data									
Assigned Mvmt				4				8	
Mvmt Sat Flow, veh/h				5253				5253	

Right-Turn Movement Data									
Assigned Mvmt				14				18	
Mvmt Sat Flow, veh/h				0				2787	

Left Lane Group Data									
Assigned Mvmt		0	0	0	0	0	0	7	3
Lane Assignment								(Prot)	

Lanes in Grp	0	0	0	0	0	0	2	0
Grp Vol (v), veh/h	0	0	0	0	0	0	570	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	1721	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	18.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	18.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	77.9
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	654	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.87	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	817	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	44.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	46.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	8.5	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	8.7	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.42	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	3	0	0	0	3
Grp Vol (v), veh/h	0	0	0	3227	0	0	0	2991
Grp Sat Flow (s), veh/h/ln	0	0	0	1695	0	0	0	1695
Q Serve Time (g_s), s	0.0	0.0	0.0	11.1	0.0	0.0	0.0	48.7
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	11.1	0.0	0.0	0.0	48.7
Lane Grp Cap (c), veh/h	0	0	0	4795	0	0	0	3538
V/C Ratio (X)	0.00	0.00	0.00	0.67	0.00	0.00	0.00	0.85
Avail Cap (c_a), veh/h	0	0	0	4795	0	0	0	3538
Upstream Filter (I)	0.00	0.00	0.00	0.21	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.5	0.0	0.0	0.0	12.6
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	2.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.7	0.0	0.0	0.0	15.3
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	4.8	0.0	0.0	0.0	22.4

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	4.9	0.0	0.0	0.0	23.3
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.38
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	0	0	18
Lane Assignment								R
Lanes in Grp	0	0	0	0	0	0	0	2
Grp Vol (v), veh/h	0	0	0	0	0	0	0	817
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	1393
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.1
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	1939
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	1939
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.5
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.6
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	10.6
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2502	358	688	3012	13	0	0	987	0	0	603
Future Volume (veh/h)	0	2502	358	688	3012	13	0	0	987	0	0	603
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	1900	0	0	1863	0	0	1863
Adj Flow Rate, veh/h	0	2690	385	740	3239	14	0	0	1061	0	0	648
Adj No. of Lanes	0	3	2	2	3	0	0	0	3	0	0	3
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	2	2	2	2	2	0	0	2	0	0	2
Opposing Right Turn Influence	No			Yes			No			No		
Cap, veh/h	0	3524	1931	803	5034	22	0	0	0	0	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.00	0.69	0.69	0.23	0.96	0.96	0.00	0.00	0.00	0.00	0.00	0.00
Ln Grp Delay, s/veh	0.0	19.0	9.7	66.6	0.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0
Ln Grp LOS		B	A	E	A	A						
Approach Vol, veh/h		3075			3993			0			0	
Approach Delay, s/veh		17.9			12.7			0.0			0.0	
Approach LOS		B			B							

Timer:	1	2	3	4	5	6	7	8
Assigned Phs			3	4				8
Case No			2.0	7.0				4.0
Phs Duration (G+Y+Rc), s			47.0	127.0				174.0
Change Period (Y+Rc), s			6.4	6.4				6.4
Max Green (Gmax), s			47.6	93.6				147.6
Max Allow Headway (MAH), s			3.8	5.2				5.2
Max Q Clear (g_c+I1), s			38.5	62.0				12.5
Green Ext Time (g_e), s			2.1	31.5				133.5
Prob of Phs Call (p_c)			1.00	1.00				1.00
Prob of Max Out (p_x)			0.17	0.00				0.00

Left-Turn Movement Data								
Assigned Mvmt			3	7				
Mvmt Sat Flow, veh/h			3442	0				

Through Movement Data								
Assigned Mvmt				4				8
Mvmt Sat Flow, veh/h				5253				5226

Right-Turn Movement Data								
Assigned Mvmt				14				18
Mvmt Sat Flow, veh/h				2787				23

Left Lane Group Data								
Assigned Mvmt	0	0	3	7	0	0	0	0
Lane Assignment			(Prot)					

Lanes in Grp	0	0	2	0	0	0	0	0
Grp Vol (v), veh/h	0	0	740	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1721	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	36.5	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	36.5	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	120.6	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	803	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.92	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	942	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	65.1	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	66.6	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	17.4	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	17.5	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	1.39	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	3	0	0	0	2
Grp Vol (v), veh/h	0	0	0	2690	0	0	0	2099
Grp Sat Flow (s), veh/h/ln	0	0	0	1695	0	0	0	1695
Q Serve Time (g_s), s	0.0	0.0	0.0	60.0	0.0	0.0	0.0	10.4
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	60.0	0.0	0.0	0.0	10.4
Lane Grp Cap (c), veh/h	0	0	0	3524	0	0	0	3265
V/C Ratio (X)	0.00	0.00	0.00	0.76	0.00	0.00	0.00	0.64
Avail Cap (c_a), veh/h	0	0	0	3524	0	0	0	3265
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	0.0	0.0	17.4	0.0	0.0	0.0	0.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	19.0	0.0	0.0	0.0	0.4
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	27.9	0.0	0.0	0.0	4.4

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	28.4	0.0	0.0	0.0	4.4
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.47	0.00	0.00	0.00	0.08
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	0	0	18
Lane Assignment				R				T+R
Lanes in Grp	0	0	0	2	0	0	0	1
Grp Vol (v), veh/h	0	0	0	385	0	0	0	1154
Grp Sat Flow (s), veh/h/ln	0	0	0	1393	0	0	0	1859
Q Serve Time (g_s), s	0.0	0.0	0.0	8.6	0.0	0.0	0.0	10.5
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	8.6	0.0	0.0	0.0	10.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.01
Lane Grp Cap (c), veh/h	0	0	0	1931	0	0	0	1790
V/C Ratio (X)	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.64
Avail Cap (c_a), veh/h	0	0	0	1931	0	0	0	1790
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	0.0	0.0	9.5	0.0	0.0	0.0	0.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	9.7	0.0	0.0	0.0	0.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.3	0.0	0.0	0.0	4.8
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	3.3	0.0	0.0	0.0	4.9
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.09
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		14.9						
HCM 2010 LOS		B						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	466	163	314	428	277	218	1376	434	402	997	59
Future Volume (veh/h)	55	466	163	314	428	277	218	1376	434	402	997	59
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	57	480	168	324	441	286	225	1419	447	414	1028	61
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	73	321	112	187	391	252	202	1146	346	344	1723	102
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.04	0.13	0.13	0.11	0.19	0.19	0.12	0.45	0.45	0.20	0.53	0.53
Ln Grp Delay, s/veh	90.1	310.8	317.7	420.2	151.2	156.4	165.7	149.3	184.8	178.2	27.8	27.7
Ln Grp LOS	F	F	F	F	F	F	F	F	F	F	C	C
Approach Vol, veh/h		705			1051			2091			1503	
Approach Delay, s/veh		296.1			235.9			167.2			69.2	
Approach LOS		F			F			F			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	4.0
Phs Duration (G+Y+Rc), s	36.0	74.0	21.0	24.0	23.0	87.0	10.9	34.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green (Gmax), s	31.5	69.5	16.5	19.5	18.5	82.5	13.5	22.5
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.4	3.8	5.3	3.8	5.4
Max Q Clear (g_c+I1), s	33.5	71.5	18.5	21.5	20.5	35.8	7.0	31.6
Green Ext Time (g_e), s	0.0	0.0	0.0	0.0	0.0	38.2	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	1.00	1.00	0.00	0.03	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1691		1757		1691		1757	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2556		2553		3237		2046

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		771		888		192		1318

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	414	0	324	0	225	0	57	0
Grp Sat Flow (s), veh/h/ln	1691	0	1757	0	1691	0	1757	0
Q Serve Time (g_s), s	31.5	0.0	16.5	0.0	18.5	0.0	5.0	0.0
Cycle Q Clear Time (g_c), s	31.5	0.0	16.5	0.0	18.5	0.0	5.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	344	0	187	0	202	0	73	0
V/C Ratio (X)	1.20	0.00	1.73	0.00	1.11	0.00	0.78	0.00
Avail Cap (c_a), veh/h	344	0	187	0	202	0	153	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	61.7	0.0	69.3	0.0	68.3	0.0	73.6	0.0
Incr Delay (d2), s/veh	116.4	0.0	351.0	0.0	97.5	0.0	16.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	178.2	0.0	420.2	0.0	165.7	0.0	90.1	0.0
1st-Term Q (Q1), veh/ln	14.7	0.0	8.0	0.0	8.6	0.0	2.4	0.0
2nd-Term Q (Q2), veh/ln	11.1	0.0	18.2	0.0	5.5	0.0	0.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	25.8	0.0	26.2	0.0	14.1	0.0	2.8	0.0
%ile Storage Ratio (RQ%)	2.10	0.00	2.86	0.00	2.26	0.00	0.56	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	17.6	0.0	34.2	0.0	5.8	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.4	0.0	0.3	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	915	0	329	0	536	0	377
Grp Sat Flow (s), veh/h/ln	0	1687	0	1752	0	1687	0	1752
Q Serve Time (g_s), s	0.0	69.5	0.0	19.5	0.0	33.7	0.0	29.6
Cycle Q Clear Time (g_c), s	0.0	69.5	0.0	19.5	0.0	33.7	0.0	29.6
Lane Grp Cap (c), veh/h	0	756	0	220	0	898	0	334
V/C Ratio (X)	0.00	1.21	0.00	1.49	0.00	0.60	0.00	1.13
Avail Cap (c_a), veh/h	0	756	0	220	0	898	0	334
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	42.8	0.0	67.8	0.0	24.8	0.0	62.7
Incr Delay (d2), s/veh	0.0	106.6	0.0	243.1	0.0	2.9	0.0	88.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	149.3	0.0	310.8	0.0	27.8	0.0	151.2
1st-Term Q (Q1), veh/ln	0.0	32.4	0.0	9.4	0.0	15.6	0.0	14.3

2nd-Term Q (Q2), veh/ln	0.0	22.4	0.0	14.9	0.0	0.7	0.0	8.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	54.8	0.0	24.3	0.0	16.4	0.0	22.5
%ile Storage Ratio (RQ%)	0.00	4.31	0.00	0.56	0.00	1.25	0.00	0.51
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	39.7	0.0	27.0	0.0	0.0	0.0	10.7
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.4	0.0	0.0	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	951	0	319	0	553	0	350
Grp Sat Flow (s), veh/h/ln	0	1640	0	1688	0	1742	0	1612
Q Serve Time (g_s), s	0.0	69.5	0.0	19.5	0.0	33.8	0.0	29.6
Cycle Q Clear Time (g_c), s	0.0	69.5	0.0	19.5	0.0	33.8	0.0	29.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.47	0.00	0.53	0.00	0.11	0.00	0.82
Lane Grp Cap (c), veh/h	0	735	0	212	0	927	0	308
V/C Ratio (X)	0.00	1.29	0.00	1.50	0.00	0.60	0.00	1.14
Avail Cap (c_a), veh/h	0	735	0	212	0	927	0	308
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	42.8	0.0	67.8	0.0	24.8	0.0	62.7
Incr Delay (d2), s/veh	0.0	142.0	0.0	249.9	0.0	2.8	0.0	93.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	184.8	0.0	317.7	0.0	27.7	0.0	156.4
1st-Term Q (Q1), veh/ln	0.0	31.5	0.0	9.1	0.0	16.1	0.0	13.2
2nd-Term Q (Q2), veh/ln	0.0	29.0	0.0	14.7	0.0	0.7	0.0	8.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	60.5	0.0	23.8	0.0	16.9	0.0	21.2
%ile Storage Ratio (RQ%)	0.00	4.76	0.00	0.55	0.00	1.29	0.00	0.48
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	53.9	0.0	26.8	0.0	0.0	0.0	10.5
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.4	0.0	0.0	0.0	0.3
Intersection Summary								
HCM 2010 Ctrl Delay		170.1						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	41	81	95	41	78	88	596	196	167	503	9
Future Volume (veh/h)	4	41	81	95	41	78	88	596	196	167	503	9
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1900	1712	1712	1712	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	4	44	86	101	44	83	94	634	209	178	535	10
Adj No. of Lanes	1	1	0	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	11	11	11	11	11	11	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	9	60	117	101	294	250	74	1278	421	74	1735	32
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.01	0.12	0.12	0.06	0.17	0.17	0.04	0.51	0.51	0.04	0.51	0.51
Ln Grp Delay, s/veh	79.9	0.0	45.3	132.7	32.6	34.2	240.8	16.7	16.8	722.7	13.9	13.9
Ln Grp LOS	E		D	F	C	C	F	B	B	F	B	B
Approach Vol, veh/h		134			228			937			723	
Approach Delay, s/veh		46.3			77.5			39.2			188.4	
Approach LOS		D			E			D			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	10.0	53.1	12.0	16.9	10.0	53.1	6.8	22.1
Change Period (Y+Rc), s	6.0	6.0	* 6.3	* 6.3	6.0	6.0	* 6.3	* 6.3
Max Green (Gmax), s	4.0	34.0	* 5.7	* 24	4.0	34.0	* 5.7	* 24
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.0	3.8	5.3	3.8	5.0
Max Q Clear (g_c+I1), s	6.0	17.3	7.7	9.5	6.0	10.4	2.2	6.6
Green Ext Time (g_e), s	0.0	8.3	0.0	1.0	0.0	9.9	0.0	1.1
Prob of Phs Call (p_c)	0.99	1.00	0.92	1.00	0.91	1.00	0.10	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.01	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		1		3		5		7
Mvmt Sat Flow, veh/h		1691		1630		1691		1630

Through Movement Data								
Assigned Mvmt			2		4		6		8
Mvmt Sat Flow, veh/h			2496		519		3388		1712

Right-Turn Movement Data								
Assigned Mvmt			12		14		16		18
Mvmt Sat Flow, veh/h			822		1014		63		1455

Left Lane Group Data								
Assigned Mvmt		1	0	3	0	5	0	7	0
Lane Assignment		(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	178	0	101	0	94	0	4	0
Grp Sat Flow (s), veh/h/ln	1691	0	1630	0	1691	0	1630	0
Q Serve Time (g_s), s	4.0	0.0	5.7	0.0	4.0	0.0	0.2	0.0
Cycle Q Clear Time (g_c), s	4.0	0.0	5.7	0.0	4.0	0.0	0.2	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	74	0	101	0	74	0	9	0
V/C Ratio (X)	2.42	0.00	1.00	0.00	1.28	0.00	0.46	0.00
Avail Cap (c_a), veh/h	74	0	101	0	74	0	101	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	44.0	0.0	43.1	0.0	44.0	0.0	45.6	0.0
Incr Delay (d2), s/veh	678.7	0.0	89.5	0.0	196.8	0.0	34.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	722.7	0.0	132.7	0.0	240.8	0.0	79.9	0.0
1st-Term Q (Q1), veh/ln	1.9	0.0	2.6	0.0	1.9	0.0	0.1	0.0
2nd-Term Q (Q2), veh/ln	13.9	0.0	2.5	0.0	4.0	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	15.7	0.0	5.1	0.0	5.9	0.0	0.2	0.0
%ile Storage Ratio (RQ%)	1.83	0.00	0.98	0.00	0.49	0.00	0.03	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	26.1	0.0	0.0	0.0	5.1	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.6	0.0	0.0	0.0	0.3	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	428	0	0	0	266	0	44
Grp Sat Flow (s), veh/h/ln	0	1687	0	0	0	1687	0	1712
Q Serve Time (g_s), s	0.0	15.3	0.0	0.0	0.0	8.4	0.0	2.0
Cycle Q Clear Time (g_c), s	0.0	15.3	0.0	0.0	0.0	8.4	0.0	2.0
Lane Grp Cap (c), veh/h	0	864	0	0	0	864	0	294
V/C Ratio (X)	0.00	0.50	0.00	0.00	0.00	0.31	0.00	0.15
Avail Cap (c_a), veh/h	0	864	0	0	0	864	0	441
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	14.7	0.0	0.0	0.0	13.0	0.0	32.4
Incr Delay (d2), s/veh	0.0	2.0	0.0	0.0	0.0	0.9	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	16.7	0.0	0.0	0.0	13.9	0.0	32.6
1st-Term Q (Q1), veh/ln	0.0	7.0	0.0	0.0	0.0	3.9	0.0	1.0

2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.5	0.0	0.0	0.0	4.1	0.0	1.0
%ile Storage Ratio (RQ%)	0.00	0.24	0.00	0.00	0.00	0.12	0.00	0.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	415	0	130	0	279	0	83
Grp Sat Flow (s), veh/h/ln	0	1631	0	1533	0	1765	0	1455
Q Serve Time (g_s), s	0.0	15.3	0.0	7.5	0.0	8.4	0.0	4.6
Cycle Q Clear Time (g_c), s	0.0	15.3	0.0	7.5	0.0	8.4	0.0	4.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.50	0.00	0.66	0.00	0.04	0.00	1.00
Lane Grp Cap (c), veh/h	0	835	0	176	0	904	0	250
V/C Ratio (X)	0.00	0.50	0.00	0.74	0.00	0.31	0.00	0.33
Avail Cap (c_a), veh/h	0	835	0	395	0	904	0	375
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	14.7	0.0	39.4	0.0	13.0	0.0	33.5
Incr Delay (d2), s/veh	0.0	2.1	0.0	5.9	0.0	0.9	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	16.8	0.0	45.3	0.0	13.9	0.0	34.2
1st-Term Q (Q1), veh/ln	0.0	6.8	0.0	3.2	0.0	4.1	0.0	1.8
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.3	0.0	0.2	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.3	0.0	3.5	0.0	4.3	0.0	1.9
%ile Storage Ratio (RQ%)	0.00	0.24	0.00	0.08	0.00	0.13	0.00	0.33
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	97.4
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	314	49	179	270	150	104	1221	222	391	1230	81
Future Volume (veh/h)	110	314	49	179	270	150	104	1221	222	391	1230	81
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	112	320	50	183	276	153	106	1246	227	399	1255	83
Adj No. of Lanes	1	1	0	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	96	376	59	96	445	378	126	1228	222	185	1494	99
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.24	0.24	0.05	0.24	0.24	0.07	0.43	0.43	0.11	0.46	0.46
Ln Grp Delay, s/veh	211.3	0.0	60.1	510.7	50.8	47.3	103.4	77.4	81.1	586.8	36.2	36.2
Ln Grp LOS	F		E	F	D	D	F	F	F	F	D	D
Approach Vol, veh/h		482			612			1579			1737	
Approach Delay, s/veh		95.2			187.4			80.8			162.7	
Approach LOS		F			F			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	22.0	68.8	14.0	41.2	16.9	73.9	14.0	41.2
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green (Gmax), s	16.0	46.0	8.0	52.0	11.0	51.0	8.0	52.0
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.0	3.8	5.3	3.8	5.0
Max Q Clear (g_c+I1), s	18.0	64.8	10.0	30.6	11.0	52.2	10.0	21.5
Green Ext Time (g_e), s	0.0	0.0	0.0	4.6	0.0	0.0	0.0	5.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.99	1.00	0.99	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.06	1.00	0.00	1.00	0.01

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1691		1757		1691		1757	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2855		1558		3213		1845

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		516		243		212		1568

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	399	0	183	0	106	0	112	0
Grp Sat Flow (s), veh/h/ln	1691	0	1757	0	1691	0	1757	0
Q Serve Time (g_s), s	16.0	0.0	8.0	0.0	9.0	0.0	8.0	0.0
Cycle Q Clear Time (g_c), s	16.0	0.0	8.0	0.0	9.0	0.0	8.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	185	0	96	0	126	0	96	0
V/C Ratio (X)	2.15	0.00	1.90	0.00	0.84	0.00	1.16	0.00
Avail Cap (c_a), veh/h	185	0	96	0	127	0	96	0
Upstream Filter (I)	0.16	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	65.0	0.0	69.0	0.0	66.7	0.0	69.0	0.0
Incr Delay (d2), s/veh	521.8	0.0	441.7	0.0	36.7	0.0	142.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	586.8	0.0	510.7	0.0	103.4	0.0	211.3	0.0
1st-Term Q (Q1), veh/ln	7.5	0.0	3.9	0.0	4.2	0.0	3.9	0.0
2nd-Term Q (Q2), veh/ln	26.9	0.0	11.8	0.0	1.3	0.0	3.8	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	34.3	0.0	15.7	0.0	5.5	0.0	7.7	0.0
%ile Storage Ratio (RQ%)	3.62	0.00	2.97	0.00	0.68	0.00	1.19	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	53.4	0.0	21.7	0.0	0.0	0.0	3.9	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.5	0.0	0.5	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	732	0	0	0	658	0	276
Grp Sat Flow (s), veh/h/ln	0	1687	0	0	0	1687	0	1845
Q Serve Time (g_s), s	0.0	62.8	0.0	0.0	0.0	50.0	0.0	19.5
Cycle Q Clear Time (g_c), s	0.0	62.8	0.0	0.0	0.0	50.0	0.0	19.5
Lane Grp Cap (c), veh/h	0	725	0	0	0	784	0	445
V/C Ratio (X)	0.00	1.01	0.00	0.00	0.00	0.84	0.00	0.62
Avail Cap (c_a), veh/h	0	725	0	0	0	784	0	657
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.16	0.00	1.00
Uniform Delay (d1), s/veh	0.0	41.6	0.0	0.0	0.0	34.3	0.0	49.4
Incr Delay (d2), s/veh	0.0	35.7	0.0	0.0	0.0	1.9	0.0	1.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	77.4	0.0	0.0	0.0	36.2	0.0	50.8
1st-Term Q (Q1), veh/ln	0.0	29.2	0.0	0.0	0.0	23.2	0.0	10.0

2nd-Term Q (Q2), veh/ln	0.0	7.2	0.0	0.0	0.0	0.4	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	36.4	0.0	0.0	0.0	23.6	0.0	10.1
%ile Storage Ratio (RQ%)	0.00	1.83	0.00	0.00	0.00	0.49	0.00	0.28
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	741	0	370	0	680	0	153
Grp Sat Flow (s), veh/h/ln	0	1685	0	1802	0	1738	0	1568
Q Serve Time (g_s), s	0.0	62.8	0.0	28.6	0.0	50.2	0.0	12.0
Cycle Q Clear Time (g_c), s	0.0	62.8	0.0	28.6	0.0	50.2	0.0	12.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.31	0.00	0.14	0.00	0.12	0.00	1.00
Lane Grp Cap (c), veh/h	0	724	0	435	0	808	0	378
V/C Ratio (X)	0.00	1.02	0.00	0.85	0.00	0.84	0.00	0.40
Avail Cap (c_a), veh/h	0	724	0	642	0	808	0	558
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.16	0.00	1.00
Uniform Delay (d1), s/veh	0.0	41.6	0.0	52.9	0.0	34.3	0.0	46.6
Incr Delay (d2), s/veh	0.0	39.4	0.0	7.2	0.0	1.9	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	81.1	0.0	60.1	0.0	36.2	0.0	47.3
1st-Term Q (Q1), veh/ln	0.0	29.2	0.0	14.3	0.0	24.0	0.0	5.2
2nd-Term Q (Q2), veh/ln	0.0	7.9	0.0	0.9	0.0	0.4	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	37.1	0.0	15.2	0.0	24.4	0.0	5.2
%ile Storage Ratio (RQ%)	0.00	1.87	0.00	0.43	0.00	0.51	0.00	0.15
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		129.4						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	162	285	67	159	374	171	131	1116	91	305	1380	127
Future Volume (veh/h)	162	285	67	159	374	171	131	1116	91	305	1380	127
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	172	303	71	169	398	182	139	1187	97	324	1468	135
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	176	625	531	255	625	531	160	1403	114	217	1493	136
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.09	0.44	0.44	0.13	0.48	0.48
Ln Grp Delay, s/veh	127.2	40.3	34.9	63.6	44.5	38.0	70.6	38.8	38.8	298.4	55.0	57.5
Ln Grp LOS	F	D	C	E	D	D	E	D	D	F	D	E
Approach Vol, veh/h		546			749			1423			1927	
Approach Delay, s/veh		67.0			47.2			41.9			97.0	
Approach LOS		E			D			D			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Case No	2.0	4.0		5.0	2.0	4.0		5.0
Phs Duration (G+Y+Rc), s	24.0	72.0		56.0	18.9	77.1		56.0
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green (Gmax), s	19.5	67.5		51.5	19.5	67.5		51.5
Max Allow Headway (MAH), s	3.8	5.3		5.0	3.8	5.3		5.0
Max Q Clear (g_c+I1), s	21.5	53.0		53.5	14.3	73.2		46.4
Green Ext Time (g_e), s	0.0	13.2		0.0	0.1	0.0		3.1
Prob of Phs Call (p_c)	1.00	1.00		1.00	1.00	1.00		1.00
Prob of Max Out (p_x)	1.00	0.00		1.00	0.29	0.00		0.99

Left-Turn Movement Data								
Assigned Mvmt	1			7	5			3
Mvmt Sat Flow, veh/h	1691			823	1691			995

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3159		1845		3127		1845

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		258		1568		286		1568

Left Lane Group Data								
Assigned Mvmt	1	0	0	7	5	0	0	3
Lane Assignment	(Prot)				(Prot)			

Lanes in Grp	1	0	0	1	1	0	0	1
Grp Vol (v), veh/h	324	0	0	172	139	0	0	169
Grp Sat Flow (s), veh/h/ln	1691	0	0	823	1691	0	0	995
Q Serve Time (g_s), s	19.5	0.0	0.0	23.9	12.3	0.0	0.0	24.6
Cycle Q Clear Time (g_c), s	19.5	0.0	0.0	51.5	12.3	0.0	0.0	44.4
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	823	0	0	0	995
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	51.5	0.0	0.0	0.0	51.5
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	23.9	0.0	0.0	0.0	31.7
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	23.9	0.0	0.0	0.0	24.6
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	217	0	0	176	160	0	0	255
V/C Ratio (X)	1.49	0.00	0.00	0.97	0.87	0.00	0.00	0.66
Avail Cap (c_a), veh/h	217	0	0	176	217	0	0	255
Upstream Filter (I)	0.42	0.00	0.00	1.00	0.09	0.00	0.00	1.00
Uniform Delay (d1), s/veh	66.3	0.0	0.0	67.1	67.8	0.0	0.0	57.3
Incr Delay (d2), s/veh	232.2	0.0	0.0	60.1	2.7	0.0	0.0	6.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	298.4	0.0	0.0	127.2	70.6	0.0	0.0	63.6
1st-Term Q (Q1), veh/ln	9.1	0.0	0.0	7.2	5.8	0.0	0.0	6.8
2nd-Term Q (Q2), veh/ln	14.0	0.0	0.0	2.9	0.1	0.0	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	23.1	0.0	0.0	10.2	5.9	0.0	0.0	7.2
%ile Storage Ratio (RQ%)	2.26	0.00	0.00	1.53	0.80	0.00	0.00	1.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	26.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	633	0	303	0	788	0	398
Grp Sat Flow (s), veh/h/ln	0	1687	0	1845	0	1687	0	1845
Q Serve Time (g_s), s	0.0	50.8	0.0	19.8	0.0	69.6	0.0	27.6
Cycle Q Clear Time (g_c), s	0.0	50.8	0.0	19.8	0.0	69.6	0.0	27.6
Lane Grp Cap (c), veh/h	0	749	0	625	0	805	0	625
V/C Ratio (X)	0.00	0.85	0.00	0.48	0.00	0.98	0.00	0.64
Avail Cap (c_a), veh/h	0	749	0	625	0	805	0	625
Upstream Filter (I)	0.00	0.09	0.00	1.00	0.00	0.42	0.00	1.00
Uniform Delay (d1), s/veh	0.0	37.6	0.0	39.8	0.0	38.9	0.0	42.4
Incr Delay (d2), s/veh	0.0	1.2	0.0	0.6	0.0	16.0	0.0	2.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	38.8	0.0	40.3	0.0	55.0	0.0	44.5
1st-Term Q (Q1), veh/ln	0.0	23.6	0.0	10.1	0.0	32.4	0.0	14.0

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.1	0.0	3.6	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	23.8	0.0	10.2	0.0	36.0	0.0	14.4
%ile Storage Ratio (RQ%)	0.00	0.50	0.00	0.30	0.00	1.58	0.00	0.34
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	651	0	71	0	815	0	182
Grp Sat Flow (s), veh/h/ln	0	1730	0	1568	0	1725	0	1568
Q Serve Time (g_s), s	0.0	51.0	0.0	4.8	0.0	71.2	0.0	13.2
Cycle Q Clear Time (g_c), s	0.0	51.0	0.0	4.8	0.0	71.2	0.0	13.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.15	0.00	1.00	0.00	0.17	0.00	1.00
Lane Grp Cap (c), veh/h	0	768	0	531	0	824	0	531
V/C Ratio (X)	0.00	0.85	0.00	0.13	0.00	0.99	0.00	0.34
Avail Cap (c_a), veh/h	0	768	0	531	0	824	0	531
Upstream Filter (I)	0.00	0.09	0.00	1.00	0.00	0.42	0.00	1.00
Uniform Delay (d1), s/veh	0.0	37.7	0.0	34.8	0.0	39.3	0.0	37.6
Incr Delay (d2), s/veh	0.0	1.2	0.0	0.1	0.0	18.1	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	38.8	0.0	34.9	0.0	57.5	0.0	38.0
1st-Term Q (Q1), veh/ln	0.0	24.2	0.0	2.1	0.0	33.7	0.0	5.7
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	4.1	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	24.5	0.0	2.1	0.0	37.9	0.0	5.8
%ile Storage Ratio (RQ%)	0.00	0.51	0.00	0.37	0.00	1.66	0.00	0.82
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		68.5						
HCM 2010 LOS		E						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	56	48	140	47	629	52	1436	95	545	1681	108
Future Volume (veh/h)	80	56	48	140	47	629	52	1436	95	545	1681	108
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	85	60	51	149	50	669	55	1528	101	580	1788	115
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	46	109	93	170	28	373	102	1465	96	300	2161	138
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.12	0.12	0.12	0.10	0.25	0.25	0.46	0.46	0.46	0.18	0.67	0.67
Ln Grp Delay, s/veh	540.3	0.0	68.9	97.2	0.0	425.5	68.1	76.1	79.0	488.0	20.2	20.8
Ln Grp LOS	F		E	F		F	E	F	F	F	C	C
Approach Vol, veh/h		196			868			1684			2483	
Approach Delay, s/veh		273.3			369.1			77.3			129.7	
Approach LOS		F			F			E			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4		6		8
Case No	2.0	6.0	2.0	6.0		4.0		4.0
Phs Duration (G+Y+Rc), s	34.0	78.0	21.3	24.7		112.0		46.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0		6.0		6.0
Max Green (Gmax), s	28.0	72.0	19.0	15.0		106.0		40.0
Max Allow Headway (MAH), s	3.8	5.4	3.8	5.6		5.4		5.6
Max Q Clear (g_c+I1), s	30.0	74.0	15.2	20.7		68.3		42.0
Green Ext Time (g_e), s	0.0	0.0	0.1	0.0		35.6		0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00		1.00		1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00		0.00		1.00

Left-Turn Movement Data				
Assigned Mvmt	1	5	3	7
Mvmt Sat Flow, veh/h	1691	225	1757	723

Through Movement Data				
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3214		922		3221		110

Right-Turn Movement Data				
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		211		784		205		1474

Left Lane Group Data								
Assigned Mvmt	1	5	3	7	0	0	0	0
Lane Assignment	(Prot)		(Prot)					

Lanes in Grp	1	1	1	1	0	0	0	0
Grp Vol (v), veh/h	580	55	149	85	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1691	225	1757	723	0	0	0	0
Q Serve Time (g_s), s	28.0	38.3	13.2	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	28.0	70.7	13.2	18.7	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	225	0	723	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	72.0	0.0	18.7	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	39.7	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	38.3	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	300	102	170	46	0	0	0	0
V/C Ratio (X)	1.94	0.54	0.87	1.87	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	300	102	211	46	0	0	0	0
Upstream Filter (I)	0.17	0.48	1.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	65.0	58.7	70.4	79.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	423.0	9.4	26.8	461.3	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	488.0	68.1	97.2	540.3	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	13.1	2.4	6.4	2.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	35.2	0.3	1.3	5.8	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	48.3	2.6	7.7	7.8	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	5.10	0.33	0.87	2.50	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	70.1	0.0	0.0	9.9	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.5	0.0	0.0	0.5	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	798	0	0	0	928	0	0
Grp Sat Flow (s), veh/h/ln	0	1687	0	0	0	1687	0	0
Q Serve Time (g_s), s	0.0	72.0	0.0	0.0	0.0	63.6	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	72.0	0.0	0.0	0.0	63.6	0.0	0.0
Lane Grp Cap (c), veh/h	0	769	0	0	0	1132	0	0
V/C Ratio (X)	0.00	1.04	0.00	0.00	0.00	0.82	0.00	0.00
Avail Cap (c_a), veh/h	0	769	0	0	0	1132	0	0
Upstream Filter (I)	0.00	0.48	0.00	0.00	0.00	0.17	0.00	0.00
Uniform Delay (d1), s/veh	0.0	43.0	0.0	0.0	0.0	19.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	33.1	0.0	0.0	0.0	1.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	76.1	0.0	0.0	0.0	20.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	33.5	0.0	0.0	0.0	29.4	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	7.1	0.0	0.0	0.0	0.4	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	40.6	0.0	0.0	0.0	29.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.78	0.00	0.00	0.00	1.52	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	7.4	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	831	0	111	0	975	0	719
Grp Sat Flow (s), veh/h/ln	0	1738	0	1706	0	1739	0	1584
Q Serve Time (g_s), s	0.0	72.0	0.0	9.7	0.0	66.3	0.0	40.0
Cycle Q Clear Time (g_c), s	0.0	72.0	0.0	9.7	0.0	66.3	0.0	40.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.12	0.00	0.46	0.00	0.12	0.00	0.93
Lane Grp Cap (c), veh/h	0	792	0	202	0	1167	0	401
V/C Ratio (X)	0.00	1.05	0.00	0.55	0.00	0.84	0.00	1.79
Avail Cap (c_a), veh/h	0	792	0	202	0	1167	0	401
Upstream Filter (I)	0.00	0.48	0.00	1.00	0.00	0.17	0.00	1.00
Uniform Delay (d1), s/veh	0.0	43.0	0.0	65.7	0.0	19.5	0.0	59.0
Incr Delay (d2), s/veh	0.0	36.0	0.0	3.2	0.0	1.3	0.0	366.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	79.0	0.0	68.9	0.0	20.8	0.0	425.5
1st-Term Q (Q1), veh/ln	0.0	34.5	0.0	4.6	0.0	31.7	0.0	17.5
2nd-Term Q (Q2), veh/ln	0.0	7.9	0.0	0.2	0.0	0.4	0.0	40.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	42.5	0.0	4.8	0.0	32.1	0.0	58.3
%ile Storage Ratio (RQ%)	0.00	1.86	0.00	0.62	0.00	1.64	0.00	6.22
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	9.6	0.0	0.0	0.0	0.0	0.0	79.5
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	157.9
HCM 2010 LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	570	786	346	844	950	9	293	1176	1	0	1002	227
Future Volume (veh/h)	570	786	346	844	950	9	293	1176	1	0	1002	227
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1759	1759	1759	1900	1776	1776	1776	0	1776	1776
Adj Flow Rate, veh/h	594	819	360	879	990	9	305	1225	0	0	1044	0
Adj No. of Lanes	2	2	1	2	2	0	1	2	1	0	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	8	8	8	8	8	8	7	7	7	0	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			No		
Cap, veh/h	660	455	204	855	666	6	134	1614	722	0	1214	543
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.20	0.14	0.14	0.26	0.20	0.20	0.08	0.48	0.00	0.00	0.36	0.00
Ln Grp Delay, s/veh	69.4	434.0	430.4	94.0	295.6	294.9	650.2	32.8	0.0	0.0	53.2	0.0
Ln Grp LOS	E	F	F	F	F	F	F	C			D	
Approach Vol, veh/h		1773			1878			1530			1044	
Approach Delay, s/veh		311.1			201.1			155.9			53.2	
Approach LOS		F			F			F			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Case No		3.0	2.0	3.0	2.0	7.0	2.0	4.0
Phs Duration (G+Y+Rc), s		79.0	46.0	27.0	18.0	61.0	36.9	36.1
Change Period (Y+Rc), s		6.3	6.0	6.3	6.0	6.3	6.0	6.3
Max Green (Gmax), s		72.7	40.0	20.7	12.0	54.7	40.0	20.7
Max Allow Headway (MAH), s		5.3	3.8	5.1	3.8	5.3	3.8	5.1
Max Q Clear (g_c+I1), s		47.2	42.0	22.7	14.0	45.6	29.1	31.8
Green Ext Time (g_e), s		19.0	0.0	0.0	0.0	7.9	1.8	0.0
Prob of Phs Call (p_c)		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)		0.00	1.00	1.00	1.00	0.00	0.05	1.00

Left-Turn Movement Data								
Assigned Mvmt			3		5	1	7	
Mvmt Sat Flow, veh/h			3250		1691	0	3250	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3374		3343		3463		3394

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1509		1495		1509		31

Left Lane Group Data								
Assigned Mvmt	0	0	3	0	5	1	7	0
Lane Assignment			(Prot)		(Prot)		(Prot)	

Lanes in Grp	0	0	2	0	1	0	2	0
Grp Vol (v), veh/h	0	0	879	0	305	0	594	0
Grp Sat Flow (s), veh/h/ln	0	0	1625	0	1691	0	1625	0
Q Serve Time (g_s), s	0.0	0.0	40.0	0.0	12.0	0.0	27.1	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	40.0	0.0	12.0	0.0	27.1	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	54.7	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	855	0	134	0	660	0
V/C Ratio (X)	0.00	0.00	1.03	0.00	2.28	0.00	0.90	0.00
Avail Cap (c_a), veh/h	0	0	855	0	134	0	855	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.09	0.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	56.0	0.0	70.0	0.0	59.1	0.0
Incr Delay (d2), s/veh	0.0	0.0	38.0	0.0	580.2	0.0	10.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	94.0	0.0	650.2	0.0	69.4	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	17.9	0.0	5.6	0.0	12.2	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	4.5	0.0	21.5	0.0	1.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	22.5	0.0	27.1	0.0	13.2	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	1.49	0.00	3.05	0.00	1.25	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	5.9	0.0	42.9	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.6	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	2	0	1
Grp Vol (v), veh/h	0	1225	0	819	0	1044	0	487
Grp Sat Flow (s), veh/h/ln	0	1687	0	1671	0	1687	0	1671
Q Serve Time (g_s), s	0.0	45.2	0.0	20.7	0.0	43.6	0.0	29.8
Cycle Q Clear Time (g_c), s	0.0	45.2	0.0	20.7	0.0	43.6	0.0	29.8
Lane Grp Cap (c), veh/h	0	1614	0	455	0	1214	0	328
V/C Ratio (X)	0.00	0.76	0.00	1.80	0.00	0.86	0.00	1.49
Avail Cap (c_a), veh/h	0	1614	0	455	0	1214	0	328
Upstream Filter (I)	0.00	0.09	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	32.5	0.0	65.7	0.0	45.1	0.0	61.1
Incr Delay (d2), s/veh	0.0	0.3	0.0	368.3	0.0	8.1	0.0	234.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	32.8	0.0	434.0	0.0	53.2	0.0	295.6
1st-Term Q (Q1), veh/ln	0.0	20.9	0.0	9.5	0.0	20.3	0.0	13.8

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	23.3	0.0	1.4	0.0	21.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	21.0	0.0	32.8	0.0	21.7	0.0	35.1
%ile Storage Ratio (RQ%)	0.00	1.07	0.00	1.13	0.00	0.72	0.00	1.06
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	90.9	0.0	0.0	0.0	39.9
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.4
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	360	0	0	0	512
Grp Sat Flow (s), veh/h/ln	0	1509	0	1495	0	1509	0	1754
Q Serve Time (g_s), s	0.0	0.0	0.0	20.7	0.0	0.0	0.0	29.8
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	20.7	0.0	0.0	0.0	29.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.02
Lane Grp Cap (c), veh/h	0	722	0	204	0	543	0	344
V/C Ratio (X)	0.00	0.00	0.00	1.77	0.00	0.00	0.00	1.49
Avail Cap (c_a), veh/h	0	722	0	204	0	543	0	344
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	65.7	0.0	0.0	0.0	61.1
Incr Delay (d2), s/veh	0.0	0.0	0.0	364.8	0.0	0.0	0.0	233.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	430.4	0.0	0.0	0.0	294.9
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	8.6	0.0	0.0	0.0	14.4
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	20.6	0.0	0.0	0.0	22.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	29.2	0.0	0.0	0.0	36.8
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	1.01	0.00	0.00	0.00	1.11
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	39.1	0.0	0.0	0.0	41.8
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.4
Intersection Summary								
HCM 2010 Ctrl Delay		196.5						
HCM 2010 LOS		F						

APPENDIX I-P4:
Year 2040 Zoning Intersection Background LOS PM Analysis with Mitigation

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	735	1343	726	236	750	92	363	335	229	186	224	239
Future Volume (veh/h)	735	1343	726	236	750	92	363	335	229	186	224	239
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1743	1743	1743	1743	1743	1743
Adj Flow Rate, veh/h	782	1429	772	251	798	98	386	356	244	198	238	254
Adj No. of Lanes	2	2	1	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	9	9	9	9	9	9
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	827	1693	758	299	1653	515	211	1177	367	65	961	299
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.24	0.47	0.47	0.09	0.32	0.32	0.07	0.25	0.25	0.02	0.20	0.20
Ln Grp Delay, s/veh	76.5	40.9	78.1	82.3	42.9	38.5	462.3	47.8	61.4	1039.4	52.2	84.0
Ln Grp LOS	E	D	F	F	D	D	F	D	E	F	D	F
Approach Vol, veh/h		2983			1147			986			690	
Approach Delay, s/veh		59.8			51.2			213.4			347.2	
Approach LOS		E			D			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	10.0	45.0	19.6	79.4	17.0	38.0	43.0	56.0
Change Period (Y+Rc), s	6.9	6.9	6.4	6.4	6.9	6.9	6.4	6.4
Max Green (Gmax), s	3.1	38.1	16.6	69.6	10.1	31.1	37.6	48.6
Max Allow Headway (MAH), s	3.8	4.7	3.7	4.8	3.8	4.7	3.8	4.8
Max Q Clear (g_c+I1), s	5.1	24.8	13.0	75.0	12.1	27.4	36.1	21.2
Green Ext Time (g_e), s	0.0	4.9	0.3	0.0	0.0	2.0	0.6	22.6
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	3221	3476	3221	3476

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	4759	3574	4759	5136

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	1482	1599	1482	1599

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	198	0	251	0	386	0	782	0
Grp Sat Flow (s), veh/h/ln	1610	0	1738	0	1610	0	1738	0
Q Serve Time (g_s), s	3.1	0.0	11.0	0.0	10.1	0.0	34.1	0.0
Cycle Q Clear Time (g_c), s	3.1	0.0	11.0	0.0	10.1	0.0	34.1	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	65	0	299	0	211	0	827	0
V/C Ratio (X)	3.05	0.00	0.84	0.00	1.83	0.00	0.95	0.00
Avail Cap (c_a), veh/h	65	0	375	0	211	0	849	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	75.4	0.0	69.3	0.0	71.9	0.0	57.7	0.0
Incr Delay (d2), s/veh	963.9	0.0	12.9	0.0	390.3	0.0	18.8	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	1039.4	0.0	82.3	0.0	462.3	0.0	76.5	0.0
1st-Term Q (Q1), veh/ln	1.4	0.0	5.3	0.0	4.5	0.0	16.4	0.0
2nd-Term Q (Q2), veh/ln	8.7	0.0	0.5	0.0	11.5	0.0	2.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	10.1	0.0	5.8	0.0	15.9	0.0	18.6	0.0
%ile Storage Ratio (RQ%)	0.84	0.00	0.46	0.00	1.33	0.00	0.75	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	33.3	0.0	0.0	0.0	43.7	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.8	0.0	0.0	0.0	0.5	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	2	0	3	0	3
Grp Vol (v), veh/h	0	356	0	1429	0	238	0	798
Grp Sat Flow (s), veh/h/ln	0	1586	0	1787	0	1586	0	1712
Q Serve Time (g_s), s	0.0	9.4	0.0	54.0	0.0	6.5	0.0	19.2
Cycle Q Clear Time (g_c), s	0.0	9.4	0.0	54.0	0.0	6.5	0.0	19.2
Lane Grp Cap (c), veh/h	0	1177	0	1693	0	961	0	1653
V/C Ratio (X)	0.00	0.30	0.00	0.84	0.00	0.25	0.00	0.48
Avail Cap (c_a), veh/h	0	1177	0	1693	0	961	0	1653
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	47.1	0.0	35.5	0.0	51.6	0.0	41.9
Incr Delay (d2), s/veh	0.0	0.7	0.0	5.3	0.0	0.6	0.0	1.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	47.8	0.0	40.9	0.0	52.2	0.0	42.9
1st-Term Q (Q1), veh/ln	0.0	4.1	0.0	26.6	0.0	2.8	0.0	9.1

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	1.3	0.0	0.1	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	4.2	0.0	27.9	0.0	2.9	0.0	9.2
%ile Storage Ratio (RQ%)	0.00	0.15	0.00	0.63	0.00	0.11	0.00	0.45
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	244	0	772	0	254	0	98
Grp Sat Flow (s), veh/h/ln	0	1482	0	1599	0	1482	0	1599
Q Serve Time (g_s), s	0.0	22.8	0.0	73.0	0.0	25.4	0.0	6.8
Cycle Q Clear Time (g_c), s	0.0	22.8	0.0	73.0	0.0	25.4	0.0	6.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	367	0	758	0	299	0	515
V/C Ratio (X)	0.00	0.67	0.00	1.02	0.00	0.85	0.00	0.19
Avail Cap (c_a), veh/h	0	367	0	758	0	299	0	515
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	52.2	0.0	40.5	0.0	59.2	0.0	37.7
Incr Delay (d2), s/veh	0.0	9.2	0.0	37.6	0.0	24.8	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	61.4	0.0	78.1	0.0	84.0	0.0	38.5
1st-Term Q (Q1), veh/ln	0.0	9.3	0.0	32.2	0.0	10.4	0.0	3.0
2nd-Term Q (Q2), veh/ln	0.0	0.9	0.0	7.9	0.0	2.1	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	10.3	0.0	40.1	0.0	12.5	0.0	3.1
%ile Storage Ratio (RQ%)	0.00	0.37	0.00	4.21	0.00	1.40	0.00	0.15
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	3.6	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		118.4						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	166	1530	188	155	910	149	216	136	211	164	73	71
Future Volume (veh/h)	166	1530	188	155	910	149	216	136	211	164	73	71
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	177	1628	200	165	968	159	230	145	224	174	78	76
Adj No. of Lanes	2	2	1	2	2	0	2	1	1	2	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	192	1886	844	192	1622	266	286	324	276	227	292	248
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.53	0.53	0.06	0.53	0.53	0.08	0.18	0.18	0.07	0.16	0.16
Ln Grp Delay, s/veh	115.5	36.6	19.9	91.5	26.2	26.2	74.5	61.2	83.4	76.0	59.2	60.5
Ln Grp LOS	F	D	B	F	C	C	E	E	F	E	E	E
Approach Vol, veh/h		2005			1292			599			328	
Approach Delay, s/veh		41.9			34.6			74.6			68.4	
Approach LOS		D			C			E			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	16.9	33.7	15.0	88.5	19.5	31.0	15.0	88.5
Change Period (Y+Rc), s	6.6	6.6	6.4	6.4	6.6	6.6	6.4	6.4
Max Green (Gmax), s	32.4	24.4	8.6	62.6	32.4	24.4	8.6	62.6
Max Allow Headway (MAH), s	3.8	4.6	3.7	5.0	3.8	4.6	3.7	5.0
Max Q Clear (g_c+I1), s	9.7	23.2	9.3	63.3	12.2	8.6	9.9	35.6
Green Ext Time (g_e), s	0.5	0.3	0.0	0.0	0.7	2.1	0.0	22.4
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3408		3442		3408		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1845		3539		1845		3044

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		1583		1568		500

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	174	0	165	0	230	0	177	0
Grp Sat Flow (s), veh/h/ln	1704	0	1721	0	1704	0	1721	0
Q Serve Time (g_s), s	7.7	0.0	7.3	0.0	10.2	0.0	7.9	0.0
Cycle Q Clear Time (g_c), s	7.7	0.0	7.3	0.0	10.2	0.0	7.9	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	227	0	192	0	286	0	192	0
V/C Ratio (X)	0.77	0.00	0.86	0.00	0.80	0.00	0.92	0.00
Avail Cap (c_a), veh/h	717	0	192	0	717	0	192	0
Upstream Filter (I)	1.00	0.00	0.57	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	70.7	0.0	72.1	0.0	69.3	0.0	72.4	0.0
Incr Delay (d2), s/veh	5.3	0.0	19.4	0.0	5.2	0.0	43.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	76.0	0.0	91.5	0.0	74.5	0.0	115.5	0.0
1st-Term Q (Q1), veh/ln	3.6	0.0	3.5	0.0	4.8	0.0	3.8	0.0
2nd-Term Q (Q2), veh/ln	0.2	0.0	0.5	0.0	0.2	0.0	1.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	3.8	0.0	4.0	0.0	5.0	0.0	4.9	0.0
%ile Storage Ratio (RQ%)	0.72	0.00	0.38	0.00	0.95	0.00	0.39	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	1	0	1
Grp Vol (v), veh/h	0	145	0	1628	0	78	0	562
Grp Sat Flow (s), veh/h/ln	0	1845	0	1770	0	1845	0	1770
Q Serve Time (g_s), s	0.0	10.8	0.0	61.3	0.0	5.7	0.0	33.5
Cycle Q Clear Time (g_c), s	0.0	10.8	0.0	61.3	0.0	5.7	0.0	33.5
Lane Grp Cap (c), veh/h	0	324	0	1886	0	292	0	943
V/C Ratio (X)	0.00	0.45	0.00	0.86	0.00	0.27	0.00	0.60
Avail Cap (c_a), veh/h	0	324	0	1886	0	292	0	943
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.57
Uniform Delay (d1), s/veh	0.0	56.8	0.0	31.1	0.0	56.9	0.0	24.6
Incr Delay (d2), s/veh	0.0	4.4	0.0	5.5	0.0	2.2	0.0	1.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	61.2	0.0	36.6	0.0	59.2	0.0	26.2
1st-Term Q (Q1), veh/ln	0.0	5.5	0.0	29.8	0.0	2.9	0.0	16.4

2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	1.4	0.0	0.2	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	5.9	0.0	31.3	0.0	3.1	0.0	16.8
%ile Storage Ratio (RQ%)	0.00	0.20	0.00	0.33	0.00	0.11	0.00	0.31
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	224	0	200	0	76	0	565
Grp Sat Flow (s), veh/h/ln	0	1568	0	1583	0	1568	0	1775
Q Serve Time (g_s), s	0.0	21.2	0.0	10.4	0.0	6.6	0.0	33.6
Cycle Q Clear Time (g_c), s	0.0	21.2	0.0	10.4	0.0	6.6	0.0	33.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.28
Lane Grp Cap (c), veh/h	0	276	0	844	0	248	0	946
V/C Ratio (X)	0.00	0.81	0.00	0.24	0.00	0.31	0.00	0.60
Avail Cap (c_a), veh/h	0	276	0	844	0	248	0	946
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.57
Uniform Delay (d1), s/veh	0.0	61.0	0.0	19.2	0.0	57.3	0.0	24.6
Incr Delay (d2), s/veh	0.0	22.4	0.0	0.7	0.0	3.2	0.0	1.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	83.4	0.0	19.9	0.0	60.5	0.0	26.2
1st-Term Q (Q1), veh/ln	0.0	9.1	0.0	4.6	0.0	2.9	0.0	16.5
2nd-Term Q (Q2), veh/ln	0.0	1.7	0.0	0.2	0.0	0.2	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	10.9	0.0	4.7	0.0	3.1	0.0	16.9
%ile Storage Ratio (RQ%)	0.00	0.37	0.00	0.05	0.00	0.11	0.00	0.31
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		46.4						
HCM 2010 LOS		D						

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	197	1685	1080	325	255	62
Future Volume (veh/h)	197	1685	1080	325	255	62
Number	7	4	8	18	1	16
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00			1.00	1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1676	1676	1676	1710	1660	1660
Adj Flow Rate, veh/h	203	1737	1113	335	263	64
Adj No. of Lanes	2	2	2	0	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	3	3
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	240	2300	1469	437	317	283
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.72	0.61	0.61	0.20	0.20
Ln Grp Delay, s/veh	78.3	14.4	28.2	29.0	85.5	57.7
Ln Grp LOS	E	B	C	C	F	E
Approach Vol, veh/h		1940	1448		327	
Approach Delay, s/veh		21.1	28.6		80.1	
Approach LOS		C	C		F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	6			4			7	8
Case No	9.0			4.0			2.0	8.0
Phs Duration (G+Y+Rc), s	40.0			127.0			19.3	107.7
Change Period (Y+Rc), s	6.5			6.4			6.4	6.4
Max Green (Gmax), s	33.5			120.6			14.6	99.6
Max Allow Headway (MAH), s	3.9			5.0			3.7	5.0
Max Q Clear (g_c+I1), s	28.6			57.6			12.8	59.1
Green Ext Time (g_e), s	0.5			49.2			0.1	34.3
Prob of Phs Call (p_c)	1.00			1.00			1.00	1.00
Prob of Max Out (p_x)	0.00			0.00			1.00	0.00
Left-Turn Movement Data								
Assigned Mvmt	1						7	3
Mvmt Sat Flow, veh/h	1581						3097	0
Through Movement Data								
Assigned Mvmt	6			4				8
Mvmt Sat Flow, veh/h	0			3269				2506
Right-Turn Movement Data								
Assigned Mvmt	16			14				18
Mvmt Sat Flow, veh/h	1411			0				720
Left Lane Group Data								
Assigned Mvmt	1	0	0	0	0	0	7	3
Lane Assignment							(Prot)	

Lanes in Grp	1	0	0	0	0	0	2	0
Grp Vol (v), veh/h	263	0	0	0	0	0	203	0
Grp Sat Flow (s), veh/h/ln	1581	0	0	0	0	0	1549	0
Q Serve Time (g_s), s	26.6	0.0	0.0	0.0	0.0	0.0	10.8	0.0
Cycle Q Clear Time (g_c), s	26.6	0.0	0.0	0.0	0.0	0.0	10.8	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1581	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	101.3
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	317	0	0	0	0	0	240	0
V/C Ratio (X)	0.83	0.00	0.00	0.00	0.00	0.00	0.85	0.00
Avail Cap (c_a), veh/h	317	0	0	0	0	0	271	0
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00
Uniform Delay (d1), s/veh	64.0	0.0	0.0	0.0	0.0	0.0	76.1	0.0
Incr Delay (d2), s/veh	21.5	0.0	0.0	0.0	0.0	0.0	2.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	85.5	0.0	0.0	0.0	0.0	0.0	78.3	0.0
1st-Term Q (Q1), veh/ln	11.6	0.0	0.0	0.0	0.0	0.0	4.6	0.0
2nd-Term Q (Q2), veh/ln	1.9	0.0	0.0	0.0	0.0	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	13.5	0.0	0.0	0.0	0.0	0.0	4.7	0.0
%ile Storage Ratio (RQ%)	0.67	0.00	0.00	0.00	0.00	0.00	0.54	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	6	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	1
Grp Vol (v), veh/h	0	0	0	1737	0	0	0	727
Grp Sat Flow (s), veh/h/ln	0	0	0	1593	0	0	0	1593
Q Serve Time (g_s), s	0.0	0.0	0.0	55.6	0.0	0.0	0.0	55.2
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	55.6	0.0	0.0	0.0	55.2
Lane Grp Cap (c), veh/h	0	0	0	2300	0	0	0	966
V/C Ratio (X)	0.00	0.00	0.00	0.76	0.00	0.00	0.00	0.75
Avail Cap (c_a), veh/h	0	0	0	2300	0	0	0	966
Upstream Filter (I)	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.80
Uniform Delay (d1), s/veh	0.0	0.0	0.0	14.2	0.0	0.0	0.0	23.8
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	4.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	14.4	0.0	0.0	0.0	28.2
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	24.1	0.0	0.0	0.0	24.2

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	1.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	24.2	0.0	0.0	0.0	25.4
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.39
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	16	0	0	14	0	0	0	18
Lane Assignment	R							T+R
Lanes in Grp	1	0	0	0	0	0	0	1
Grp Vol (v), veh/h	64	0	0	0	0	0	0	721
Grp Sat Flow (s), veh/h/ln	1411	0	0	0	0	0	0	1549
Q Serve Time (g_s), s	6.3	0.0	0.0	0.0	0.0	0.0	0.0	57.1
Cycle Q Clear Time (g_c), s	6.3	0.0	0.0	0.0	0.0	0.0	0.0	57.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46
Lane Grp Cap (c), veh/h	283	0	0	0	0	0	0	940
V/C Ratio (X)	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.77
Avail Cap (c_a), veh/h	283	0	0	0	0	0	0	940
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.80
Uniform Delay (d1), s/veh	55.9	0.0	0.0	0.0	0.0	0.0	0.0	24.2
Incr Delay (d2), s/veh	1.8	0.0	0.0	0.0	0.0	0.0	0.0	4.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	57.7	0.0	0.0	0.0	0.0	0.0	0.0	29.0
1st-Term Q (Q1), veh/ln	5.3	0.0	0.0	0.0	0.0	0.0	0.0	24.4
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.0	0.0	0.0	0.0	0.0	1.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	5.5	0.0	0.0	0.0	0.0	0.0	0.0	25.7
%ile Storage Ratio (RQ%)	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.39
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		29.2						
HCM 2010 LOS		C						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	1732	52	87	1303	105	78	20	81	72	7	36
Future Volume (veh/h)	42	1732	52	87	1303	105	78	20	81	72	7	36
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	43	1767	57	89	1330	107	80	20	83	73	7	37
Adj No. of Lanes	2	2	0	2	2	0	2	1	1	2	1	1
Peak Hour Factor	0.98	0.98	0.92	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	94	2498	80	130	2404	193	114	61	52	140	76	65
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.71	0.71	0.04	0.72	0.72	0.03	0.03	0.03	0.04	0.04	0.04
Ln Grp Delay, s/veh	75.2	14.5	14.5	81.9	11.2	11.2	103.9	85.8	411.5	85.0	73.0	104.1
Ln Grp LOS	E	B	B	F	B	B	F	F	F	F	E	F
Approach Vol, veh/h		1867			1526			183			117	
Approach Delay, s/veh		15.9			15.3			241.4			90.3	
Approach LOS		B			B			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	6	2	3	4			7	8
Case No	9.0	9.0	2.0	4.0			2.0	4.0
Phs Duration (G+Y+Rc), s	13.0	12.0	12.2	115.8			10.6	117.4
Change Period (Y+Rc), s	6.7	6.9	6.4	* 6.6			6.4	* 6.6
Max Green (Gmax), s	6.3	5.1	6.6	* 1.1E2			6.6	* 1.1E2
Max Allow Headway (MAH), s	4.0	4.1	3.8	5.1			3.7	5.1
Max Q Clear (g_c+I1), s	5.5	7.1	5.9	47.0			3.9	30.4
Green Ext Time (g_e), s	0.0	0.0	0.0	49.6			0.0	59.9
Prob of Phs Call (p_c)	1.00	1.00	0.98	1.00			0.84	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.00			1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1	5	3				7	
Mvmt Sat Flow, veh/h	3408	3408	3442				3442	

Through Movement Data								
Assigned Mvmt	6	2		4				8
Mvmt Sat Flow, veh/h	1845	1845		3500				3319

Right-Turn Movement Data								
Assigned Mvmt	16	12		14				18
Mvmt Sat Flow, veh/h	1568	1568		112				266

Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	7	0
Lane Assignment			(Prot)				(Prot)	

Lanes in Grp	2	2	2	0	0	0	2	0
Grp Vol (v), veh/h	73	80	89	0	0	0	43	0
Grp Sat Flow (s), veh/h/ln	1704	1704	1721	0	0	0	1721	0
Q Serve Time (g_s), s	3.2	3.6	3.9	0.0	0.0	0.0	1.9	0.0
Cycle Q Clear Time (g_c), s	3.2	3.6	3.9	0.0	0.0	0.0	1.9	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1704	1704	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	140	114	130	0	0	0	94	0
V/C Ratio (X)	0.52	0.70	0.68	0.00	0.00	0.00	0.46	0.00
Avail Cap (c_a), veh/h	140	114	148	0	0	0	148	0
Upstream Filter (I)	1.00	1.00	0.88	0.00	0.00	0.00	0.56	0.00
Uniform Delay (d1), s/veh	71.9	73.2	72.7	0.0	0.0	0.0	73.3	0.0
Incr Delay (d2), s/veh	13.1	30.7	9.2	0.0	0.0	0.0	1.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	85.0	103.9	81.9	0.0	0.0	0.0	75.2	0.0
1st-Term Q (Q1), veh/ln	1.5	1.7	1.9	0.0	0.0	0.0	0.9	0.0
2nd-Term Q (Q2), veh/ln	0.3	0.5	0.2	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	1.8	2.2	2.0	0.0	0.0	0.0	0.9	0.0
%ile Storage Ratio (RQ%)	0.09	0.12	0.15	0.00	0.00	0.00	0.13	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	6	2	0	4	0	0	0	8
Lane Assignment	T	T		T				T
Lanes in Grp	1	1	0	1	0	0	0	1
Grp Vol (v), veh/h	7	20	0	890	0	0	0	707
Grp Sat Flow (s), veh/h/ln	1845	1845	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.6	1.6	0.0	44.3	0.0	0.0	0.0	28.1
Cycle Q Clear Time (g_c), s	0.6	1.6	0.0	44.3	0.0	0.0	0.0	28.1
Lane Grp Cap (c), veh/h	76	61	0	1263	0	0	0	1282
V/C Ratio (X)	0.09	0.33	0.00	0.70	0.00	0.00	0.00	0.55
Avail Cap (c_a), veh/h	76	61	0	1263	0	0	0	1282
Upstream Filter (I)	1.00	1.00	0.00	0.56	0.00	0.00	0.00	0.88
Uniform Delay (d1), s/veh	70.6	72.3	0.0	12.6	0.0	0.0	0.0	9.7
Incr Delay (d2), s/veh	2.4	13.5	0.0	1.9	0.0	0.0	0.0	1.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	73.0	85.8	0.0	14.5	0.0	0.0	0.0	11.2
1st-Term Q (Q1), veh/ln	0.3	0.8	0.0	21.5	0.0	0.0	0.0	13.6

2nd-Term Q (Q2), veh/ln	0.1	0.2	0.0	0.7	0.0	0.0	0.0	0.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.3	1.1	0.0	22.2	0.0	0.0	0.0	14.1
%ile Storage Ratio (RQ%)	0.02	0.06	0.00	0.32	0.00	0.00	0.00	0.89
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	16	12	0	14	0	0	0	18
Lane Assignment	R	R		T+R				T+R
Lanes in Grp	1	1	0	1	0	0	0	1
Grp Vol (v), veh/h	37	83	0	934	0	0	0	730
Grp Sat Flow (s), veh/h/ln	1568	1568	0	1843	0	0	0	1816
Q Serve Time (g_s), s	3.5	5.1	0.0	45.0	0.0	0.0	0.0	28.4
Cycle Q Clear Time (g_c), s	3.5	5.1	0.0	45.0	0.0	0.0	0.0	28.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	1.00	0.00	0.06	0.00	0.00	0.00	0.15
Lane Grp Cap (c), veh/h	65	52	0	1315	0	0	0	1315
V/C Ratio (X)	0.57	1.59	0.00	0.71	0.00	0.00	0.00	0.55
Avail Cap (c_a), veh/h	65	52	0	1315	0	0	0	1315
Upstream Filter (I)	1.00	1.00	0.00	0.56	0.00	0.00	0.00	0.88
Uniform Delay (d1), s/veh	72.0	73.9	0.0	12.7	0.0	0.0	0.0	9.7
Incr Delay (d2), s/veh	32.1	337.5	0.0	1.8	0.0	0.0	0.0	1.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	104.1	411.5	0.0	14.5	0.0	0.0	0.0	11.2
1st-Term Q (Q1), veh/ln	1.5	2.2	0.0	22.6	0.0	0.0	0.0	14.0
2nd-Term Q (Q2), veh/ln	0.6	4.9	0.0	0.7	0.0	0.0	0.0	0.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	2.1	7.1	0.0	23.2	0.0	0.0	0.0	14.5
%ile Storage Ratio (RQ%)	1.35	1.66	0.00	0.34	0.00	0.00	0.00	0.92
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	7.7	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	29.2
HCM 2010 LOS	C

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1619	248	308	1190	289	324
Future Volume (veh/h)	1619	248	308	1190	289	324
Number	4	14	3	8	5	12
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)		1.00	1.00		1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1845	1845
Adj Flow Rate, veh/h	1686	258	321	1240	301	338
Adj No. of Lanes	3	0	2	2	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	3	3
Opposing Right Turn Influence			Yes		Yes	
Cap, veh/h	2680	408	365	2641	602	277
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.60	0.60	0.11	0.75	0.18	0.18
Ln Grp Delay, s/veh	22.2	23.2	90.4	8.9	65.0	196.0
Ln Grp LOS	C	C	F	A	E	F
Approach Vol, veh/h	1944			1561	639	
Approach Delay, s/veh	22.6			25.7	134.3	
Approach LOS	C			C	F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Case No		9.0	2.0	8.0				4.0
Phs Duration (G+Y+Rc), s		36.0	24.1	106.9				131.0
Change Period (Y+Rc), s		6.5	6.4	6.4				6.4
Max Green (Gmax), s		29.5	20.6	97.6				124.6
Max Allow Headway (MAH), s		3.9	3.8	5.3				5.3
Max Q Clear (g_c+I1), s		31.5	17.4	42.9				24.9
Green Ext Time (g_e), s		0.0	0.4	45.1				71.4
Prob of Phs Call (p_c)		1.00	1.00	1.00				1.00
Prob of Max Out (p_x)		0.00	1.00	0.00				0.00

Left-Turn Movement Data			
Assigned Mvmt	5	3	7
Mvmt Sat Flow, veh/h	3408	3442	0

Through Movement Data			
Assigned Mvmt	2	4	8
Mvmt Sat Flow, veh/h	0	4623	3632

Right-Turn Movement Data			
Assigned Mvmt	12	14	18
Mvmt Sat Flow, veh/h	1568	678	0

Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	0	0	0
Lane Assignment			(Prot)					

Lanes in Grp	0	2	2	0	0	0	0	0
Grp Vol (v), veh/h	0	301	321	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1704	1721	0	0	0	0	0
Q Serve Time (g_s), s	0.0	13.3	15.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	13.3	15.4	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1704	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	100.5	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	602	365	0	0	0	0	0
V/C Ratio (X)	0.00	0.50	0.88	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	602	425	0	0	0	0	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	62.1	73.6	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	3.0	16.9	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	65.0	90.4	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	6.3	7.3	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.9	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	6.5	8.2	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.28	0.90	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	2
Grp Vol (v), veh/h	0	0	0	1281	0	0	0	1240
Grp Sat Flow (s), veh/h/ln	0	0	0	1695	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	40.4	0.0	0.0	0.0	22.9
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	40.4	0.0	0.0	0.0	22.9
Lane Grp Cap (c), veh/h	0	0	0	2040	0	0	0	2641
V/C Ratio (X)	0.00	0.00	0.00	0.63	0.00	0.00	0.00	0.47
Avail Cap (c_a), veh/h	0	0	0	2040	0	0	0	2641
Upstream Filter (I)	0.00	0.00	0.00	0.63	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	21.3	0.0	0.0	0.0	8.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	22.2	0.0	0.0	0.0	8.9
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	18.9	0.0	0.0	0.0	11.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	19.1	0.0	0.0	0.0	11.2
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	1.21	0.00	0.00	0.00	1.17
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	0	0	18
Lane Assignment		R		T+R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	338	0	663	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1568	0	1743	0	0	0	0
Q Serve Time (g_s), s	0.0	29.5	0.0	40.9	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	29.5	0.0	40.9	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.39	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	277	0	1049	0	0	0	0
V/C Ratio (X)	0.00	1.22	0.00	0.63	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	277	0	1049	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.63	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	68.8	0.0	21.4	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	127.2	0.0	1.8	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	196.0	0.0	23.2	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	12.8	0.0	19.5	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	9.8	0.0	0.5	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	22.6	0.0	20.1	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.97	0.00	1.27	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	15.3	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		41.0						
HCM 2010 LOS		D						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	1714	316	104	1402	22	125	4	84	14	4	25
Future Volume (veh/h)	48	1714	316	104	1402	22	125	4	84	14	4	25
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1900	1900	1845	1900
Adj Flow Rate, veh/h	51	1804	333	109	1476	23	132	4	88	15	4	26
Adj No. of Lanes	2	2	0	2	2	0	1	1	0	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	96	2203	394	107	2630	41	300	14	302	104	37	153
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.73	0.73	0.03	0.74	0.74	0.20	0.20	0.20	0.20	0.20	0.20
Ln Grp Delay, s/veh	81.7	19.1	21.8	162.8	10.9	10.9	63.1	0.0	57.0	54.1	0.0	0.0
Ln Grp LOS	F	B	C	F	B	B	E		E	D		
Approach Vol, veh/h		2188			1608			224			45	
Approach Delay, s/veh		21.9			21.2			60.6			54.1	
Approach LOS		C			C			E			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		6.0	2.0	4.0		8.0	2.0	4.0
Phs Duration (G+Y+Rc), s		39.0	11.4	125.0		39.0	10.9	125.5
Change Period (Y+Rc), s		* 6.8	6.4	6.4		* 6.8	6.4	6.4
Max Green (Gmax), s		* 32	5.0	104.6		* 32	5.0	104.6
Max Allow Headway (MAH), s		4.7	3.8	5.3		4.7	3.8	5.3
Max Q Clear (g_c+I1), s		18.0	7.0	71.8		10.1	4.4	31.9
Green Ext Time (g_e), s		1.0	0.0	31.2		1.2	0.0	65.6
Prob of Phs Call (p_c)		1.00	0.99	1.00		1.00	0.90	1.00
Prob of Max Out (p_x)		0.00	1.00	0.00		0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		1361	3442			371	3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		69		3000		187		3567

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1510		537		763		56

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0
Lane Assignment			(Prot)			L+T+R	(Prot)	

Lanes in Grp	0	1	2	0	0	1	2	0
Grp Vol (v), veh/h	0	132	109	0	0	45	51	0
Grp Sat Flow (s), veh/h/ln	0	1361	1721	0	0	1321	1721	0
Q Serve Time (g_s), s	0.0	7.9	5.0	0.0	0.0	0.1	2.4	0.0
Cycle Q Clear Time (g_c), s	0.0	16.0	5.0	0.0	0.0	8.1	2.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1361	0	0	0	1325	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	1028	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	32.2	0.0	0.0	0.0	32.2	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	24.1	0.0	0.0	0.0	24.2	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	7.9	0.0	0.0	0.0	0.1	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	3.6	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	0.00	0.33	1.00	0.00
Lane Grp Cap (c), veh/h	0	300	107	0	0	294	96	0
V/C Ratio (X)	0.00	0.44	1.02	0.00	0.00	0.15	0.53	0.00
Avail Cap (c_a), veh/h	0	300	107	0	0	294	107	0
Upstream Filter (I)	0.00	1.00	0.83	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	58.4	78.0	0.0	0.0	53.0	77.2	0.0
Incr Delay (d2), s/veh	0.0	4.6	84.6	0.0	0.0	1.1	4.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	63.1	162.8	0.0	0.0	54.1	81.7	0.0
1st-Term Q (Q1), veh/ln	0.0	5.3	2.4	0.0	0.0	1.7	1.1	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	1.3	0.0	0.0	0.1	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	5.7	3.6	0.0	0.0	1.7	1.2	0.0
%ile Storage Ratio (RQ%)	0.00	0.66	0.38	0.00	0.00	0.15	0.16	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	1041	0	0	0	732
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	61.2	0.0	0.0	0.0	29.8
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	61.2	0.0	0.0	0.0	29.8
Lane Grp Cap (c), veh/h	0	0	0	1299	0	0	0	1305
V/C Ratio (X)	0.00	0.00	0.00	0.80	0.00	0.00	0.00	0.56
Avail Cap (c_a), veh/h	0	0	0	1299	0	0	0	1305
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.83
Uniform Delay (d1), s/veh	0.0	0.0	0.0	13.8	0.0	0.0	0.0	9.5
Incr Delay (d2), s/veh	0.0	0.0	0.0	5.3	0.0	0.0	0.0	1.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	19.1	0.0	0.0	0.0	10.9
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	29.5	0.0	0.0	0.0	14.4

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	31.4	0.0	0.0	0.0	15.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	1.02	0.00	0.00	0.00	0.22
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R				T+R
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	92	0	1096	0	0	0	767
Grp Sat Flow (s), veh/h/ln	0	1578	0	1768	0	0	0	1853
Q Serve Time (g_s), s	0.0	8.0	0.0	69.8	0.0	0.0	0.0	29.9
Cycle Q Clear Time (g_c), s	0.0	8.0	0.0	69.8	0.0	0.0	0.0	29.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.96	0.00	0.30	0.00	0.58	0.00	0.03
Lane Grp Cap (c), veh/h	0	316	0	1298	0	0	0	1366
V/C Ratio (X)	0.00	0.29	0.00	0.84	0.00	0.00	0.00	0.56
Avail Cap (c_a), veh/h	0	316	0	1298	0	0	0	1366
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.83
Uniform Delay (d1), s/veh	0.0	54.7	0.0	15.0	0.0	0.0	0.0	9.5
Incr Delay (d2), s/veh	0.0	2.3	0.0	6.9	0.0	0.0	0.0	1.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	57.0	0.0	21.8	0.0	0.0	0.0	10.9
1st-Term Q (Q1), veh/ln	0.0	3.5	0.0	33.8	0.0	0.0	0.0	15.1
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	2.5	0.0	0.0	0.0	0.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	3.7	0.0	36.3	0.0	0.0	0.0	15.7
%ile Storage Ratio (RQ%)	0.00	0.33	0.00	1.18	0.00	0.00	0.00	0.23
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	24.1
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	62	1824	0	27	1800	182	0	0	33	126	0	40
Future Volume (veh/h)	62	1824	0	27	1800	182	0	0	33	126	0	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	0	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	63	1861	0	28	1837	186	0	0	34	129	0	41
Adj No. of Lanes	1	2	0	1	3	1	0	1	0	1	1	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	0	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			No			Yes		
Cap, veh/h	96	1259	0	55	1691	526	0	0	470	506	0	470
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.36	0.00	0.03	0.33	0.33	0.00	0.00	0.30	0.30	0.00	0.30
Ln Grp Delay, s/veh	35.2	239.1	0.0	35.7	69.5	17.0	0.0	0.0	15.3	18.2	0.0	15.5
Ln Grp LOS	D	F		D	F	B			B	B		B
Approach Vol, veh/h		1924			2051			34			170	
Approach Delay, s/veh		232.4			64.2			15.3			17.5	
Approach LOS		F			E			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		8.0	2.0	4.0		6.0	2.0	3.0
Phs Duration (G+Y+Rc), s		24.0	8.3	27.7		24.0	9.7	26.3
Change Period (Y+Rc), s		6.0	6.4	6.4		6.0	6.4	6.4
Max Green (Gmax), s		18.0	5.0	18.6		18.0	5.0	18.6
Max Allow Headway (MAH), s		4.5	3.8	5.2		4.5	3.8	5.2
Max Q Clear (g_c+I1), s		2.9	2.9	23.3		7.4	4.1	21.9
Green Ext Time (g_e), s		0.7	0.0	0.0		0.5	0.0	0.0
Prob of Phs Call (p_c)		1.00	0.37	1.00		1.00	0.65	1.00
Prob of Max Out (p_x)		0.00	1.00	0.00		0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		0	1774			1356	1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		0		3632		0		5085

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		0		1568		1583

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0
Lane Assignment			(Prot)				(Prot)	

Lanes in Grp	0	0	1	0	0	1	1	0
Grp Vol (v), veh/h	0	0	28	0	0	129	63	0
Grp Sat Flow (s), veh/h/ln	0	0	1774	0	0	1356	1774	0
Q Serve Time (g_s), s	0.0	0.0	0.9	0.0	0.0	4.5	2.1	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.9	0.0	0.0	5.4	2.1	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	1356	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	18.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	17.1	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	4.5	0.0	0.0
Time to First Blk (g_f), s	0.0	18.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	55	0	0	506	96	0
V/C Ratio (X)	0.00	0.00	0.51	0.00	0.00	0.26	0.66	0.00
Avail Cap (c_a), veh/h	0	0	148	0	0	506	148	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	28.6	0.0	0.0	17.0	27.8	0.0
Incr Delay (d2), s/veh	0.0	0.0	7.1	0.0	0.0	1.2	7.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	35.7	0.0	0.0	18.2	35.2	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.5	0.0	0.0	1.7	1.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.1	0.0	0.0	0.2	0.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.6	0.0	0.0	1.9	1.2	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.08	0.00	0.00	0.32	0.17	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	3
Grp Vol (v), veh/h	0	0	0	1861	0	0	0	1837
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1695
Q Serve Time (g_s), s	0.0	0.0	0.0	21.3	0.0	0.0	0.0	19.9
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	21.3	0.0	0.0	0.0	19.9
Lane Grp Cap (c), veh/h	0	0	0	1259	0	0	0	1691
V/C Ratio (X)	0.00	0.00	0.00	1.48	0.00	0.00	0.00	1.09
Avail Cap (c_a), veh/h	0	0	0	1259	0	0	0	1691
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	19.3	0.0	0.0	0.0	20.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	219.8	0.0	0.0	0.0	49.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	239.1	0.0	0.0	0.0	69.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	10.3	0.0	0.0	0.0	9.2

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	38.4	0.0	0.0	0.0	7.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	48.7	0.0	0.0	0.0	17.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	5.76	0.00	0.00	0.00	1.40
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	150.6	0.0	0.0	0.0	36.5
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R				T+R		R
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	34	0	0	0	41	0	186
Grp Sat Flow (s), veh/h/ln	0	1568	0	0	0	1568	0	1583
Q Serve Time (g_s), s	0.0	0.9	0.0	0.0	0.0	1.1	0.0	5.3
Cycle Q Clear Time (g_c), s	0.0	0.9	0.0	0.0	0.0	1.1	0.0	5.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	470	0	0	0	470	0	526
V/C Ratio (X)	0.00	0.07	0.00	0.00	0.00	0.09	0.00	0.35
Avail Cap (c_a), veh/h	0	470	0	0	0	470	0	526
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	15.0	0.0	0.0	0.0	15.1	0.0	15.1
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.0	0.0	0.4	0.0	1.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	15.3	0.0	0.0	0.0	15.5	0.0	17.0
1st-Term Q (Q1), veh/ln	0.0	0.4	0.0	0.0	0.0	0.5	0.0	2.3
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.4	0.0	0.0	0.0	0.5	0.0	2.6
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.00	0.00	0.04	0.00	0.21
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		139.4						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	552	1115	258	413	968	136	374	1197	365	293	1146	548
Future Volume (veh/h)	552	1115	258	413	968	136	374	1197	365	293	1146	548
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	587	1186	274	439	1030	145	398	1273	388	312	1219	583
Adj No. of Lanes	2	3	0	2	3	0	2	3	0	2	3	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	522	1090	252	463	1111	156	353	1070	325	370	1433	446
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.15	0.26	0.26	0.13	0.25	0.25	0.10	0.28	0.28	0.11	0.28	0.28
Ln Grp Delay, s/veh	127.4	99.8	111.3	79.0	60.3	71.3	139.6	137.9	148.2	64.3	45.7	195.1
Ln Grp LOS	F	F	F	E	E	E	F	F	F	E	D	F
Approach Vol, veh/h		2047			1614			2059			2114	
Approach Delay, s/veh		110.4			68.1			140.9			89.6	
Approach LOS		F			E			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	18.6	38.4	22.0	37.0	18.0	39.0	24.0	35.0
Change Period (Y+Rc), s	6.0	6.0	6.4	6.4	6.0	6.0	6.4	6.4
Max Green (Gmax), s	14.0	31.0	15.6	30.6	12.0	33.0	17.6	28.6
Max Allow Headway (MAH), s	3.8	5.1	3.8	5.3	3.8	5.1	3.8	5.3
Max Q Clear (g_c+I1), s	12.4	34.4	16.7	32.6	14.0	35.0	19.6	27.9
Green Ext Time (g_e), s	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.6
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3408		3442		3408		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3831		4130		5036		4508

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1165		954		1568		633

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	312	0	439	0	398	0	587	0
Grp Sat Flow (s), veh/h/ln	1704	0	1721	0	1704	0	1721	0
Q Serve Time (g_s), s	10.4	0.0	14.7	0.0	12.0	0.0	17.6	0.0
Cycle Q Clear Time (g_c), s	10.4	0.0	14.7	0.0	12.0	0.0	17.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	370	0	463	0	353	0	522	0
V/C Ratio (X)	0.84	0.00	0.95	0.00	1.13	0.00	1.12	0.00
Avail Cap (c_a), veh/h	411	0	463	0	353	0	522	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	50.7	0.0	49.8	0.0	52.0	0.0	49.2	0.0
Incr Delay (d2), s/veh	13.5	0.0	29.2	0.0	87.6	0.0	78.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	64.3	0.0	79.0	0.0	139.6	0.0	127.4	0.0
1st-Term Q (Q1), veh/ln	4.9	0.0	7.0	0.0	5.6	0.0	8.3	0.0
2nd-Term Q (Q2), veh/ln	0.7	0.0	1.9	0.0	4.3	0.0	5.7	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	5.6	0.0	8.8	0.0	9.9	0.0	14.0	0.0
%ile Storage Ratio (RQ%)	0.45	0.00	1.32	0.00	0.79	0.00	1.19	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	11.4	0.0	16.2	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.3	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	3	0	2
Grp Vol (v), veh/h	0	1115	0	973	0	1219	0	774
Grp Sat Flow (s), veh/h/ln	0	1679	0	1695	0	1679	0	1695
Q Serve Time (g_s), s	0.0	32.4	0.0	30.6	0.0	26.5	0.0	25.9
Cycle Q Clear Time (g_c), s	0.0	32.4	0.0	30.6	0.0	26.5	0.0	25.9
Lane Grp Cap (c), veh/h	0	937	0	894	0	1433	0	836
V/C Ratio (X)	0.00	1.19	0.00	1.09	0.00	0.85	0.00	0.93
Avail Cap (c_a), veh/h	0	937	0	894	0	1433	0	836
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	41.8	0.0	42.7	0.0	39.2	0.0	42.7
Incr Delay (d2), s/veh	0.0	96.1	0.0	57.1	0.0	6.5	0.0	17.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	137.9	0.0	99.8	0.0	45.7	0.0	60.3
1st-Term Q (Q1), veh/ln	0.0	15.0	0.0	14.3	0.0	12.3	0.0	12.0

2nd-Term Q (Q2), veh/ln	0.0	12.5	0.0	7.1	0.0	0.9	0.0	2.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	27.5	0.0	21.4	0.0	13.2	0.0	14.1
%ile Storage Ratio (RQ%)	0.00	1.54	0.00	0.87	0.00	0.50	0.00	2.24
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	44.5	0.0	19.8	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	546	0	487	0	583	0	401
Grp Sat Flow (s), veh/h/ln	0	1639	0	1694	0	1568	0	1751
Q Serve Time (g_s), s	0.0	32.4	0.0	30.6	0.0	33.0	0.0	25.9
Cycle Q Clear Time (g_c), s	0.0	32.4	0.0	30.6	0.0	33.0	0.0	25.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.71	0.00	0.56	0.00	1.00	0.00	0.36
Lane Grp Cap (c), veh/h	0	458	0	447	0	446	0	432
V/C Ratio (X)	0.00	1.19	0.00	1.09	0.00	1.31	0.00	0.93
Avail Cap (c_a), veh/h	0	458	0	447	0	446	0	432
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	41.8	0.0	42.7	0.0	41.5	0.0	42.7
Incr Delay (d2), s/veh	0.0	106.3	0.0	68.6	0.0	153.6	0.0	28.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	148.2	0.0	111.3	0.0	195.1	0.0	71.3
1st-Term Q (Q1), veh/ln	0.0	14.6	0.0	14.3	0.0	14.2	0.0	12.6
2nd-Term Q (Q2), veh/ln	0.0	13.5	0.0	8.5	0.0	19.0	0.0	3.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	28.1	0.0	22.8	0.0	33.3	0.0	16.0
%ile Storage Ratio (RQ%)	0.00	1.57	0.00	0.93	0.00	1.28	0.00	2.54
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	22.0	0.0	9.9	0.0	34.2	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.3	0.0	0.3	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		104.1						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	192	1500	51	0	1388	159	148	56	4	109	42	83
Future Volume (veh/h)	192	1500	51	0	1388	159	148	56	4	109	42	83
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	0	1863	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	198	1546	53	0	1431	164	153	58	4	112	43	86
Adj No. of Lanes	2	2	0	0	2	0	2	1	1	2	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	0	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			No			Yes			Yes		
Cap, veh/h	186	2391	82	0	1906	217	96	337	286	96	337	286
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.68	0.68	0.00	0.59	0.59	0.03	0.18	0.18	0.03	0.18	0.18
Ln Grp Delay, s/veh	169.1	18.5	18.5	0.0	31.1	31.6	398.9	62.5	59.7	231.3	61.7	65.6
Ln Grp LOS	F	B	B		C	C	F	E	E	F	E	E
Approach Vol, veh/h		1797			1595			215			241	
Approach Delay, s/veh		35.1			31.3			301.9			141.9	
Approach LOS		D			C			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6	7	8
Case No	2.0	3.0		4.0	2.0	3.0	2.0	8.0
Phs Duration (G+Y+Rc), s	10.7	39.0		128.3	10.7	39.0	16.0	112.3
Change Period (Y+Rc), s	* 5.7	6.5		6.4	* 5.7	6.5	6.4	6.4
Max Green (Gmax), s	* 5	32.5		121.6	* 5	32.5	9.6	105.6
Max Allow Headway (MAH), s	3.8	4.7		5.3	3.8	4.7	3.8	5.3
Max Q Clear (g_c+I1), s	7.0	6.7		46.8	7.0	10.4	11.6	61.0
Green Ext Time (g_e), s	0.0	0.8		58.3	0.0	0.8	0.0	38.1
Prob of Phs Call (p_c)	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	0.00	0.00		0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1				5		7	3
Mvmt Sat Flow, veh/h	3408				3408		3442	0

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1845		3492		1845		3297

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		119		1568		364

Left Lane Group Data								
Assigned Mvmt	1	0	0	0	5	0	7	3
Lane Assignment	(Prot)				(Prot)		(Prot)	

Lanes in Grp	2	0	0	0	2	0	2	0
Grp Vol (v), veh/h	112	0	0	0	153	0	198	0
Grp Sat Flow (s), veh/h/ln	1704	0	0	0	1704	0	1721	0
Q Serve Time (g_s), s	5.0	0.0	0.0	0.0	5.0	0.0	9.6	0.0
Cycle Q Clear Time (g_c), s	5.0	0.0	0.0	0.0	5.0	0.0	9.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	105.9
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	96	0	0	0	96	0	186	0
V/C Ratio (X)	1.17	0.00	0.00	0.00	1.60	0.00	1.07	0.00
Avail Cap (c_a), veh/h	96	0	0	0	96	0	186	0
Upstream Filter (I)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	86.5	0.0	0.0	0.0	86.5	0.0	84.2	0.0
Incr Delay (d2), s/veh	144.8	0.0	0.0	0.0	312.4	0.0	84.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	231.3	0.0	0.0	0.0	398.9	0.0	169.1	0.0
1st-Term Q (Q1), veh/ln	2.4	0.0	0.0	0.0	2.4	0.0	4.6	0.0
2nd-Term Q (Q2), veh/ln	1.9	0.0	0.0	0.0	4.2	0.0	2.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	4.3	0.0	0.0	0.0	6.5	0.0	6.8	0.0
%ile Storage Ratio (RQ%)	1.10	0.00	0.00	0.00	1.19	0.00	0.41	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	4.1	0.0	0.0	0.0	14.3	0.0	3.1	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.0	0.0	0.4	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	58	0	782	0	43	0	785
Grp Sat Flow (s), veh/h/ln	0	1845	0	1770	0	1845	0	1770
Q Serve Time (g_s), s	0.0	4.7	0.0	44.4	0.0	3.5	0.0	57.5
Cycle Q Clear Time (g_c), s	0.0	4.7	0.0	44.4	0.0	3.5	0.0	57.5
Lane Grp Cap (c), veh/h	0	337	0	1212	0	337	0	1053
V/C Ratio (X)	0.00	0.17	0.00	0.65	0.00	0.13	0.00	0.75
Avail Cap (c_a), veh/h	0	337	0	1212	0	337	0	1053
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	61.4	0.0	15.8	0.0	60.9	0.0	26.3
Incr Delay (d2), s/veh	0.0	1.1	0.0	2.7	0.0	0.8	0.0	4.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	62.5	0.0	18.5	0.0	61.7	0.0	31.1
1st-Term Q (Q1), veh/ln	0.0	2.4	0.0	21.5	0.0	1.8	0.0	27.9

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.9	0.0	0.1	0.0	1.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.5	0.0	22.4	0.0	1.8	0.0	29.3
%ile Storage Ratio (RQ%)	0.00	0.27	0.00	0.26	0.00	0.10	0.00	0.59
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	4	0	817	0	86	0	810
Grp Sat Flow (s), veh/h/ln	0	1568	0	1842	0	1568	0	1798
Q Serve Time (g_s), s	0.0	0.4	0.0	44.8	0.0	8.4	0.0	59.0
Cycle Q Clear Time (g_c), s	0.0	0.4	0.0	44.8	0.0	8.4	0.0	59.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.06	0.00	1.00	0.00	0.20
Lane Grp Cap (c), veh/h	0	286	0	1261	0	286	0	1070
V/C Ratio (X)	0.00	0.01	0.00	0.65	0.00	0.30	0.00	0.76
Avail Cap (c_a), veh/h	0	286	0	1261	0	286	0	1070
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	59.6	0.0	15.9	0.0	62.9	0.0	26.6
Incr Delay (d2), s/veh	0.0	0.1	0.0	2.6	0.0	2.7	0.0	5.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	59.7	0.0	18.5	0.0	65.6	0.0	31.6
1st-Term Q (Q1), veh/ln	0.0	0.2	0.0	22.7	0.0	7.7	0.0	29.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.9	0.0	0.2	0.0	1.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.2	0.0	23.6	0.0	7.9	0.0	30.7
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.28	0.00	0.43	0.00	0.62
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	55.1
HCM 2010 LOS	E

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	476	935	192	283	797	283	485	1953	259	434	1216	254
Future Volume (veh/h)	476	935	192	283	797	283	485	1953	259	434	1216	254
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	486	954	196	289	813	289	495	1993	264	443	1241	259
Adj No. of Lanes	2	3	1	2	3	1	2	3	0	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	327	1027	320	159	779	243	533	2016	264	489	1813	378
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.10	0.20	0.20	0.05	0.15	0.15	0.16	0.45	0.45	0.14	0.43	0.43
Ln Grp Delay, s/veh	308.0	79.7	68.1	467.3	113.5	188.7	90.4	64.6	77.9	86.8	40.0	42.5
Ln Grp LOS	F	E	E	F	F	F	F	E	F	F	D	D
Approach Vol, veh/h		1636			1391			2752			1943	
Approach Delay, s/veh		146.1			202.6			73.0			51.3	
Approach LOS		F			F			E			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	3.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	30.3	80.1	14.0	39.5	32.5	78.0	22.0	31.5
Change Period (Y+Rc), s	6.8	6.8	6.4	6.4	6.8	6.8	6.4	6.4
Max Green (Gmax), s	26.2	71.2	7.6	32.6	26.2	71.2	15.6	24.6
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.0	3.8	5.3	3.8	5.0
Max Q Clear (g_c+I1), s	23.0	75.3	9.6	32.2	25.5	41.2	17.6	27.1
Green Ext Time (g_e), s	0.6	0.0	0.0	0.4	0.2	28.4	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3408		3442		3408		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		4508		5085		4177		5085

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		590		1583		872		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	443	0	289	0	495	0	486	0
Grp Sat Flow (s), veh/h/ln	1704	0	1721	0	1704	0	1721	0
Q Serve Time (g_s), s	21.0	0.0	7.6	0.0	23.5	0.0	15.6	0.0
Cycle Q Clear Time (g_c), s	21.0	0.0	7.6	0.0	23.5	0.0	15.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	489	0	159	0	533	0	327	0
V/C Ratio (X)	0.91	0.00	1.81	0.00	0.93	0.00	1.48	0.00
Avail Cap (c_a), veh/h	544	0	159	0	544	0	327	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	69.1	0.0	78.2	0.0	68.3	0.0	74.2	0.0
Incr Delay (d2), s/veh	17.6	0.0	389.1	0.0	22.2	0.0	233.8	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	86.8	0.0	467.3	0.0	90.4	0.0	308.0	0.0
1st-Term Q (Q1), veh/ln	9.9	0.0	3.6	0.0	11.1	0.0	7.4	0.0
2nd-Term Q (Q2), veh/ln	1.2	0.0	8.6	0.0	1.6	0.0	10.6	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	11.1	0.0	12.2	0.0	12.7	0.0	18.0	0.0
%ile Storage Ratio (RQ%)	0.49	0.00	0.63	0.00	0.81	0.00	0.92	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	32.4	0.0	0.0	0.0	39.7	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.5	0.0	0.0	0.0	0.4	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	3	0	2	0	3
Grp Vol (v), veh/h	0	1478	0	954	0	998	0	813
Grp Sat Flow (s), veh/h/ln	0	1679	0	1695	0	1679	0	1695
Q Serve Time (g_s), s	0.0	71.3	0.0	30.2	0.0	39.2	0.0	25.1
Cycle Q Clear Time (g_c), s	0.0	71.3	0.0	30.2	0.0	39.2	0.0	25.1
Lane Grp Cap (c), veh/h	0	1501	0	1027	0	1458	0	779
V/C Ratio (X)	0.00	0.98	0.00	0.93	0.00	0.68	0.00	1.04
Avail Cap (c_a), veh/h	0	1501	0	1027	0	1458	0	779
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	44.8	0.0	64.3	0.0	37.4	0.0	69.4
Incr Delay (d2), s/veh	0.0	19.8	0.0	15.4	0.0	2.6	0.0	44.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	64.6	0.0	79.7	0.0	40.0	0.0	113.5
1st-Term Q (Q1), veh/ln	0.0	33.0	0.0	14.1	0.0	18.2	0.0	11.8

2nd-Term Q (Q2), veh/ln	0.0	4.1	0.0	1.5	0.0	0.5	0.0	3.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	37.2	0.0	15.6	0.0	18.7	0.0	14.9
%ile Storage Ratio (RQ%)	0.00	1.71	0.00	0.74	0.00	0.72	0.00	0.25
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.4
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	779	0	196	0	502	0	289
Grp Sat Flow (s), veh/h/ln	0	1741	0	1583	0	1691	0	1583
Q Serve Time (g_s), s	0.0	73.3	0.0	18.5	0.0	39.2	0.0	25.1
Cycle Q Clear Time (g_c), s	0.0	73.3	0.0	18.5	0.0	39.2	0.0	25.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.34	0.00	1.00	0.00	0.52	0.00	1.00
Lane Grp Cap (c), veh/h	0	778	0	320	0	734	0	243
V/C Ratio (X)	0.00	1.00	0.00	0.61	0.00	0.68	0.00	1.19
Avail Cap (c_a), veh/h	0	778	0	320	0	734	0	243
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	45.3	0.0	59.6	0.0	37.4	0.0	69.4
Incr Delay (d2), s/veh	0.0	32.6	0.0	8.5	0.0	5.1	0.0	119.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	77.9	0.0	68.1	0.0	42.5	0.0	188.7
1st-Term Q (Q1), veh/ln	0.0	35.2	0.0	8.1	0.0	18.3	0.0	11.0
2nd-Term Q (Q2), veh/ln	0.0	7.0	0.0	0.8	0.0	1.0	0.0	8.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	42.3	0.0	8.9	0.0	19.3	0.0	19.0
%ile Storage Ratio (RQ%)	0.00	1.94	0.00	0.42	0.00	0.75	0.00	0.68
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.3	0.0	0.0	0.0	0.0	0.0	11.6
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.3
Intersection Summary								
HCM 2010 Ctrl Delay		106.4						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	188	828	4	22	1678	616	3	17	29	271	1	114
Future Volume (veh/h)	188	828	4	22	1678	616	3	17	29	271	1	114
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1696	1696	1696	1696	1696	1696	1900	1696	1900	1696	1696	1696
Adj Flow Rate, veh/h	198	872	4	23	1766	0	3	18	31	285	1	0
Adj No. of Lanes	1	2	1	1	2	1	0	2	0	2	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	12	12	12	12	12	12	12	12	12	12	12	12
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	226	2263	1012	27	1867	835	0	52	47	132	208	177
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.14	0.70	0.70	0.02	0.58	0.00	0.00	0.03	0.03	0.04	0.12	0.00
Ln Grp Delay, s/veh	66.5	8.6	5.9	71.5	27.5	0.0	0.0	66.9	78.8	609.8	51.2	0.0
Ln Grp LOS	E	A	A	E	C			E	E	F	D	
Approach Vol, veh/h		1074			1789			49			286	
Approach Delay, s/veh		19.3			28.1			74.4			607.8	
Approach LOS		B			C			E			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	4.0	2.0	3.0	0.0	3.0
Phs Duration (G+Y+Rc), s	25.7	84.1	12.0	11.2	9.3	100.5	0.0	23.2
Change Period (Y+Rc), s	7.1	7.1	6.4	6.9	7.1	7.1	6.9	* 6.9
Max Green (Gmax), s	67.9	18.9	5.6	13.1	30.9	55.9	13.1	* 5.6
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.5	3.8	5.3	0.0	5.5
Max Q Clear (g_c+I1), s	18.0	69.8	7.6	4.8	3.9	16.7	0.0	2.1
Green Ext Time (g_e), s	0.6	0.0	0.0	0.1	0.0	30.9	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	0.86	0.57	1.00	0.00	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.09	0.00	0.00	0.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1616		3134		1616		0	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3223		1612		3223		1696

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1442		1442		1442		1442

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)			

Lanes in Grp	1	0	2	0	1	0	0	0
Grp Vol (v), veh/h	198	0	285	0	23	0	0	0
Grp Sat Flow (s), veh/h/ln	1616	0	1567	0	1616	0	0	0
Q Serve Time (g_s), s	16.0	0.0	5.6	0.0	1.9	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	16.0	0.0	5.6	0.0	1.9	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	226	0	132	0	27	0	0	0
V/C Ratio (X)	0.88	0.00	2.16	0.00	0.84	0.00	0.00	0.00
Avail Cap (c_a), veh/h	825	0	132	0	375	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.09	0.00	0.00	0.00
Uniform Delay (d1), s/veh	56.1	0.0	63.7	0.0	65.2	0.0	0.0	0.0
Incr Delay (d2), s/veh	10.4	0.0	546.1	0.0	6.3	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	66.5	0.0	609.8	0.0	71.5	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	7.1	0.0	2.4	0.0	0.8	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.7	0.0	10.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	7.8	0.0	12.4	0.0	0.9	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.25	0.00	0.54	0.00	0.07	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	38.3	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	1766	0	18	0	872	0	1
Grp Sat Flow (s), veh/h/ln	0	1612	0	1612	0	1612	0	1696
Q Serve Time (g_s), s	0.0	67.8	0.0	1.5	0.0	14.7	0.0	0.1
Cycle Q Clear Time (g_c), s	0.0	67.8	0.0	1.5	0.0	14.7	0.0	0.1
Lane Grp Cap (c), veh/h	0	1867	0	52	0	2263	0	208
V/C Ratio (X)	0.00	0.95	0.00	0.35	0.00	0.39	0.00	0.00
Avail Cap (c_a), veh/h	0	1867	0	159	0	2263	0	208
Upstream Filter (I)	0.00	0.09	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	26.0	0.0	63.0	0.0	8.1	0.0	51.2
Incr Delay (d2), s/veh	0.0	1.4	0.0	3.9	0.0	0.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	27.5	0.0	66.9	0.0	8.6	0.0	51.2
1st-Term Q (Q1), veh/ln	0.0	29.9	0.0	0.7	0.0	6.5	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.1	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	30.3	0.0	0.7	0.0	6.7	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.42	0.00	0.05	0.00	0.06	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	31	0	4	0	0
Grp Sat Flow (s), veh/h/ln	0	1442	0	1442	0	1442	0	1442
Q Serve Time (g_s), s	0.0	0.0	0.0	2.8	0.0	0.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	2.8	0.0	0.1	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	835	0	47	0	1012	0	177
V/C Ratio (X)	0.00	0.00	0.00	0.67	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	835	0	142	0	1012	0	177
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	63.6	0.0	5.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	15.1	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	78.8	0.0	5.9	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.09	0.00	0.01	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	77.7
HCM 2010 LOS	E

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	129	1020	2143	379	617	353
Future Volume (veh/h)	129	1020	2143	379	617	353
Number	1	6	2	12	3	18
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00			1.00	1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1696	1696	1696	1696	1696	1696
Adj Flow Rate, veh/h	136	1074	2256	0	649	0
Adj No. of Lanes	1	2	3	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	12	12	12	12	12	12
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	160	1918	1887	588	756	348
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.10	0.60	0.41	0.00	0.24	0.00
Ln Grp Delay, s/veh	53.0	10.4	113.4	0.0	35.8	0.0
Ln Grp LOS	D	B	F		D	
Approach Vol, veh/h		1210	2256		649	
Approach Delay, s/veh		15.2	113.4		35.8	
Approach LOS		B	F		D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8			6		
Case No	2.0	7.0	9.0			4.0		
Phs Duration (G+Y+Rc), s	15.0	39.7	25.3			54.7		
Change Period (Y+Rc), s	7.1	7.1	6.0			7.1		
Max Green (Gmax), s	7.9	27.9	24.0			42.9		
Max Allow Headway (MAH), s	3.8	5.3	3.8			5.3		
Max Q Clear (g_c+I1), s	8.6	34.6	17.9			18.2		
Green Ext Time (g_e), s	0.0	0.0	1.4			23.1		
Prob of Phs Call (p_c)	0.95	1.00	1.00			1.00		
Prob of Max Out (p_x)	1.00	0.00	0.42			0.00		

Left-Turn Movement Data			
Assigned Mvmt	1	5	3
Mvmt Sat Flow, veh/h	1616	0	3134

Through Movement Data			
Assigned Mvmt		2	8			6		
Mvmt Sat Flow, veh/h		4784	0			3308		

Right-Turn Movement Data			
Assigned Mvmt		12	18			16		
Mvmt Sat Flow, veh/h		1442	1442			0		

Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	0	0
Lane Assignment	(Prot)							

Lanes in Grp	1	0	2	0	0	0	0	0
Grp Vol (v), veh/h	136	0	649	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1616	0	1567	0	0	0	0	0
Q Serve Time (g_s), s	6.6	0.0	15.9	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	6.6	0.0	15.9	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1567	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	32.6	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	160	0	756	0	0	0	0	0
V/C Ratio (X)	0.85	0.00	0.86	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	160	0	940	0	0	0	0	0
Upstream Filter (I)	0.44	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	35.5	0.0	29.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	17.5	0.0	6.7	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	53.0	0.0	35.8	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	2.9	0.0	6.9	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.8	0.0	0.7	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	3.7	0.0	7.6	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.22	0.00	0.47	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	3	0	0	0	2	0	0
Grp Vol (v), veh/h	0	2256	0	0	0	1074	0	0
Grp Sat Flow (s), veh/h/ln	0	1544	0	0	0	1612	0	0
Q Serve Time (g_s), s	0.0	32.6	0.0	0.0	0.0	16.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	32.6	0.0	0.0	0.0	16.2	0.0	0.0
Lane Grp Cap (c), veh/h	0	1887	0	0	0	1918	0	0
V/C Ratio (X)	0.00	1.20	0.00	0.00	0.00	0.56	0.00	0.00
Avail Cap (c_a), veh/h	0	1887	0	0	0	1918	0	0
Upstream Filter (I)	0.00	0.32	0.00	0.00	0.00	0.44	0.00	0.00
Uniform Delay (d1), s/veh	0.0	23.7	0.0	0.0	0.0	9.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	89.7	0.0	0.0	0.0	0.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	113.4	0.0	0.0	0.0	10.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	13.8	0.0	0.0	0.0	7.2	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	15.7	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	29.5	0.0	0.0	0.0	7.3	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.24	0.00	0.00	0.00	0.10	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	92.1	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lane Assignment		R	R					
Lanes in Grp	0	1	1	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1442	1442	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	588	348	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	588	433	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		72.3						
HCM 2010 LOS		E						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	754	704	75	51	1015	325	409	367	234	175	73	965
Future Volume (veh/h)	754	704	75	51	1015	325	409	367	234	175	73	965
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1712	1712	1712	1712	1712	1712	1900	1712	1712	1712
Adj Flow Rate, veh/h	762	711	76	52	1025	0	413	371	236	177	74	975
Adj No. of Lanes	2	3	1	2	3	1	2	2	0	1	1	2
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	11	11	11	11	11	11	11	11	11	11	11	11
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	806	2214	689	89	1155	360	441	365	229	198	293	439
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.25	0.47	0.47	0.03	0.25	0.00	0.14	0.19	0.19	0.12	0.17	0.17
Ln Grp Delay, s/veh	73.2	26.4	23.6	82.8	68.3	0.0	95.8	119.6	126.6	91.7	57.9	624.2
Ln Grp LOS	E	C	C	F	E		F	F	F	F	E	F
Approach Vol, veh/h		1549			1077			1020			1226	
Approach Delay, s/veh		49.3			69.0			112.0			513.1	
Approach LOS		D			E			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	4.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	48.3	46.6	27.0	38.1	12.0	82.9	30.0	35.1
Change Period (Y+Rc), s	7.5	7.1	7.6	* 7.7	7.5	7.1	* 7.7	* 7.7
Max Green (Gmax), s	42.5	37.9	27.4	* 22	42.5	37.9	* 22	* 27
Max Allow Headway (MAH), s	3.8	5.2	3.8	4.6	3.8	5.2	3.8	4.6
Max Q Clear (g_c+I1), s	39.8	35.8	19.1	32.4	4.6	17.1	22.7	29.4
Green Ext Time (g_e), s	0.9	1.8	0.3	0.0	0.2	13.0	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	0.03	1.00	0.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3163		1630		3163		3163	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		4673		1921		4673		1712

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1455		1204		1455		2561

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	1	0	2	0	2	0
Grp Vol (v), veh/h	762	0	177	0	52	0	413	0
Grp Sat Flow (s), veh/h/ln	1581	0	1630	0	1581	0	1581	0
Q Serve Time (g_s), s	37.8	0.0	17.1	0.0	2.6	0.0	20.7	0.0
Cycle Q Clear Time (g_c), s	37.8	0.0	17.1	0.0	2.6	0.0	20.7	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	806	0	198	0	89	0	441	0
V/C Ratio (X)	0.95	0.00	0.90	0.00	0.58	0.00	0.94	0.00
Avail Cap (c_a), veh/h	840	0	279	0	840	0	441	0
Upstream Filter (I)	0.70	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	58.5	0.0	69.3	0.0	76.8	0.0	68.2	0.0
Incr Delay (d2), s/veh	14.7	0.0	22.4	0.0	5.9	0.0	27.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	73.2	0.0	91.7	0.0	82.8	0.0	95.8	0.0
1st-Term Q (Q1), veh/ln	16.5	0.0	7.7	0.0	1.1	0.0	9.1	0.0
2nd-Term Q (Q2), veh/ln	1.6	0.0	1.2	0.0	0.1	0.0	1.7	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	18.1	0.0	9.0	0.0	1.2	0.0	10.8	0.0
%ile Storage Ratio (RQ%)	0.67	0.00	2.21	0.00	0.08	0.00	0.59	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	1	0	3	0	1
Grp Vol (v), veh/h	0	1025	0	313	0	711	0	74
Grp Sat Flow (s), veh/h/ln	0	1558	0	1626	0	1558	0	1712
Q Serve Time (g_s), s	0.0	33.8	0.0	30.4	0.0	15.1	0.0	6.0
Cycle Q Clear Time (g_c), s	0.0	33.8	0.0	30.4	0.0	15.1	0.0	6.0
Lane Grp Cap (c), veh/h	0	1155	0	309	0	2214	0	293
V/C Ratio (X)	0.00	0.89	0.00	1.01	0.00	0.32	0.00	0.25
Avail Cap (c_a), veh/h	0	1155	0	309	0	2214	0	293
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.70	0.00	1.00
Uniform Delay (d1), s/veh	0.0	58.1	0.0	64.8	0.0	26.1	0.0	57.4
Incr Delay (d2), s/veh	0.0	10.2	0.0	54.8	0.0	0.3	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	68.3	0.0	119.6	0.0	26.4	0.0	57.9
1st-Term Q (Q1), veh/ln	0.0	14.6	0.0	13.6	0.0	6.5	0.0	2.8

2nd-Term Q (Q2), veh/ln	0.0	1.1	0.0	4.7	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	15.7	0.0	18.3	0.0	6.6	0.0	2.9
%ile Storage Ratio (RQ%)	0.00	0.18	0.00	1.01	0.00	0.05	0.00	0.09
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	2
Grp Vol (v), veh/h	0	0	0	294	0	76	0	975
Grp Sat Flow (s), veh/h/ln	0	1455	0	1499	0	1455	0	1280
Q Serve Time (g_s), s	0.0	0.0	0.0	30.4	0.0	4.6	0.0	27.4
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	30.4	0.0	4.6	0.0	27.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.80	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	360	0	285	0	689	0	439
V/C Ratio (X)	0.00	0.00	0.00	1.03	0.00	0.11	0.00	2.22
Avail Cap (c_a), veh/h	0	360	0	285	0	689	0	439
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.70	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	64.8	0.0	23.4	0.0	66.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	61.8	0.0	0.2	0.0	557.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	126.6	0.0	23.6	0.0	624.2
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	12.6	0.0	1.9	0.0	9.7
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	4.9	0.0	0.0	0.0	34.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	17.5	0.0	1.9	0.0	43.7
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.96	0.00	0.11	0.00	1.33
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	2.3	0.0	0.0	0.0	134.1
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay	183.5
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	529	1019	21	95	875	895	178	1380	295	290	774	226
Future Volume (veh/h)	529	1019	21	95	875	895	178	1380	295	290	774	226
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1776	1776	1776	1776	1776	1776	1776	1776	1776	1776	1900
Adj Flow Rate, veh/h	534	1029	21	96	884	904	180	1394	298	293	782	228
Adj No. of Lanes	2	3	1	2	3	2	2	3	1	2	2	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	7	7	7	7	7	7	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	80	1491	464	80	1491	817	254	1076	335	370	638	186
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.02	0.31	0.31	0.02	0.31	0.31	0.08	0.22	0.22	0.11	0.25	0.25
Ln Grp Delay, s/veh	2619.2	27.6	20.1	203.9	25.8	93.1	43.3	171.9	55.0	44.8	151.7	152.2
Ln Grp LOS	F	C	C	F	C	F	D	F	E	D	F	F
Approach Vol, veh/h		1584			1884			1872			1303	
Approach Delay, s/veh		901.2			67.2			140.9			127.9	
Approach LOS		F			E			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	9.2	32.6	16.0	25.8	9.2	32.6	13.9	27.9
Change Period (Y+Rc), s	7.2	* 7.3	6.8	* 7.6	7.2	* 7.3	* 7.6	* 7.6
Max Green (Gmax), s	2.0	* 24	10.2	* 18	2.0	* 24	* 7.4	* 19
Max Allow Headway (MAH), s	3.8	4.9	3.8	5.2	3.8	4.9	3.8	5.2
Max Q Clear (g_c+I1), s	4.0	27.2	9.1	20.2	4.0	17.3	6.4	22.3
Green Ext Time (g_e), s	0.0	0.0	0.1	0.0	0.0	5.9	0.1	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.89	1.00	0.98	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3281		3281		3281		3281	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		4848		4848		4848		2578

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		2656		1509		1509		752

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	534	0	293	0	96	0	180	0
Grp Sat Flow (s), veh/h/ln	1640	0	1640	0	1640	0	1640	0
Q Serve Time (g_s), s	2.0	0.0	7.1	0.0	2.0	0.0	4.4	0.0
Cycle Q Clear Time (g_c), s	2.0	0.0	7.1	0.0	2.0	0.0	4.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	80	0	370	0	80	0	254	0
V/C Ratio (X)	6.67	0.00	0.79	0.00	1.20	0.00	0.71	0.00
Avail Cap (c_a), veh/h	80	0	408	0	80	0	296	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	40.0	0.0	35.4	0.0	40.0	0.0	36.9	0.0
Incr Delay (d2), s/veh	2579.2	0.0	9.4	0.0	163.9	0.0	6.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	2619.2	0.0	44.8	0.0	203.9	0.0	43.3	0.0
1st-Term Q (Q1), veh/ln	0.9	0.0	3.2	0.0	0.9	0.0	2.0	0.0
2nd-Term Q (Q2), veh/ln	28.7	0.0	0.5	0.0	1.8	0.0	0.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	29.6	0.0	3.7	0.0	2.7	0.0	2.2	0.0
%ile Storage Ratio (RQ%)	1.70	0.00	0.07	0.00	0.14	0.00	0.06	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	113.5	0.0	0.0	0.0	4.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	1.7	0.0	0.0	0.0	0.3	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	3	0	3	0	1
Grp Vol (v), veh/h	0	884	0	1394	0	1029	0	512
Grp Sat Flow (s), veh/h/ln	0	1616	0	1616	0	1616	0	1687
Q Serve Time (g_s), s	0.0	12.7	0.0	18.2	0.0	15.3	0.0	20.3
Cycle Q Clear Time (g_c), s	0.0	12.7	0.0	18.2	0.0	15.3	0.0	20.3
Lane Grp Cap (c), veh/h	0	1491	0	1076	0	1491	0	418
V/C Ratio (X)	0.00	0.59	0.00	1.30	0.00	0.69	0.00	1.22
Avail Cap (c_a), veh/h	0	1491	0	1076	0	1491	0	418
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	24.0	0.0	31.9	0.0	24.9	0.0	30.8
Incr Delay (d2), s/veh	0.0	1.7	0.0	140.0	0.0	2.6	0.0	120.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	25.8	0.0	171.9	0.0	27.6	0.0	151.7
1st-Term Q (Q1), veh/ln	0.0	5.6	0.0	8.1	0.0	6.8	0.0	9.4

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	13.9	0.0	0.4	0.0	14.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	5.9	0.0	22.0	0.0	7.1	0.0	23.4
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.59	0.00	0.08	0.00	0.46
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	79.5	0.0	0.0	0.0	23.5
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	2	0	1	0	1	0	1
Grp Vol (v), veh/h	0	904	0	298	0	21	0	498
Grp Sat Flow (s), veh/h/ln	0	1328	0	1509	0	1509	0	1643
Q Serve Time (g_s), s	0.0	25.2	0.0	15.7	0.0	0.8	0.0	20.3
Cycle Q Clear Time (g_c), s	0.0	25.2	0.0	15.7	0.0	0.8	0.0	20.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.46
Lane Grp Cap (c), veh/h	0	817	0	335	0	464	0	407
V/C Ratio (X)	0.00	1.11	0.00	0.89	0.00	0.05	0.00	1.23
Avail Cap (c_a), veh/h	0	817	0	335	0	464	0	407
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	28.4	0.0	30.9	0.0	19.9	0.0	30.8
Incr Delay (d2), s/veh	0.0	64.7	0.0	24.1	0.0	0.2	0.0	121.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	93.1	0.0	55.0	0.0	20.1	0.0	152.2
1st-Term Q (Q1), veh/ln	0.0	9.2	0.0	6.5	0.0	0.3	0.0	9.2
2nd-Term Q (Q2), veh/ln	0.0	7.3	0.0	2.2	0.0	0.0	0.0	13.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	16.5	0.0	8.8	0.0	0.4	0.0	22.9
%ile Storage Ratio (RQ%)	0.00	0.65	0.00	0.24	0.00	0.02	0.00	0.45
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	21.7	0.0	0.0	0.0	0.0	0.0	22.9
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	298.7
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	466	163	314	428	277	218	1376	434	402	997	59
Future Volume (veh/h)	55	466	163	314	428	277	218	1376	434	402	997	59
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1776	1776	1776	1776	1776	1900
Adj Flow Rate, veh/h	57	480	168	324	441	286	225	1419	447	414	1028	61
Adj No. of Lanes	2	3	1	2	2	1	2	2	1	2	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	100	609	190	363	694	310	272	1529	684	667	1857	110
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.12	0.12	0.11	0.20	0.20	0.08	0.45	0.45	0.20	0.57	0.57
Ln Grp Delay, s/veh	79.2	72.6	101.2	91.6	59.0	92.6	79.4	51.2	37.7	60.6	22.9	22.9
Ln Grp LOS	E	E	F	F	E	F	E	D	D	E	C	C
Approach Vol, veh/h		705			1051			2091			1503	
Approach Delay, s/veh		79.9			78.2			51.4			33.3	
Approach LOS		E			E			D			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	36.0	74.8	21.0	23.2	17.3	93.4	9.1	35.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green (Gmax), s	31.5	69.5	16.5	19.5	18.5	82.5	13.5	22.5
Max Allow Headway (MAH), s	3.8	5.1	3.8	4.8	3.8	5.1	3.8	4.8
Max Q Clear (g_c+I1), s	19.8	63.5	16.5	18.4	12.5	32.8	4.6	29.7
Green Ext Time (g_e), s	1.2	5.7	0.0	0.4	0.4	36.7	0.1	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	1.00	0.17	0.00	0.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3281		3408		3281		3408	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3374		5036		3237		3505

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1509		1568		192		1568

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	414	0	324	0	225	0	57	0
Grp Sat Flow (s), veh/h/ln	1640	0	1704	0	1640	0	1704	0
Q Serve Time (g_s), s	17.8	0.0	14.5	0.0	10.5	0.0	2.6	0.0
Cycle Q Clear Time (g_c), s	17.8	0.0	14.5	0.0	10.5	0.0	2.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	667	0	363	0	272	0	100	0
V/C Ratio (X)	0.62	0.00	0.89	0.00	0.83	0.00	0.57	0.00
Avail Cap (c_a), veh/h	667	0	363	0	392	0	297	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	56.3	0.0	68.4	0.0	70.0	0.0	74.2	0.0
Incr Delay (d2), s/veh	4.3	0.0	23.2	0.0	9.5	0.0	4.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	60.6	0.0	91.6	0.0	79.4	0.0	79.2	0.0
1st-Term Q (Q1), veh/ln	8.1	0.0	6.8	0.0	4.8	0.0	1.2	0.0
2nd-Term Q (Q2), veh/ln	0.4	0.0	1.2	0.0	0.4	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	8.5	0.0	8.0	0.0	5.1	0.0	1.3	0.0
%ile Storage Ratio (RQ%)	0.69	0.00	0.87	0.00	0.82	0.00	0.26	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	3	0	1	0	2
Grp Vol (v), veh/h	0	1419	0	480	0	536	0	441
Grp Sat Flow (s), veh/h/ln	0	1687	0	1679	0	1687	0	1752
Q Serve Time (g_s), s	0.0	61.5	0.0	14.4	0.0	30.8	0.0	17.9
Cycle Q Clear Time (g_c), s	0.0	61.5	0.0	14.4	0.0	30.8	0.0	17.9
Lane Grp Cap (c), veh/h	0	1529	0	609	0	968	0	694
V/C Ratio (X)	0.00	0.93	0.00	0.79	0.00	0.55	0.00	0.64
Avail Cap (c_a), veh/h	0	1529	0	634	0	968	0	694
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	40.0	0.0	66.2	0.0	20.6	0.0	57.0
Incr Delay (d2), s/veh	0.0	11.2	0.0	6.4	0.0	2.3	0.0	1.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	51.2	0.0	72.6	0.0	22.9	0.0	59.0
1st-Term Q (Q1), veh/ln	0.0	28.6	0.0	6.7	0.0	14.3	0.0	8.7

2nd-Term Q (Q2), veh/ln	0.0	2.4	0.0	0.4	0.0	0.6	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	31.0	0.0	7.0	0.0	14.9	0.0	8.9
%ile Storage Ratio (RQ%)	0.00	2.73	0.00	0.17	0.00	1.24	0.00	0.84
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	447	0	168	0	553	0	286
Grp Sat Flow (s), veh/h/ln	0	1509	0	1568	0	1742	0	1568
Q Serve Time (g_s), s	0.0	35.7	0.0	16.4	0.0	30.8	0.0	27.7
Cycle Q Clear Time (g_c), s	0.0	35.7	0.0	16.4	0.0	30.8	0.0	27.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.11	0.00	1.00
Lane Grp Cap (c), veh/h	0	684	0	190	0	999	0	310
V/C Ratio (X)	0.00	0.65	0.00	0.89	0.00	0.55	0.00	0.92
Avail Cap (c_a), veh/h	0	684	0	197	0	999	0	310
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	32.9	0.0	67.1	0.0	20.6	0.0	61.0
Incr Delay (d2), s/veh	0.0	4.8	0.0	34.1	0.0	2.2	0.0	31.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	37.7	0.0	101.2	0.0	22.9	0.0	92.6
1st-Term Q (Q1), veh/ln	0.0	14.9	0.0	7.1	0.0	14.8	0.0	12.0
2nd-Term Q (Q2), veh/ln	0.0	0.9	0.0	1.8	0.0	0.6	0.0	2.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	15.8	0.0	8.9	0.0	15.4	0.0	14.7
%ile Storage Ratio (RQ%)	0.00	1.39	0.00	0.21	0.00	1.28	0.00	1.39
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		55.3						
HCM 2010 LOS		E						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	41	81	95	41	78	88	596	196	167	503	9
Future Volume (veh/h)	4	41	81	95	41	78	88	596	196	167	503	9
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1900	1712	1712	1712	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	4	44	86	101	44	83	94	634	209	178	535	10
Adj No. of Lanes	1	1	0	2	1	1	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	11	11	11	11	11	11	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	9	60	117	159	274	233	74	1307	431	74	1775	33
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.01	0.12	0.12	0.05	0.16	0.16	0.04	0.52	0.52	0.04	0.52	0.52
Ln Grp Delay, s/veh	79.9	0.0	45.3	47.5	33.6	35.3	240.8	15.9	16.0	722.7	13.3	13.2
Ln Grp LOS	E		D	D	C	D	F	B	B	F	B	B
Approach Vol, veh/h		134			228			937			723	
Approach Delay, s/veh		46.3			40.4			38.5			187.9	
Approach LOS		D			D			D			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	10.0	54.2	10.9	16.9	10.0	54.2	6.8	21.0
Change Period (Y+Rc), s	6.0	6.0	* 6.3	* 6.3	6.0	6.0	* 6.3	* 6.3
Max Green (Gmax), s	4.0	34.0	* 5.7	* 24	4.0	34.0	* 5.7	* 24
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.0	3.8	5.3	3.8	5.0
Max Q Clear (g_c+I1), s	6.0	16.9	4.9	9.5	6.0	10.2	2.2	6.7
Green Ext Time (g_e), s	0.0	8.4	0.0	1.0	0.0	10.0	0.0	1.1
Prob of Phs Call (p_c)	0.99	1.00	0.92	1.00	0.91	1.00	0.10	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.01	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		1		3		5		7
Mvmt Sat Flow, veh/h		1691		3163		1691		1630

Through Movement Data								
Assigned Mvmt			2		4		6		8
Mvmt Sat Flow, veh/h			2496		519		3388		1712

Right-Turn Movement Data								
Assigned Mvmt			12		14		16		18
Mvmt Sat Flow, veh/h			822		1014		63		1455

Left Lane Group Data								
Assigned Mvmt		1	0	3	0	5	0	7	0
Lane Assignment		(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	2	0	1	0	1	0
Grp Vol (v), veh/h	178	0	101	0	94	0	4	0
Grp Sat Flow (s), veh/h/ln	1691	0	1581	0	1691	0	1630	0
Q Serve Time (g_s), s	4.0	0.0	2.9	0.0	4.0	0.0	0.2	0.0
Cycle Q Clear Time (g_c), s	4.0	0.0	2.9	0.0	4.0	0.0	0.2	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	74	0	159	0	74	0	9	0
V/C Ratio (X)	2.42	0.00	0.64	0.00	1.28	0.00	0.46	0.00
Avail Cap (c_a), veh/h	74	0	196	0	74	0	101	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	44.0	0.0	42.9	0.0	44.0	0.0	45.6	0.0
Incr Delay (d2), s/veh	678.7	0.0	4.6	0.0	196.8	0.0	34.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	722.7	0.0	47.5	0.0	240.8	0.0	79.9	0.0
1st-Term Q (Q1), veh/ln	1.9	0.0	1.3	0.0	1.9	0.0	0.1	0.0
2nd-Term Q (Q2), veh/ln	13.9	0.0	0.1	0.0	4.0	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	15.7	0.0	1.4	0.0	5.9	0.0	0.2	0.0
%ile Storage Ratio (RQ%)	1.83	0.00	0.27	0.00	0.49	0.00	0.03	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	26.1	0.0	0.0	0.0	5.1	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.6	0.0	0.0	0.0	0.3	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	428	0	0	0	266	0	44
Grp Sat Flow (s), veh/h/ln	0	1687	0	0	0	1687	0	1712
Q Serve Time (g_s), s	0.0	14.9	0.0	0.0	0.0	8.2	0.0	2.0
Cycle Q Clear Time (g_c), s	0.0	14.9	0.0	0.0	0.0	8.2	0.0	2.0
Lane Grp Cap (c), veh/h	0	884	0	0	0	884	0	274
V/C Ratio (X)	0.00	0.48	0.00	0.00	0.00	0.30	0.00	0.16
Avail Cap (c_a), veh/h	0	884	0	0	0	884	0	441
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	14.0	0.0	0.0	0.0	12.4	0.0	33.3
Incr Delay (d2), s/veh	0.0	1.9	0.0	0.0	0.0	0.9	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	15.9	0.0	0.0	0.0	13.3	0.0	33.6
1st-Term Q (Q1), veh/ln	0.0	6.9	0.0	0.0	0.0	3.8	0.0	1.0

2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.4	0.0	0.0	0.0	4.0	0.0	1.0
%ile Storage Ratio (RQ%)	0.00	0.24	0.00	0.00	0.00	0.12	0.00	0.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	415	0	130	0	279	0	83
Grp Sat Flow (s), veh/h/ln	0	1631	0	1533	0	1765	0	1455
Q Serve Time (g_s), s	0.0	14.9	0.0	7.5	0.0	8.2	0.0	4.7
Cycle Q Clear Time (g_c), s	0.0	14.9	0.0	7.5	0.0	8.2	0.0	4.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.50	0.00	0.66	0.00	0.04	0.00	1.00
Lane Grp Cap (c), veh/h	0	854	0	176	0	924	0	233
V/C Ratio (X)	0.00	0.49	0.00	0.74	0.00	0.30	0.00	0.36
Avail Cap (c_a), veh/h	0	854	0	395	0	924	0	375
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	14.0	0.0	39.4	0.0	12.4	0.0	34.4
Incr Delay (d2), s/veh	0.0	2.0	0.0	5.9	0.0	0.8	0.0	0.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	16.0	0.0	45.3	0.0	13.2	0.0	35.3
1st-Term Q (Q1), veh/ln	0.0	6.7	0.0	3.2	0.0	3.9	0.0	1.9
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.3	0.0	0.2	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.1	0.0	3.5	0.0	4.2	0.0	1.9
%ile Storage Ratio (RQ%)	0.00	0.23	0.00	0.08	0.00	0.12	0.00	0.34
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	92.6
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	314	49	179	270	150	104	1221	222	391	1230	81
Future Volume (veh/h)	110	314	49	179	270	150	104	1221	222	391	1230	81
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	112	320	50	183	276	153	106	1246	227	399	1255	83
Adj No. of Lanes	2	2	1	2	1	1	1	3	0	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	156	633	283	187	350	297	126	2023	369	185	1689	112
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.18	0.18	0.05	0.19	0.19	0.07	0.49	0.49	0.11	0.53	0.53
Ln Grp Delay, s/veh	78.8	54.6	50.9	128.7	60.4	54.5	103.4	28.9	30.7	601.4	32.5	32.5
Ln Grp LOS	E	D	D	F	E	D	F	C	C	F	C	C
Approach Vol, veh/h		482			612			1579			1737	
Approach Delay, s/veh		59.8			79.3			34.5			163.2	
Approach LOS		E			E			C			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	3.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	22.0	77.6	14.0	32.4	16.9	82.7	12.7	33.7
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green (Gmax), s	16.0	46.0	8.0	52.0	11.0	51.0	8.0	52.0
Max Allow Headway (MAH), s	3.8	5.3	3.8	4.9	3.8	5.3	3.8	4.9
Max Q Clear (g_c+I1), s	18.0	34.2	9.8	14.0	11.0	46.5	6.7	22.8
Green Ext Time (g_e), s	0.0	10.7	0.0	5.0	0.0	4.3	0.0	4.9
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.99	1.00	0.99	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.01

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1691		3408		1691		3408	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		4124		3505		3213		1845

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		751		1568		212		1568

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	2	0	1	0	2	0
Grp Vol (v), veh/h	399	0	183	0	106	0	112	0
Grp Sat Flow (s), veh/h/ln	1691	0	1704	0	1691	0	1704	0
Q Serve Time (g_s), s	16.0	0.0	7.8	0.0	9.0	0.0	4.7	0.0
Cycle Q Clear Time (g_c), s	16.0	0.0	7.8	0.0	9.0	0.0	4.7	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	185	0	187	0	126	0	156	0
V/C Ratio (X)	2.15	0.00	0.98	0.00	0.84	0.00	0.72	0.00
Avail Cap (c_a), veh/h	185	0	187	0	127	0	187	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	65.0	0.0	68.9	0.0	66.7	0.0	68.7	0.0
Incr Delay (d2), s/veh	536.4	0.0	59.8	0.0	36.7	0.0	10.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	601.4	0.0	128.7	0.0	103.4	0.0	78.8	0.0
1st-Term Q (Q1), veh/ln	7.5	0.0	3.7	0.0	4.2	0.0	2.2	0.0
2nd-Term Q (Q2), veh/ln	27.6	0.0	1.6	0.0	1.3	0.0	0.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	35.1	0.0	5.2	0.0	5.5	0.0	2.5	0.0
%ile Storage Ratio (RQ%)	3.70	0.00	0.99	0.00	0.68	0.00	0.38	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	53.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	1	0	1
Grp Vol (v), veh/h	0	977	0	320	0	658	0	276
Grp Sat Flow (s), veh/h/ln	0	1616	0	1752	0	1687	0	1845
Q Serve Time (g_s), s	0.0	32.2	0.0	12.0	0.0	44.3	0.0	20.8
Cycle Q Clear Time (g_c), s	0.0	32.2	0.0	12.0	0.0	44.3	0.0	20.8
Lane Grp Cap (c), veh/h	0	1585	0	633	0	887	0	350
V/C Ratio (X)	0.00	0.62	0.00	0.51	0.00	0.74	0.00	0.79
Avail Cap (c_a), veh/h	0	1585	0	1248	0	887	0	657
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	27.1	0.0	53.9	0.0	26.9	0.0	56.4
Incr Delay (d2), s/veh	0.0	1.8	0.0	0.6	0.0	5.6	0.0	4.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	28.9	0.0	54.6	0.0	32.5	0.0	60.4
1st-Term Q (Q1), veh/ln	0.0	14.4	0.0	5.8	0.0	20.5	0.0	10.7

2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.1	0.0	1.4	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	14.8	0.0	5.9	0.0	21.8	0.0	11.0
%ile Storage Ratio (RQ%)	0.00	0.79	0.00	0.17	0.00	2.04	0.00	1.69
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	496	0	50	0	680	0	153
Grp Sat Flow (s), veh/h/ln	0	1643	0	1568	0	1738	0	1568
Q Serve Time (g_s), s	0.0	32.2	0.0	3.9	0.0	44.5	0.0	12.8
Cycle Q Clear Time (g_c), s	0.0	32.2	0.0	3.9	0.0	44.5	0.0	12.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.46	0.00	1.00	0.00	0.12	0.00	1.00
Lane Grp Cap (c), veh/h	0	806	0	283	0	914	0	297
V/C Ratio (X)	0.00	0.62	0.00	0.18	0.00	0.74	0.00	0.51
Avail Cap (c_a), veh/h	0	806	0	558	0	914	0	558
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	27.1	0.0	50.6	0.0	27.0	0.0	53.1
Incr Delay (d2), s/veh	0.0	3.5	0.0	0.3	0.0	5.5	0.0	1.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	30.7	0.0	50.9	0.0	32.5	0.0	54.5
1st-Term Q (Q1), veh/ln	0.0	14.6	0.0	1.7	0.0	21.3	0.0	5.5
2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	0.0	0.0	1.4	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	15.4	0.0	1.7	0.0	22.7	0.0	5.7
%ile Storage Ratio (RQ%)	0.00	0.82	0.00	0.29	0.00	2.13	0.00	0.87
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		94.2						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	162	285	67	159	374	171	131	1116	91	305	1380	127
Future Volume (veh/h)	162	285	67	159	374	171	131	1116	91	305	1380	127
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	172	303	71	169	398	182	139	1187	97	324	1468	135
Adj No. of Lanes	2	1	1	2	1	1	2	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	316	599	509	465	599	509	186	1447	118	217	1656	151
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.06	0.46	0.46	0.13	0.53	0.53
Ln Grp Delay, s/veh	64.7	42.1	36.4	54.9	46.7	39.6	76.5	45.2	45.1	299.7	37.9	38.7
Ln Grp LOS	E	D	D	D	D	D	E	D	D	F	D	D
Approach Vol, veh/h		546			749			1423			1927	
Approach Delay, s/veh		48.5			46.8			48.2			82.3	
Approach LOS		D			D			D			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Case No	2.0	4.0		5.0	2.0	4.0		5.0
Phs Duration (G+Y+Rc), s	24.0	74.1		53.9	13.1	85.0		53.9
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green (Gmax), s	19.5	67.5		51.5	19.5	67.5		51.5
Max Allow Headway (MAH), s	3.8	5.3		5.0	3.8	5.3		5.0
Max Q Clear (g_c+I1), s	21.5	51.7		46.0	8.3	66.0		34.0
Green Ext Time (g_e), s	0.0	14.3		3.3	0.3	1.4		7.3
Prob of Phs Call (p_c)	1.00	1.00		1.00	1.00	1.00		1.00
Prob of Max Out (p_x)	1.00	0.00		0.96	0.00	0.00		0.33

Left-Turn Movement Data								
Assigned Mvmt	1			7	5			3
Mvmt Sat Flow, veh/h	1691			1596	3281			1930

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3159		1845		3127		1845

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		258		1568		286		1568

Left Lane Group Data								
Assigned Mvmt	1	0	0	7	5	0	0	3
Lane Assignment	(Prot)				(Prot)			

Lanes in Grp	1	0	0	2	2	0	0	2
Grp Vol (v), veh/h	324	0	0	172	139	0	0	169
Grp Sat Flow (s), veh/h/ln	1691	0	0	798	1640	0	0	965
Q Serve Time (g_s), s	19.5	0.0	0.0	15.8	6.3	0.0	0.0	11.8
Cycle Q Clear Time (g_c), s	19.5	0.0	0.0	44.0	6.3	0.0	0.0	32.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	798	0	0	0	965
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	49.4	0.0	0.0	0.0	49.4
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	21.1	0.0	0.0	0.0	29.2
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	15.8	0.0	0.0	0.0	11.8
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	217	0	0	316	186	0	0	465
V/C Ratio (X)	1.49	0.00	0.00	0.54	0.75	0.00	0.00	0.36
Avail Cap (c_a), veh/h	217	0	0	339	421	0	0	492
Upstream Filter (I)	0.48	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	66.3	0.0	0.0	63.2	70.6	0.0	0.0	54.4
Incr Delay (d2), s/veh	233.5	0.0	0.0	1.5	5.9	0.0	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	299.7	0.0	0.0	64.7	76.5	0.0	0.0	54.9
1st-Term Q (Q1), veh/ln	9.1	0.0	0.0	3.5	2.9	0.0	0.0	3.1
2nd-Term Q (Q2), veh/ln	14.1	0.0	0.0	0.1	0.2	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	23.2	0.0	0.0	3.6	3.0	0.0	0.0	3.2
%ile Storage Ratio (RQ%)	2.27	0.00	0.00	0.54	0.41	0.00	0.00	0.44
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	26.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	633	0	303	0	788	0	398
Grp Sat Flow (s), veh/h/ln	0	1687	0	1845	0	1687	0	1845
Q Serve Time (g_s), s	0.0	49.5	0.0	20.2	0.0	62.6	0.0	28.2
Cycle Q Clear Time (g_c), s	0.0	49.5	0.0	20.2	0.0	62.6	0.0	28.2
Lane Grp Cap (c), veh/h	0	773	0	599	0	894	0	599
V/C Ratio (X)	0.00	0.82	0.00	0.51	0.00	0.88	0.00	0.66
Avail Cap (c_a), veh/h	0	773	0	625	0	894	0	625
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.48	0.00	1.00
Uniform Delay (d1), s/veh	0.0	35.7	0.0	41.5	0.0	31.5	0.0	44.2
Incr Delay (d2), s/veh	0.0	9.4	0.0	0.7	0.0	6.4	0.0	2.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	45.2	0.0	42.1	0.0	37.9	0.0	46.7
1st-Term Q (Q1), veh/ln	0.0	23.0	0.0	10.3	0.0	29.1	0.0	14.4

2nd-Term Q (Q2), veh/ln	0.0	2.0	0.0	0.1	0.0	1.6	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	25.1	0.0	10.4	0.0	30.7	0.0	14.8
%ile Storage Ratio (RQ%)	0.00	0.72	0.00	0.31	0.00	1.46	0.00	0.35
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	651	0	71	0	815	0	182
Grp Sat Flow (s), veh/h/ln	0	1730	0	1568	0	1725	0	1568
Q Serve Time (g_s), s	0.0	49.7	0.0	4.9	0.0	64.0	0.0	13.5
Cycle Q Clear Time (g_c), s	0.0	49.7	0.0	4.9	0.0	64.0	0.0	13.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.15	0.00	1.00	0.00	0.17	0.00	1.00
Lane Grp Cap (c), veh/h	0	793	0	509	0	914	0	509
V/C Ratio (X)	0.00	0.82	0.00	0.14	0.00	0.89	0.00	0.36
Avail Cap (c_a), veh/h	0	793	0	531	0	914	0	531
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.48	0.00	1.00
Uniform Delay (d1), s/veh	0.0	35.8	0.0	36.3	0.0	31.9	0.0	39.2
Incr Delay (d2), s/veh	0.0	9.3	0.0	0.1	0.0	6.9	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	45.1	0.0	36.4	0.0	38.7	0.0	39.6
1st-Term Q (Q1), veh/ln	0.0	23.7	0.0	2.1	0.0	30.3	0.0	5.8
2nd-Term Q (Q2), veh/ln	0.0	2.1	0.0	0.0	0.0	1.7	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	25.7	0.0	2.1	0.0	32.1	0.0	5.9
%ile Storage Ratio (RQ%)	0.00	0.74	0.00	0.37	0.00	1.53	0.00	0.84
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		62.2						
HCM 2010 LOS		E						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	56	48	140	47	629	52	1436	95	545	1681	108
Future Volume (veh/h)	80	56	48	140	47	629	52	1436	95	545	1681	108
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	85	60	51	149	50	669	55	1528	101	580	1788	115
Adj No. of Lanes	2	3	1	2	1	1	1	2	0	2	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	312	794	247	196	467	397	102	1465	96	581	2161	138
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.16	0.16	0.16	0.06	0.25	0.25	0.46	0.46	0.46	0.18	0.67	0.67
Ln Grp Delay, s/veh	60.1	56.8	58.4	79.3	45.4	378.2	67.4	75.3	78.3	79.8	20.2	20.8
Ln Grp LOS	E	E	E	E	D	F	E	F	F	E	C	C
Approach Vol, veh/h		196			868			1684			2483	
Approach Delay, s/veh		58.6			307.7			76.5			34.4	
Approach LOS		E			F			E			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4		6		8
Case No	2.0	6.0	2.0	5.0		4.0		3.0
Phs Duration (G+Y+Rc), s	34.0	78.0	15.1	30.9		112.0		46.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0		6.0		6.0
Max Green (Gmax), s	28.0	72.0	19.0	15.0		106.0		40.0
Max Allow Headway (MAH), s	3.8	5.4	3.8	4.4		5.4		4.4
Max Q Clear (g_c+I1), s	29.9	74.0	8.8	10.6		68.3		42.0
Green Ext Time (g_e), s	0.0	0.0	0.3	1.9		35.6		0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00		1.00		1.00
Prob of Max Out (p_x)	1.00	0.00	0.00	0.99		0.00		1.00

Left-Turn Movement Data				
Assigned Mvmt	1	5	3	7
Mvmt Sat Flow, veh/h	3281	225	3408	1403

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	3214	5036	3221	1845

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	211	1568	205	1568

Left Lane Group Data								
Assigned Mvmt	1	5	3	7	0	0	0	0
Lane Assignment	(Prot)		(Prot)					

Lanes in Grp	2	1	2	2	0	0	0	0
Grp Vol (v), veh/h	580	55	149	85	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1640	225	1704	701	0	0	0	0
Q Serve Time (g_s), s	27.9	38.3	6.8	8.6	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	27.9	70.7	6.8	8.6	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	225	0	701	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	72.0	0.0	24.9	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	39.7	0.0	24.9	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	38.3	0.0	8.6	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	581	102	196	312	0	0	0	0
V/C Ratio (X)	1.00	0.54	0.76	0.27	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	581	102	410	312	0	0	0	0
Upstream Filter (I)	0.17	0.44	1.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	65.0	58.7	73.4	59.7	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	14.8	8.8	5.9	0.5	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	79.8	67.4	79.3	60.1	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	12.6	2.4	3.2	1.7	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	1.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	13.8	2.6	3.4	1.7	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	1.46	0.32	0.38	0.54	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	3	0	1	0	1
Grp Vol (v), veh/h	0	798	0	60	0	928	0	50
Grp Sat Flow (s), veh/h/ln	0	1687	0	1679	0	1687	0	1845
Q Serve Time (g_s), s	0.0	72.0	0.0	1.6	0.0	63.6	0.0	3.3
Cycle Q Clear Time (g_c), s	0.0	72.0	0.0	1.6	0.0	63.6	0.0	3.3
Lane Grp Cap (c), veh/h	0	769	0	794	0	1132	0	467
V/C Ratio (X)	0.00	1.04	0.00	0.08	0.00	0.82	0.00	0.11
Avail Cap (c_a), veh/h	0	769	0	794	0	1132	0	467
Upstream Filter (I)	0.00	0.44	0.00	1.00	0.00	0.17	0.00	1.00
Uniform Delay (d1), s/veh	0.0	43.0	0.0	56.7	0.0	19.0	0.0	45.3
Incr Delay (d2), s/veh	0.0	32.3	0.0	0.0	0.0	1.2	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	75.3	0.0	56.8	0.0	20.2	0.0	45.4
1st-Term Q (Q1), veh/ln	0.0	33.5	0.0	0.7	0.0	29.4	0.0	1.7

2nd-Term Q (Q2), veh/ln	0.0	6.9	0.0	0.0	0.0	0.4	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	40.4	0.0	0.7	0.0	29.8	0.0	1.7
%ile Storage Ratio (RQ%)	0.00	1.93	0.00	0.10	0.00	1.62	0.00	0.19
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	7.4	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	831	0	51	0	975	0	669
Grp Sat Flow (s), veh/h/ln	0	1738	0	1568	0	1739	0	1568
Q Serve Time (g_s), s	0.0	72.0	0.0	4.5	0.0	66.3	0.0	40.0
Cycle Q Clear Time (g_c), s	0.0	72.0	0.0	4.5	0.0	66.3	0.0	40.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.12	0.00	1.00	0.00	0.12	0.00	1.00
Lane Grp Cap (c), veh/h	0	792	0	247	0	1167	0	397
V/C Ratio (X)	0.00	1.05	0.00	0.21	0.00	0.84	0.00	1.69
Avail Cap (c_a), veh/h	0	792	0	247	0	1167	0	397
Upstream Filter (I)	0.00	0.44	0.00	1.00	0.00	0.17	0.00	1.00
Uniform Delay (d1), s/veh	0.0	43.0	0.0	57.9	0.0	19.5	0.0	59.0
Incr Delay (d2), s/veh	0.0	35.3	0.0	0.4	0.0	1.3	0.0	319.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	78.3	0.0	58.4	0.0	20.8	0.0	378.2
1st-Term Q (Q1), veh/ln	0.0	34.5	0.0	1.9	0.0	31.7	0.0	17.3
2nd-Term Q (Q2), veh/ln	0.0	7.8	0.0	0.0	0.0	0.4	0.0	35.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	42.3	0.0	2.0	0.0	32.1	0.0	52.5
%ile Storage Ratio (RQ%)	0.00	2.02	0.00	0.27	0.00	1.74	0.00	5.74
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	9.6	0.0	0.0	0.0	0.0	0.0	68.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	94.2
HCM 2010 LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	570	786	346	844	950	9	293	1176	1	0	1002	227
Future Volume (veh/h)	570	786	346	844	950	9	293	1176	1	0	1002	227
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1759	1759	1759	1900	1776	1776	1776	0	1776	1776
Adj Flow Rate, veh/h	594	819	360	879	990	9	305	1225	0	0	1044	0
Adj No. of Lanes	2	3	1	2	3	0	2	2	1	0	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	8	8	8	8	8	8	7	7	7	0	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			No		
Cap, veh/h	660	654	204	855	963	9	259	1614	722	0	1214	543
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.20	0.14	0.14	0.26	0.20	0.20	0.08	0.48	0.00	0.00	0.36	0.00
Ln Grp Delay, s/veh	69.4	191.5	430.4	94.0	104.2	117.0	153.9	32.8	0.0	0.0	53.2	0.0
Ln Grp LOS	E	F	F	F	F	F	F	C			D	
Approach Vol, veh/h		1773			1878			1530			1044	
Approach Delay, s/veh		199.1			101.9			56.9			53.2	
Approach LOS		F			F			E			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Case No		3.0	2.0	3.0	2.0	7.0	2.0	4.0
Phs Duration (G+Y+Rc), s		79.0	46.0	27.0	18.0	61.0	36.9	36.1
Change Period (Y+Rc), s		6.3	6.0	6.3	6.0	6.3	6.0	6.3
Max Green (Gmax), s		72.7	40.0	20.7	12.0	54.7	40.0	20.7
Max Allow Headway (MAH), s		5.3	3.8	5.1	3.8	5.3	3.8	5.1
Max Q Clear (g_c+I1), s		47.2	42.0	22.7	14.0	45.6	29.1	31.8
Green Ext Time (g_e), s		19.0	0.0	0.0	0.0	7.9	1.8	0.0
Prob of Phs Call (p_c)		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)		0.00	1.00	1.00	1.00	0.00	0.05	1.00

Left-Turn Movement Data								
Assigned Mvmt			3		5	1	7	
Mvmt Sat Flow, veh/h			3250		3281	0	3250	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3374		4803		3463		4909

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1509		1495		1509		45

Left Lane Group Data								
Assigned Mvmt	0	0	3	0	5	1	7	0
Lane Assignment			(Prot)		(Prot)		(Prot)	

Lanes in Grp	0	0	2	0	2	0	2	0
Grp Vol (v), veh/h	0	0	879	0	305	0	594	0
Grp Sat Flow (s), veh/h/ln	0	0	1625	0	1640	0	1625	0
Q Serve Time (g_s), s	0.0	0.0	40.0	0.0	12.0	0.0	27.1	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	40.0	0.0	12.0	0.0	27.1	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	54.7	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	855	0	259	0	660	0
V/C Ratio (X)	0.00	0.00	1.03	0.00	1.18	0.00	0.90	0.00
Avail Cap (c_a), veh/h	0	0	855	0	259	0	855	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.09	0.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	56.0	0.0	70.0	0.0	59.1	0.0
Incr Delay (d2), s/veh	0.0	0.0	38.0	0.0	83.9	0.0	10.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	94.0	0.0	153.9	0.0	69.4	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	17.9	0.0	5.4	0.0	12.2	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	4.5	0.0	3.0	0.0	1.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	22.5	0.0	8.4	0.0	13.2	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	1.49	0.00	0.95	0.00	1.25	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	5.9	0.0	11.5	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.3	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	3	0	2	0	2
Grp Vol (v), veh/h	0	1225	0	819	0	1044	0	646
Grp Sat Flow (s), veh/h/ln	0	1687	0	1601	0	1687	0	1601
Q Serve Time (g_s), s	0.0	45.2	0.0	20.7	0.0	43.6	0.0	29.8
Cycle Q Clear Time (g_c), s	0.0	45.2	0.0	20.7	0.0	43.6	0.0	29.8
Lane Grp Cap (c), veh/h	0	1614	0	654	0	1214	0	628
V/C Ratio (X)	0.00	0.76	0.00	1.25	0.00	0.86	0.00	1.03
Avail Cap (c_a), veh/h	0	1614	0	654	0	1214	0	628
Upstream Filter (I)	0.00	0.09	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	32.5	0.0	65.6	0.0	45.1	0.0	61.1
Incr Delay (d2), s/veh	0.0	0.3	0.0	125.8	0.0	8.1	0.0	43.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	32.8	0.0	191.5	0.0	53.2	0.0	104.2
1st-Term Q (Q1), veh/ln	0.0	20.9	0.0	9.1	0.0	20.3	0.0	13.2

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	7.6	0.0	1.4	0.0	3.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	21.0	0.0	16.8	0.0	21.7	0.0	16.9
%ile Storage Ratio (RQ%)	0.00	1.14	0.00	0.58	0.00	0.74	0.00	1.08
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	41.2	0.0	0.0	0.0	4.3
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	360	0	0	0	353
Grp Sat Flow (s), veh/h/ln	0	1509	0	1495	0	1509	0	1751
Q Serve Time (g_s), s	0.0	0.0	0.0	20.7	0.0	0.0	0.0	29.8
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	20.7	0.0	0.0	0.0	29.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.03
Lane Grp Cap (c), veh/h	0	722	0	204	0	543	0	344
V/C Ratio (X)	0.00	0.00	0.00	1.77	0.00	0.00	0.00	1.03
Avail Cap (c_a), veh/h	0	722	0	204	0	543	0	344
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	65.7	0.0	0.0	0.0	61.1
Incr Delay (d2), s/veh	0.0	0.0	0.0	364.8	0.0	0.0	0.0	56.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	430.4	0.0	0.0	0.0	117.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	8.6	0.0	0.0	0.0	14.4
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	20.6	0.0	0.0	0.0	5.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	29.2	0.0	0.0	0.0	19.8
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	1.02	0.00	0.00	0.00	1.26
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	39.1	0.0	0.0	0.0	2.4
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.3
Intersection Summary								
HCM 2010 Ctrl Delay		110.3						
HCM 2010 LOS		F						

APPENDIX I-Q:
INTERSECTION PARAMETERS FOR SYNCHRO

APPENDIX I-Q1:
Truck Percentages

Appendix: Peak Hour Peak Period Truck Percentage Calculations for Intersection Analyses

	NB\SB Movements						EB\WB Movements					
Intersection ID	Station No.	Des	24T&B	DHT	Ratio DHT/24T &B	Final PkHr Percentage	Station No.	Des	24T&B	DHT	Ratio DHT/24T&B	Final PkHr Percentage
1	8176	NW 87Th Ave, 200' South of NW 186Th Street	17.40%	NA	NA	9.00%	2518	SR 860/ miami Gardens Dr, 800' W of NW 87 Ave	2.27%	1.14%	NA	1.00%
2	NA	NA	NA	NA	NA	3.00%	NA	NA	NA	NA	NA	2.00%
3			NA	NA	NA		NA	NA	NA	NA	NA	
4	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	
5	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	
6	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	
7	8467	NW 68 TH AVE/CR-9823,200' OF NW 179ST (2001)	5.50%	NA	NA		2517	SR 860/MIAMI GARDENS DR, 200' W NW 67 AV	4.60%	NA	NA	
8	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	
9	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	
10	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	
11	2514	SR 823/NW 57 AV, 550' N SR 860/ NW 183 ST	5.70%	NA	NA		2516	SR 860/ Mimi Grdens dr, 200' w sr 823/ red rd	4.60%	NA		
					NA		1233	SR 860/ miami Gardens Dr, 200' W of NW 67 Ave	4.07%	2.03%	0.50	
12	8243	W 68 ST/ W 36 AVE, 200' SOUTH OF NW 130TH STREET	14.60%	NA	NA	7.00%	7048	NW 138TH ST 0.5 MILE WEST OF 36 AVE/9TH AVE	22.34%	11.17%	NA	11.00%
13	8243	W 68 ST/ W 36 AVE, 200' SOUTH OF NW 130TH STREET	14.60%	NA	NA	7.00%	NA	NA	NA	NA	NA	3.00%
14	0353	HEFT SB OFF RAMP TO OKEECHOBEE RD/US-27, M35C	7.40%	NA	NA	12.00%	7	SR 25/US-27/OKEECHOBEE, 200' NW 821/HEFT	24.40%	12.69%	NA	12.00%
	0354	HEFT SB OFF RAMP TO OKEECHOBEE RD/US-27, M35C	24.20%	NA	NA						NA	
15	0352	HEFT NB OFF RAMP TO OKEECHOBEE RD/US-27, M35C	7.40%	NA	NA		7	SR 25/US-27/OKEECHOBEE, 200' NW 821/HEFT	25.40%	12.69%	NA	
	0351	HEFT NB OFF RAMP TO OKEECHOBEE RD/US-27, M35A	7.40%	NA	NA						NA	
16	436	HEFT NB OFF RAMP FROM NW 57TH AVE (RED ROAD), M43A	7.40%	NA	NA	4.00%	NA	NA	NA	NA	NA	2.00%
	432	HEFT NB ON RAMP FROM NW 57TH AVE (RED ROAD), M43	7.40%	NA	NA		2515	SR 823/ NW 57 AV, 200' S MIAMI- DADE/BROWARD CO LI	4.72%	2.36%	NA	
17	5216	SR 823/ FLAMINGO RD (RED RD) EXT N DADE BROWARD C	5.60%	NA	NA	3.00%	0434	HEFT SB OFF RAMP TO NW 57TH AVE (RED AVE), M43D	7.40%	NA	NA	4.00%
			NA	NA	NA		433	HEFT SB OFF RAMP TO NW 57TH AVE (RED AVE), M43C	7.40%	NA	NA	
20	7083	NW 115 AVE/NW 138 ST, 250' SOUTH OF NW 113 AVE	21.00%	NA	NA	11.00%	8684	NW 138 STREET 600' WEST OF NW 107 AVENUE	21.00%	NA	NA	11.00%
	2536	SR 25/US-27/OKEECHOBEE RD, 1000' NB RAMP TO HEFT	21.45%	10.73%	0.50						NA	
23	NA	NA	NA	NA	NA	7.00%	8568	NW S. RIVER SR, 200' SOUTH OF NW 114 WAY 2011 O	14.60%	NA	NA	7.00%
36	4142	I-75 NB OFF RAMP TO WB. MIRAMAR PARKWAY	6.20%	NA	NA	3.00%	5322	MIRAMAR PARKWAY- E OF I-75/ SR 93	4.82%	2.41%	0.50	3.00%
	4101	I-75 NB ON RAMP FROM WB. MIRAMAR PARKWAY	6.20%	NA	NA						NA	
37	4141	I-75 SB OFF RAMP TO EB MIRAMAR PKWY	6.20%	NA	NA		4103	I-75 SB ON RAMP FM MIRAMAR PARKWAY	6.20%	NA	NA	
	5323	MIRAMAR PARKWAY- W OF I-75/ SR 93	4.30%	NA	NA		5322	MIRAMAR PARKWAY- E OF I-75/ SR 93	4.82%	2.41%	NA	
38	4144	I-75 NB OFF RAMP TO WB SR 820/ PINES BLVD	3.50%	NA	NA	2.00%	0035	SR 820/ HOLLYWOOD BLVD - 1000' E OF SR 93/ I-75	4.87%	2.44%	0.50	2.00%
	4105	ENT RAMP TO NB I-75 FM HOLLYWOOD BLVD	3.50%	NA	NA						NA	
39	4143	I-75 SB OFF RAMP TO SR 820/ PINES BLVD. EB	3.50%	NA	NA		4107	I-75 SB ON RAMP FM SR-820/ PINES BLVD	3.50%	NA	NA	
	86	i-75 SB ON RAMP FM SR-820/ PINES BLVD	3.50%	NA	NA		88	SR 820/PINES BLVD - W OF SR 93/I-75	4.47%	2.23%	NA	
44	8620	HIALEAH GRDS BLVD, 200 FT N OF W 72ND ST, HIALEA	14.60%	NA	NA	7.00%	7076	NW 122 ST- 300' EAST OF NW 92 AVE	6.49%	3.25%	0.50	3.00%
50	8112	NW 87Th Ave, 200' South of NW 168Th TER	11.70%	NA	NA		8177	NW 170 TH ST/NW 169TH ST, 200' EAST OF NW 87TH AVE	21.90%	NA	NA	11.00%
51	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	3.00%
52	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	
53	8620	NA	14.60%	NA	NA		NA	NA	NA	NA	NA	
54	6077	RAMP 87075... FROM NB NW 92 AVE TO NB I-75, 1000'	11.98%	5.99%	0.50		6076	RAMP 87075... FROM NB NW 92 AVE TO EB I-75, 1000'	15.76%	7.88%	0.50	8.00%
	6078	RAMP 87075... FROM SB I-75,TO NW 138 ST 500' S OF	11.34%	5.67%	0.50						NA	

Notes:

DHT: The percent of trucks expected to use a highway segment during the 30th highest hour of the design year. The adjusted, annual design hour percentage of trucks and buses (24T+B) divided by two. (FATCR)

24 T&B: Daily Truck and Bus percentage

APPENDIX I-Q2:
Miami-Dade County Signal System TODs

TOD Schedule Report

for 5107: Miami Gardens Dr&NW 87 Av

Print Date: 4/3/2016

Print Time: 2:26 AM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
5107	Miami Gardens Dr&NW 87 Av	DOW-1		N/A	0	0	N/A	0	Max 0

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
EBL	WBT	SBL	NBT	WBL	EBT	NBL	SBT
0	0	0	0	0	0	0	0

Active Phase Bank: Phase Bank 1

Phase	Walk (Phase Bank 1 - 2 - 3)	Don't Walk (1 - 2 - 3)	Min Initial (1 - 2 - 3)	Veh Ext (1 - 2 - 3)	Max Limit (1 - 2 - 3)	Max 2 (1 - 2 - 3)	Yellow	Red
1 EBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	3 - 3 - 3	7 - 15 - 15	45 - 25 - 25	4.4	2
2 WBT	7 - 7 - 7	18 - 18 - 18	7 - 7 - 7	1 - 1 - 1	58 - 45 - 45	0 - 45 - 45	4.4	2
3 SBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	5 - 15 - 15	22 - 20 - 20	4	2.9
4 NBT	7 - 7 - 7	20 - 20 - 20	7 - 7 - 7	2.5 - 2.5 - 2.5	40 - 30 - 30	65 - 45 - 45	4	2.9
5 WBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	15 - 15 - 15	45 - 25 - 25	4.4	2
6 EBT	7 - 7 - 7	18 - 18 - 18	7 - 7 - 7	1 - 1 - 1	58 - 45 - 45	0 - 45 - 45	4.4	2
7 NBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	12 - 15 - 15	35 - 20 - 20	4	2.9
8 SBT	0 - 0 - 0	0 - 0 - 0	7 - 7 - 7	2.5 - 2.5 - 2.5	40 - 30 - 30	65 - 45 - 45	4	2.9

Last In Service Date: unknown

Permitted Phases

	12345678
Default	12345678
External Permit 0	--------
External Permit 1	12-456-8
External Permit 2	12-456-8

1812

TOD Schedule Report

for 5107: Miami Gardens Dr&NW 87 Av

Print Date: 4/3/2016

Print Time: 2:26 AM

Current TOD Schedule	Plan	Cycle	Green Time 1 EBL	2 WBT	3 SBL	4 NBT	5 WBL	6 EBT	7 NBL	8 SBT	Ring Offset	Offset
	1	130	9	56	4	35	9	56	0	46	0	28
	2	180	13	68	17	56	23	58	35	38	0	115
	3	100	9	40	4	21	9	40	6	19	0	54
	4	120	10	39	10	35	10	39	14	31	0	36
	5	100	11	38	6	19	11	38	6	19	0	0
	6	180	44	55	10	45	23	76	17	38	0	78
	7	130	13	56	8	27	13	56	8	27	0	32
	9	180	17	79	9	49	17	79	20	38	0	132
	18	110	9	36	6	33	13	32	6	33	0	88
	19	130	19	48	6	31	19	48	9	28	0	34
	20	120	14	47	6	27	19	42	6	27	0	42

Local TOD Schedule

Time	Plan	DOW
0000	Free	Su M T W Th F S
0600	2	M T W Th F
0700	18	Su S
1000	19	Su S
1000	4	M T W Th F
1330	9	M T W Th F
1545	6	M T W Th F
1900	20	Su S
1930	7	M T W Th F
2200	Free	M T W Th F

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S
0645	VEH MAX RECALL	8---4---	M T W ThF
0700	VEH MAX RECALL	-7------	M T W ThF
0830	VEH MAX RECALL	--------	M T W ThF
0930	VEH MAX RECALL	--------	M T W ThF

* Settings

Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

No Calendar Defined/Enabled

TOD Schedule Report

for 4915: Miami Gardens Dr&NW 82 Av

Print Date: 4/4/2016

Print Time: 2:19 AM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
4915	Miami Gardens Dr&NW 82 Av	DOW-2		N/A	0	0	N/A	0	Max 0

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
EBL	WBT	SBL	NBT	WBL	EBT	NBL	SBT
0	0	0	0	0	0	0	0

Active Phase Bank: Phase Bank 1

Phase		Walk (Phase Bank 1 - 2 - 3)	Don't Walk (1 - 2 - 3)	Min Initial (1 - 2 - 3)	Veh Ext (1 - 2 - 3)	Max Limit (1 - 2 - 3)	Max 2 (1 - 2 - 3)	Yellow	Red
1	EBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	8 - 20 - 7	20 - 15 - 15	4.4	2
2	WBT	7 - 0 - 7	12 - 0 - 12	7 - 16 - 7	1 - 1 - 1	50 - 45 - 45	0 - 45 - 45	4.4	2
3	SBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	7 - 45 - 7	45 - 45 - 15	4	2.6
4	NBT	7 - 0 - 7	18 - 0 - 18	7 - 7 - 7	2.5 - 2.5 - 2.5	35 - 42 - 25	50 - 50 - 40	4	2.6
5	WBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	8 - 25 - 7	25 - 15 - 15	4.4	2
6	EBT	7 - 0 - 7	12 - 0 - 12	7 - 16 - 7	1 - 1 - 1	50 - 45 - 45	0 - 45 - 45	4.4	2
7	NBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 3.5 - 2	7 - 45 - 7	45 - 45 - 15	4	2.6
8	SBT	7 - 0 - 7	18 - 0 - 18	7 - 7 - 7	2.5 - 2.5 - 2.5	35 - 42 - 25	50 - 50 - 40	4	2.6

Last In Service Date: unknown

Permitted Phases

	12345678
Default	12345678
External Permit 0	--------
External Permit 1	-2-4-6-8
External Permit 2	-2-4-6-8

1814

TOD Schedule Report

for 4915: Miami Gardens Dr&NW 82 Av

Print Date: 4/4/2016

Print Time: 2:19 AM

Current TOD Schedule	Plan	Cycle	Green Time 1 EBL	2 WBT	3 SBL	4 NBT	5 WBL	6 EBT	7 NBL	8 SBT	Ring Offset	Offset
	1	130	7	73	0	31	7	73	0	31	0	108
	2	180	7	86	34	27	17	76	37	24	0	65
	3	100	5	50	6	13	5	50	6	13	0	8
	4	120	7	66	8	13	7	66	8	13	0	98
	5	100	5	50	6	13	5	50	6	13	0	0
	6	180	15	69	39	31	15	69	39	31	0	117
	7	130	9	64	8	23	9	64	8	23	0	100
	8	90	7	26	6	25	7	26	6	25	0	22
	9	180	7	90	42	15	7	90	42	15	0	138
	18	110	5	47	6	26	5	47	6	26	0	50
	19	130	9	57	10	28	9	57	10	28	0	100
	20	120	11	52	8	23	11	52	8	23	0	114

Local TOD Schedule

Time	Plan	DOW
0000	Free	Su M T W Th F S
0600	2	M T W Th F
0600	Free	Su S
0700	Free	Su S
0900	8	M T W Th F
1000	19	Su S
1545	6	M T W Th F
1900	7	M T W Th F
1900	20	Su S
2200	Free	M T W Th F

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	-7------	SuM T W ThF S
0715	TOD OUTPUTS	-------1	M T W ThF
0900	TOD OUTPUTS	-7------	M T W ThF
1330	TOD OUTPUTS	-------1	M T W ThF
1545	TOD OUTPUTS	-7------	M T W ThF

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	-7------	SuM T W ThF S
0715	TOD OUTPUTS	-------1	M T W ThF
0900	TOD OUTPUTS	-7------	M T W ThF
1330	TOD OUTPUTS	-------1	M T W ThF
1545	TOD OUTPUTS	-7------	M T W ThF

* Settings

Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

No Calendar Defined/Enabled

TOD Schedule Report

for 6119: Miami Gardens Dr&NW 79 Av

Print Date: 4/4/2016

Print Time: 2:25 AM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
6119	Miami Gardens Dr&NW 79 Av	DOW-2		N/A	0	0	N/A	0	Max 0

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
EBL	WBT	-	-	-	EBT	-	SBT
0	0	0	0	0	0	0	0

Active Phase Bank: Phase Bank 1

Phase		Walk (Phase Bank 1 2 3)	Don't Walk (Phase Bank 1 2 3)	Min Initial (Phase Bank 1 2 3)	Veh Ext (Phase Bank 1 2 3)	Max Limit (Phase Bank 1 2 3)	Max 2 (Phase Bank 1 2 3)	Yellow	Red
1	EBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2.5 - 2.5 - 2.5	10 - 10 - 10	35 - 15 - 15	4.4	2
2	WBT	7 - 7 - 7	16 - 16 - 16	7 - 7 - 7	1 - 1 - 1	45 - 30 - 30	0 - 35 - 35	4.4	2
3	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
4	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
5	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
6	EBT	7 - 7 - 7	16 - 16 - 16	7 - 7 - 7	1 - 1 - 1	45 - 30 - 30	0 - 35 - 35	4.4	2
7	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
8	SBT	7 - 7 - 7	18 - 18 - 18	7 - 7 - 7	4 - 2.5 - 2.5	30 - 20 - 20	58 - 35 - 35	4	2.5

Last In Service Date: unknown

Permitted Phases

	12345678
Default	12---6-8
External Permit 0	-2---6-8
External Permit 1	-2---6-8
External Permit 2	-2---6-8

1816

TOD Schedule Report

for 6119: Miami Gardens Dr&NW 79 Av

Print Date: 4/4/2016

Print Time: 2:25 AM

Current TOD Schedule	Plan	Cycle	Green Time 1 EBL	2 WBT	3 -	4 -	5 -	6 EBT	7 -	8 SBT	Ring Offset	Offset
	1	130	8	74	0	0	0	89	0	29	0	94
	2	180	5	117	0	0	0	128	0	39	0	76
	3	100	5	54	0	0	0	66	0	22	0	34
	4	120	7	70	0	0	0	84	0	24	0	104
	5	100	11	33	0	0	0	51	0	37	0	50
	6	180	15	106	0	0	0	127	0	40	0	60
	7	130	9	76	0	0	0	92	0	26	0	108
	8	90	5	41	0	0	0	53	0	25	0	47
	9	90	5	43	0	0	0	55	0	23	0	71
	18	110	5	60	0	0	0	72	0	26	0	34
	19	130	7	76	0	0	0	90	0	28	0	118
	20	120	7	68	0	0	0	82	0	26	0	112

Local TOD Schedule

Time	Plan	DOW
0000	Flash	Su M T W Th F S
0600	2	M T W Th F
0600	Free	Su S
0700	18	Su S
0900	8	M T W Th F
1000	19	Su S
1545	6	M T W Th F
1900	7	M T W Th F
1900	20	Su S
2200	Free	M T W Th F

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S

*** Settings**

Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

No Calendar Defined/Enabled

TOD Schedule Report

for 4973: Miami Gardens Dr&Oakmont Dr W

Print Date: 3/28/2016

Print Time: 2:16 AM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
4973	Miami Gardens Dr&Oakmont Dr W	DOW-2		N/A	0	0	N/A	0	Max 0

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
EBL	WBT	SBT	NBT	WBL	EBT	-	-
0	0	0	0	0	0	0	0

Active Phase Bank: Phase Bank 1

Phase	Walk (Phase Bank 1 - 2 - 3)	Don't Walk (1 - 2 - 3)	Min Initial (1 - 2 - 3)	Veh Ext (1 - 2 - 3)	Max Limit (1 - 2 - 3)	Max 2 (1 - 2 - 3)	Yellow	Red
1 EBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	12 - 12 - 12	15 - 15 - 15	4.4	2
2 WBT	0 - 0 - 0	0 - 0 - 0	16 - 16 - 16	1 - 1 - 1	35 - 35 - 35	0 - 0 - 0	4.4	2.2
3 SBT	0 - 0 - 0	0 - 0 - 0	7 - 7 - 7	2.5 - 2.5 - 2.5	15 - 15 - 15	25 - 25 - 25	4	2.7
4 NBT	0 - 0 - 0	0 - 0 - 0	7 - 7 - 7	2.5 - 2.5 - 2.5	15 - 15 - 15	25 - 25 - 25	4	2.9
5 WBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	12 - 12 - 12	15 - 15 - 15	4.4	2
6 EBT	0 - 0 - 0	0 - 0 - 0	16 - 16 - 16	1 - 1 - 1	35 - 35 - 35	0 - 0 - 0	4.4	2.2
7 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
8 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0

Last In Service Date: unknown

Permitted Phases

	12345678
Default	123456--
External Permit 0	--------
External Permit 1	--------
External Permit 2	--------

1818

TOD Schedule Report

for 4973: Miami Gardens Dr&Oakmont Dr W

Print Date: 3/28/2016

Print Time: 2:16 AM

Current TOD Schedule	Plan	Cycle	Green Time 1 EBL	2 WBT	3 SBT	4 NBT	5 WBL	6 EBT	7 -	8 -	Ring Offset	Offset
	1	130	12	63	15	13	12	63	0	0	0	50
	2	180	12	110	21	10	12	110	0	0	0	68
	3	100	10	40	13	10	10	40	0	0	0	72
	4	120	11	55	13	14	11	55	0	0	0	42
	5	100	10	42	11	10	10	42	0	0	0	12
	6	180	13	115	13	12	13	115	0	0	0	43
	7	130	10	64	13	16	10	64	0	0	0	26
	8	90	7	33	11	12	7	33	0	0	0	67
	9	180	12	114	17	10	12	114	0	0	0	63
	18	110	11	52	10	10	11	52	0	0	0	108
	19	130	12	62	15	14	12	62	0	0	0	52
	20	120	11	55	13	14	11	55	0	0	0	62

Local TOD Schedule

Time	Plan	DOW
0000	Flash	Su M T W Th F S
0600	2	M T W Th F
0600	Free	Su S
0700	18	Su S
0900	8	M T W Th F
1000	19	Su S
1545	6	M T W Th F
1900	7	M T W Th F
1900	20	Su S
2200	Free	M T W Th F

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S

*** Settings**

Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

No Calendar Defined/Enabled

TOD Schedule Report

for 6476: Miami Gardens Dr&NW 75 Pl

Print Date: 4/4/2016

Print Time: 2:26 AM

Current TOD Schedule	Plan	Cycle	Green Time 1 -	2 WBT	3 -	4 NBT	5 WBL	6 EBT	7 -	8 -	Ring Offset	Offset
	1	130	0	88	0	30	12	69	0	0	0	50
	2	180	0	136	0	31	42	89	0	0	0	68
	3	100	0	62	0	26	10	45	0	0	0	78
	4	120	0	82	0	26	14	61	0	0	0	42
	5	100	0	62	0	26	12	43	0	0	0	12
	6	180	0	131	0	36	21	104	0	0	0	43
	7	130	0	90	0	28	15	68	0	0	0	26
	8	90	0	50	0	28	8	35	0	0	0	67
	9	180	0	136	0	31	19	111	0	0	0	42
	18	110	0	70	0	28	10	53	0	0	0	108
	19	130	0	90	0	28	10	73	0	0	0	52
	20	120	0	80	0	28	10	63	0	0	0	60

Local TOD Schedule

Time	Plan	DOW
0000	Flash	Su M T W Th F S
0600	2	M T W Th F
0600	Free	Su S
0700	18	Su S
0900	8	M T W Th F
1000	19	Su S
1545	6	M T W Th F
1900	7	M T W Th F
1900	20	Su S
2200	Free	M T W Th F

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S

* Settings

Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

No Calendar Defined/Enabled

1820

TOD Schedule Report

for 6476: Miami Gardens Dr&NW 75 Pl

Print Date: 4/4/2016

Print Time: 2:26 AM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
6476	Miami Gardens Dr&NW 75 Pl	DOW-2		N/A	0	0	N/A	0	Max 0

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
-	WBT	-	NBT	WBL	EBT	-	-
0	0	0	0	0	0	0	0

Active Phase Bank: Phase Bank 1

Phase	Walk (Phase Bank 1 / 2 / 3)	Don't Walk (1 / 2 / 3)	Min Initial (1 / 2 / 3)	Veh Ext (1 / 2 / 3)	Max Limit (1 / 2 / 3)	Max 2 (1 / 2 / 3)	Yellow	Red
1 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
2 WBT	7 - 7 - 7	13 - 13 - 13	7 - 7 - 7	1 - 1 - 1	40 - 40 - 40	0 - 40 - 40	4.4	2
3 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
4 NBT	7 - 7 - 7	20 - 20 - 20	7 - 7 - 7	2.5 - 2.5 - 2.5	20 - 20 - 20	40 - 30 - 30	4	2.5
5 WBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	10 - 10 - 10	45 - 15 - 15	4.4	2
6 EBT	7 - 7 - 7	13 - 13 - 13	7 - 7 - 7	1 - 1 - 1	40 - 40 - 40	0 - 40 - 40	4.4	2
7 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
8 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0

Last In Service Date: unknown

Permitted Phases

	12345678
Default	-2-456--
External Permit 0	--------
External Permit 1	-2-4-6--
External Permit 2	-2-4-6--

TOD Schedule Report

for 6864: Miami Gardens Dr@NW 73 Av

Print Date: 4/4/2016

Print Time: 2:28 AM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
6864	Miami Gardens Dr@NW 73 Av	DOW-2		N/A	0	0	N/A	0	Max 0

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
EBL	WBT	-	NBT	WBL	EBT	-	SBT
0	0	0	0	0	0	0	0

Active Phase Bank: Phase Bank 1

Phase	Walk (Phase Bank 1 - 2 - 3)	Don't Walk (1 - 2 - 3)	Min Initial (1 - 2 - 3)	Veh Ext (1 - 2 - 3)	Max Limit (1 - 2 - 3)	Max 2 (1 - 2 - 3)	Yellow	Red
1 EBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	10 - 10 - 10	15 - 15 - 15	4.4	2
2 WBT	0 - 0 - 0	0 - 0 - 0	16 - 16 - 16	1 - 1 - 1	40 - 40 - 40	0 - 40 - 40	4.4	2
3 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
4 NBT	0 - 0 - 0	0 - 0 - 0	7 - 7 - 7	2.5 - 2.5 - 2.5	20 - 20 - 20	40 - 30 - 30	4	2.8
5 WBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	10 - 10 - 10	15 - 15 - 15	4.4	2
6 EBT	0 - 0 - 0	0 - 0 - 0	16 - 16 - 16	1 - 1 - 1	40 - 40 - 40	0 - 40 - 40	4.4	2
7 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
8 SBT	7 - 7 - 7	22 - 22 - 22	7 - 7 - 7	2.5 - 2.5 - 2.5	20 - 20 - 20	40 - 30 - 30	4	2.8

Last In Service Date: unknown

Permitted Phases

	12345678
Default	12-456-8
External Permit 0	--------
External Permit 1	-2-4-6-8
External Permit 2	-2-4-6-8

1822

TOD Schedule Report

for 6864: Miami Gardens Dr@NW 73 Av

Print Date: 4/4/2016

Print Time: 2:28 AM

Current TOD Schedule	Plan	Cycle	Green Time 1 EBL	2 WBT	3 -	4 NBT	5 WBL	6 EBT	7 -	8 SBT	Ring Offset	Offset
	1	130	5	76	0	30	5	76	0	30	0	50
	2	180	10	117	0	34	10	117	0	34	0	79
	3	100	5	56	0	20	5	56	0	20	0	98
	4	120	5	74	0	22	5	74	0	22	0	42
	5	100	5	56	0	20	5	56	0	20	0	12
	6	180	11	111	0	39	11	111	0	39	0	42
	7	130	7	74	0	30	7	74	0	30	0	26
	8	90	5	37	0	29	5	37	0	29	0	50
	9	180	8	121	0	32	8	121	0	32	0	52
	18	110	5	55	0	31	5	55	0	31	0	108
	19	130	7	74	0	30	7	74	0	30	0	52
	20	120	7	64	0	30	7	64	0	30	0	60

Local TOD Schedule

Time	Plan	DOW
0000	Free	Su M T W Th F S
0600	2	M T W Th F
0600	Free	Su S
0700	18	Su S
0900	8	M T W Th F
1000	19	Su S
1545	6	M T W Th F
1900	7	M T W Th F
1900	20	Su S
2200	Free	M T W Th F

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S

* Settings

Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

No Calendar Defined/Enabled

TOD Schedule Report

for 6864: Miami Gardens Dr@NW 73 Av

Print Date: 4/4/2016

Print Time: 2:28 AM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
6864	Miami Gardens Dr@NW 73 Av	DOW-2		N/A	0	0	N/A	0	Max 0

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
EBL	WBT	-	NBT	WBL	EBT	-	SBT
0	0	0	0	0	0	0	0

Active Phase Bank: Phase Bank 1

Phase		Walk (Phase Bank 1 - 2 - 3)	Don't Walk (1 - 2 - 3)	Min Initial (1 - 2 - 3)	Veh Ext (1 - 2 - 3)	Max Limit (1 - 2 - 3)	Max 2 (1 - 2 - 3)	Yellow	Red
1	EBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	10 - 10 - 10	15 - 15 - 15	4.4	2
2	WBT	0 - 0 - 0	0 - 0 - 0	16 - 16 - 16	1 - 1 - 1	40 - 40 - 40	0 - 40 - 40	4.4	2
3	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
4	NBT	0 - 0 - 0	0 - 0 - 0	7 - 7 - 7	2.5 - 2.5 - 2.5	20 - 20 - 20	40 - 30 - 30	4	2.8
5	WBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	10 - 10 - 10	15 - 15 - 15	4.4	2
6	EBT	0 - 0 - 0	0 - 0 - 0	16 - 16 - 16	1 - 1 - 1	40 - 40 - 40	0 - 40 - 40	4.4	2
7	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
8	SBT	7 - 7 - 7	22 - 22 - 22	7 - 7 - 7	2.5 - 2.5 - 2.5	20 - 20 - 20	40 - 30 - 30	4	2.8

Last In Service Date: unknown

Permitted Phases

	12345678
Default	12-456-8
External Permit 0	--------
External Permit 1	-2-4-6-8
External Permit 2	-2-4-6-8

1824

TOD Schedule Report

for 6864: Miami Gardens Dr@NW 73 Av

Print Date: 4/4/2016

Print Time: 2:28 AM

Current TOD Schedule	Plan	Cycle	Green Time 1 EBL	2 WBT	3 -	4 NBT	5 WBL	6 EBT	7 -	8 SBT	Ring Offset	Offset
	1	130	5	76	0	30	5	76	0	30	0	50
	2	180	10	117	0	34	10	117	0	34	0	79
	3	100	5	56	0	20	5	56	0	20	0	98
	4	120	5	74	0	22	5	74	0	22	0	42
	5	100	5	56	0	20	5	56	0	20	0	12
	6	180	11	111	0	39	11	111	0	39	0	42
	7	130	7	74	0	30	7	74	0	30	0	26
	8	90	5	37	0	29	5	37	0	29	0	50
	9	180	8	121	0	32	8	121	0	32	0	52
	18	110	5	55	0	31	5	55	0	31	0	108
	19	130	7	74	0	30	7	74	0	30	0	52
	20	120	7	64	0	30	7	64	0	30	0	60

Local TOD Schedule

Time	Plan	DOW
0000	Free	Su M T W Th F S
0600	2	M T W Th F
0600	Free	Su S
0700	18	Su S
0900	8	M T W Th F
1000	19	Su S
1545	6	M T W Th F
1900	7	M T W Th F
1900	20	Su S
2200	Free	M T W Th F

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S

*** Settings**

Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

No Calendar Defined/Enabled

TOD Schedule Report

for 4287: Miami Gardens Dr&NW 68 Av

Print Date: 4/4/2016

Print Time: 2:13 AM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
4287	Miami Gardens Dr&NW 68 Av	DOW-2		N/A	0	0	N/A	0	Max 0

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
-	WBT	-	NBT	WBL	EBT	-	SBT
0	0	0	0	0	0	0	0

Active Phase Bank: Phase Bank 1

Phase	Walk (Phase Bank 1 - 2 - 3)	Don't Walk (1 - 2 - 3)	Min Initial (1 - 2 - 3)	Veh Ext (1 - 2 - 3)	Max Limit (1 - 2 - 3)	Max 2 (1 - 2 - 3)	Yellow	Red
1 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
2 WBT	0 - 0 - 0	0 - 0 - 0	16 - 16 - 16	1 - 1 - 1	35 - 45 - 45	0 - 45 - 45	4.4	2
3 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
4 NBT	7 - 7 - 7	25 - 25 - 25	7 - 7 - 7	3 - 3 - 3	20 - 20 - 20	45 - 40 - 40	4	2.5
5 WBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	7 - 7 - 7	25 - 20 - 20	4.4	2
6 EBT	0 - 0 - 0	0 - 0 - 0	16 - 16 - 16	1 - 1 - 1	35 - 45 - 45	0 - 45 - 45	4.4	2
7 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
8 SBT	7 - 7 - 7	25 - 25 - 25	7 - 7 - 7	3 - 3 - 3	20 - 20 - 20	45 - 40 - 40	4	2.5

Last In Service Date: unknown

Permitted Phases

	12345678
Default	-2-456-8
External Permit 0	--------
External Permit 1	-2-4-6-8
External Permit 2	-2-4-6-8

TOD Schedule Report

for 4287: Miami Gardens Dr&NW 68 Av

Print Date: 4/4/2016

Print Time: 2:13 AM

Current TOD Schedule	Plan	Cycle	Green Time 1 -	2 WBT	3 -	4 NBT	5 WBL	6 EBT	7 -	8 SBT	Ring Offset	Offset
	1	130	0	96	0	22	7	82	0	22	0	123
	2	180	0	123	0	44	9	108	0	44	0	13
	3	100	0	68	0	20	5	56	0	20	0	32
	4	120	0	86	0	22	9	70	0	22	0	97
	5	100	0	68	0	20	17	44	0	20	0	60
	6	180	0	133	0	34	23	104	0	34	0	120
	7	130	0	86	0	32	18	61	0	32	0	105
	8	90	0	46	0	32	5	34	0	32	0	17
	9	180	0	123	0	44	9	108	0	44	0	147
	18	110	0	67	0	31	13	47	0	31	0	40
	19	130	0	86	0	32	15	64	0	32	0	123
	20	120	0	76	0	32	10	59	0	32	0	118

Local TOD Schedule

Time	Plan	DOW
0000	Free	Su M T W Th F S
0600	2	M T W Th F
0700	18	Su S
0900	8	M T W Th F
1000	19	Su S
1545	6	M T W Th F
1900	7	M T W Th F
1900	20	Su S
2200	Free	M T W Th F

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S

*** Settings**

Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

No Calendar Defined/Enabled

TOD Schedule Report

for 6757: Miami Gardens Dr&NW 62 Av

Print Date: 4/4/2016

Print Time: 2:27 AM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
6757	Miami Gardens Dr&NW 62 Av	DOW-2		N/A	0	0	N/A	0	Max 0

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
EBL	WBT	SBL	NBT	-	EBT	NBL	SBT
0	0	0	0	0	0	0	0

Active Phase Bank: Phase Bank 1

Phase		Walk (Phase Bank 1 - 2 - 3)	Don't Walk (1 - 2 - 3)	Min Initial (1 - 2 - 3)	Veh Ext (1 - 2 - 3)	Max Limit (1 - 2 - 3)	Max 2 (1 - 2 - 3)	Yellow	Red
1	EBL	0 - 0 - 0	0 - 0 - 0	7 - 7 - 7	2 - 2 - 2	7 - 7 - 7	18 - 15 - 15	4.4	2
2	WBT	0 - 0 - 0	0 - 0 - 0	16 - 16 - 16	1 - 1 - 1	35 - 35 - 35	0 - 40 - 40	4.4	2
3	SBL	0 - 0 - 0	0 - 0 - 0	7 - 7 - 7	2 - 2 - 2	7 - 7 - 7	12 - 10 - 10	3.7	2
4	NBT	7 - 7 - 7	12 - 12 - 12	7 - 7 - 7	2.5 - 2.5 - 2.5	26 - 26 - 26	45 - 40 - 40	4	2.5
5	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
6	EBT	0 - 0 - 0	0 - 0 - 0	16 - 16 - 16	1 - 1 - 1	35 - 35 - 35	0 - 40 - 40	4.4	2
7	NBL	0 - 0 - 0	0 - 0 - 0	7 - 7 - 7	2 - 2 - 2	7 - 7 - 7	12 - 10 - 10	3.7	2
8	SBT	7 - 7 - 7	12 - 12 - 12	7 - 7 - 7	2.5 - 2.5 - 2.5	26 - 26 - 26	45 - 40 - 40	4	2.5

Last In Service Date: unknown

Permitted Phases

	12345678
Default	1234-678
External Permit 0	--------
External Permit 1	-2-4-6-8
External Permit 2	-2-4-6-8

TOD Schedule Report

for 6757: Miami Gardens Dr&NW 62 Av

Print Date: 4/4/2016

Print Time: 2:27 AM

Current TOD Schedule	Plan	Cycle	Green Time 1 EBL	2 WBT	3 SBL	4 NBT	5 -	6 EBT	7 NBL	8 SBT	Ring Offset	Offset
	1	130	15	59	9	22	0	81	9	22	0	109
	2	180	13	107	9	26	0	126	9	26	0	24
	3	100	8	32	8	27	0	47	8	27	0	42
	4	120	8	49	8	30	0	64	8	30	0	87
	5	100	7	37	8	23	0	51	8	23	0	62
	6	180	10	112	10	23	0	128	0	39	0	122
	7	130	7	61	9	28	0	75	9	28	0	117
	8	180	13	107	9	26	0	126	9	26	0	24
	9	180	9	108	12	26	0	123	8	30	0	163
	18	110	10	46	8	21	0	63	8	21	0	40
	19	130	10	67	9	19	0	84	0	34	0	120
	20	120	8	59	8	20	0	74	8	20	0	116
	24	180	10	112	10	23	0	128	0	39	0	102

Local TOD Schedule

Time	Plan	DOW
0000	Flash	Su M T W Th F S
0500	Free	Su M T W Th F S
0600	2	M T W Th F
0600	Free	Su S
0700	8	M T W Th F
0845	24	M T W Th F
0900	20	Su S
1000	4	M T W Th F
1545	6	M T W Th F
1900	Free	M T W Th F
2200	Free	Su S

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S

*** Settings**

Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

No Calendar Defined/Enabled

TOD Schedule Report

for 4264: Miami Gardens Dr&Red Rd

Print Date: 4/3/2016

Print Time: 2:18 AM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
4264	Miami Gardens Dr&Red Rd	DOW-1		N/A	0	0	N/A	0	Max 0

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
NBL	SBT	EBL	WBT	SBL	NBT	WBL	EBT
0	0	0	0	0	0	0	0

Active Phase Bank: Phase Bank 1

Phase	Walk (Phase Bank 1 - 2 - 3)	Don't Walk (1 - 2 - 3)	Min Initial (1 - 2 - 3)	Veh Ext (1 - 2 - 3)	Max Limit (1 - 2 - 3)	Max 2 (1 - 2 - 3)	Yellow	Red
1 NBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	15 - 15 - 15	60 - 50 - 50	4.8	2
2 SBT	7 - 7 - 7	22 - 22 - 22	7 - 7 - 7	1 - 1 - 1	50 - 50 - 50	0 - 80 - 80	4.8	2
3 EBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	15 - 15 - 15	60 - 50 - 50	4.4	2
4 WBT	7 - 7 - 7	22 - 22 - 22	7 - 7 - 7	2.5 - 2.5 - 2.5	30 - 30 - 30	90 - 80 - 80	4.4	2
5 SBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	15 - 15 - 15	60 - 50 - 50	4.8	2
6 NBT	7 - 7 - 7	22 - 22 - 22	7 - 7 - 7	1 - 1 - 1	50 - 50 - 50	0 - 80 - 80	4.8	2
7 WBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	15 - 15 - 15	60 - 50 - 50	4.4	2
8 EBT	7 - 7 - 7	22 - 22 - 22	7 - 7 - 7	2.5 - 2.5 - 2.5	30 - 30 - 30	90 - 80 - 80	4.4	2

Last In Service Date: unknown

Permitted Phases

	12345678
Default	12345678
External Permit 0	--------
External Permit 1	--------
External Permit 2	--------

1830

TOD Schedule Report

for 4264: Miami Gardens Dr&Red Rd

Print Date: 4/3/2016

Print Time: 2:18 AM

Current TOD Schedule	Plan	Cycle	Green Time 1 NBL	2 SBT	3 EBL	4 WBT	5 SBL	6 NBT	7 WBL	8 EBT	Ring Offset	Offset
	1	140	17	52	19	26	17	52	19	26	0	40
	2	190	26	80	23	35	26	80	23	35	0	67
	3	160	24	57	21	32	24	57	21	32	0	72
	4	180	29	63	24	38	29	63	24	38	0	64
	5	170	24	64	24	32	24	64	24	32	0	86
	6	190	33	78	22	31	33	78	14	39	0	104
	7	160	22	60	21	31	22	60	21	31	0	86
	8	140	22	42	19	31	22	42	19	31	0	40
	9	110	9	32	13	30	9	32	13	30	0	40
	11	200	34	79	27	34	34	79	19	42	0	66
	12	170	24	64	24	32	24	64	24	32	0	72
	16	110	9	37	13	25	9	37	13	25	0	40
	19	110	9	37	13	25	9	37	13	25	0	40

Local TOD Schedule

Time	Plan	DOW
0000	9	Su M T W Th F S
0500	8	M T W Th F
0600	2	M T W Th F
0630	9	Su S
0900	8	Su S
1000	3	M T W Th F
1330	5	M T W Th F
1530	6	M T W Th F
1900	7	Su M T W Th F S

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S

*** Settings**

Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

No Calendar Defined/Enabled

TOD Schedule Report

for 6760: NW 138 St-NW 97 Av-W 84 St

Print Date: 1/26/2016

Print Time: 9:44 AM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
6760	NW 138 St-NW 97 Av-W 84 St	DOW-3		N/A	0	0	N/A	0	Max 0

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
EBL	WBT	SBL	NBT	WBL	EBT	NBL	SBT
0	0	0	0	0	0	0	0

Active Phase Bank: Phase Bank 1

Phase	Walk (Phase Bank 1 - 2 - 3)	Don't Walk (1 - 2 - 3)	Min Initial (1 - 2 - 3)	Veh Ext (1 - 2 - 3)	Max Limit (1 - 2 - 3)	Max 2 (1 - 2 - 3)	Yellow	Red
1 EBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	8 - 8 - 8	12 - 6 - 12	3	1
2 WBT	0 - 0 - 0	0 - 0 - 0	18 - 18 - 18	1 - 1 - 1	40 - 22 - 40	0 - 20 - 50	4.3	1.7
3 SBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2.5 - 2.5 - 2.5	20 - 12 - 20	46 - 5 - 46	3	1
4 NBT	7 - 7 - 7	24 - 24 - 24	7 - 7 - 7	3.5 - 3.5 - 3.5	25 - 16 - 25	30 - 21 - 30	4.3	1.7
5 WBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	8 - 8 - 8	30 - 6 - 12	3	1
6 EBT	0 - 0 - 0	0 - 0 - 0	18 - 18 - 18	1 - 1 - 1	40 - 22 - 40	0 - 20 - 50	4.3	1.7
7 NBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2.5 - 2.5 - 2.5	20 - 12 - 20	46 - 10 - 46	3	0
8 SBT	7 - 7 - 7	24 - 24 - 24	7 - 7 - 7	3.5 - 3.5 - 3.5	25 - 16 - 25	30 - 21 - 30	4.3	1.7

Last In Service Date: unknown

Permitted Phases

	12345678
Default	12345678
External Permit 0	--------
External Permit 1	123456-8
External Permit 2	123456-8

Current TOD Schedule	Plan	Cycle	Green Time 1 EBL	2 WBT	3 SBL	4 NBT	5 WBL	6 EBT	7 NBL	8 SBT	Ring Offset	Offset
	2	90	6	30	17	17	6	30	17	18	0	32
	5	160	12	61	14	53	27	46	43	25	0	88
	8	110	7	28	26	29	7	28	36	20	0	96
	12	160	8	57	46	29	8	57	46	30	0	88
	14	90	6	30	19	15	6	30	19	16	0	32

Local TOD Schedule

Time	Plan	DOW
0000	Flash	M T W Th F
0200	Flash	Su S
0545	Free	M T W Th F
0600	Free	Su S
0630	5	M T W Th F
0800	14	Su S
0900	8	M T W Th F
1600	12	M T W Th F
1800	8	M T W Th F
1900	14	M T W Th F
2000	Free	Su M T W Th F S

TOD Schedule Report

for 6760: NW 138 St-NW 97 Av-W 84 St

Print Date: 1/26/2016

Print Time: 9:44 AM

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S
0545	TOD OUTPUTS	------2-	M T W ThF
0600	TOD OUTPUTS	-------1	M T W ThF
0630	TOD OUTPUTS	--------	M T W ThF
1930	TOD OUTPUTS	-------1	SuM T W ThF S
2100	TOD OUTPUTS	------2-	SuM T W ThF S

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S
0545	TOD OUTPUTS	------2-	M T W ThF
0600	TOD OUTPUTS	-------1	M T W ThF
0630	TOD OUTPUTS	--------	M T W ThF
0700	TOD OUTPUTS	------2-	Su S
0800	TOD OUTPUTS	--------	Su S
1930	TOD OUTPUTS	-------1	SuM T W ThF S
2100	TOD OUTPUTS	------2-	SuM T W ThF S

* Settings

Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

No Calendar Defined/Enabled

TOD Schedule Report

for 5161: Okeechobee Rd&SR- 821 W

Print Date: 4/14/2016

Print Time: 2:10 AM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
5161	Okeechobee Rd&SR- 821 W	DOW-5		N/A	0	0	N/A	0	Max 0

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
SEL	NWT	SBT	NBT	NWL	SET	-	-
0	0	0	0	0	0	0	0

Active Phase Bank: Phase Bank 1

Phase	Walk (Phase Bank 1 - 2 - 3)	Don't Walk (1 - 2 - 3)	Min Initial (1 - 2 - 3)	Veh Ext (1 - 2 - 3)	Max Limit (1 - 2 - 3)	Max 2 (1 - 2 - 3)	Yellow	Red
1 SEL	0 - 0 - 0	0 - 0 - 0	7 - 7 - 7	3 - 3 - 5	75 - 50 - 80	80 - 70 - 15	5.1	2
2 NWT	0 - 0 - 0	0 - 0 - 0	22 - 22 - 22	1 - 1 - 1	26 - 35 - 95	0 - 50 - 70	5.1	2
3 SBT	0 - 0 - 0	0 - 0 - 0	10 - 10 - 10	4 - 4 - 4	12 - 20 - 33	18 - 22 - 28	4	2.4
4 NBT	0 - 0 - 0	0 - 0 - 0	10 - 10 - 10	3 - 3 - 5	20 - 20 - 45	30 - 30 - 28	4	2.9
5 NWL	0 - 0 - 0	0 - 0 - 0	7 - 7 - 7	3 - 3 - 5	8 - 35 - 15	15 - 15 - 10	5.1	2
6 SET	0 - 0 - 0	0 - 0 - 0	22 - 22 - 22	1 - 1 - 1	26 - 35 - 85	0 - 50 - 70	5.1	2
7 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
8 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0

Last In Service Date: unknown

Permitted Phases

	12345678
Default	123456--
External Permit 0	--------
External Permit 1	-234-6--
External Permit 2	-234-6--

Current TOD Schedule	Plan	Cycle	Green Time 1 SEL	2 NWT	3 SBT	4 NBT	5 NWL	6 SET	7 -	8 -	Ring Offset	Offset
	1	180	51	47	32	23	10	88	0	0	0	143

Local TOD Schedule

Time	Plan	DOW
0000	Free	Su M T W Th F S

1834

TOD Schedule Report

for 5161: Okeechobee Rd&SR- 821 W

Print Date: 4/14/2016

Print Time: 2:10 AM

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S
0530	TOD OUTPUTS	------2-	M T W ThF
0600	VEH MAX RECALL	-------1	M T W ThF
0630	TOD OUTPUTS	-----3--	M T W ThF
0930	TOD OUTPUTS	------2-	M T W ThF
0930	VEH MAX RECALL	--------	M T W ThF
1000	TOD OUTPUTS	-------1	M T W ThF
1530	TOD OUTPUTS	----4---	M T W ThF
1800	TOD OUTPUTS	----4---	M T W ThF
1900	TOD OUTPUTS	----4---	M T W ThF
2000	TOD OUTPUTS	--------	M T W ThF

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S
0530	TOD OUTPUTS	------2-	M T W ThF
0600	VEH MAX RECALL	-------1	M T W ThF
0630	TOD OUTPUTS	-----3--	M T W ThF
0930	TOD OUTPUTS	------2-	M T W ThF
0930	VEH MAX RECALL	--------	M T W ThF
1000	TOD OUTPUTS	-------1	M T W ThF
1000	TOD OUTPUTS	-------1	Su S
1530	TOD OUTPUTS	----4---	M T W ThF
1800	TOD OUTPUTS	----4---	M T W ThF
1900	TOD OUTPUTS	----4---	M T W ThF
1930	TOD OUTPUTS	--------	Su S
2000	TOD OUTPUTS	--------	M T W ThF

* Settings

Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

No Calendar Defined/Enabled

TOD Schedule Report

for 5427: Okeechobee Rd&SR- 821 E

Print Date: 4/14/2016

Print Time: 2:11 AM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
5427	Okeechobee Rd&SR- 821 E	DOW-5		N/A	0	0	N/A	0	Max 0

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
EBL	WBT	SBT	-	-	EBT	-	-
0	0	0	0	0	0	0	0

Active Phase Bank: Phase Bank 1

Phase	Walk (Phase Bank 1 - 2 - 3)	Don't Walk (1 - 2 - 3)	Min Initial (1 - 2 - 3)	Veh Ext (1 - 2 - 3)	Max Limit (1 - 2 - 3)	Max 2 (1 - 2 - 3)	Yellow	Red
1 EBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2.5 - 3.5 - 2.5	15 - 40 - 15	35 - 0 - 0	5.1	2
2 WBT	12 - 12 - 12	8 - 8 - 8	12 - 12 - 12	1 - 1 - 1	35 - 65 - 60	0 - 0 - 0	5.1	2
3 SBT	0 - 0 - 0	0 - 0 - 0	7 - 7 - 7	2.5 - 4 - 2.5	30 - 45 - 40	50 - 0 - 0	4	2
4 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
5 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
6 EBT	12 - 12 - 12	8 - 8 - 8	12 - 12 - 12	1 - 1 - 1	35 - 65 - 60	0 - 0 - 0	5.1	2
7 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
8 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0

Last In Service Date: unknown

Permitted Phases

	12345678
Default	123--6--
External Permit 0	--------
External Permit 1	12345678
External Permit 2	12345678

Current TOD Schedule	Plan	Cycle	Green Time 1 EBL	2 WBT	3 SBT	4 -	5 -	6 EBT	7 -	8 -	Ring Offset	Offset
	1	180	33	84	43	0	0	124	0	0	0	7

Local TOD Schedule

Time	Plan	DOW
0000	Free	Su M T W Th F S

1836

TOD Schedule Report

for 5427: Okeechobee Rd&SR- 821 E

Print Date: 4/14/2016

Print Time: 2:11 AM

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S
0530	TOD OUTPUTS	-------1	M T W ThF
1530	TOD OUTPUTS	-----3--	SuM T W ThF S
1800	TOD OUTPUTS	--------	SuM T W ThF S

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S
0530	TOD OUTPUTS	-------1	M T W ThF
1530	TOD OUTPUTS	-----3--	SuM T W ThF S
1800	TOD OUTPUTS	--------	SuM T W ThF S

*** Settings**

Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

No Calendar Defined/Enabled

TOD Schedule Report

for 5994: Okeechobee Rd&NW 138 St

Print Date: 4/14/2016

Print Time: 2:12 AM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
5994	Okeechobee Rd&NW 138 St	DOW-5		N/A	0	0	N/A	0	Max 0

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
SEL	NWT	-	-	NWL	SET	NET	SWT
0	0	0	0	0	0	0	0

Active Phase Bank: Phase Bank 1

Phase	Walk (Phase Bank 1 - 2 - 3)	Don't Walk (1 - 2 - 3)	Min Initial (1 - 2 - 3)	Veh Ext (1 - 2 - 3)	Max Limit (1 - 2 - 3)	Max 2 (1 - 2 - 3)	Yellow	Red
1 SEL	0 - 0 - 0	0 - 0 - 0	7 - 7 - 7	5 - 5 - 5	50 - 70 - 65	70 - 20 - 15	5.5	2
2 NWT	0 - 0 - 0	0 - 0 - 0	20 - 20 - 20	1 - 1 - 1	45 - 45 - 50	0 - 45 - 45	5.1	2
3 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
4 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
5 NWL	0 - 0 - 0	0 - 0 - 0	7 - 7 - 7	2.5 - 2.5 - 2.5	15 - 15 - 12	18 - 10 - 15	5.5	2
6 SET	0 - 0 - 0	0 - 0 - 0	20 - 20 - 20	1 - 1 - 1	45 - 45 - 50	0 - 45 - 45	5.1	2
7 NET	0 - 0 - 0	0 - 0 - 0	7 - 7 - 7	5 - 5 - 5	30 - 25 - 40	45 - 18 - 22	4	3.7
8 SWT	0 - 0 - 0	0 - 0 - 0	7 - 7 - 7	5 - 5 - 5	35 - 43 - 35	35 - 30 - 22	4	3.6

Last In Service Date: unknown

Permitted Phases

	12345678
Default	12--5678
External Permit 0	--------
External Permit 1	--------
External Permit 2	--------

Current TOD Schedule	Plan	Cycle	Green Time 1 SEL	2 NWT	3 -	4 -	5 NWL	6 SET	7 NET	8 SWT	Ring Offset	Offset
	1	180	58	39	0	0	10	86	21	32	0	7

Local TOD Schedule

Time	Plan	DOW
0000	Free	Su M T W Th F S

1838

TOD Schedule Report

for 5994: Okeechobee Rd&NW 138 St

Print Date: 4/14/2016

Print Time: 2:12 AM

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	------2-	SuM T W ThF S
0000	VEH MAX RECALL	-7------	SuM T W ThF S
0530	TOD OUTPUTS	-------1	M T W ThF
1000	TOD OUTPUTS	--------	SuM T W ThF S
1600	TOD OUTPUTS	-----3--	SuM T W ThF S
1800	TOD OUTPUTS	--------	SuM T W ThF S
2000	TOD OUTPUTS	------2-	SuM T W ThF S
2359	VEH MAX RECALL	--------	SuM T W ThF S

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	------2-	SuM T W ThF S
0000	VEH MAX RECALL	-7------	SuM T W ThF S
0530	TOD OUTPUTS	-------1	M T W ThF
1000	TOD OUTPUTS	--------	SuM T W ThF S
1600	TOD OUTPUTS	-----3--	SuM T W ThF S
1800	TOD OUTPUTS	--------	SuM T W ThF S
2000	TOD OUTPUTS	------2-	SuM T W ThF S
2359	VEH MAX RECALL	--------	SuM T W ThF S

* Settings

Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

No Calendar Defined/Enabled

TOD Schedule Report

for 4515: Hia-Hialeah Garden Blvd&Okeechobee Rd&NW 116 Way

Print Date: 3/16/2016

Print Time: 2:13 AM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
4515	Hia-Hialeah Garden Blvd&Okeechobe	DOW-4		N/A	0	0	N/A	0	Max 0

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
EBL	WBT	SBL	NBT	WBL	EBT	NBL	SBT
0	0	0	0	0	0	0	0

Active Phase Bank: Phase Bank 1

Phase	Walk (Phase Bank 1 - 2 - 3)	Don't Walk (1 - 2 - 3)	Min Initial (1 - 2 - 3)	Veh Ext (1 - 2 - 3)	Max Limit (1 - 2 - 3)	Max 2 (1 - 2 - 3)	Yellow	Red
1 EBL	0 - 0 - 0	0 - 0 - 0	7 - 7 - 7	3 - 3 - 3	12 - 13 - 35	26 - 15 - 26	5.1	2.1
2 WBT	0 - 0 - 0	0 - 0 - 0	20 - 20 - 20	1 - 1 - 1	30 - 40 - 50	0 - 38 - 60	5.1	2.2
3 SBL	0 - 0 - 0	0 - 0 - 0	7 - 7 - 7	5 - 5 - 5	12 - 18 - 30	50 - 18 - 50	4.4	2.4
4 NBT	0 - 0 - 0	0 - 0 - 0	10 - 10 - 10	3.5 - 3.5 - 3.5	14 - 33 - 77	82 - 33 - 80	4.4	3.2
5 WBL	0 - 0 - 0	0 - 0 - 0	7 - 7 - 7	3 - 3 - 3	12 - 13 - 20	26 - 15 - 26	5.1	2.1
6 EBT	0 - 0 - 0	0 - 0 - 0	20 - 20 - 20	1 - 1 - 1	30 - 40 - 50	0 - 38 - 60	5.1	2.2
7 NBL	0 - 0 - 0	0 - 0 - 0	7 - 7 - 7	3 - 3 - 3	12 - 18 - 16	18 - 18 - 18	4.4	3.2
8 SBT	0 - 0 - 0	0 - 0 - 0	10 - 10 - 10	3.5 - 3.5 - 3.5	14 - 33 - 77	85 - 33 - 90	4.4	3.2

Last In Service Date: unknown

Permitted Phases

	12345678
Default	12345678
External Permit 0	--------
External Permit 1	--------
External Permit 2	--------

Current TOD Schedule	Plan	Cycle	Green Time 1 EBL	2 WBT	3 SBL	4 NBT	5 WBL	6 EBT	7 NBL	8 SBT	Ring Offset	Offset
	3	110	8	49	13	11	8	49	8	15	0	28
	4	120	12	29	25	25	12	29	25	24	0	22
	5	180	14	54	44	39	19	49	13	69	0	66
	6	130	15	27	29	30	15	27	15	43	0	12
	8	110	9	31	17	24	9	31	13	27	0	38
	10	120	11	34	17	29	11	34	17	28	0	22
	13	180	23	38	24	66	17	44	16	73	0	88

Local TOD Schedule

Time	Plan	DOW
0000	Free	Su M T Th F S
0430	Free	W
0600	5	M T W Th F
0630	Free	Su S
0800	3	Su S
0900	13	M T W Th F
1000	8	Su S
1900	8	M T W Th F
1930	Free	Su S
2100	Free	M T W Th F
2300	10	T

TOD Schedule Report

for 4515: Hia-Hialeah Garden Blvd&Okeechobee Rd&NW 116 Way

Print Date: 3/16/2016

Print Time: 2:13 AM

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	------2-	SuM T W ThF S
0530	TOD OUTPUTS	--------	M T W ThF
0600	VEH MAX RECALL	8---4---	M T W ThF
0700	TOD OUTPUTS	-----3--	M T W ThF
0930	TOD OUTPUTS	--------	M T W ThF
1815	VEH MAX RECALL	--------	M T W ThF
2100	TOD OUTPUTS	-------1	M T W ThF

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	------2-	SuM T W ThF S
0530	TOD OUTPUTS	--------	M T W ThF
0600	VEH MAX RECALL	8---4---	M T W ThF
0630	TOD OUTPUTS	-------1	Su S
0700	TOD OUTPUTS	-----3--	M T W ThF
0800	TOD OUTPUTS	--------	Su S
0930	TOD OUTPUTS	--------	M T W ThF
1815	VEH MAX RECALL	--------	M T W ThF
1930	TOD OUTPUTS	-------1	Su S
2100	TOD OUTPUTS	-------1	M T W ThF

* Settings

Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

No Calendar Defined/Enabled

TOD Schedule Report

for 5445: Hia-Hialeah Garden Blvd&W 68 St

Print Date: 1/25/2016

Print Time: 3:19 PM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
5445	Hia-Hialeah Garden Blvd&W 68 St	DOW-2		N/A	0	0	N/A	0	Max 0

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
NBL	SBT	EBL	WBT	SBL	NBT	WBL	EBT
0	0	0	0	0	0	0	0

Active Phase Bank: Phase Bank 1

Phase		Walk (Phase Bank 1 - 2 - 3)	Don't Walk (1 - 2 - 3)	Min Initial (1 - 2 - 3)	Veh Ext (1 - 2 - 3)	Max Limit (1 - 2 - 3)	Max 2 (1 - 2 - 3)	Yellow	Red
1	NBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2.5 - 2.5 - 2.5	8 - 7 - 0	40 - 7 - 12	4.4	2
2	SBT	8 - 8 - 8	8 - 8 - 8	8 - 8 - 8	1 - 1 - 1	30 - 26 - 21	0 - 21 - 0	4.4	2.5
3	EBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2.5 - 2.5 - 2.5	8 - 7 - 0	40 - 7 - 15	4	2
4	WBT	0 - 0 - 0	0 - 0 - 0	7 - 7 - 7	3 - 3 - 3	20 - 16 - 12	60 - 13 - 42	4	2
5	SBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2.5 - 2.5 - 2.5	8 - 7 - 0	40 - 7 - 12	4.4	2
6	NBT	8 - 8 - 8	8 - 8 - 8	8 - 8 - 8	1 - 1 - 1	30 - 26 - 21	0 - 21 - 0	4.4	2.5
7	WBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2.5 - 2.5 - 2.5	8 - 7 - 0	40 - 7 - 15	4	2
8	EBT	0 - 0 - 0	0 - 0 - 0	7 - 7 - 7	3 - 3 - 3	20 - 16 - 12	60 - 13 - 42	4	2

Last In Service Date: unknown

Permitted Phases

	12345678
Default	12345678
External Permit 0	--------
External Permit 1	-2-4-6-8
External Permit 2	12345678

Current TOD Schedule	Plan	Cycle	Green Time 1 NBL	2 SBT	3 EBL	4 WBT	5 SBL	6 NBT	7 WBL	8 EBT	Ring Offset	Offset
	1	75	7	25	5	13	7	25	5	13	0	26
	2	90	7	33	6	19	7	33	6	19	0	86
	3	165	17	76	13	34	29	64	33	14	0	95
	5	180	13	71	20	51	30	54	38	33	0	110
	8	110	9	44	8	24	9	44	8	24	0	87
	12	180	23	87	18	27	36	74	21	24	0	58
	14	100	7	35	6	27	7	35	6	27	0	32

Local TOD Schedule

Time	Plan	DOW
0000	Free	Su M T W Th F S
0600	5	M T W Th F
0600	Free	Su S
0800	14	Su S
1000	8	Su M T W Th F S
1345	12	M T W Th F
1900	14	Su M T W Th F S
2100	Free	Su M T W Th F S

TOD Schedule Report

for 5445: Hia-Hialeah Garden Blvd&W 68 St

Print Date: 1/25/2016

Print Time: 3:19 PM

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S

*** Settings**

Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

No Calendar Defined/Enabled

TOD Schedule Report

for 5974: NW 87 Av&NW 170 St

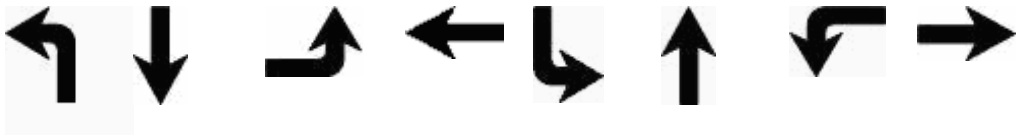
Print Date: 3/1/2015

Print Time: 2:07 AM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
5974	NW 87 Av&NW 170 St	DOW-1		N/A	0	0	N/A	0	Max 0

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
NBL	SBT	EBL	WBT	SBL	NBT	WBL	EBT
0	0	0	0	0	0	0	0



Active Phase Bank: Phase Bank 1

Phase		Walk (Phase Bank 1 - 2 - 3)	Don't Walk (1 - 2 - 3)	Min Initial (1 - 2 - 3)	Veh Ext (1 - 2 - 3)	Max Limit (1 - 2 - 3)	Max 2 (1 - 2 - 3)	Yellow	Red
1	NBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	5 - 5 - 10	12 - 5 - 9	4	2
2	SBT	7 - 7 - 7	16 - 16 - 16	7 - 7 - 7	1 - 1 - 1	40 - 35 - 40	0 - 25 - 30	4	2
3	EBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	12 - 25 - 10	12 - 25 - 9	4	2.3
4	WBT	7 - 7 - 7	13 - 13 - 13	7 - 7 - 7	2.5 - 2.5 - 2.5	30 - 30 - 30	35 - 20 - 25	4	2.3
5	SBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	5 - 5 - 10	12 - 5 - 9	4	2
6	NBT	7 - 7 - 7	16 - 16 - 16	7 - 7 - 7	1 - 1 - 1	40 - 35 - 40	0 - 25 - 30	4	2
7	WBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	12 - 15 - 10	12 - 5 - 9	4	2.3
8	EBT	7 - 7 - 7	13 - 13 - 13	7 - 7 - 7	2.5 - 2.5 - 2.5	30 - 30 - 30	35 - 20 - 25	4	2.3

Last In Service Date: unknown

Permitted Phases

	12345678
Default	12345678
External Permit 0	--------
External Permit 1	-2-4-6-8
External Permit 2	-2-4-6-8

Current TOD Schedule	Plan	Cycle	1 NBL	2 SBT	3 EBL	4 WBT	5 SBL	6 NBT	7 WBL	8 EBT	Ring Offset	Offset

Local TOD Schedule

Time	Plan	DOW
0000	Flash	Su M T W Th F S
0500	Free	Su M T W Th F S

1844

TOD Schedule Report

for 5974: NW 87 Av&NW 170 St

Print Date: 3/1/2015

Print Time: 2:07 AM

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S
0500	TOD OUTPUTS	---5--2-	SuM T W ThF S
2000	TOD OUTPUTS	---5--2-	SuM T W ThF S

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S
0500	TOD OUTPUTS	---5--2-	SuM T W ThF S
0630	TOD OUTPUTS	-------1	M T W ThF
0900	TOD OUTPUTS	---5----	M T W ThF S
1530	TOD OUTPUTS	-------1	M T W ThF S
1900	TOD OUTPUTS	---5----	M T W ThF
2000	TOD OUTPUTS	---5--2-	SuM T W ThF S

* Settings

Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

No Calendar Defined/Enabled

TOD Schedule Report

for 5446: Hia-Hialeah Garden Blvd&W 76 St

Print Date: 2/17/2016

Print Time: 2:16 AM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
5446	Hia-Hialeah Garden Blvd&W 76 St	DOW-4		N/A	0	0	N/A	0	Max 0

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
NBL	SBT	EBL	WBT	SBL	NBT	WBL	EBT
0	0	0	0	0	0	0	0

Active Phase Bank: Phase Bank 1

Phase		Walk (Phase Bank 1 - 2 - 3)	Don't Walk (1 - 2 - 3)	Min Initial (1 - 2 - 3)	Veh Ext (1 - 2 - 3)	Max Limit (1 - 2 - 3)	Max 2 (1 - 2 - 3)	Yellow	Red
1	NBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	15 - 5 - 10	20 - 7 - 0	4	2
2	SBT	0 - 0 - 0	0 - 0 - 0	16 - 16 - 16	1 - 1 - 1	45 - 21 - 26	0 - 21 - 0	4	2
3	EBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	10 - 5 - 10	20 - 7 - 0	4	2
4	WBT	0 - 0 - 0	0 - 0 - 0	7 - 7 - 7	4 - 4 - 4	33 - 14 - 15	30 - 16 - 0	4	2
5	SBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	15 - 5 - 10	30 - 7 - 0	4	2
6	NBT	0 - 0 - 0	0 - 0 - 0	16 - 16 - 16	1 - 1 - 1	45 - 21 - 26	0 - 21 - 0	4	2
7	WBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	10 - 5 - 10	20 - 7 - 0	4	2
8	EBT	0 - 0 - 0	0 - 0 - 0	7 - 7 - 7	4 - 4 - 4	33 - 14 - 15	30 - 16 - 0	4	2

Last In Service Date: unknown

Permitted Phases

	12345678
Default	12345678
External Permit 0	--------
External Permit 1	-2-4-6-8
External Permit 2	12345678

Current TOD Schedule	Plan	Cycle	Green Time 1 NBL	2 SBT	3 EBL	4 WBT	5 SBL	6 NBT	7 WBL	8 EBT	Ring Offset	Offset
	2	90	6	36	7	17	6	36	7	17	0	76
	5	180	19	81	16	40	29	71	16	40	0	55
	8	110	8	40	9	29	8	40	9	29	0	37
	12	170	17	57	14	58	22	52	14	58	0	89
	14	100	6	37	7	26	6	37	7	26	0	32

Local TOD Schedule

Time	Plan	DOW
0000	Free	Su M T W Th F S
0600	5	M T W Th F
0800	14	Su S
1000	8	Su M T W Th F S
1345	12	M T W Th F
1900	14	Su M T W Th F S
2100	Free	Su M T W Th F S

TOD Schedule Report

for 5446: Hia-Hialeah Garden Blvd&W 76 St

Print Date: 2/17/2016

Print Time: 2:16 AM

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S

*** Settings**

Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

No Calendar Defined/Enabled

TOD Schedule Report

for 6658: Hia-Hialeah Garden Blvd&W 80 St

Print Date: 1/26/2016

Print Time: 9:37 AM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
6658	Hia-Hialeah Garden Blvd&W 80 St	DOW-3		N/A	0	0	N/A	0	Max 0

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
NBL	SBT	-	WBT	SBL	NBT	-	EBT
0	0	0	0	0	0	0	0

Active Phase Bank: Phase Bank 1

Phase		Walk (Phase Bank 1 - 2 - 3)	Don't Walk (1 - 2 - 3)	Min Initial (1 - 2 - 3)	Veh Ext (1 - 2 - 3)	Max Limit (1 - 2 - 3)	Max 2 (1 - 2 - 3)	Yellow	Red
1	NBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	12 - 20 - 20	60 - 30 - 30	4	2
2	SBT	0 - 0 - 0	0 - 0 - 0	16 - 16 - 16	1 - 1 - 1	30 - 30 - 30	0 - 50 - 50	4	2
3	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
4	WBT	10 - 10 - 10	20 - 20 - 20	7 - 7 - 7	2.5 - 2.5 - 2.5	25 - 25 - 25	60 - 40 - 40	4	2
5	SBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	12 - 20 - 20	60 - 30 - 30	4	2
6	NBT	0 - 0 - 0	0 - 0 - 0	16 - 16 - 16	1 - 1 - 1	30 - 30 - 30	0 - 50 - 50	4	2
7	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
8	EBT	10 - 10 - 10	20 - 20 - 20	7 - 7 - 7	2.5 - 2.5 - 2.5	25 - 25 - 25	60 - 40 - 40	4	2

Last In Service Date: 11/19/2009 14:40

Permitted Phases

	12345678
Default	12-456-8
External Permit 0	-2-4-6-8
External Permit 1	-2-4-6-8
External Permit 2	-2-4-6-8

Current TOD Schedule	Plan	Cycle	Green Time 1 NBL	2 SBT	3 -	4 WBT	5 SBL	6 NBT	7 -	8 EBT	Ring Offset	Offset
	2	90	9	38	0	25	14	33	0	25	0	42
	5	180	26	97	0	39	39	84	0	39	0	42
	8	110	15	46	0	31	15	46	0	31	0	20
	12	170	24	72	0	56	24	72	0	56	0	132
	14	100	9	43	0	30	9	43	0	30	0	32

Local TOD Schedule

Time	Plan	DOW
0000	Free	Su M T W Th F S
0600	5	M T W Th F
0600	Free	Su S
0800	14	Su S
1000	8	Su M T W Th F S
1345	12	M T W Th F
1900	14	Su M T W Th F S
2100	Free	Su M T W Th F S

TOD Schedule Report

for 6658: Hia-Hialeah Garden Blvd&W 80 St

Print Date: 1/26/2016

Print Time: 9:37 AM

Current Time of Day Function

Time	Function	Settings *	Day of Week
0600	TOD OUTPUTS	--------	SuM T W ThF S
2000	TOD OUTPUTS	8-------	SuM T W ThF S

Local Time of Day Function

Time	Function	Settings *	Day of Week
0600	TOD OUTPUTS	--------	SuM T W ThF S
2000	TOD OUTPUTS	8-------	SuM T W ThF S

*** Settings**

Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

No Calendar Defined/Enabled

TOD Schedule Report

for 6658: Hia-Hialeah Garden Blvd&W 80 St

Print Date: 1/26/2016

Print Time: 9:37 AM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
6658	Hia-Hialeah Garden Blvd&W 80 St	DOW-3		N/A	0	0	N/A	0	Max 0

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
NBL	SBT	-	WBT	SBL	NBT	-	EBT
0	0	0	0	0	0	0	0

Active Phase Bank: Phase Bank 1

Phase		Walk (Phase Bank 1 - 2 - 3)	Don't Walk (1 - 2 - 3)	Min Initial (1 - 2 - 3)	Veh Ext (1 - 2 - 3)	Max Limit (1 - 2 - 3)	Max 2 (1 - 2 - 3)	Yellow	Red
1	NBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	12 - 20 - 20	60 - 30 - 30	4	2
2	SBT	0 - 0 - 0	0 - 0 - 0	16 - 16 - 16	1 - 1 - 1	30 - 30 - 30	0 - 50 - 50	4	2
3	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
4	WBT	10 - 10 - 10	20 - 20 - 20	7 - 7 - 7	2.5 - 2.5 - 2.5	25 - 25 - 25	60 - 40 - 40	4	2
5	SBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	12 - 20 - 20	60 - 30 - 30	4	2
6	NBT	0 - 0 - 0	0 - 0 - 0	16 - 16 - 16	1 - 1 - 1	30 - 30 - 30	0 - 50 - 50	4	2
7	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
8	EBT	10 - 10 - 10	20 - 20 - 20	7 - 7 - 7	2.5 - 2.5 - 2.5	25 - 25 - 25	60 - 40 - 40	4	2

Last In Service Date: 11/19/2009 14:40

Permitted Phases

	12345678
Default	12-456-8
External Permit 0	-2-4-6-8
External Permit 1	-2-4-6-8
External Permit 2	-2-4-6-8

Current TOD Schedule	Plan	Cycle	Green Time 1 NBL	2 SBT	3 -	4 WBT	5 SBL	6 NBT	7 -	8 EBT	Ring Offset	Offset
	2	90	9	38	0	25	14	33	0	25	0	42
	5	180	26	97	0	39	39	84	0	39	0	42
	8	110	15	46	0	31	15	46	0	31	0	20
	12	170	24	72	0	56	24	72	0	56	0	132
	14	100	9	43	0	30	9	43	0	30	0	32

Local TOD Schedule

Time	Plan	DOW
0000	Free	Su M T W Th F S
0600	5	M T W Th F
0600	Free	Su S
0800	14	Su S
1000	8	Su M T W Th F S
1345	12	M T W Th F
1900	14	Su M T W Th F S
2100	Free	Su M T W Th F S

1850

TOD Schedule Report

for 6658: Hia-Hialeah Garden Blvd&W 80 St

Print Date: 1/26/2016

Print Time: 9:37 AM

Current Time of Day Function

Time	Function	Settings *	Day of Week
0600	TOD OUTPUTS	--------	SuM T W ThF S
2000	TOD OUTPUTS	8-------	SuM T W ThF S

Local Time of Day Function

Time	Function	Settings *	Day of Week
0600	TOD OUTPUTS	--------	SuM T W ThF S
2000	TOD OUTPUTS	8-------	SuM T W ThF S

*** Settings**

Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

No Calendar Defined/Enabled

TOD Schedule Report

for 5447: Hia-Hialeah Garden Blvd&W 84 St

Print Date: 1/25/2016

Print Time: 3:19 PM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
5447	Hia-Hialeah Garden Blvd&W 84 St	DOW-2		N/A	0	0	N/A	0	Max 0

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
-	SBT	-	WBT	SBL	NBT	WBL	EBT
0	0	0	0	0	0	0	0

Active Phase Bank: Phase Bank 1

Phase		Walk (Phase Bank 1 - 2 - 3)	Don't Walk (1 - 2 - 3)	Min Initial (1 - 2 - 3)	Veh Ext (1 - 2 - 3)	Max Limit (1 - 2 - 3)	Max 2 (1 - 2 - 3)	Yellow	Red
1	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
2	SBT	0 - 0 - 0	0 - 0 - 0	16 - 16 - 16	1 - 1 - 1	40 - 26 - 40	0 - 21 - 0	4	2
3	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
4	WBT	0 - 0 - 0	0 - 0 - 0	7 - 7 - 7	2.5 - 2.5 - 2.5	20 - 14 - 20	46 - 11 - 0	4	2
5	SBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	4 - 2.5 - 2.5	20 - 0 - 20	70 - 0 - 0	4	2
6	NBT	0 - 0 - 0	0 - 0 - 0	16 - 16 - 16	1 - 1 - 1	40 - 26 - 40	0 - 21 - 0	4	2
7	WBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2.5 - 2.5 - 2.5	10 - 0 - 10	40 - 0 - 0	4	2
8	EBT	0 - 0 - 0	0 - 0 - 0	7 - 7 - 7	2.5 - 2.5 - 2.5	20 - 14 - 20	46 - 11 - 0	4	2

Last In Service Date: unknown

Permitted Phases

	12345678
Default	-2-45678
External Permit 0	--------
External Permit 1	-2-4-6-8
External Permit 2	12345678

Current TOD Schedule	Plan	Cycle	Green Time 1 -	2 SBT	3 -	4 WBT	5 SBL	6 NBT	7 WBL	8 EBT	Ring Offset	Offset
	2	90	0	53	0	25	14	33	11	8	0	42
	5	180	0	124	0	44	54	64	19	19	0	34
	8	110	0	57	0	41	20	31	14	21	0	21
	12	170	0	112	0	46	34	72	25	15	0	142
	14	100	0	55	0	33	19	30	11	16	0	32

Local TOD Schedule

Time	Plan	DOW
0000	Free	Su M T W Th F S
0600	5	M T W Th F
0700	Free	Su S
0800	14	Su S
1000	8	Su M T W Th F S
1345	12	M T W Th F
1900	14	Su M T W Th F S
2100	Free	Su M T W Th F S

1852

TOD Schedule Report

for 5447: Hia-Hialeah Garden Blvd&W 84 St

Print Date: 1/25/2016

Print Time: 3:19 PM

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S

*** Settings**

Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

No Calendar Defined/Enabled

TOD Schedule Report

for 5080: Hia-Hialeah Garden Blvd&I- 75

Print Date: 1/25/2016

Print Time: 2:43 PM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
5080	Hia-Hialeah Garden Blvd&I- 75	DOW-2		N/A	0	0	N/A	0	Max 0

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
NBL	SBT	EBL	WBT	-	NBT	WBL	EBT
0	0	0	0	0	0	0	0

Active Phase Bank: Phase Bank 1

Phase		Walk (Phase Bank 1 - 2 - 3)	Don't Walk (1 - 2 - 3)	Min Initial (1 - 2 - 3)	Veh Ext (1 - 2 - 3)	Max Limit (1 - 2 - 3)	Max 2 (1 - 2 - 3)	Yellow	Red
1	NBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 0	2.5 - 2.5 - 0	8 - 6 - 0	26 - 6 - 0	4	2
2	SBT	0 - 0 - 0	0 - 0 - 0	18 - 18 - 18	1 - 1 - 1	40 - 22 - 20	0 - 20 - 50	4.3	2
3	EBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 0	2.5 - 2.5 - 0	20 - 12 - 0	56 - 5 - 0	4	2
4	WBT	0 - 0 - 0	0 - 0 - 0	7 - 7 - 7	3.5 - 3.5 - 3.5	25 - 16 - 16	56 - 21 - 40	4.3	2
5	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
6	NBT	0 - 0 - 0	0 - 0 - 0	18 - 18 - 18	1 - 1 - 1	40 - 22 - 20	0 - 20 - 50	4.3	2
7	WBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 0	2.5 - 2.5 - 0	20 - 12 - 0	56 - 10 - 0	4	2
8	EBT	0 - 0 - 0	0 - 0 - 0	7 - 7 - 7	3.5 - 3.5 - 3.5	25 - 16 - 16	56 - 21 - 40	4.3	2

Last In Service Date: unknown

Permitted Phases

	12345678
Default	1234-678
External Permit 0	--------
External Permit 1	-234-678
External Permit 2	--------

Current TOD Schedule	Plan	Cycle	Green Time 1 NBL	2 SBT	3 EBL	4 WBT	5 -	6 NBT	7 WBL	8 EBT	Ring Offset	Offset
	2	90	6	28	17	15	0	40	17	15	0	32
	5	180	22	68	19	47	0	96	39	27	0	166
	8	110	12	21	24	29	0	39	34	19	0	83
	12	170	18	55	46	27	0	79	46	27	0	160
	14	100	6	38	19	13	0	50	19	13	0	32

Local TOD Schedule

Time	Plan	DOW
0000	Free	M T W Th F
0600	5	M T W Th F
0600	Free	Su S
0800	14	Su S
1000	8	Su M T W Th F S
1345	12	M T W Th F
1900	14	Su M T W Th F S
2100	Free	Su M T W Th F S

1854

TOD Schedule Report

for 5080: Hia-Hialeah Garden Blvd&I- 75

Print Date: 1/25/2016

Print Time: 2:43 PM

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S

*** Settings**

Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

No Calendar Defined/Enabled

APPENDIX I-R:
MDC PHP RATIO CALCULATION EXAMPLE

Miami Dade County PHP Ratio Calculation Example

A/1	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	Miami Dade	AM Raw		AM Raw Total	PM Raw		PM Raw Total	Official	AM PHP		AM PHP Total	PM PHP		PM PHP Total
3	Count Station	NB/EB	SB/WB		NB/EB	SB/WB		PHP (TOTAL)	NB/EB	SB/WB		NB/EB	SB/WB	
4	9256	785	570	1355	723	600	1323	1354	784	570	1354	722	600	1322
								Ratio	L4*C4/E4	L4*D4/E4	IF(E4>H4,+I4,+I4*H4/E4)	O4*F4/H4	O4*G4/H4	IF(H4>E4,+I4,+I4*H4/E4)
								Equations:	1354*785/1355	1354*570/1355	IF(1355>1323,1354,1354*1323/1355)	1322*723/1323	1322*600/1323	IF(1323>1355,1354,1354*1323/1355)

APPENDIX I-S:
Summary of Vested Trips in Addition to Miami-Dade County RER Database

Appendix: Summary of Vested Trips in Addition to Miami-Dade County RER Database

Roadway	From	To	Length (mi)	No. of Lanes	EXISTING 2015 PHP		City of Hialeah	City of Hialeah		City of Hialeah	Unincorperated Miami-Dade		Hialeah Gardens	Hialeah Gardens	Hialeah Gardens	City of Hialeah	Unincorperated Miami-Dade	City of Hialeah	City of Hialeah		City of Hialeah	City of Hialeah	City of Hialeah	Miami Lakes		Unincorperated Miami-Dade	Unincorperated Miami-Dade	City of Hialeah		City of Hialeah		Total	
							Bonterra	Bellagio & Bellagio Villas		Erudition	AMB I-75 Business Park		Liebherr Tract	Teba Subdivision	Preferred Freezer Hialeah Gardens	FDG Beacon Countyline, LLC	Sevilla Group & Irving TR	FP&L	Atlas Hlh Heights LLC		F78 1 LLC	Lowell S. Dunn	Lowell S. Dunn	F69 1 LLC	F71 1 LLC	Northwest School Property LLC	The Genet Family Limited Partners	Hialeah Gardens Irrevocable Trust		Flightway 14			
					NB/EB	SB/WB		NB/EB	SB/WB		NB/EB	SB/WB							NB/EB	SB/WB				NB/EB	SB/WB			NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Florida's Turnpike/ HEFT/SR 821	SW 8th St	SR 836	1.00	8	5,291	7,854	Not Available			Not Available			Built-out Already	No Traffic Study Required by City	Built-out Already	Not Available	Not Applicable	Not Available			Not Available	Not Available	Not Available			Not Applicable	Not Applicable						
	SR 836	NW 12th Street	0.56	8	3,589	4,728																											
	NW 12th Street	NW 41th Street	2.02	8	5,297	7,497																											
	NW 41th Street	NW 74th Street	1.99	8	6,529	7,178																											
	NW 74th Street	NW 106th Street	2.02	8	6,527	5,749																											
	NW 106th Street	US 27/ Okeechobee Rd	2.45	6	7,341	4,839													1	1								1	1			2	1
	US 27/ Okeechobee Rd	NW 170th St	2.00	6	6,264	4,162													12	8								51	34			63	41
	NW 170th St	Interstate 75	2.10	6	6,771	4,499													12	8								51	34			63	42
	Interstate 75	CR 823/Red Rd	4.10	4	3,661	2,680																											
	CR 823/Red Rd	CR 817/NW 27th Ave	3.00	4	4,106	3,992																											
	CR 817/NW 27th Ave	Florida's Turnpike/SR 91	1.05	6	4,067	3,954																											
Florida's Turnpike/ SR 91	I-595	Griffin Rd	1.27	8	6,647	6,157																											
	Griffin Rd	Pines Blvd	3.84	6	6,412	7,016																											
	Pines Blvd	Florida's Turnpike/HEFT/SR 821	2.91	8	6,648	6,586																											
	Florida's Turnpike/HEFT/SR 821	NW 203rd St	0.92	8	5,103	4,344																											
Interstate 75	I-595	Royal Palm Blvd	2.50	8	6,877	6,547																											
	Royal Palm Blvd	Griffin Rd	1.82	8	6,065	5,434																											
	Griffin Rd	Sheridan St	2.28	8	4,426	4,019																											
	Sheridan St	Pines Blvd	1.67	8	6,707	6,193																											
	Pines Blvd	Miramar Pkwy/ S 33rd St	2.25	8	7,490	5,092																											
	Miramar Pkwy/ S 33rd St	Florida's Turnpike	2.10	12	6,864	5,291					82	63																				82	63
	Florida's Turnpike	Miami Gardens Dr/NW 186 St	0.40	10	6,639	4,473					87	59							40	31								73	56			200	145
	Miami Gardens Dr/NW 186 St	NW 178th St	0.50	8	6,359	3,582					170	96																				170	96
	NW 178th St	NW 138th Street	2.70	8	6,359	3,582					170	96							23	13								46	26			238	134
	NW 138th Street	SR 826	1.30	8	3,672	6,395					31	55							101	57								281	158			413	270
SR 924/Gratigny Pkwy	SR 826	NW 57th Ave (Red Road)	2.06	6	1,367	2,840													25	43								58	101			83	145
	NW 57th Ave (Red Road)	Douglas(Le Jeune Connector)	2.06	6	2,179	2,702																											
	Douglas(Le Jeune Connector)	NW 32nd Ave	0.64	6	1,502	1,946																											
NW 107th Ave	US 27/ Okeechobee Rd	NW 138th St	1.00	4	334	400																											
	NW 138th St	NW 170th St	2.02	-																										100		100	0
NW 102nd Ave	NW 170th St	NW 178th St	0.50	-																													
	NW 178th St	ADM Project Access Rd	0.50	-																													
Miami Gardens Dr	ADM Project Access Rd	Interstate 75 Western Ramps	0.50	-																													
	Interstate 75 Western Ramps	Interstate 75 Eastern Ramps	0.80	-																													
	Interstate 75 Eastern Ramps	NW 87th Ave	0.20	4	2,427	1,058					287	125							25	11								40	17			351	153
	NW 87th Ave	NW 82nd Ave	0.50	4	2,427	1,058					73	32							25	11								40	17			138	60
	NW 82nd Ave	NW 77nd Ave	0.60	4	1,380	1,641					48	57																				48	57
	NW 77nd Ave	NW 67nd Ave	1.10	4	1,380	1,641					48	57																				48	57
	NW 67nd Ave	NW 57nd Ave	0.90	4	1,220	1,429													50	60								55	65			105	125
	NW 57th Ave	NW 47th Ave	1.02	6	804	906																											
NW 170th St	Florida Turnpike	NW 102 Ave/NW 107 Ave	0.57	-																													
	NW 102 Ave/NW 107 Ave	NW 97th Ave	0.50	-																													
	NW 87th Ave	NW 82nd Ave	0.50	2	444	361																		15	12							15	12
	NW 82nd Ave	NW 78th Ave	0.50	2	444	361																											
NW 169th St	NW 77th Ct	NW 67th Ave	1.02	4	328	370																											
NW 154th St	NW 87th Ave	NW 82nd Ave	0.50	4	985	963																		67	65							67	65
	NW 82nd Ave	SR 826	0.50	4	1,000	1,194																		35	42							35	42
	SR 826	NW 67th Ave	1.19	4	652	660																											
	NW 67th Ave	NW 57th Ave (Red Road)	1.08	4	700	581																											
NW 138th St	US 27/ Okeechobee Rd	NW 107th Ave	1.00	4	833	704					5	5							111	92								215	178			331	275
	NW 107th Ave	NW 97th Ave	1.00	6	937	756					5	4							110	93								213	180			328	277
	NW 97th Ave	Hialeah Gardens Blvd	0.30	6	937	756					5	4							112	91								217	176			335	270
Hialeah Gardens Blvd	NW 106th Terrace	US 27/ Okeechobee Rd	0.78	6	1,218	930					96	74							77	63								106	85			279	221
	US 27/ Okeechobee Rd	NW 138th St	1.45	4	1,039	898					91	79							79	61								108	83			279	222
NW 97th Ave	NW 122nd St	NW 130th St	0.50	2	365	313													48	42								86	74			134	116
	NW 130th St	NW 138th St	0.50	2	365	313													48	41								86	74			134	115
	NW 138th St	NW 154th St	1.00	4	365	313		158	98										48	41								86	74			292	213
	NW 154th St	NW 170th St	1.00	2	365	313													48	41								86	74			134	115
	NW 170th St	Graham Access	0.25	-																													
	Graham Access	NW 178th St	0.25	-																													
NW 87th Ave	Miami Gardens Dr/NW 186 St	NW 170th St	1.00	4	1,447	1,737					235	282																				235	282
	NW 170th St	NW 154th St	1.00	4	189	302																		46	73							46	73
NW178th St	Graham Access	NW 97th Ave	0.46	-																													
	NW 97th Ave	Interstate 75	0.46	-																													
Miramar Pkwy	SW 172nd Ave	SW 160th Ave	0.99	6	1,344	1,865																											
	SW 160th Ave	Interstate 75	0.50	6	2,786	3,257																											
	Interstate 75	SW 148th Ave	0.48	6	2,282	1,862																											
	SW 148th Ave	Flamingo Rd	2.03	6	1,833	2,018																											
NW 122nd St	NW 97th Ave	Hialeah Gardens Blvd	0.23	4	1,023	935													43	47								76	84			119	131
	Hialeah Gardens Blvd	NW 89th Ave	0.27	4	1,023	935													47	43								83	76			130	119
	NW 89th Ave	NW 87th Ave	0.49	4	836	787																											
	NW 87th Ave	SR 826	0.99	4	490	665													46	43								82	77			128	121
	N Okeechobee Rd	NW 97th Ave	0.43	2	1,023	935													38	52								68	92			106	144
SR 826	I-75	NW 122nd St	1.13	8	6,840	6,795													47	43								83	76			130	119
	NW 122nd St	NW 103rd St	1.20	10	8,742	8,894													45	45								80	80			125	124
	NW 103rd St	N Okeechobee Rd	0.87	10	11,527	7,595																											
Pines Blvd	I-75	SW 160th Ave	0.58	6	2,207	2,481																											
	SW 160th Ave	SW 172th Ave	1.00	6	1,565	1,761																											
Okeechobee Rd	NW 154th St	Florida's Turnpike	1.31	4	1,053	380																											
	Florida's Turnpike	NW 138th St	0.51	6	884	1,423													17	6								85	31			102	37
	NW 138th St	NW 107th Ave	0.56	6	884	1,423													9	14								44	71			53	86
	NW 107th Ave	Hialeah Gardens Blvd	1.27	6	884	1,423													9	14								44	71			53	86
	Hialeah Gardens Blvd	NW 103rd St	1.31	6	1,577	1,533					58	57							69	111								106	171			234	339
	NW 103rd St	SR 826	1.41	6	1,577	1,533													91	88								141	137			232	225
	SR 826	W 16th Ave (Milam Dairy Rd)	0.66	6	2,126	1,979																											
	W 16th Ave (Milam Dairy Rd)	Hialeah Expy	0.80	6	2,174	2,250																											
	Hialeah Expy	NW 57th Ave (Red Road)	1.18	6	2,174	2,250																											
	NW 57th Ave (Red Road)	Hialeah Dr	0.77	6	2,174	2,250																											
	Hialeah Dr	SW 42nd Ave (Le Jeune Rd)	1.28	6	2,650	2,279																											
SW 67th Ave/Flamingo	NW 191st St	Miami Gardens Dr/NW 186 St	0.33	6	1,035	1,257																											
	Miami Gardens Dr/NW 186 St	NW 173rd Dr	0.88	6	1,386	1,560																											
SW 57th Ave/Red Rd	Miramar Pkwy/ S 33rd St	Florida's Turnpike/HEFT/SR 821	0.54	6	1,806	1,677																											
	Florida's Turnpike/HEFT/SR 821	NW 202nd St	0.97	6	1,626	1,758																											
	NW 202nd St	Miami Gardens Dr/NW 186 St	1.22	6	2,033	1,470																											
	Miami Gardens Dr/NW 186 St	NW 177th St	0.31	6	2,080	1,254																											

Note:	Name of Taffic Study	"Bellagio at Hialeah - Traffic Evaluation for Right-Turn Lane Analysis" dated July 17, 2013 "Bellagio at Hialeah – Queuing at Entry Gate" dated January 13, 2014	"Updated Traffic Concurrency Analysis for an Alternative Access Configuration AMB I-75 Business Park Tentative Plat T-22967" dated April 2012	"Traffic Concurrency Impact Study Atlas Hialeah Heights" dated June 5, 2016	"Traffic Impact Analysis Dunnwoody Lake & Dunnwoody Forest" dated February 2011	"Traffic Concurrency Impact Analysis Hialeah Gardens Irrevocable Trust" date June 5, 2016	"Flightway 14 Traffic Study" dated August 2016
	Build out year	2015	Around 2020	Build-out year 2016	The project is anticipated to be built and fully occupied by year 2030	Around 2020	Around 2020

APPENDIX I-T:
Summary of Study Area Links for 2020 CDMP Zoning, 2040 CDMP and 2040 Zoning

Appendix: Summary of Study Area Links for 2020 CDMP/Zoning, 2040 CDMP and 2040 Zoning

				Figure 3						Figure 4A			Figure 4B		
				2020						2040					
				CDMP			Zoning			CDMP			Zoning		
STA ID	Roadway	From	To	Combined	ADM	Graham	Combined	ADM	Graham	Combined	ADM	Graham	Combined	ADM	Graham
972250	Florida's Turnpike/ HEFT/SR 821	SW 8th St	SR 836												
972526		SR 836	NW 12th Street												
972230		NW 12th Street	NW 41th Street												
972269		NW 41th Street	NW 74th Street							Y			Y		
972268		NW 74th Street	NW 106th Street							Y			Y		
972272		NW 106th Street	US 27/ Okeechobee Rd							Y			Y		
972248		US 27/ Okeechobee Rd	NW 170th St	Y	Y		Y	Y		Y	Y		Y	Y	Y
972248		NW 170th St	Interstate 75	Y	Y		Y	Y		Y	Y		Y	Y	
972285		Interstate 75	CR 823/Red Rd	Y	Y		Y	Y		Y	Y	Y	Y	Y	Y
971996		CR 823/Red Rd	CR 817/NW 27th Ave	Y	Y		Y	Y		Y	Y		Y	Y	
971998		CR 817/NW 27th Ave	Florida's Turnpike/SR 91												
971904	Florida's Turnpike/ SR 91	I-595	Griffin Rd												
971902		Griffin Rd	Pines Blvd												
971900		Pines Blvd	Florida's Turnpike/HEFT/SR 821												
970502		Florida's Turnpike/HEFT/SR 821	NW 203rd St												
862005	Interstate 75	I-595	Royal Palm Blvd												
862004		Royal Palm Blvd	Griffin Rd												
862003		Griffin Rd	Sheridan St							Y			Y		
862002		Sheridan St	Pines Blvd												
862001		Pines Blvd	Miramar Pkwy/ S 33rd St							Y			Y		
860362		Miramar Pkwy/ S 33rd St	Florida's Turnpike	Y	Y		Y	Y		Y	Y		Y	Y	
872503		Florida's Turnpike	Miami Gardens Dr/NW 186 St	Y	Y		Y	Y		Y	Y	Y	Y	Y	Y
872501		Miami Gardens Dr/NW 186 St	NW 178th St	Y	Y		Y	Y		Y	Y	Y	Y	Y	Y
872501		NW 178th St	NW 138th Street	Y			Y			Y			Y		Y
872500		NW 138th Street	SR 826							Y			Y		
872511	SR 924/Gratigny Pkwy	SR 826	NW 57th Ave (Red Road)												
872512		NW 57th Ave (Red Road)	Douglas(Le Jeune Connector)												
872510		Douglas(Le Jeune Connector)	NW 32nd Ave												
n/a	NW 107th Ave	US 27/ Okeechobee Rd	NW 138th St							Y		Y			
n/a		NW 138th St	NW 170th St							Y		Y			
n/a	NW 102nd Ave	NW 170th St	NW 178th St							Y	Y	Y			
n/a		NW 178th St	ADM Project Access Rd	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
n/a	Miami Gardens Dr	ADM Project Access Rd	Interstate 75 Western Ramps	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
n/a		Interstate 75 Western Ramps	Interstate 75 Eastern Ramps	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
872518		Interstate 75 Eastern Ramps	NW 87th Ave	Y	Y		Y	Y		Y	Y	Y	Y	Y	Y
872518		NW 87th Ave	NW 82nd Ave	Y	Y		Y	Y		Y	Y	Y	Y	Y	Y
872517		NW 82nd Ave	NW 77nd Ave	Y	Y		Y	Y		Y	Y	Y	Y	Y	Y
872517		NW 77nd Ave	NW 67nd Ave	Y	Y		Y	Y		Y	Y	Y	Y	Y	Y
872516		NW 67nd Ave	NW 57nd Ave							Y			Y		
871233		NW 57th Ave	NW 47th Ave												
n.a	NW 170th St	Florida Turnpike	NW 102 Ave/NW 107 Ave	Y	Y		Y	Y		Y	Y	Y	Y	Y	Y
n./a		NW 102 Ave/NW 107 Ave	NW 97th Ave	Y	Y		Y	Y		Y	Y	Y	Y	Y	Y
878177		NW 87th Ave	NW 82nd Ave												
9552		NW 82nd Ave	NW 78th Ave												
9550	NW 169th St	NW 77th Ct	NW 67th Ave	Y			Y			Y			Y		
877037	NW 154th St	NW 87th Ave	NW 82nd Ave												
877037		NW 82nd Ave	SR 826												
878673		SR 826	NW 67th Ave												
9256		NW 67th Ave	NW 57th Ave (Red Road)												

Appendix: Summary of Study Area Links for 2020 CDMP/Zoning, 2040 CDMP and 2040 Zoning

				Figure 3						Figure 4A			Figure 4B		
				2020						2040					
				CDMP			Zoning			CDMP			Zoning		
STA ID	Roadway	From	To	Combined	ADM	Graham	Combined	ADM	Graham	Combined	ADM	Graham	Combined	ADM	Graham
878684	NW 138th St	US 27/ Okeechobee Rd	NW 107th Ave												
877048		NW 107th Ave	NW 97th Ave												
877048		NW 97th Ave	Hialeah Gardens Blvd												
877065	Hialeah Gardens Blvd	NW 106th Terrace	US 27/ Okeechobee Rd												
878620		US 27/ Okeechobee Rd	NW 138th St												
878243	NW 97th Ave	NW 122nd St	NW 130th St												
878243		NW 130th St	NW 138th St												
878243		NW 138th St	NW 154th St	Y			Y			Y			Y		Y
878243		NW 154th St	NW 170th St	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
n/a		NW 170th St	Graham Access	Y	Y		Y	Y		Y	Y	Y	Y	Y	Y
n/a		Graham Access	NW 178th St	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
878176	NW 87th Ave	Miami Gardens Dr/NW 186 St	NW 170th St	Y	Y		Y	Y		Y	Y	Y	Y	Y	Y
878112		NW 170th St	NW 154th St										Y		
n/a	NW178th St	Graham Access	NW 97th Ave	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
n/a		NW 97th Ave	Iinterstate 75	Y	Y		Y	Y		Y	Y	Y	Y	Y	Y
869688	Miramar Pkwy	SW 172nd Ave	SW 160th Ave												
n/a		SW 160th Ave	Interstate 75												
n/a		Interstate 75	SW 148th Ave							Y			Y		
867326		SW 148th Ave	Flamingo Rd												
877076	NW 122nd St	NW 97th Ave	Hialeah Gardens Blvd												
877076		Hialeah Gardens Blvd	NW 89th Ave												
878193		NW 89th Ave	NW 87th Ave												
877041		NW 87th Ave	SR 826												
877076		N Okeechobee Rd	NW 97th Ave	Y	Y		Y	Y		Y					
870575	SR 826	I-75	NW 122nd St												
870574		NW 122nd St	NW 103rd St												
870553		NW 103rd St	N Okeechobee Rd												
860088	Pines Blvd	I-75	SW 160th Ave							Y			Y		
860087		SW 160th Ave	SW 172th Ave												
870585	Okeechobee Rd	NW 154th St	Florida's Turnpike												
872536		Florida's Turnpike	NW 138th St	Y	Y		Y	Y		Y	Y		Y	Y	
872536		NW 138th St	NW 107th Ave	Y	Y		Y	Y		Y	Y		Y	Y	
872536		NW 107th Ave	Hialeah Gardens Blvd	Y	Y		Y	Y		Y	Y	Y	Y	Y	
870109		Hialeah Gardens Blvd	NW 103rd St	Y			Y			Y		Y	Y		
870109		NW 103rd St	SR 826							Y		Y			
870528		SR 826	W 16th Ave (Milam Dairy Rd)	Y	Y		Y	Y		Y			Y		
875252		W 16th Ave (Milam Dairy Rd)	Hialeah Expy	Y			Y			Y			Y		
875252		Hialeah Expy	NW 57th Ave (Red Road)							Y					
875252		NW 57th Ave (Red Road)	Hialeah Dr							Y					
870200		Hialeah Dr	SW 42nd Ave (Le Jeune Rd)												
860494	SW 67th Ave/Flamingo	NW 191st St	Miami Gardens Dr/NW 186 St												
877036		Miami Gardens Dr/NW 186 St	NW 173rd Dr												
865216	SW 57th Ave/Red Rd	Miramar Pkwy/ S 33rd St	Florida's Turnpike/HEFT/SR 821							Y			Y		
872515		Florida's Turnpike/HEFT/SR 821	NW 202nd St												
872514		NW 202nd St	Miami Gardens Dr/NW 186 St												
871190		Miami Gardens Dr/NW 186 St	NW 177th St												

Miami-Dade County

Appendix II

October 10, 2016

Leftwich Consulting Engineers, Inc.

APPENDIX II-A:
ADM Preliminary Impact Fee Analysis
05312016

American Dream Miami
Preliminary Impact Fee Assessment

A preliminary traffic impact fee assessment has been prepared for the American Dream Miami (ADM) Project. The impact fee estimate is based on Miami-Dade County's impact fee formula as reported in its guidelines titled "Chapter 33E-Road Impact Fee Ordinance" (source: Miami-Dade County's website).

In accordance with the Miami-Dade County Impact Fee Ordinance, impact fees are identified in Section 33E-7 Road Impact Fee Formula. It specifically states that "The feepayer shall pay a road impact fee amount based on the formulas set forth below. Such fee will be based on the capital cost of roadway improvements required to serve any increase in transportation requirements resulting from proposed development activities together with impact fee administrate costs." Impact fee costs are determined by applying the following formulas:

1. **Total Trips = Proposed Units of Development x Trip Generation Rate x 97% Trips Non-transit x 1/2 x Percent New Trips**
2. **(Outside UIA) New Lane Miles = Total Trips × Trip Length ÷ 8,100 Average Daily Vehicles Capacity per Lane Mile**
   (Within UIA) New Lane Miles = Total Trips × Trip Length ÷ 8,500 Average Daily Vehicles Capacity per Lane Mile
3. **Road Cost = New Lane Miles × $1,951,500 per Lane Mile (Including $151,500 per lane mile for Right-of-Way Costs)**
4. **(Outside UIA) Net Road Cost = Road Cost - $265,680 per New Lane Mile credited from Motor Fuels Tax and Vehicle License Fees**
   (Within UIA) = Net Road Cost = Road Cost - $278,800 per New Lane Mile credited from Motor Fuels Tax and Vehicle License Fees
5. **Inflation Factor = PDC Multiplier from Table of Present Day Cost (PDC) Multipliers by Calendar Year in subsection 33E-8(d)**
6. **Road Impact Fee = Net Road Costs × Inflation Factor + 2% Administrative Costs**

The ADM site is located outside the MDC Urban Infill Area and as such the "Outside UIA" equations apply. The standard per unit impact fee costs and referenced PDC Multipliers are presented in the Appendix.

<u>Adjustment for Trip Generation Rate and Percent New Trips</u>

The standard impact fee costs per development unit as determined by Miami-Dade County for new developments are based on general land uses typically built within the County boundaries. Furthermore, the per unit costs are based on the traditional Institute of Transportation Engineers (ITE) Manual Edition 7th Edition dated 2003. The ITE trip generation rates are average rates based on studies performed throughout the United States and therefore are not specific to the ADM Project.

The American Dream Miami project is a unique attraction. At approximately 6,200,000 square feet of gross floor area (GFA), of which 3,500,000 square feet is gross leasable area (GLA) of retail use, it will be the largest single-enclosure retail/entertainment experience in the country. In addition to retail, the

project is envisioned to include a theme park, a water park, a movie theater complex, restaurants, hotel, and other attractions intended to capture trips for an extended stay. As such, the trip characteristics at American Dream Miami (trip intensity per area, time-of-day behavior, trip duration, internal capture between uses, etc.) is neither entirely similar to established data available for retail uses or for entertainment uses.

The most representative land use category published in the Institute of Transportation Engineers (ITE) Trip Generation Handbook which could be used to forecast trips for the Project is ITE Code 820/Shopping Center. However, even as the fitted curve for ITE 820 shows larger shopping centers generate less external traffic per gross leasable area, the data available does not include any sample sizes which are comparable to the Project. Additionally, shopping centers do not typically have the theme park/water park element and other unique venues envisioned for American Dream Miami. Therefore, use of ITE Code 820 was therefore not deemed appropriate for use for the Site. In lieu of this, the similar site at Mall of America (MOA) and extensive coordination with review agencies were involved prior to finalizing the trip generation information for ADM. Table 1 presents the final trip generation rates and resulting trips agreed to by MDC and FDOT in March of 2016. The site-specific trip generation rate serves as the basis for the ADM impact fee calculation.

Table 1
ADM Final Trip Generation

Land Use	ITE Code	Size	Units	Trip Rates		Trips					
							PM Peak Hour				
				Daily	PM Peak	Daily	Total	In		Out	
Entertainment/Retail (GFA)	-	6,200	KSF	11.26	0.85	69,822	5,293	60%	3,176	40%	2,117
Total Generated Trips (pre-LRT adjustment)						**69,822**	**5,293**		**3,176**		**2,117**
AM Internal Capture =	0.0%					0	0		0		0
Net External Trips (pre-LRT adjustment)						**69,822**	**5,293**		**3,176**		**2,117**
LRT Adjustment =	10.8%	of net external trips				6,481	491		295		197
Net External Trips						**76,303**	**5,784**		**3,471**		**2,314**
Diverted Trips =	9.7%	of net external trips				5,995	454		250		204
New External Trips						**70,308**	**5,330**		**3,221**		**2,110**

Adjusted Present Day Cost Multiplier

Attached are the Present Day Cost (PDC) Multipliers outlined in the County's Impact Fee Ordinance. The multipliers are calculated using 2006 as the base year. Acknowledging that the actual historical information is now available for these earlier projected multipliers, FDOT's PDC were compiled and are attached. The report is titled "Advisory Inflation Factors for Previous Years (1987-2015)." Based on the information, the PDC values are 1.34 for 2006 and 1.00 for 2015; meaning that there was a 34 percent growth in costs in the 19 year period. To determine the PDC Multiplier from 2006 to 2016, an additional 1 percent was added based on the inflation observed between 2014 and 2015. The resulting 1.35 PDC Multiplier was applied to the ADM development's impact fee projections.

Final Recommended Road Impact Fee Costs

To obtain a preliminary impact fee estimate for the ADM development, the agreed to Trip Generation Rate and Percent New Trips per unit were utilized to prepare a refined impact fee cost, along with the adjusted PDC Multiplier. The MDC impact fee trip length of 5.90 miles for a Shopping Center/General

Retail with 1,200,000+ GSF was also applied. Table 2 attached shows the calculated impact fee cost corresponding to ADM's planned 6,200,000 GFA of entertainment. The resulting preliminary impact fee cost for the Project equates to $58,752,501.

Table 2

ADM Impact Fee Calculations

American Dream Miami (ADM) Entertainment/Retail (GFA)					
(1) Total Trips =	**Proposed Units of Development**	**× Trip Generation Rate**	**× (100)% Trips Non-transit**	**× 1/2**	**× Percent New Trips**
	6200	12.48	100%	0.50	90.3%
					34,924
(2) (Outside UIA) New Lane Miles =	**Total Trips**	**× Trip Length**	**÷ 8,100 Average Daily Vehicles Capacity per Lane Mile**		
	34,924	5.90	8,100		
					25.4
(3) Road Cost =	**New Lane Miles**	**× $1,951,500 per Lane Mile (Including $151,500 per lane mile for Right-of-Way Costs)**			
	25.4	$1,951,500			
					$49,643,586
(4) (Outside UIA) Net Road Cost =	**Road Cost**	**- $265,680 per New Lane Mile credited from Motor Fuels Tax and Vehicle License Fees**			
	$49,643,586	$6,758,549			
					$42,885,037
(5) Inflation Factor =	PDC Multiplier				
	1.35				
					1.35
(6) Road Impact Fee =	**Net Road Costs**	**× Inflation Factor**	**+ 2% Administrative Costs**		
	$42,885,037	1.35	$857,701		
					$58,752,501
Impact Fee Per Unit of Dev =	**Road Impact Fee**	**÷ Proposed Units of Development**			
	$58,752,501	6200			
					$9,476.21

Note: MOA TG rate = 11.26 per KSF; ADM TG rate = 11.26+10.8% LRT Adjustment

The above information has been prepared at the request of Miami-Dade County and represents the preliminary cost that should serve as the basis for evaluating ADM's impact on local roadways.

Detailed coordination will be made with the County to establish how the impact fee costs will be applied within the parameters coordinated between the County and representatives of the ADM development.

APPENDICES

Sec. 33E-8. - Fee computation by adopted schedule.

The feepayer may elect to allow the County Public Works Director to use the impact fee schedule set forth below developed pursuant to the formula set forth in Section 33E-7(a). The Impact Fee Per Unit of Development shall be multiplied by the Present Day Cost (PDC) Multiplier for the year in which the fee is paid in accordance with the table in subsection 33E-8(d).

(a) The following impact fee schedule shall be used by the County Public Works Director in computing the road impact fee:

TABLE 100

ROAD IMPACT FEE SCHEDULE
OUTSIDE URBAN INFILL AREA

ITE Code	ITE Land Use Type	Trip Generation Rate[1] (ADT)[2] Per Unit of Dev.	Trip Length (mile)	% New Trip[3]	Impact Fee Per Unit of Dev. ($)[6]
	Port and Terminal				
30	Truck Terminals	9.85/1,000 GSF[4]	6.25	100%	6,338
	Industrial				
130	Industrial Park	6.96/1,000 GSF	6.16	100%	4,414
140	Manufacturing	3.82/1,000 GSF	6.16	100%	2,423
150	Warehousing	4.96/1,000 GSF	6.16	100%	3,146
151	Mini-Warehouse	2.50/1,000 GSF	5.90	100%	1,519
	Residential				
210	Single-Family Detached	9.57/unit	6.09	100%	6,001
220	Apartment (Rentals)	6.72/unit	6.09	100%	4,214
222	High-Rise Apartment or Condominium (more than three floors)	4.20/unit	6.09	100%	2,634

230	Condominium, Townhouse	5.86/unit	6.09	100%	3,674
240	Mobile Home	4.99/unit	6.09	100%	3,129
251	Senior Adult Housing—Detached	3.68/unit	6.09	100%	2,307
252	Senior Adult Housing—Attached	3.44/unit	6.09	100%	2,157
253	Congregate Care Facility	2.02/unit	6.2	100%	1,289
254	Assisted Living Facility	2.66/bed	6.2	100%	1,698
255	Continuing Care Retirement Community	2.28/unit	6.09	100%	1,532
	Lodging				
310	Hotel	8.92/available room	6.09	100%	5,593
311	All Suites Hotel	6.24/available room	6.09	100%	3,913
320	Motel	9.11/ available room	6.09	100%	5,712
	Recreational				
420	Marina	2.96/berth	6.30	100%	1,920
430	Golf Course	35.74/hole	6.30	100%	23,183
480	Amusement Park	75.76/acre	6.30	100%	49,142
490	Tennis Courts (open to public; no ancillary facilities)	31.04/court	6.30	100%	20,134
491	Racquet Club	38.70/court	6.30	100%	25,103
492	Health/Fitness	4.02/1,000 GSF	6.30	100%	2,608

	Institutional				
520	Elementary School	1.29/student	1.25	75%	125
530	High School	1.71/student	4.00	100%	704
540	Jr./Community College	1.20/student	6.07	100%	750
550	University	2.38/student	6.07	100%	1,487
560	Church/Synagogue	9.11/1,000 GSF	4.00	100%	3,752
565	Day Care Center	79.26/1,000 GSF	1.25	50%	5,100
	Medical				
610	Hospital	17.57/1,000 GSF	6.20	100%	11,216
620	Nursing Home	2.37/bed	6.20	100%	1,513
630	Clinic	31.45/1,000 GSF	6.20	100%	20,076
	Office				
710	General Office Building				
	1—50,000	15.65/1,000 GSF	6.07	100%	9,778
	50,001—100,000	13.34/1,000 GSF	6.07	100%	8,337
	100,001—200,000	11.37/1,000 GSF	6.07	100%	7,109
	200,001—300,000	10.36/1,000 GSF	6.07	100%	6,476
	300,001—400,000	9.70/1,000 GSF	6.07	100%	6,061
	400,001—500,000	9.21/1,000 GSF	6.07	100%	5,758
	500,001—600,000	8.83/1,000 GSF	6.07	100%	5,521

	600,001—700,000	8.53/1,000 GSF	6.07	100%	5,329
	700,001—more	8.27/1,000 GSF	6.07	100%	5,168
720	Medical Office Building	36.13/1,000 GSF	6.07	100%	22,580
750	Office Park[7]	11.42/GSF	6.07	100%	7,137
760	Research Center	8.11/1,000 GSF	6.07	100%	5,068
770	Business Park	12.76/1,000 GSF	6.07	100%	7,975
	Retail				
813	Discount Superstore (free standing)	50.75/1,000 GSF	5.9	42%	12,948
816	Hardware/Paint Store/Pool Supply (free standing)	51.29/1,000 GSF	2.36	75%	9,347
817	Nursery/Garden Center	36.08/1,000 GSF	4.00	75%	11,144
820	Shopping Center/General Retail				
	1—10,000	152.03/1,000 GSF	2.36	32%	11,821
	10,001—50,000	86.56/1,000 GSF	2.36	42%	8,833
	50,001—100,000	67.91/1,000 GSF	2.36	51%	8,416
	100,001—200,000	53.28/1,000 GSF	4.00	58%	12,727
	200,001—300,000	46.23/1,000 GSF	4.00	62%	11,805
	300,001—400,000	41.80/1,000 GSF	5.90	64%	16,252
	400,001—500,000	38.66/1,000 GSF	5.90	66%	15,501
	500,001—600,000	36.27/1,000 GSF	5.90	67%	14,763
	600,001—800,000	32.80/1,000 GSF	5.90	69%	13,748

	800,001—1,000,000	30.33/1,000 GSF	5.90	70%	12,899
	1,000,001—1,200,000	28.46/1,000 GSF	5.90	71%	12,274
	1,200,001—more	27.67/1,000 GSF	5.90	72%	12,103
841	Car Sales[5]				
	Car Sales (new and used car sales area)	33.56/1,000 GSF	5.90	75%	15,290
	Car Sales (services and parts sales area)	21.44/1,000 GSF	5.90	75%	9,768
848	Tire Store	24.87/1,000 GSF	5.9	100%	15,108
850	Supermarket (free standing)	102.24/1,000 GSF	2.36	50%	12,422
851	Convenience Market	737.99/1,000 GSF	1.25	35%	33,243
853	Convenience Market with Gasoline	845.60/1,000 GSF	1.25	35%	38,090
862	Home Improvement Superstore	30.74/1,000 GSF	5.9	75%	14,005
875	Department Store (free standing)	22.88/1,000 GSF	5.9	42%	5,838
880	Pharmacy/Drugstore (no Drive thru)	90.06/1,000 GSF	2.36	32%	7,003
881	Pharmacy/Drugstore (with Drive thru)	96.91/1,000 GSF	2.36	32%	7,535
890	Furniture Store (free standing)	5.06/1,000 GSF	4.00	50%	1,042
	Services				
911	Bank (Walk-in)	156.48/1,000 GSF	1.25	50%	10,069
912	Bank (Drive-in)	246.49/1,000 GSF	1.25	50%	15,862
931	Quality Restaurant	89.95/1,000 GSF - or-	6.16	75%	42,787
	Quality Restaurant	2.86/seat[8]	6.16	75%	1,360

932	High Turnover Restaurant	158.37/1,000 GSF -or-	4.00	50%	32,612
	High Turnover Restaurant	4.83/seat[8]	4.00	50%	995
933	Fast Food Restaurant No Drive Thru	716.00/1,000 GSF	1.25	50%	46,075
934	Fast Food Restaurant with Drive Thru	496.12/1,000 GSF	1.25	50%	31,925
937	Coffee/Donut Shop	818.58/1,000 GSF	1.25	35%	36,838
944	Service Stations w/Gasoline	168.56/pump	1.25	35%	7,593

Notes:

1. Rates are derived from Trip Generation, An Informational Report, 7th Edition by the Institute of Transportation Engineers (ITE), 2003.
2. ADT = Average Daily Traffic.
3. Percentage of New Trips from ITE Generation Handbook, 2nd Edition (retail assumes 10% diverted-link trips in addition to pass-by trips from the formula) and Dade County existing Road Impact Fee Schedule.
4. GSF = Gross Square Feet.
5. The trip generation rates of services and sales areas for Car Sales were obtained from a survey study of Miami-Dade County car dealerships.
6. Base year for Impact Fee Per Unit of Development is 2006.
7. Office Park means a planned development including offices together with support services such as banks, restaurants and service stations in a campus-like arrangement.
8. Seats = Maximum occupancy. For Quality Restaurants and High Turnover Restaurants, the Fee may be computed per seat at the option of the feepayer as provided herein.

(d) Table of Present Day Cost (PDC) Multipliers.

Calendar Year	PDC Multiplier
2006 Base Year	1.000
2007	1.035 not used[1]
2008	1.094 not used[1]

2009	1.141 used after April 22, 2009[1]
2010	1.184
2011	1.225
2012	1.267
2013	1.308
2014 through September 2015	1.351
Fiscal Year (October 1—September 30)	
2015—2016	1.430
2016—2017	1.477
2017—2018	1.527
2018—2019	1.577
2019—2020	1.628
2020—2021	1.682

Source: This table is based on the table of Construction Cost Inflation Factors published August 3, 2006 by Florida Department of Transportation (FDOT) Office of Policy Planning for FDOT Fiscal Year 2007 (July 1, 2006 to June 30, 2007). PDC Multiplier values have been interpolated onto a calendar year intervalor onto a Miami-Dade County Fiscal Year respectively.

Note:

1. Use of the Present Day Cost multiplier was first implemented upon the April 22, 2009 effective date of Ordinance No. 09-08.

(Ord. No. 88-112, § 1(8), 12-6-88; Ord. No. 94-134, § 1, 6-21-94; Ord. No. 95-215, § 1, 12-5-95; Ord. No. 98-125, § 26, 9-3-98; Ord. No. 09-08, § 5, 1-22-09; Ord. No. 14-122, § 1, 12-2-14; Ord. No. 15-144, § 1, 12-1-15)

Advisory Inflation Factors For Previous Years (1987-2015)

This *"Transportation Costs"* report is one of a series of reports issued by the Transportation Policy Planning office. This report provides an opportunity to approximately adjust costs, or estimated costs, for a project from prior years to a current or recent Fiscal Year. Such adjusted cost estimates may be appropriate for planning purposes, but they do not substitute for formal project cost estimates generated using the Long Range Estimates (LRE) system or other software systems.

In this report, cost inflation factors are also referred to as Present Day Cost (PDC) multipliers. They are purely advisory. The Florida Department of Transportation does not estimate previous years' highway construction cost inflation for the State of Florida. However, because of the occasional need to express prior costs, or prior cost estimates, in today's dollars (technically those of a current or recent Fiscal Year), we provide multipliers for doing so. The multipliers on Page 2 are based on estimates from several sources of prior and current cost inflation on a national level.

This report does not include inflation factors to use in estimating future costs for construction projects such as those included in the Department's Work Program. Factors for use in estimating future costs are available in a separate report entitled "Inflation Factors".

CONTACTS

If you have any questions about the use of the multipliers on Page 2, please contact:

Martin Markovich, Office of Policy Planning, (850) 414-4918,
martin.markovich@dot.state.fl.us

Prior Year Construction Cost Inflation Factors

Fiscal Year	PDC Multiplier
1987	2.33
1988	2.32
1989	2.26
1990	2.18
1991	2.11
1992	2.11
1993	2.12
1994	2.09
1995	2.04
1996	1.97
1997	1.91
1998	1.87
1999	1.89
2000	1.84
2001	1.79
2002	1.74
2003	1.70
2004	1.59
2005	1.44
2006	1.34
2007	1.23
2008	1.17
2009	1.15
2010	1.14
2011	1.10
2012	1.06
2013	1.04
2014	1.01
2015	1.00

PDC stands for Present Day Cost
Fiscal Years run from July 1 of the previous year to June 30 of the designated year. For example, Fiscal Year 2014 runs from July 1, 2013 to June 30, 2014.

The above table can be used to estimate present or recent costs based on costs in prior years. Cost in the prior year should be multiplied by the PDC multiplier for that year in order to generate a planning cost for a recent or current year. For example, for a project that cost exactly one million dollars in Fiscal Year 2000, the $1.00 million would be multiplied by the PDC multiplier of 1.84 to generate an estimated cost of $1.84 million for the recent Fiscal Year of 2015.

APPENDIX II-B:
Q22 - Air Impacts - ADM 06 22 16

Question 22 –Air Quality Impacts American Dream Miami Project

Question 22 of the Development of Regional Impact (DRI) process dates back to when major developments were required to submit a DRI. The DRI process is technically no longer in place for State requirements. For the American Dream Miami (ADM) project, a "mini-DRI" set of analyses are required to meet Zoning requirements for the project. As such, Question 22 of the original DRI process is being addressed to meet these requirements.

A. Document the steps which will be taken to contain fugitive dust during site preparation and construction of the project. If site preparation includes demolition activities, provide a copy of any notice of demolition sent to the Florida Department of Environmental Regulation (FDER) as required by the National Emission Standards for Asbestos, 40 CFR Part 61, Subpart M.

Fugitive dust from site preparation and from wind erosion will cause minor short-term air quality impacts during the construction period. To reduce any adverse effects, cleared and disturbed areas will be periodically sprayed with water where appropriate after clearing. After completion of construction, all project areas will be grassed, mulched, or paved depending on land use, thus containing fugitive dust.

B. Specify structural or operational measures that will be implemented by the development to minimize air quality impacts (e.g., road widening and other traffic flow improvements on existing roadways, etc.). Any roadway improvements identified here should be consistent with those utilized in Question 21, Transportation.

The Amendment Site is fortunate to be surrounded by regional roadway network improvements that are programmed and/or planned in the Miami-Dade Metropolitan Planning Organization's Transportation Improvement Program (TIP) and its Year Long Range Transportation Plan (LRTP) to add regional roadway network capacity to Florida's Turnpike (HEFT), Interstate-75 and SR-826, along with other significant roadways in the area.

To compliment the regional network improvements, the development will provide additional roadway and interchange improvements to improve access to the site and to address network capacity on adjacent local roadways to accommodate project impacts. A preliminary listing of the roadway and interchange improvements which are currently under review to provide access to the amendment site are presented in the main part of the report. The final determination of required roadway and interchange improvements will be made during the agency review and approval process for the CDMP Amendment Transportation Impact Analysis. Once finalized, a detailed listing of the roadway improvements will be presented in response to Question 22.

C. Complete Table 22-1 for all substantially impacted intersections within the study area, as defined in Map J, and all parking facilities associated with the project. Using the guidance supplied or approved by the Florida Department of Environmental Regulation, determine if detailed air quality modeling for carbon monoxide (CO) is to be completed for any of the facilities listed in the table.

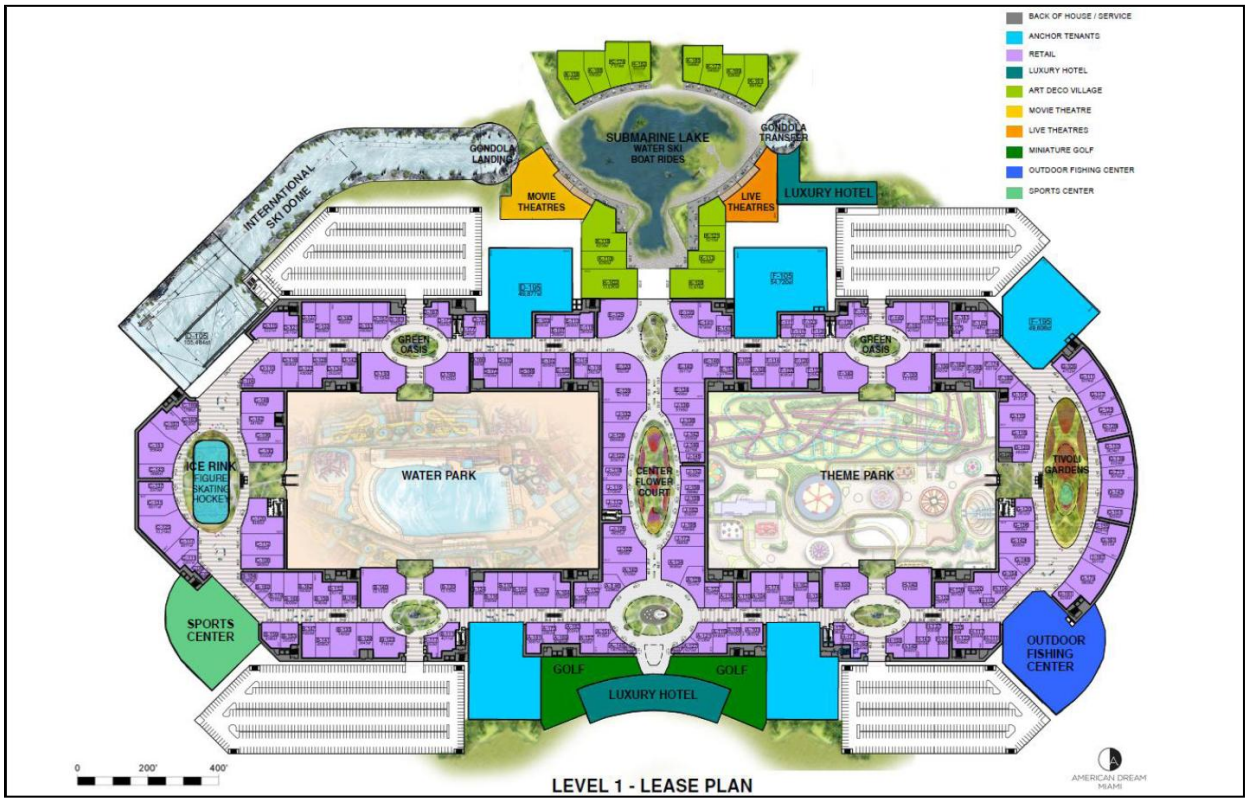
Detailed information on impacted intersections and surface and structured parking areas will be provided during the zoning and/or site plan approval and permitting process (if requested and/or

required by reviewing agencies). After the CDMP Amendment Transportation Impact Analysis has been reviewed and determined to be sufficient, the Applicant will meet with applicable review agencies (e.g. DERM and FDEP as necessary) to discuss applicable guidelines and to identify those study intersections and parking facilities which are anticipated to be substantially impacted by project traffic. As part of the original DRI process, FDEP guidelines required that the following be considered for air quality modeling:

- LOS E and F intersections impacted by 5% or more of project traffic;
- Surface parking areas accommodating 1500 vehicle trips per hour; or
- Parking garages accommodating 750 vehicle trips per hour.

Coordination with review agencies will determine the exact parameters used to identify whether air quality impacts apply for the ADM Site. Meanwhile a cursory review of the Site's preliminary parking estimates have been performed and is detailed below:

1. ADM is proposed as a unique retail/entertainment complex with 6,200,000 square feet of gross space, of which 3,500,000 square feet is leasable retail area, plus 2,000 on-site hotel rooms. A general layout of the site is shown below.



2. Based on coordination with the applicant, approximately 12,000 to 16,000 parking spaces will be provided on Site. The majority of the parking will be accommodated at four large parking garages (e.g. 4,000 spaces each).
3. The highest traffic conditions at the Site is anticipated to occur during the Saturday period between around 3:00 and 4:00 PM (refer to the Weekend Analysis for further detail) with 4,688 Net External Trips as noted in the table below (e.g. Saturday trip generation for Year 2020 built-out conditions).

Land Use	ITE Code	Size	Units	Trip Rates Daily	Trip Rates Sat. Peak	Trips Daily	Trips Sat. Peak Hour Total	Trips Sat. Peak Hour In		Trips Sat. Peak Hour Out	
Entertainment/Retail (GFA)	-	6,200	KSF	17.03	1.37	105,599	8,495	50.5%	4,290	49.5%	4,205
Total Generated Trips (pre-LRT adjustment)						**105,599**	**8,495**		**4,290**		**4,205**
Saturday Internal Capture =	0.0%					0	0		0		0
Net External Trips (pre-LRT adjustment)						**105,599**	**8,495**		**4,290**		**4,205**
LRT Adjustment =	10.8%	of net external trips				9,802	789		398		390
Net External Trips						**115,401**	**9,284**		**4,688**		**4,595**
Diverted Trips =	9.7%	of net external trips				9,067	729		337		392
New External Trips						**106,334**	**8,555**		**4,351**		**4,203**

4. Assuming the 4,688 Net External Outbound Trips are distributed equally at the four garages, each garage will be having 1172 trips leaving the building at the highest hour of the Site. Each garage will have two to four exists. If each garage has two exit points, to be conservative, then each exit will accommodate approximately 586 trips at the Site's peak conditions.
5. The 586 trips are within the 750 trips identified when Question 22 guidelines were in place for DRIs.

D. If detailed modeling is required, estimate the worst case one-hour and eight-hour CO concentrations expected for each phase through buildout for comparison with the state and federal ambient air quality standards. Utilize methodology supplied or approved by the Florida Department of Environmental Regulation for making such estimates. Submit all air quality modeling input and output data along with associated calculations to support the modeling and explain any deviations from guidance. Provide drawings of site geometry and coordinate information for each area modeled. Show the location of the sources and receptor sites. Modeling assumptions should consider federal, state, and local government programmed link and intersection improvements with respect to project phasing. Any roadway improvements utilized in the model should be consistent with those used in Question 21, Transportation. Provide verification of any assumptions in the modeling which consider such programmed improvements. It is recommended that air quality analyses be completed concurrently and in conjunction with the traffic analyses for the project.

If applicable, this information will be provided after the CDMP Amendment Transportation Analysis has been reviewed and determined to be sufficient, and the Applicant has met with the applicable review agencies to determine which intersections and/or parking facilities need to be modeled and have established parameters for the carbon monoxide analysis.

E. If initial detailed modeling shows projected exceedance(s) of ambient air quality standards, identify appropriate mitigation measures and provide assurances that appropriate mitigating measures will be employed so as to maintain compliance with air quality standards. Submit further modeling demonstrating the adequacy of such measures.

This information will be provided, as applicable, after the CDMP Amendment Transportation Analysis has been reviewed and determined to be sufficient, and the modeling (if applicable) has been completed.

APPENDIX II-C:
ADM Weekend Analysis final with Appendix 06212016

American Dream Miami
Weekend Analysis

INTRODUCTION

American Dream Miami is proposed as a unique retail/entertainment complex with 6,200,000 square feet of gross space, of which 3,500,000 square feet is leasable retail area, plus 2,000 on-site hotel rooms. The site is to be located on +/-194 acres of property currently designated as "Industrial and Office" use in the County Land Use Plan Map. The American Dream Miami property is generally located east of the Homestead Extension of Florida's Turnpike (HEFT), west of Interstate 75 (I-75), and north of a future NW 178th Street alignment. Project build-out is anticipated by Year 2020.

The Mall of America (MOA) in Bloomington, Minnesota was found to be the most representative site available to observe trip rates for use with American Dream Miami. MOA is operated by the same developer who is planning American Dream Miami and with similar scale and unique concept and mix of land uses. MOA is comparable to the proposed square footage at American Dream Miami and is nearly equal in proportion of leasable retail use to gross floor area. Throughout the methodology process, searches for developments more representative or similar to MOA were discussed and conclusions documented. The Applicant, and many of the agencies who submitted comments, concluded that MOA would be the best representative model to look to for use in American Dream Miami. For MOA, the highest traffic volumes occur during the weekend when visitors come to the site for shopping and entertainment.

This analysis has been prepared to respond to agency request to review whether the weekend impacts are more substantial than the traditional weekday traffic analyses. The approach for the analysis is to compare the background, project and total traffic for ADM for respectively the Weekday PM Peak Hour and the Weekend Peak Hour of Generator traffic conditions.

Three sample roadway link analyses have been prepared based on Miami Gardens Drive between the I-75 eastern ramps and NW 87th Avenue, Florida's Turnpike(HEFT/SR 821) between US 27/ Okeechobee Rd and NW 170th St, and Interstate 75 between Florida's Turnpike and Miami Gardens Drive. The Miami Gardens Drive and Interstate 75 segments are located immediately east of the proposed ADM Site and the Florida's Turnpike segment is located southeast of the proposed ADM and Graham Sites. These three segments represent critical facilities for the ADM as well as Miami-Dade area in general.

WEEKEND VS WEEKDAY

The most representative land use category published in the Institute of Transportation Engineers (ITE) Trip Generation Handbook which could be used to forecast trips for the Project is ITE Code 820/Shopping Center. However, even as the fitted curve for ITE 820 shows larger shopping centers generate less external traffic per gross leasable area, the data available does not include any sample sizes which are comparable to the Project. Additionally, shopping centers do not typically have the theme park/water park element and other unique venues envisioned for American Dream Miami. Therefore, use of ITE Code 820 was therefore not deemed appropriate for use for the site. In lieu of this, the similar site at Mall of America (MOA) and extensive coordination with review agencies were involved prior to finalizing the trip generation information for ADM.

Two studies were performed at MOA to identify average trip generation rates for the site. The Westwood Study was prepared in July of 2015 and the Kimley-Horn and Associates, Inc. Study was prepared in September of 2015. The Westwood study reviewed peak hour volumes of adjacent street traffic based on the entrances surrounding the MOA. The typical peak hours for intersections on the streets surrounding the Mall of America are:

Weekday A.M. Peak Hour -- 7:00 A.M. to 8:00 A.M.
Weekday P.M. Peak Hour – 4:30 P.M. to 5:30 P.M.
Saturday Peak Hour – 3:00 P.M. to 4:00 P.M.

Table 1 summarizes the Westwood highest hours by AM, PM and Saturday Peak and **Table 2** provides the detailed traffic counts from Wednesday, Thursday, Friday, and Saturday.

Table 1
Westwood 2015 Annualized Peak Hour Volume - Summary

Weekday Average	Average Volume	Seasonal Variation	Annualized Volume
A.M. Peak Hour	678	1.092182	**621**
P.M. Peak Hour	3656	1.092182	**3347**
Saturday Peak	4514	0.869183	**5193**

Table 2
Westwood Peak Hour Volumes Peak Hour Volumes - Detail

		Inbound	Outbound	Total
Wednesday	7:00 - 8:00 AM	419	210	629
Thursday	7:00 - 8:00 AM	495	227	722
Friday	7:00 - 8:00 AM	480	204	684
AVERAGE		**465**	**214**	**678**
DIRECTIONAL DISTRIBTIION - A.M. PEAK		**69%**	**31%**	

		Inbound	Outbound	Total
Wednesday	4:30 - 5:30 PM	1614	1816	3430
Thursday	4:30 - 5:30 PM	1581	1804	3385
Friday	4:30 - 5:30 PM	1961	2191	4152
AVERAGE		**1719**	**1937**	**3656**
DIRECTIONAL DISTRIBTIION - P.M. PEAK		**47%**	**53%**	

		Inbound	Outbound	Total
Saturday	3:00 - 4:00 PM	**2315**	**2199**	**4514**
DIRECTIONAL DISTRIBTIION - SAT. PEAK		**51%**	**49%**	

NOTE: Volumes shown are for the Peak Hour of Adjacent Street Traffic, not necessarily the Peak Hour of the Generator

For the Kimley-Horn Study, the following trip information was determined. The trip generation rates are based on 2,581,582 square feet of gross leasable area that currently exists as part of the MOA. **Table 3** shows the resulting findings.

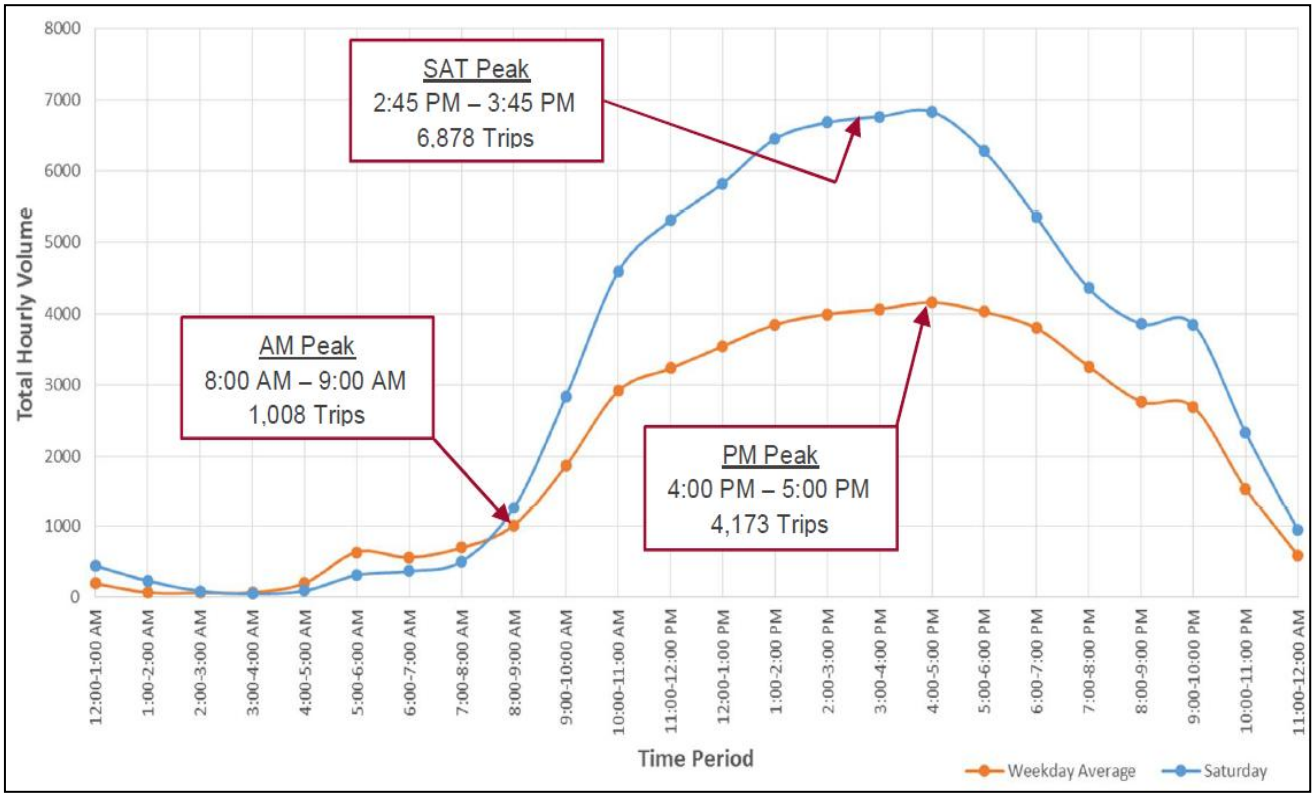
Table 3

Kimley-Horn Trip Generation Summary

Analysis Period	Scenario	Hour	Adjusted (Yearly Average)			Trip Rate	Percent Entering	Percent Exiting
			Entering	Exiting	Total			
Weekday	Daily		24,332	25,468	49,800	19.29	49%	51%
	AM Peak Hour (Adjacent Street Traffic)	8:00 AM – 9:00 AM	510	498	1,008	0.39	51%	49%
	AM Peak Hour (Generator)	11:00 AM – 12:00 PM	1,489	1,742	3,231	1.25	46%	54%
	PM Peak Hour (Adjacent Street Traffic)	4:00 PM – 5:00 PM	2,042	2,131	4,173	1.62	49%	51%
	PM Peak Hour (Generator)	3:45 PM – 4:45 PM	2,068	2,115	4,183	1.62	49%	51%
Saturday	Daily		36,702	38,911	75,613	29.29	49%	51%
	Saturday Peak Hour (Generator)	2:45 PM – 3:45 PM	3,433	3,445	6,878	2.66	50%	50%

Figure 1 provides the Kimley-Horn Study associated raw hourly volumes for the average weekday and Saturday 24-hour periods. As noted, the Saturday peak is substantially higher than the Weekday PM peak. Traditional traffic studies are performed for the PM peak hour to be consistent with adjacent street peaks, however the MOA and the proposed ADM are unique land uses and therefore warrant futher review of when the highest total traffic occurs.

Figure 1
Kimley-Horn Trip Hourly Traffic Distribution for Weekday and Weekend



ADM TRIP GENERATION

The Weekday Daily and PM trip generation for ADM was coordinated with review agencies starting September 2015 and was approved in March of 2016. **Table 4** shows the Daily and PM Peak Weekday trip generation that was derived based on the MOA traffic rate information and discussion with review agencies.

Table 4
Trip Generation Summary for American Dream Miami - Weekday

Land Use	ITE Code	Size	Units	Trip Rates		Trips					
							PM Peak Hour				
				Daily	PM Peak	Daily	Total	In		Out	
Entertainment/Retail (GFA)	-	6,200	KSF	11.26	0.85	69,822	5,293	60%	3,176	40%	2,117
Total Generated Trips (pre-LRT adjustment)						**69,822**	**5,293**		**3,176**		**2,117**
AM Internal Capture =	0.0%					0	0		0		0
Net External Trips (pre-LRT adjustment)						**69,822**	**5,293**		**3,176**		**2,117**
LRT Adjustment =	10.8%	of net external trips				6,481	491		295		197
Net External Trips						**76,303**	**5,784**		**3,471**		**2,314**
Diverted Trips =	9.7%	of net external trips				5,995	454		250		204
New External Trips						**70,308**	**5,330**		**3,221**		**2,110**

In addition to the trip generation for the weekday traffic associated with ADM, trip generation was also developed for the Saturday peak hour. This was accomplished by averaging the Westwood and Kimley-Horn observed Saturday peak hour trips and dividing them by the total square feet at MOA. **Table 5** shows the resulting Saturday Peak Hour of Generator trip generation. The LRT and diverted trip adjustments were maintained to be consistent with the trip generation information approved for the Weekday Daily and PM Peak Hour trip generation.

Table 5
Trip Generation Summary for American Dream Miami – Saturday

Land Use	ITE Code	Size	Units	Trip Rates		Trips					
							Sat. Peak Hour				
				Daily	Sat. Peak	Daily	Total	In		Out	
Entertainment/Retail (GFA)	-	6,200	KSF	17.03	1.37	105,599	8,495	50.5%	4,290	49.5%	4,205
Total Generated Trips (pre-LRT adjustment)						**105,599**	**8,495**		**4,290**		**4,205**
Saturday Internal Capture =	0.0%					0	0		0		0
Net External Trips (pre-LRT adjustment)						**105,599**	**8,495**		**4,290**		**4,205**
LRT Adjustment =	10.8%	of net external trips				9,802	789		398		390
Net External Trips						**115,401**	**9,284**		**4,688**		**4,595**
Diverted Trips =	9.7%	of net external trips				9,067	729		337		392
New External Trips						**106,334**	**8,555**		**4,351**		**4,203**

GRAHAM TRIP GENERATION

The Graham Project is located immediately south of ADM. It is planned for 500 dwelling units of apartments, 150 KSF of retail, and 250 KSF of Business Park by the year 2020. Prior to the year 2040, a total of 2000 dwelling units of apartments, 1000 KSF of retail, and 3000 KSF feet of Business Park are planned. This analysis is performed for both year 2020 and 2040, therefore both years trip generations are referenced. **Table 6A** and **6B** show the Weekday Graham year 2020 & 2040 trip generations per direction, which are part of the background traffic for the ADM Project. **Table 7A** and **7B** show the corresponding Weekend trip generations for Graham.

Table 6A
Trip Generation Summary for Graham 2020 - Weekday

LAND USE	UNITS	ITE LUC	ITE 9TH EDITION	PM TRIPS	% IN	TRIPS IN	% OUT	TRIPS OUT
APARTMENTS	500 DU	220	T = 0.55 (X) + 17.65	293	65%	190	35%	103
RETAIL	150,000 SQ. FT.	820	Ln (T) = 0.67 Ln (X) + 3.31	786	48%	377	52%	409
BUSINESS PARK	250,000 SQ. FT.	770	Ln (T) = 0.90 Ln (X) + 0.85	337	26%	88	74%	249
GROSS DRIVEWAY TRIPS				1,416	46%	655	54%	761
INTERNALIZATION		24.38%	Internalization - See Table 1D	345	46%	159	54%	186
DIVERTED TRIPS TO RETAIL USE		35.00%	Ln (TP) = -0.29 Ln (X) + 5.00	208	48%	100	52%	108
NET EXTERNAL TRIPS				863	46%	396	54%	467

Table 6B
Trip Generation Summary for Graham 2040 - Weekday

LAND USE	UNITS	ITE LUC	ITE 9TH EDITION	PM TRIPS	% IN	TRIPS IN	% OUT	TRIPS OUT
APARTMENTS	2,000 DU	220	T = 0.55 (X) + 17.65	1,118	65%	726	35%	392
RETAIL	1,000,000 SQ. FT.	820	Ln (T) = 0.67 Ln (X) + 3.31	2,802	48%	1,345	52%	1,457
BUSINESS PARK	3,000,000 SQ. FT.	770	Ln (T) = 0.90 Ln (X) + 0.85	3,152	26%	820	74%	2,332
GROSS DRIVEWAY TRIPS				7,072	41%	2,891	59%	4,181
INTERNALIZATION		18.38%	Internalization - See Table 2D	1,300	41%	533	59%	767
DIVERTED TRIPS TO RETAIL USE		20.00%	Ln (TP) = -0.29 Ln (X) + 5.00	457	48%	220	52%	237
NET EXTERNAL TRIPS				5,315	40%	2,138	60%	3,177

Table 7A
Trip Generation Summary for Graham 2020 - Saturday

LAND USE	UNITS	ITE LUC	ITE 9TH EDITION	Peak of Generator	% IN	TRIPS IN	% OUT	TRIPS OUT
APARTMENTS	500 DU	220	T = 0.52 (X)	260	65%	169	35%	91
RETAIL - PK HR OF THE GENERATOR	150,000 SQ. FT.	820	Ln (T) = 0.65 Ln (X) + 3.78	1,138	52%	592	48%	546
BUSINESS PARK [Office for Sat PM]	250,000 SQ. FT.	710	T = 0.43 (X)	108	54%	58	46%	50
GROSS DRIVEWAY TRIPS				1,506	54%	819	46%	687
INTERNALIZATION		18.78%	Internalization - See Table 1D	283	54%	153	46%	130
DIVERTED TRIPS TO RETAIL USE		35.59%	T = - 0.02 (X) + 38.59	329	48%	158	52%	171
NET EXTERNAL TRIPS				894	57%	508	43%	386

Table 7B
Trip Generation Summary for Graham 2040 - Saturday

LAND USE	UNITS	ITE LUC	ITE 9TH EDITION	Peak of Generator	% IN	TRIPS IN	% OUT	TRIPS OUT
APARTMENTS	2,000 DU	220	T = 0.52 (X)	1,040	65%	676	35%	364
RETAIL - PK HR OF THE GENERATOR	1,000,000 SQ. FT.	820	Ln (T) = 0.65 Ln (X) + 3.78	3,905	52%	2,031	48%	1,874
BUSINESS PARK [Office for Sat PM]	3,000,000 SQ. FT.	710	T = 0.43 (X)	1,290	54%	697	46%	593
GROSS DRIVEWAY TRIPS				6,235	55%	3,404	45%	2,831
INTERNALIZATION		20.74%	Internalization - See Table 2D	1,293	55%	711	45%	582
DIVERTED TRIPS TO RETAIL USE		18.59%	T = - 0.02 (X) + 38.59	575	48%	276	52%	299
NET EXTERNAL TRIPS				4,367	55%	2,417	45%	1,950

EXISTING CONDITIONS

Traffic counts were collected on Miami Gardens Drive for the week of April 16, 2016 through April 22, 2016 and therefore included counts for Monday, Tuesday, Wednesday, Thursday, Friday, Saturday and Sunday. The traffic counts are included as an attachment.

Based on the traffic counts, PHP volumes were derived for respectively the Weekday and the Weekend traffic conditions. The Weekday two-hour peak hour period from 4:00 PM to 6:00 PM was used and adjusted by peak season factors. A 2014 FDOT traffic count was also obtained and PHP was derived for this count as well. The existing 2014 FDOT was used for comparison.

For Saturday the two-hour peak period was based on a review of the Westwood and the Kimley-Horn collected traffic. The Westwood Study observed the Saturday peak hour from 3:00 to 4:00 PM and the Kimley-Horn Study noted the peak hour as from 2:45 to 3:45. To derive the Saturday PHP for the study segment, the two-hour peak period from 2:30 to 4:30 was assumed since it encompasses both the Westwood and the Kimley-Horn peak hours.

Table 8A and **8B** show the PHPs for the studied roadway segment for respectively the estimated 2016 FDOT count and the 2016 Weekday PM Count and Saturday Peak Hour of Generator count obtained from the 2016 tube counts collected by the Applicant. The FDOT counts which were collected in 2014 were adjusted by the addition of 2 percent growth from 2014 to 2015 and a 1 percent growth from 2015 to 2016 (to be consistent with the CDMP analysis prepared separately). The Florida's Turnpike segment PM PHP is derived from 2014 FDOT daily counts (AADT*K*D), and then factored up by these same growth rates mentioned above and therefore shows only the projected 2016 count.

Table 8A

Existing PHP Volumes for Miami Gardens Drive & 2016 Tube counts

Count Source	Data Collected Year	Raw PHP		PSCF	2016 PM PHP	
		NB/EB	SB/WB		NB/EB	SB/WB
FDOT Weekday PM Peak	2014	2179	950	1.02	2290	988
Tube Count Weekday PM Peak	2016	1471	725	1.00	1471	725
Tube Count Saturday Peak Hour	2016	1289	1054	1.00	1289	1054

Table 8B
Existing PHP Volumes for Florida's Turnpike and I-75

Count Source	Data Collected Year	Raw PHP		PSCF	2016 PM PHP	
		NB/EB	SB/WB		NB/EB	SB/WB
Florida's Turnpike(HEFT/SR 821)	-	-	-	-	5125	3977
Interstate 75	2014	7961	5363	1.01	8283	5580

Since the forecast FDOT derived Weekday PM PHP for Miami Gardens Drive is higher than the tube counts collected, the FDOT counts were referenced and thus are consistent with the traffic analyses prepared for the ADM CDMP and its supporting studies. The existing traffic conditions for the analyzed three segments are shown in **Table 9**. It should be noted that the service volume capacity used by Miami-Dade County for Miami-Gardens is LOS EE and represents a 20 percent increase above standard capacity for a similar facility.

Table 9
Year 2016 Existing Weekday and Weekend Roadway Conditions

Roadway	From	To	No. of Lanes	Adopted LOS	Peak Hour Peak Dir Service Vol				EXISTING YEAR 2016 Directional Analysis PHP - PM Peak			
					LOS B	LOS C	LOS D	LOS E	NB/EB (Vol / LOS)		SB/WB (Vol / LOS)	
FDOT Weekday PM Peak Analysis												
Miami Gardens Drive	I-75 Eastern Ramps	NW 87th Ave	4	E	0	2,292	2,400	2,400	2,290	C	998	C
Florida's Turnpike(HEFT/SR 821	US 27/ Okeechobee Rd	NW 170th St	6	D	3,360	4,580	5,500	6,080	5124	D	3977	C
Interstate 75	Florida's Turnpike	Miami Gardens Dr	8	D	4,500	6,080	7,320	8,220	8283	F	5580	C
Tube Count Weekend Peak Hour of Generator Analysis												
Miami Gardens Drive	I-75 Eastern Ramps	NW 87th Ave	4	E	0	2,292	2,400	2,400	1,299	C	1,050	C
Florida's Turnpike(HEFT/SR 821	US 27/ Okeechobee Rd	NW 170th St	6	D	3,360	4,580	5,500	6,080	3661	C	2842	B
Interstate 75	Florida's Turnpike	Miami Gardens Dr	8	D	4,500	6,080	7,320	8,220	5918	C	3987	B

FUTURE CONDITIONS

The background traffic growth rates derived during the development for the CDMP analyses were utilized to obtain year 2020 and 2040 background traffic, prior to the addition of the ADM and Graham Projects. Next the Graham Project trips were added based on the trip generation associated with its site and the directional trip distributions obtained from model runs prepared for the year 2020 (short-term) CDMP and 2040 (long-term) CDMP analyses. The Graham trips are included as background trips for the ADM analyses. Then the ADM trips were assigned using its trip generation forecasts and its 2020 CDMP and 2040 CDMP directional trip distribution (e.g Project trips used to develop Total trips). The resulting years (2020 & 2040) Weekday and Weekend roadway conditions are presented in **Table 10A** and **10B**.

As indicated in **Table 10A** and **10B**, the total traffic volumes for the Weekday conditions are higher than the total Weekend traffic. Even though Miami Gardens Drive segment is at LOS F in year 2040 weekend, its total trips are substantially lower than the corresponding total year 2040 weekday PM trips.

SUMMARY AND CONCLUSIONS

Both existing and future conditions of weekday and weekend were analyzed. For both Year 2020 and 2040 CDMP traffic analyses, the total traffic volumes for the Weekday conditions are higher than the total Weekend traffic. Since the weekday conditions are worse than the weekend conditions, no further weekend analyses are warranted for the ADM CDMP Amendment Traffic Impact Analysis and Supporting Studies.

Table 10A
Year 2020 Short-Term CDMP Weekday and Weekend Roadway Conditions

Roadway	From	To	No. of Lanes CF + Proposed	Adopted LOS	Peak Hour Peak Dir Service Vol				BACKGROUND TRIPS Peak Hour Peak Dir				GRAHAM PROJECT TRIPS TG: IN = 396 OUT = 467					BACKGROUND W GRAHAM Peak Hour Peak Dir				ADM PROJECT TRIPS TG IN = 3,221 = 2,110					TOTAL TRIPS			
					LOS B	LOS C	LOS D	LOS E	NB/EB (Vol / LOS)		SB/WB (Vol / LOS)		Daily PD NB/EB	Daily PD SB/WB	Project Peak Dir	PK Hr Trips NB/EB	PK Hr Trips SB/WB	NB/EB (Vol / LOS)		SB/WB (Vol / LOS)		Daily PD NB/EB	Daily PD SB/WB	Project Peak Dir	Hr Trips NB/EB	Hr Trips SB/WB	NB/EB (Vol / LOS)		SB/WB (Vol / LOS)	
Weekday PM Peak Analysis																														
Miami Gardens Drive	I-75 Eastern Ramps	NW 87th Ave	4	E	0	2,292	2,400	2,400	2383	D	1039	C	8.81%	8.58%	E	76	74	2459	F	1113	C	6.96%	7.20%	W	371	384	2,830	F	1,497	C
Florida's Turnpike(HEFT/SR 821)	US 27/ Okeechobee	NW 170th St	6+4	D	5,620	7,600	9,160	10,020	5581	B	4332	B	6.44%	4.99%	S	56	43	5637	C	4375	B	10.51%	9.72%	N	560	518	6,197	C	4,893	B
Interstate 75	Florida's Turnpike	Miami Gardens Dr	8+4	D	6,760	9,100	10,980	12,160	8620	C	5807	B	18.19%	17.91%	N	157	155	8777	C	5962	B	19.92%	13.58%	S	1,062	724	9,838	D	6,685	B

Roadway	From	To	No. of Lanes CF + Proposed	Adopted LOS	Peak Hour Peak Dir Service Vol				BACKGROUND TRIPS Peak Hour Peak Dir				GRAHAM PROJECT TRIPS TG: IN = 508 OUT = 386					BACKGROUND W GRAHAM Peak Hour Peak Dir				ADM PROJECT TRIPS TG IN = 4,351 = 4,203					TOTAL TRIPS			
					LOS B	LOS C	LOS D	LOS E	NB/EB (Vol / LOS)		SB/WB (Vol / LOS)		Daily PD NB/EB	Daily PD SB/WB	Project Peak Dir	PK Hr Trips NB/EB	PK Hr Trips SB/WB	NB/EB (Vol / LOS)		SB/WB (Vol / LOS)		Daily PD NB/EB	Daily PD SB/WB	Project Peak Dir	Hr Trips NB/EB	Hr Trips SB/WB	NB/EB (Vol / LOS)		SB/WB (Vol / LOS)	
Weekend Peak Hour of Gnerator Analysis																														
Miami Gardens Drive	I-75 Eastern Ramps	NW 87th Ave	4	E	0	2,292	2,400	2,400	1352	C	1093	C	8.81%	8.58%	E	79	77	1431	C	1169	C	6.96%	7.20%	W	595	616	2,026	C	1,786	C
Florida's Turnpike(HEFT/SR 821)	US 27/ Okeechobee	NW 170th St	6+4	D	5,620	7,600	9,160	10,020	3987	B	3095	B	6.44%	4.99%	S	58	45	4045	B	3140	B	10.51%	9.72%	N	899	831	4,944	B	3,971	B
Interstate 75	Florida's Turnpike	Miami Gardens Dr	8+4	D	6,760	9,100	10,980	12,160	6158	B	4148	B	18.19%	17.91%	N	163	160	6321	B	4309	B	19.92%	13.58%	S	1704	1162	8,025	C	5,470	B

Note: Trip distributions percentages are by direction and are applied to the total In and Out trip generation sum

Table 10B
Year 2040 Long-Term CDMP Weekday and Weekend Roadway Conditions

Roadway	From	To	No. of Lanes CF + Proposed	Adopted LOS	Peak Hour Peak Dir Service Vol				BACKGROUND TRIPS Peak Hour Peak Dir				GRAHAM PROJECT TRIPS TG: IN = 2,138 OUT = 3,177					BACKGROUND W GRAHAM Peak Hour Peak Dir				ADM PROJECT TRIPS IN = 3,221 OUT = 2,110					TOTAL TRIPS			
					LOS B	LOS C	LOS D	LOS E	NB/EB (Vol / LOS)		SB/WB (Vol / LOS)		Daily PD NB/EB	Daily PD SB/WB	Project Peak Dir	PK Hr Trips NB/EB	PK Hr Trips SB/WB	NB/EB (Vol / LOS)		SB/WB (Vol / LOS)		Daily PD NB/EB	Daily PD SB/WB	Project Peak Dir	PK Hr Trips NB/EB	PK Hr Trips SB/WB	NB/EB (Vol / LOS)		SB/WB (Vol / LOS)	
Weekday PM Peak Analysis																														
Miami Gardens Dr	I-75 Eastern Ramps	NW 87th Ave	4	E	0	2,292	2,400	2,400	2,907	F	1,268	C	6.90%	8.23%	E	367	437	3274	F	1705	C	5.86%	6.80%	W	313	362	3,587	F	2,067	C
Florida's Turnpike(HEFT/SR 821)	US 27/ Okeechobee	NW 170th St	6+4	D	5,620	7,600	9,160	10,020	7,361	C	5,714	C	5.39%	4.28%	S	286	228	7648	D	5942	C	9.93%	9.08%	N	529	484	8,177	D	6,426	C
Interstate 75	Florida's Turnpike	Miami Gardens Dr	8+4	D	6,760	9,100	10,980	12,160	10,518	D	7,085	C	16.83%	15.26%	N	894	811	11412	E	7897	C	19.89%	12.55%	S	1,060	669	12,472	F	8,565	C

Roadway	From	To	No. of Lanes CF + Proposed	Adopted LOS	Peak Hour Peak Dir Service Vol				BACKGROUND TRIPS Peak Hour Peak Dir				GRAHAM PROJECT TRIPS TG: IN = 2,417 OUT = 1,950					BACKGROUND W GRAHAM Peak Hour Peak Dir				ADM PROJECT TRIPS IN = 4,351 OUT = 4,203					TOTAL TRIPS			
					LOS B	LOS C	LOS D	LOS E	NB/EB (Vol / LOS)		SB/WB (Vol / LOS)		Daily PD NB/EB	Daily PD SB/WB	Project Peak Dir	PK Hr Trips NB/EB	PK Hr Trips SB/WB	NB/EB (Vol / LOS)		SB/WB (Vol / LOS)		Daily PD NB/EB	Daily PD SB/WB	Project Peak Dir	PK Hr Trips NB/EB	PK Hr Trips SB/WB	NB/EB (Vol / LOS)		SB/WB (Vol / LOS)	
Weekend Peak Hour of Gnerator Analysis																														
Miami Gardens Dr	I-75 Eastern Ramps	NW 87th Ave	4	E	0	2,292	2,400	2,400	2,077	C	906	C	6.90%	8.23%	E	301	359	2378	D	1265	C	5.86%	6.80%	W	502	581	2,880	F	1,846	C
Florida's Turnpike(HEFT/SR 821)	US 27/ Okeechobee	NW 170th St	6+4	D	5,620	7,600	9,160	10,020	5,259	B	4082	B	5.39%	4.28%	S	235	187	5495	B	4269	B	9.93%	9.08%	N	850	777	6,344	C	5,046	B
Interstate 75	Florida's Turnpike	Miami Gardens Dr	8+4	D	6,760	9,100	10,980	12,160	7,514	C	5062	B	16.83%	15.26%	N	735	667	8249	C	5728	B	19.89%	12.55%	S	1702	1073	9,951	D	6,802	C

Note: Trip distributions percentages are by direction and are applied to the total In and Out trip generation sum

APPENDICES

NW 186 St West of NW 87th St - EB Volume

SUMMARY - Tube Count - Volume Data (Weekday)

LOCATION: NW 186 St West of NW 87th St
SPECIFIC LOCATION: NW 186 St West of NW 87th St
CITY/STATE: Hialeah, FL

QC JOB #: 13778902
DIRECTION: EB
DATE: Apr 18 2016 - Apr 22 2016

Start Time	Mon 18-Apr-16	Tue 19-Apr-16	Wed 20-Apr-16	Thu 21-Apr-16	Fri 22-Apr-16	Average Weekday Hourly Traffic			Average Weekday Profile
12:00 AM	82	62	93	86	81	81			
12:15 AM	86	67	64	77	65	72			
12:30 AM	59	64	65	65	72	65			
12:45 AM	35	43	50	33	45	41			
1:00 AM	38	41	38	43	51	42			
1:15 AM	24	22	39	27	42	31			
1:30 AM	30	29	25	30	43	31			
1:45 AM	25	24	17	16	34	23			
2:00 AM	19	14	22	16	22	19			
2:15 AM	16	18	18	25	27	21			
2:30 AM	11	18	18	20	18	17			
2:45 AM	16	14	17	16	17	16			
3:00 AM	6	16	17	15	24	16			
3:15 AM	10	13	12	19	19	15			
3:30 AM	10	8	7	10	12	9			
3:45 AM	7	15	10	13	12	11			
4:00 AM	5	6	11	12	8	8			
4:15 AM	13	15	9	10	12	12			
4:30 AM	11	10	9	16	18	13			
4:45 AM	24	11	10	21	13	16			
5:00 AM	14	19	19	19	18	18			
5:15 AM	18	24	26	19	27	23			
5:30 AM	27	40	31	29	24	30			
5:45 AM	53	41	52	57	64	53			
Day Total									
% Weekday Average									
% Week Average									
AM Peak Volume									
PM Peak Volume									

Comments:

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

SUMMARY - Tube Count - Volume Data (Weekday)

LOCATION: NW 186 St West of NW 87th St
SPECIFIC LOCATION: NW 186 St West of NW 87th St
CITY/STATE: Hialeah, FL

QC JOB #: 13778902
DIRECTION: EB
DATE: Apr 18 2016 - Apr 22 2016

Start Time	Mon 18-Apr-16	Tue 19-Apr-16	Wed 20-Apr-16	Thu 21-Apr-16	Fri 22-Apr-16	Average Weekday Hourly Traffic			Average Weekday Profile
6:00 AM	61	70	56	69	61	63			
6:15 AM	93	94	87	103	86	93			
6:30 AM	116	118	118	102	113	113			
6:45 AM	173	186	197	148	157	172			
7:00 AM	203	207	170	192	190	192			
7:15 AM	225	205	205	223	197	211			
7:30 AM	198	157	202	199	202	192			
7:45 AM	223	233	221	220	247	229			
8:00 AM	**250**	**291**	**269**	**258**	**293**	**272**			
8:15 AM	245	282	256	245	226	251			
8:30 AM	202	203	213	217	229	213			
8:45 AM	241	204	220	240	198	221			
9:00 AM	187	231	245	225	224	222			
9:15 AM	212	197	167	179	205	192			
9:30 AM	198	187	193	200	185	193			
9:45 AM	183	215	172	162	197	186			
10:00 AM	174	175	182	191	180	180			
10:15 AM	184	180	164	166	181	175			
10:30 AM	157	190	177	178	194	179			
10:45 AM	158	161	170	185	198	174			
11:00 AM	198	185	163	224	221	198			
11:15 AM	186	181	180	205	200	190			
11:30 AM	223	197	185	199	208	202			
11:45 AM	196	188	227	220	236	213			
Day Total									
% Weekday Average									
% Week Average									
AM Peak Volume									
PM Peak Volume									

Comments:

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

SUMMARY - Tube Count - Volume Data (Weekday)

LOCATION: NW 186 St West of NW 87th St
SPECIFIC LOCATION: NW 186 St West of NW 87th St
CITY/STATE: Hialeah, FL

QC JOB #: 13778902
DIRECTION: EB
DATE: Apr 18 2016 - Apr 22 2016

Start Time	Mon 18-Apr-16	Tue 19-Apr-16	Wed 20-Apr-16	Thu 21-Apr-16	Fri 22-Apr-16	Average Weekday Hourly Traffic			Average Weekday Profile
12:00 PM	207	208	199	239	243	219			
12:15 PM	258	233	202	244	252	238			
12:30 PM	211	197	242	233	265	230			
12:45 PM	252	217	227	244	273	243			
1:00 PM	213	245	214	247	241	232			
1:15 PM	222	260	260	240	300	256			
1:30 PM	232	246	271	247	253	250			
1:45 PM	257	280	310	274	263	277			
2:00 PM	272	252	284	280	288	275			
2:15 PM	288	305	294	323	326	307			
2:30 PM	349	331	289	368	327	333			
2:45 PM	362	357	346	365	325	351			
3:00 PM	339	338	329	348	375	346			
3:15 PM	354	352	376	402	366	370			
3:30 PM	382	354	351	358	418	373			
3:45 PM	395	388	401	395	435	403			
4:00 PM	382	384	398	409	393	393			
4:15 PM	**452**	**476**	454	429	451	**452**			
4:30 PM	417	437	440	409	444	429			
4:45 PM	403	432	382	433	440	418			
5:00 PM	407	411	**455**	**477**	451	440			
5:15 PM	185	256	220	268	382	262			
5:30 PM	237	282	196	298	300	263			
5:45 PM	296	249	210	354	307	283			
Day Total									
% Weekday Average									
% Week Average									
AM Peak Volume									
PM Peak Volume									

Comments:

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

SUMMARY - Tube Count - Volume Data (Weekday)

LOCATION: NW 186 St West of NW 87th St
SPECIFIC LOCATION: NW 186 St West of NW 87th St
CITY/STATE: Hialeah, FL

QC JOB #: 13778902
DIRECTION: EB
DATE: Apr 18 2016 - Apr 22 2016

Start Time	Mon 18-Apr-16	Tue 19-Apr-16	Wed 20-Apr-16	Thu 21-Apr-16	Fri 22-Apr-16	Average Weekday Hourly Traffic			Average Weekday Profile
6:00 PM	400	274	279	307	**469**	346			
6:15 PM	452	353	265	233	352	331			
6:30 PM	435	422	404	248	427	387			
6:45 PM	348	417	443	303	405	383			
7:00 PM	380	410	440	420	407	411			
7:15 PM	373	385	375	425	400	392			
7:30 PM	340	366	368	390	350	363			
7:45 PM	328	365	331	346	361	346			
8:00 PM	281	348	327	327	294	315			
8:15 PM	298	305	316	322	290	306			
8:30 PM	273	329	312	335	310	312			
8:45 PM	275	315	295	322	237	289			
9:00 PM	232	303	272	290	315	282			
9:15 PM	250	290	330	315	280	293			
9:30 PM	240	243	257	283	238	252			
9:45 PM	226	264	219	248	234	238			
10:00 PM	198	245	258	248	228	235			
10:15 PM	191	230	251	184	275	226			
10:30 PM	186	190	187	204	234	200			
10:45 PM	154	134	165	127	213	159			
11:00 PM	110	117	109	153	238	145			
11:15 PM	111	129	102	120	217	136			
11:30 PM	106	110	116	113	179	125			
11:45 PM	99	93	79	86	171	106			
Day Total	18783	19298	18968	19477	20638	19430			
% Weekday Average	96.7%	99.3%	97.6%	100.2%	106.2%				
% Week Average									
AM Peak Volume	8:00 AM 250	8:00 AM 291	8:00 AM 269	8:00 AM 258	8:00 AM 293	8:00 AM 272			
PM Peak Volume	4:15 PM 452	4:15 PM 476	5:00 PM 455	5:00 PM 477	6:00 PM 469	4:15 PM 452			

Comments:

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

SUMMARY - Tube Count - Volume Data (Weekend)

LOCATION: NW 186 St West of NW 87th St
SPECIFIC LOCATION: NW 186 St West of NW 87th St
CITY/STATE: Hialeah, FL

QC JOB #: 13778902
DIRECTION: EB
DATE: Apr 16 2016 - Apr 17 2016

Start Time			Sat 16-Apr-16	Sun 17-Apr-16	Average Weekend Hourly Traffic	Average Weekend Profile
12:00 AM			127	176	152	
12:15 AM			118	162	140	
12:30 AM			97	138	118	
12:45 AM			104	129	117	
1:00 AM			76	102	89	
1:15 AM			52	101	77	
1:30 AM			68	81	75	
1:45 AM			43	81	62	
2:00 AM			45	56	51	
2:15 AM			43	48	46	
2:30 AM			48	51	50	
2:45 AM			40	51	46	
3:00 AM			38	29	34	
3:15 AM			34	42	38	
3:30 AM			31	36	34	
3:45 AM			27	35	31	
4:00 AM			32	32	32	
4:15 AM			25	30	28	
4:30 AM			29	22	26	
4:45 AM			17	29	23	
5:00 AM			18	14	16	
5:15 AM			22	19	21	
5:30 AM			33	29	31	
5:45 AM			29	23	26	
Day Total						
% Weekday Average						
% Week Average						
AM Peak Volume						
PM Peak Volume						

Comments:

Report generated on 4/29/2016 12:00 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

SUMMARY - Tube Count - Volume Data (Weekend)

LOCATION: NW 186 St West of NW 87th St
SPECIFIC LOCATION: NW 186 St West of NW 87th St
CITY/STATE: Hialeah, FL

QC JOB #: 13778902
DIRECTION: EB
DATE: Apr 16 2016 - Apr 17 2016

Start Time			Sat 16-Apr-16	Sun 17-Apr-16	Average Weekend Hourly Traffic	Average Weekend Profile
6:00 AM			37	28	33	
6:15 AM			58	28	43	
6:30 AM			61	30	46	
6:45 AM			62	44	53	
7:00 AM			64	36	50	
7:15 AM			84	35	60	
7:30 AM			95	66	81	
7:45 AM			128	54	91	
8:00 AM			117	63	90	
8:15 AM			147	65	106	
8:30 AM			183	90	137	
8:45 AM			191	100	146	
9:00 AM			189	97	143	
9:15 AM			203	116	160	
9:30 AM			188	124	156	
9:45 AM			231	120	176	
10:00 AM			243	132	188	
10:15 AM			215	134	175	
10:30 AM			251	167	209	
10:45 AM			274	190	232	
11:00 AM			289	178	234	
11:15 AM			287	169	228	
11:30 AM			256	176	216	
11:45 AM			**312**	**199**	**256**	
Day Total						
% Weekday Average						
% Week Average						
AM Peak Volume						
PM Peak Volume						

Comments:

Report generated on 4/29/2016 12:00 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

SUMMARY - Tube Count - Volume Data (Weekend)

LOCATION: NW 186 St West of NW 87th St
SPECIFIC LOCATION: NW 186 St West of NW 87th St
CITY/STATE: Hialeah, FL

QC JOB #: 13778902
DIRECTION: EB
DATE: Apr 16 2016 - Apr 17 2016

Start Time			Sat 16-Apr-16	Sun 17-Apr-16	Average Weekend Hourly Traffic	Average Weekend Profile
12:00 PM			332	206	269	
12:15 PM			309	237	273	
12:30 PM			322	223	273	
12:45 PM			317	246	282	
1:00 PM			316	267	292	
1:15 PM			324	256	290	
1:30 PM			326	321	324	
1:45 PM			333	332	333	
2:00 PM			345	300	323	
2:15 PM			321	320	321	
2:30 PM			300	309	305	
2:45 PM			327	270	299	
3:00 PM			315	267	291	
3:15 PM			311	292	302	
3:30 PM			325	**338**	332	
3:45 PM			348	306	327	
4:00 PM			345	291	318	
4:15 PM			365	293	329	
4:30 PM			352	313	333	
4:45 PM			351	301	326	
5:00 PM			341	294	318	
5:15 PM			336	324	330	
5:30 PM			345	263	304	
5:45 PM			**367**	314	**341**	
Day Total						
% Weekday Average						
% Week Average						
AM Peak Volume						
PM Peak Volume						

Comments:

Report generated on 4/29/2016 12:00 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

SUMMARY - Tube Count - Volume Data (Weekend)

LOCATION: NW 186 St West of NW 87th St
SPECIFIC LOCATION: NW 186 St West of NW 87th St
CITY/STATE: Hialeah, FL

QC JOB #: 13778902
DIRECTION: EB
DATE: Apr 16 2016 - Apr 17 2016

Start Time			Sat 16-Apr-16	Sun 17-Apr-16	Average Weekend Hourly Traffic	Average Weekend Profile
6:00 PM			331	289	310	
6:15 PM			313	329	321	
6:30 PM			341	305	323	
6:45 PM			303	302	303	
7:00 PM			283	284	284	
7:15 PM			323	289	306	
7:30 PM			342	325	334	
7:45 PM			289	279	284	
8:00 PM			268	277	273	
8:15 PM			308	252	280	
8:30 PM			273	281	277	
8:45 PM			257	286	272	
9:00 PM			242	241	242	
9:15 PM			253	244	249	
9:30 PM			220	229	225	
9:45 PM			237	223	230	
10:00 PM			217	181	199	
10:15 PM			204	180	192	
10:30 PM			244	177	211	
10:45 PM			234	119	177	
11:00 PM			220	121	171	
11:15 PM			190	112	151	
11:30 PM			173	121	147	
11:45 PM			172	93	133	
Day Total			19571	16379	18001	
% Weekday Average						
% Week Average			108.7%	91.0%		
AM Peak Volume			11:45 AM 312	11:45 AM 199	11:45 AM 256	
PM Peak Volume			5:45 PM 367	3:30 PM 338	5:45 PM 341	

Comments:

Report generated on 4/29/2016 12:00 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Type of report: Tube Count - Volume Data

SUMMARY - Tube Count - Volume Data (Week)

LOCATION: NW 186 St West of NW 87th St
SPECIFIC LOCATION: NW 186 St West of NW 87th St
CITY/STATE: Hialeah, FL

QC JOB #: 13778902
DIRECTION: EB
DATE: Apr 16 2016 - Apr 22 2016

Start Time	Mon 18-Apr-16	Tue 19-Apr-16	Wed 20-Apr-16	Thu 21-Apr-16	Fri 22-Apr-16	Average Weekday Hourly Traffic	Sat 16-Apr-16	Sun 17-Apr-16	Average Week Hourly Traffic	Average Week Profile
12:00 AM	82	62	93	86	81	81	127	176	101	
12:15 AM	86	67	64	77	65	72	118	162	91	
12:30 AM	59	64	65	65	72	65	97	138	80	
12:45 AM	35	43	50	33	45	41	104	129	63	
1:00 AM	38	41	38	43	51	42	76	102	56	
1:15 AM	24	22	39	27	42	31	52	101	44	
1:30 AM	30	29	25	30	43	31	68	81	44	
1:45 AM	25	24	17	16	34	23	43	81	34	
2:00 AM	19	14	22	16	22	19	45	56	28	
2:15 AM	16	18	18	25	27	21	43	48	28	
2:30 AM	11	18	18	20	18	17	48	51	26	
2:45 AM	16	14	17	16	17	16	40	51	24	
3:00 AM	6	16	17	15	24	16	38	29	21	
3:15 AM	10	13	12	19	19	15	34	42	21	
3:30 AM	10	8	7	10	12	9	31	36	16	
3:45 AM	7	15	10	13	12	11	27	35	17	
4:00 AM	5	6	11	12	8	8	32	32	15	
4:15 AM	13	15	9	10	12	12	25	30	16	
4:30 AM	11	10	9	16	18	13	29	22	16	
4:45 AM	24	11	10	21	13	16	17	29	18	
5:00 AM	14	19	19	19	18	18	18	14	17	
5:15 AM	18	24	26	19	27	23	22	19	22	
5:30 AM	27	40	31	29	24	30	33	29	30	
5:45 AM	53	41	52	57	64	53	29	23	46	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										

Comments:

Report generated on 4/29/2016 12:00 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Type of report: Tube Count - Volume Data

SUMMARY - Tube Count - Volume Data (Week)

LOCATION: NW 186 St West of NW 87th St
SPECIFIC LOCATION: NW 186 St West of NW 87th St
CITY/STATE: Hialeah, FL

QC JOB #: 13778902
DIRECTION: EB
DATE: Apr 16 2016 - Apr 22 2016

Start Time	Mon 18-Apr-16	Tue 19-Apr-16	Wed 20-Apr-16	Thu 21-Apr-16	Fri 22-Apr-16	Average Weekday Hourly Traffic	Sat 16-Apr-16	Sun 17-Apr-16	Average Week Hourly Traffic	Average Week Profile
6:00 AM	61	70	56	69	61	63	37	28	55	
6:15 AM	93	94	87	103	86	93	58	28	78	
6:30 AM	116	118	118	102	113	113	61	30	94	
6:45 AM	173	186	197	148	157	172	62	44	138	
7:00 AM	203	207	170	192	190	192	64	36	152	
7:15 AM	225	205	205	223	197	211	84	35	168	
7:30 AM	198	157	202	199	202	192	95	66	160	
7:45 AM	223	233	221	220	247	229	128	54	189	
8:00 AM	**250**	**291**	**269**	**258**	**293**	**272**	117	63	220	
8:15 AM	245	282	256	245	226	251	147	65	209	
8:30 AM	202	203	213	217	229	213	183	90	191	
8:45 AM	241	204	220	240	198	221	191	100	199	
9:00 AM	187	231	245	225	224	222	189	97	200	
9:15 AM	212	197	167	179	205	192	203	116	183	
9:30 AM	198	187	193	200	185	193	188	124	182	
9:45 AM	183	215	172	162	197	186	231	120	183	
10:00 AM	174	175	182	191	180	180	243	132	182	
10:15 AM	184	180	164	166	181	175	215	134	175	
10:30 AM	157	190	177	178	194	179	251	167	188	
10:45 AM	158	161	170	185	198	174	274	190	191	
11:00 AM	198	185	163	224	221	198	289	178	208	
11:15 AM	186	181	180	205	200	190	287	169	201	
11:30 AM	223	197	185	199	208	202	256	176	206	
11:45 AM	196	188	227	220	236	213	**312**	**199**	**225**	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										

Comments:

Report generated on 4/29/2016 12:00 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Type of report: Tube Count - Volume Data

SUMMARY - Tube Count - Volume Data (Week)

LOCATION: NW 186 St West of NW 87th St
SPECIFIC LOCATION: NW 186 St West of NW 87th St
CITY/STATE: Hialeah, FL

QC JOB #: 13778902
DIRECTION: EB
DATE: Apr 16 2016 - Apr 22 2016

Start Time	Mon 18-Apr-16	Tue 19-Apr-16	Wed 20-Apr-16	Thu 21-Apr-16	Fri 22-Apr-16	Average Weekday Hourly Traffic	Sat 16-Apr-16	Sun 17-Apr-16	Average Week Hourly Traffic	Average Week Profile
12:00 PM	207	208	199	239	243	219	332	206	233	
12:15 PM	258	233	202	244	252	238	309	237	248	
12:30 PM	211	197	242	233	265	230	322	223	242	
12:45 PM	252	217	227	244	273	243	317	246	254	
1:00 PM	213	245	214	247	241	232	316	267	249	
1:15 PM	222	260	260	240	300	256	324	256	266	
1:30 PM	232	246	271	247	253	250	326	321	271	
1:45 PM	257	280	310	274	263	277	333	332	293	
2:00 PM	272	252	284	280	288	275	345	300	289	
2:15 PM	288	305	294	323	326	307	321	320	311	
2:30 PM	349	331	289	368	327	333	300	309	325	
2:45 PM	362	357	346	365	325	351	327	270	336	
3:00 PM	339	338	329	348	375	346	315	267	330	
3:15 PM	354	352	376	402	366	370	311	292	350	
3:30 PM	382	354	351	358	418	373	325	**338**	361	
3:45 PM	395	388	401	395	435	403	348	306	381	
4:00 PM	382	384	398	409	393	393	345	291	372	
4:15 PM	**452**	**476**	454	429	451	**452**	365	293	**417**	
4:30 PM	417	437	440	409	444	429	352	313	402	
4:45 PM	403	432	382	433	440	418	351	301	392	
5:00 PM	407	411	**455**	**477**	451	440	341	294	405	
5:15 PM	185	256	220	268	382	262	336	324	282	
5:30 PM	237	282	196	298	300	263	345	263	274	
5:45 PM	296	249	210	354	307	283	**367**	314	300	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										

Comments:

Report generated on 4/29/2016 12:00 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Type of report: Tube Count - Volume Data

SUMMARY - Tube Count - Volume Data (Week)

LOCATION: NW 186 St West of NW 87th St
SPECIFIC LOCATION: NW 186 St West of NW 87th St
CITY/STATE: Hialeah, FL

QC JOB #: 13778902
DIRECTION: EB
DATE: Apr 16 2016 - Apr 22 2016

Start Time	Mon 18-Apr-16	Tue 19-Apr-16	Wed 20-Apr-16	Thu 21-Apr-16	Fri 22-Apr-16	Average Weekday Hourly Traffic	Sat 16-Apr-16	Sun 17-Apr-16	Average Week Hourly Traffic	Average Week Profile
6:00 PM	400	274	279	307	**469**	346	331	289	336	
6:15 PM	452	353	265	233	352	331	313	329	328	
6:30 PM	435	422	404	248	427	387	341	305	369	
6:45 PM	348	417	443	303	405	383	303	302	360	
7:00 PM	380	410	440	420	407	411	283	284	375	
7:15 PM	373	385	375	425	400	392	323	289	367	
7:30 PM	340	366	368	390	350	363	342	325	354	
7:45 PM	328	365	331	346	361	346	289	279	328	
8:00 PM	281	348	327	327	294	315	268	277	303	
8:15 PM	298	305	316	322	290	306	308	252	299	
8:30 PM	273	329	312	335	310	312	273	281	302	
8:45 PM	275	315	295	322	237	289	257	286	284	
9:00 PM	232	303	272	290	315	282	242	241	271	
9:15 PM	250	290	330	315	280	293	253	244	280	
9:30 PM	240	243	257	283	238	252	220	229	244	
9:45 PM	226	264	219	248	234	238	237	223	236	
10:00 PM	198	245	258	248	228	235	217	181	225	
10:15 PM	191	230	251	184	275	226	204	180	216	
10:30 PM	186	190	187	204	234	200	244	177	203	
10:45 PM	154	134	165	127	213	159	234	119	164	
11:00 PM	110	117	109	153	238	145	220	121	153	
11:15 PM	111	129	102	120	217	136	190	112	140	
11:30 PM	106	110	116	113	179	125	173	121	131	
11:45 PM	99	93	79	86	171	106	172	93	113	
Day Total	18783	19298	18968	19477	20638	19430	19571	16379	19015	
% Weekday Average	96.7%	99.3%	97.6%	100.2%	106.2%					
% Week Average	98.8%	101.5%	99.8%	102.4%	108.5%	102.2%	102.9%	86.1%		
AM Peak Volume	8:00 AM 250	8:00 AM 291	8:00 AM 269	8:00 AM 258	8:00 AM 293	8:00 AM 272	11:45 AM 312	11:45 AM 199	11:45 AM 225	
PM Peak Volume	4:15 PM 452	4:15 PM 476	5:00 PM 455	5:00 PM 477	6:00 PM 469	4:15 PM 452	5:45 PM 367	3:30 PM 338	4:15 PM 417	

Comments:

Report generated on 4/29/2016 12:00 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

NW 186 St West of NW 87th St - WB Volume

Type of report: Tube Count - Volume Data

SUMMARY - Tube Count - Volume Data (Weekday)

LOCATION: NW 186 St West of NW 87th St
SPECIFIC LOCATION: NW 186 St West of NW 87th St
CITY/STATE: Hialeah, FL

QC JOB #: 13778902
DIRECTION: WB
DATE: Apr 18 2016 - Apr 22 2016

Start Time	Mon 18-Apr-16	Tue 19-Apr-16	Wed 20-Apr-16	Thu 21-Apr-16	Fri 22-Apr-16	Average Weekday Hourly Traffic			Average Weekday Profile
12:00 AM	34	30	39	48	55	41			
12:15 AM	37	33	27	38	36	34			
12:30 AM	35	37	33	36	39	36			
12:45 AM	17	17	19	28	20	20			
1:00 AM	20	20	23	34	27	25			
1:15 AM	15	19	24	24	23	21			
1:30 AM	20	16	15	23	27	20			
1:45 AM	16	12	13	10	23	15			
2:00 AM	19	20	14	16	19	18			
2:15 AM	19	16	13	18	16	16			
2:30 AM	10	11	15	20	9	13			
2:45 AM	10	2	6	13	12	9			
3:00 AM	6	10	6	18	15	11			
3:15 AM	18	19	17	15	19	18			
3:30 AM	20	20	22	23	20	21			
3:45 AM	26	36	29	20	28	28			
4:00 AM	22	17	19	27	24	22			
4:15 AM	30	28	22	28	30	28			
4:30 AM	48	52	61	55	63	56			
4:45 AM	70	60	65	53	65	63			
5:00 AM	44	49	56	59	52	52			
5:15 AM	105	99	102	107	83	99			
5:30 AM	136	166	161	165	157	157			
5:45 AM	141	135	154	173	143	149			
Day Total									
% Weekday Average									
% Week Average									
AM Peak Volume									
PM Peak Volume									

Comments:

Report generated on 4/29/2016 12:00 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Type of report: Tube Count - Volume Data

SUMMARY - Tube Count - Volume Data (Weekday)

LOCATION: NW 186 St West of NW 87th St
SPECIFIC LOCATION: NW 186 St West of NW 87th St
CITY/STATE: Hialeah, FL

QC JOB #: 13778902
DIRECTION: WB
DATE: Apr 18 2016 - Apr 22 2016

Start Time	Mon 18-Apr-16	Tue 19-Apr-16	Wed 20-Apr-16	Thu 21-Apr-16	Fri 22-Apr-16	Average Weekday Hourly Traffic			Average Weekday Profile
6:00 AM	190	204	197	204	197	198			
6:15 AM	321	338	324	338	336	331			
6:30 AM	466	449	446	466	440	453			
6:45 AM	505	506	535	511	520	515			
7:00 AM	567	521	543	567	497	539			
7:15 AM	**570**	521	467	**576**	525	532			
7:30 AM	570	516	547	542	539	543			
7:45 AM	543	**585**	**577**	524	**570**	**560**			
8:00 AM	513	556	573	535	476	531			
8:15 AM	485	509	525	503	521	509			
8:30 AM	513	505	509	515	499	508			
8:45 AM	415	470	439	442	389	431			
9:00 AM	341	371	377	326	347	352			
9:15 AM	305	334	326	353	333	330			
9:30 AM	300	309	286	313	315	305			
9:45 AM	301	271	233	296	290	278			
10:00 AM	278	258	262	254	281	267			
10:15 AM	245	237	240	244	264	246			
10:30 AM	262	238	247	263	257	253			
10:45 AM	224	238	239	223	263	237			
11:00 AM	195	198	139	214	239	197			
11:15 AM	200	189	176	241	231	207			
11:30 AM	196	182	156	229	241	201			
11:45 AM	181	190	201	223	209	201			
Day Total									
% Weekday Average									
% Week Average									
AM Peak Volume									
PM Peak Volume									

Comments:

Report generated on 4/29/2016 12:00 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Type of report: Tube Count - Volume Data

SUMMARY - Tube Count - Volume Data (Weekday)

LOCATION: NW 186 St West of NW 87th St
SPECIFIC LOCATION: NW 186 St West of NW 87th St
CITY/STATE: Hialeah, FL

QC JOB #: 13778902
DIRECTION: WB
DATE: Apr 18 2016 - Apr 22 2016

Start Time	Mon 18-Apr-16	Tue 19-Apr-16	Wed 20-Apr-16	Thu 21-Apr-16	Fri 22-Apr-16	Average Weekday Hourly Traffic			Average Weekday Profile
12:00 PM	207	203	190	211	224	207			
12:15 PM	201	197	224	213	220	211			
12:30 PM	222	215	176	226	240	216			
12:45 PM	210	185	220	209	217	208			
1:00 PM	227	241	214	230	237	230			
1:15 PM	214	195	197	227	225	212			
1:30 PM	218	240	206	227	244	227			
1:45 PM	226	219	233	228	220	225			
2:00 PM	226	248	218	229	229	230			
2:15 PM	233	250	227	235	228	235			
2:30 PM	224	239	270	255	254	248			
2:45 PM	250	222	237	238	297	249			
3:00 PM	259	222	245	234	242	240			
3:15 PM	251	275	226	259	266	255			
3:30 PM	258	264	239	**277**	301	268			
3:45 PM	272	260	263	251	268	263			
4:00 PM	**285**	**276**	**275**	263	304	**281**			
4:15 PM	235	266	238	249	282	254			
4:30 PM	237	240	239	221	245	236			
4:45 PM	177	220	157	144	232	186			
5:00 PM	177	162	211	181	220	190			
5:15 PM	64	94	87	90	192	105			
5:30 PM	70	108	69	134	123	101			
5:45 PM	82	77	60	132	129	96			
Day Total									
% Weekday Average									
% Week Average									
AM Peak Volume									
PM Peak Volume									

Comments:

Report generated on 4/29/2016 12:00 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Type of report: Tube Count - Volume Data

SUMMARY - Tube Count - Volume Data (Weekday)

LOCATION: NW 186 St West of NW 87th St
SPECIFIC LOCATION: NW 186 St West of NW 87th St
CITY/STATE: Hialeah, FL

QC JOB #: 13778902
DIRECTION: WB
DATE: Apr 18 2016 - Apr 22 2016

Start Time	Mon 18-Apr-16	Tue 19-Apr-16	Wed 20-Apr-16	Thu 21-Apr-16	Fri 22-Apr-16	Average Weekday Hourly Traffic			Average Weekday Profile
6:00 PM	139	96	99	111	240	137			
6:15 PM	234	135	62	100	164	139			
6:30 PM	205	201	201	83	233	185			
6:45 PM	129	229	237	111	218	185			
7:00 PM	190	211	199	269	306	235			
7:15 PM	219	226	235	204	**340**	245			
7:30 PM	203	202	217	205	264	218			
7:45 PM	199	174	205	220	250	210			
8:00 PM	179	187	178	206	240	198			
8:15 PM	171	181	183	206	224	193			
8:30 PM	172	151	172	172	190	171			
8:45 PM	155	156	145	149	177	156			
9:00 PM	129	157	131	145	160	144			
9:15 PM	139	158	144	152	151	149			
9:30 PM	120	140	140	174	130	141			
9:45 PM	116	131	128	140	128	129			
10:00 PM	111	111	138	132	137	126			
10:15 PM	91	91	105	108	137	106			
10:30 PM	82	95	123	113	130	109			
10:45 PM	59	99	87	97	138	96			
11:00 PM	71	68	83	64	96	76			
11:15 PM	53	55	70	71	125	75			
11:30 PM	40	51	67	59	100	63			
11:45 PM	34	45	56	64	79	56			
Day Total	17869	18087	17845	18471	19780	18411			
% Weekday Average	97.1%	98.2%	96.9%	100.3%	107.4%				
% Week Average									
AM Peak Volume	7:15 AM 570	7:45 AM 585	7:45 AM 577	7:15 AM 576	7:45 AM 570	7:45 AM 560			
PM Peak Volume	4:00 PM 285	4:00 PM 276	4:00 PM 275	3:30 PM 277	7:15 PM 340	4:00 PM 281			

Comments:

Report generated on 4/29/2016 12:00 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Type of report: Tube Count - Volume Data

SUMMARY - Tube Count - Volume Data (Weekend)

LOCATION: NW 186 St West of NW 87th St
SPECIFIC LOCATION: NW 186 St West of NW 87th St
CITY/STATE: Hialeah, FL

QC JOB #: 13778902
DIRECTION: WB
DATE: Apr 16 2016 - Apr 17 2016

Start Time			Sat 16-Apr-16	Sun 17-Apr-16	Average Weekend Hourly Traffic	Average Weekend Profile
12:00 AM			72	96	84	
12:15 AM			59	87	73	
12:30 AM			74	80	77	
12:45 AM			56	80	68	
1:00 AM			61	56	59	
1:15 AM			40	41	41	
1:30 AM			46	39	43	
1:45 AM			28	39	34	
2:00 AM			29	37	33	
2:15 AM			29	42	36	
2:30 AM			25	24	25	
2:45 AM			28	34	31	
3:00 AM			26	23	25	
3:15 AM			19	30	25	
3:30 AM			27	30	29	
3:45 AM			21	12	17	
4:00 AM			28	21	25	
4:15 AM			24	18	21	
4:30 AM			31	20	26	
4:45 AM			36	19	28	
5:00 AM			25	17	21	
5:15 AM			55	25	40	
5:30 AM			82	43	63	
5:45 AM			54	44	49	
Day Total						
% Weekday Average						
% Week Average						
AM Peak Volume						
PM Peak Volume						

Comments:

Report generated on 4/29/2016 12:00 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Type of report: Tube Count - Volume Data

SUMMARY - Tube Count - Volume Data (Weekend)

LOCATION: NW 186 St West of NW 87th St
SPECIFIC LOCATION: NW 186 St West of NW 87th St
CITY/STATE: Hialeah, FL

QC JOB #: 13778902
DIRECTION: WB
DATE: Apr 16 2016 - Apr 17 2016

Start Time			Sat 16-Apr-16	Sun 17-Apr-16	Average Weekend Hourly Traffic	Average Weekend Profile
6:00 AM			64	46	55	
6:15 AM			117	60	89	
6:30 AM			143	59	101	
6:45 AM			163	64	114	
7:00 AM			139	69	104	
7:15 AM			180	81	131	
7:30 AM			213	104	159	
7:45 AM			224	111	168	
8:00 AM			249	103	176	
8:15 AM			236	125	181	
8:30 AM			317	145	231	
8:45 AM			293	177	235	
9:00 AM			281	145	213	
9:15 AM			297	167	232	
9:30 AM			**326**	214	270	
9:45 AM			314	212	263	
10:00 AM			290	229	260	
10:15 AM			287	275	281	
10:30 AM			320	273	297	
10:45 AM			312	245	279	
11:00 AM			314	263	289	
11:15 AM			322	**300**	**311**	
11:30 AM			300	281	291	
11:45 AM			302	284	293	
Day Total						
% Weekday Average						
% Week Average						
AM Peak Volume						
PM Peak Volume						

Comments:

Report generated on 4/29/2016 12:00 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Type of report: Tube Count - Volume Data

SUMMARY - Tube Count - Volume Data (Weekend)

LOCATION: NW 186 St West of NW 87th St
SPECIFIC LOCATION: NW 186 St West of NW 87th St
CITY/STATE: Hialeah, FL

QC JOB #: 13778902
DIRECTION: WB
DATE: Apr 16 2016 - Apr 17 2016

Start Time			Sat 16-Apr-16	Sun 17-Apr-16	Average Weekend Hourly Traffic	Average Weekend Profile
12:00 PM			277	269	273	
12:15 PM			274	293	284	
12:30 PM			305	256	281	
12:45 PM			289	**300**	295	
1:00 PM			270	288	279	
1:15 PM			**324**	280	**302**	
1:30 PM			288	224	256	
1:45 PM			298	275	287	
2:00 PM			254	267	261	
2:15 PM			245	295	270	
2:30 PM			280	286	283	
2:45 PM			276	251	264	
3:00 PM			276	224	250	
3:15 PM			265	243	254	
3:30 PM			240	248	244	
3:45 PM			269	254	262	
4:00 PM			244	255	250	
4:15 PM			256	245	251	
4:30 PM			256	228	242	
4:45 PM			272	259	266	
5:00 PM			271	231	251	
5:15 PM			226	222	224	
5:30 PM			266	220	243	
5:45 PM			249	204	227	
Day Total						
% Weekday Average						
% Week Average						
AM Peak Volume						
PM Peak Volume						

Comments:

Report generated on 4/29/2016 12:00 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Type of report: Tube Count - Volume Data

SUMMARY - Tube Count - Volume Data (Weekend)

LOCATION: NW 186 St West of NW 87th St
SPECIFIC LOCATION: NW 186 St West of NW 87th St
CITY/STATE: Hialeah, FL

QC JOB #: 13778902
DIRECTION: WB
DATE: Apr 16 2016 - Apr 17 2016

Start Time			Sat 16-Apr-16	Sun 17-Apr-16	Average Weekend Hourly Traffic	Average Weekend Profile
6:00 PM			259	202	231	
6:15 PM			277	217	247	
6:30 PM			263	201	232	
6:45 PM			268	198	233	
7:00 PM			250	156	203	
7:15 PM			258	188	223	
7:30 PM			223	179	201	
7:45 PM			255	180	218	
8:00 PM			229	194	212	
8:15 PM			232	224	228	
8:30 PM			177	204	191	
8:45 PM			187	174	181	
9:00 PM			169	187	178	
9:15 PM			181	172	177	
9:30 PM			187	176	182	
9:45 PM			142	130	136	
10:00 PM			144	146	145	
10:15 PM			163	103	133	
10:30 PM			135	107	121	
10:45 PM			133	103	118	
11:00 PM			128	70	99	
11:15 PM			109	58	84	
11:30 PM			108	56	82	
11:45 PM			111	44	78	
Day Total			18036	14775	16428	
% Weekday Average						
% Week Average			109.8%	89.9%		
AM Peak Volume			9:30 AM 326	11:15 AM 300	11:15 AM 311	
PM Peak Volume			1:15 PM 324	12:45 PM 300	1:15 PM 302	

Comments:

Report generated on 4/29/2016 12:00 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Type of report: Tube Count - Volume Data

SUMMARY - Tube Count - Volume Data (Week)

LOCATION: NW 186 St West of NW 87th St
SPECIFIC LOCATION: NW 186 St West of NW 87th St
CITY/STATE: Hialeah, FL

QC JOB #: 13778902
DIRECTION: WB
DATE: Apr 16 2016 - Apr 22 2016

Start Time	Mon 18-Apr-16	Tue 19-Apr-16	Wed 20-Apr-16	Thu 21-Apr-16	Fri 22-Apr-16	Average Weekday Hourly Traffic	Sat 16-Apr-16	Sun 17-Apr-16	Average Week Hourly Traffic	Average Week Profile
12:00 AM	34	30	39	48	55	41	72	96	53	
12:15 AM	37	33	27	38	36	34	59	87	45	
12:30 AM	35	37	33	36	39	36	74	80	48	
12:45 AM	17	17	19	28	20	20	56	80	34	
1:00 AM	20	20	23	34	27	25	61	56	34	
1:15 AM	15	19	24	24	23	21	40	41	27	
1:30 AM	20	16	15	23	27	20	46	39	27	
1:45 AM	16	12	13	10	23	15	28	39	20	
2:00 AM	19	20	14	16	19	18	29	37	22	
2:15 AM	19	16	13	18	16	16	29	42	22	
2:30 AM	10	11	15	20	9	13	25	24	16	
2:45 AM	10	2	6	13	12	9	28	34	15	
3:00 AM	6	10	6	18	15	11	26	23	15	
3:15 AM	18	19	17	15	19	18	19	30	20	
3:30 AM	20	20	22	23	20	21	27	30	23	
3:45 AM	26	36	29	20	28	28	21	12	25	
4:00 AM	22	17	19	27	24	22	28	21	23	
4:15 AM	30	28	22	28	30	28	24	18	26	
4:30 AM	48	52	61	55	63	56	31	20	47	
4:45 AM	70	60	65	53	65	63	36	19	53	
5:00 AM	44	49	56	59	52	52	25	17	43	
5:15 AM	105	99	102	107	83	99	55	25	82	
5:30 AM	136	166	161	165	157	157	82	43	130	
5:45 AM	141	135	154	173	143	149	54	44	121	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										

Comments:

Report generated on 4/29/2016 12:00 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Type of report: Tube Count - Volume Data

SUMMARY - Tube Count - Volume Data (Week)

LOCATION: NW 186 St West of NW 87th St
SPECIFIC LOCATION: NW 186 St West of NW 87th St
CITY/STATE: Hialeah, FL

QC JOB #: 13778902
DIRECTION: WB
DATE: Apr 16 2016 - Apr 22 2016

Start Time	Mon 18-Apr-16	Tue 19-Apr-16	Wed 20-Apr-16	Thu 21-Apr-16	Fri 22-Apr-16	Average Weekday Hourly Traffic	Sat 16-Apr-16	Sun 17-Apr-16	Average Week Hourly Traffic	Average Week Profile
6:00 AM	190	204	197	204	197	198	64	46	157	
6:15 AM	321	338	324	338	336	331	117	60	262	
6:30 AM	466	449	446	466	440	453	143	59	353	
6:45 AM	505	506	535	511	520	515	163	64	401	
7:00 AM	567	521	543	567	497	539	139	69	415	
7:15 AM	**570**	521	467	**576**	525	532	180	81	417	
7:30 AM	570	516	547	542	539	543	213	104	433	
7:45 AM	543	**585**	**577**	524	**570**	**560**	224	111	**448**	
8:00 AM	513	556	573	535	476	531	249	103	429	
8:15 AM	485	509	525	503	521	509	236	125	415	
8:30 AM	513	505	509	515	499	508	317	145	429	
8:45 AM	415	470	439	442	389	431	293	177	375	
9:00 AM	341	371	377	326	347	352	281	145	313	
9:15 AM	305	334	326	353	333	330	297	167	302	
9:30 AM	300	309	286	313	315	305	**326**	214	295	
9:45 AM	301	271	233	296	290	278	314	212	274	
10:00 AM	278	258	262	254	281	267	290	229	265	
10:15 AM	245	237	240	244	264	246	287	275	256	
10:30 AM	262	238	247	263	257	253	320	273	266	
10:45 AM	224	238	239	223	263	237	312	245	249	
11:00 AM	195	198	139	214	239	197	314	263	223	
11:15 AM	200	189	176	241	231	207	322	**300**	237	
11:30 AM	196	182	156	229	241	201	300	281	226	
11:45 AM	181	190	201	223	209	201	302	284	227	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										

Comments:

Report generated on 4/29/2016 12:00 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Type of report: Tube Count - Volume Data

SUMMARY - Tube Count - Volume Data (Week)

LOCATION: NW 186 St West of NW 87th St
SPECIFIC LOCATION: NW 186 St West of NW 87th St
CITY/STATE: Hialeah, FL

QC JOB #: 13778902
DIRECTION: WB
DATE: Apr 16 2016 - Apr 22 2016

Start Time	Mon 18-Apr-16	Tue 19-Apr-16	Wed 20-Apr-16	Thu 21-Apr-16	Fri 22-Apr-16	Average Weekday Hourly Traffic	Sat 16-Apr-16	Sun 17-Apr-16	Average Week Hourly Traffic	Average Week Profile
12:00 PM	207	203	190	211	224	207	277	269	226	
12:15 PM	201	197	224	213	220	211	274	293	232	
12:30 PM	222	215	176	226	240	216	305	256	234	
12:45 PM	210	185	220	209	217	208	289	**300**	233	
1:00 PM	227	241	214	230	237	230	270	288	244	
1:15 PM	214	195	197	227	225	212	**324**	280	237	
1:30 PM	218	240	206	227	244	227	288	224	235	
1:45 PM	226	219	233	228	220	225	298	275	243	
2:00 PM	226	248	218	229	229	230	254	267	239	
2:15 PM	233	250	227	235	228	235	245	295	245	
2:30 PM	224	239	270	255	254	248	280	286	258	
2:45 PM	250	222	237	238	297	249	276	251	253	
3:00 PM	259	222	245	234	242	240	276	224	243	
3:15 PM	251	275	226	259	266	255	265	243	255	
3:30 PM	258	264	239	**277**	301	268	240	248	261	
3:45 PM	272	260	263	251	268	263	269	254	262	
4:00 PM	**285**	**276**	**275**	263	304	**281**	244	255	**272**	
4:15 PM	235	266	238	249	282	254	256	245	253	
4:30 PM	237	240	239	221	245	236	256	228	238	
4:45 PM	177	220	157	144	232	186	272	259	209	
5:00 PM	177	162	211	181	220	190	271	231	208	
5:15 PM	64	94	87	90	192	105	226	222	139	
5:30 PM	70	108	69	134	123	101	266	220	141	
5:45 PM	82	77	60	132	129	96	249	204	133	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										

Comments:

Report generated on 4/29/2016 12:00 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Type of report: Tube Count - Volume Data

SUMMARY - Tube Count - Volume Data (Week)

LOCATION: NW 186 St West of NW 87th St
SPECIFIC LOCATION: NW 186 St West of NW 87th St
CITY/STATE: Hialeah, FL

QC JOB #: 13778902
DIRECTION: WB
DATE: Apr 16 2016 - Apr 22 2016

Start Time	Mon 18-Apr-16	Tue 19-Apr-16	Wed 20-Apr-16	Thu 21-Apr-16	Fri 22-Apr-16	Average Weekday Hourly Traffic	Sat 16-Apr-16	Sun 17-Apr-16	Average Week Hourly Traffic	Average Week Profile
6:00 PM	139	96	99	111	240	137	259	202	164	
6:15 PM	234	135	62	100	164	139	277	217	170	
6:30 PM	205	201	201	83	233	185	263	201	198	
6:45 PM	129	229	237	111	218	185	268	198	199	
7:00 PM	190	211	199	269	306	235	250	156	226	
7:15 PM	219	226	235	204	**340**	245	258	188	239	
7:30 PM	203	202	217	205	264	218	223	179	213	
7:45 PM	199	174	205	220	250	210	255	180	212	
8:00 PM	179	187	178	206	240	198	229	194	202	
8:15 PM	171	181	183	206	224	193	232	224	203	
8:30 PM	172	151	172	172	190	171	177	204	177	
8:45 PM	155	156	145	149	177	156	187	174	163	
9:00 PM	129	157	131	145	160	144	169	187	154	
9:15 PM	139	158	144	152	151	149	181	172	157	
9:30 PM	120	140	140	174	130	141	187	176	152	
9:45 PM	116	131	128	140	128	129	142	130	131	
10:00 PM	111	111	138	132	137	126	144	146	131	
10:15 PM	91	91	105	108	137	106	163	103	114	
10:30 PM	82	95	123	113	130	109	135	107	112	
10:45 PM	59	99	87	97	138	96	133	103	102	
11:00 PM	71	68	83	64	96	76	128	70	83	
11:15 PM	53	55	70	71	125	75	109	58	77	
11:30 PM	40	51	67	59	100	63	108	56	69	
11:45 PM	34	45	56	64	79	56	111	44	62	
Day Total	17869	18087	17845	18471	19780	18411	18036	14775	17841	
% Weekday Average	97.1%	98.2%	96.9%	100.3%	107.4%					
% Week Average	100.2%	101.4%	100.0%	103.5%	110.9%	103.2%	101.1%	82.8%		
AM Peak Volume	7:15 AM 570	7:45 AM 585	7:45 AM 577	7:15 AM 576	7:45 AM 570	7:45 AM 560	9:30 AM 326	11:15 AM 300	7:45 AM 448	
PM Peak Volume	4:00 PM 285	4:00 PM 276	4:00 PM 275	3:30 PM 277	7:15 PM 340	4:00 PM 281	1:15 PM 324	12:45 PM 300	4:00 PM 272	

Comments:

Report generated on 4/29/2016 12:00 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

APPENDIX II-D:
ADM Link Mitigation Summary

APPENDIX II-D1:
Short Term (Year 2020) Study Area Roadway Segment LOS Analysis - ADM PM Mitigation Summary

Short Term (Year 2020) Study Area Roadway Segment LOS Analysis - ADM PM Mitigation Summary

								2020 Concurrency										2020 CDMP/Zoning									
								Link Anlaysis Results				Add 2L?		Add 4L?		Final Mitigated		Link Anlaysis Results				Add 2L?		Add 4L?		Final Mitigated	
STA ID	Roadway	From	To	Exist NL	2020 NL	Adopted LOS	2020 Service Volume	Study Area Link?	Pass/ Fail	Backlog Facility	Fail Pk Dir Total Trips	Improv SV	SV Ck	Improv SV	SV Ck	# lanes BG Needs	# lanes Total Needs	Study Area Link?	Pass/ Fail	Backlog Facility	Fail Pk Dir Total Trips	Improv SV	SV Ck	Improv SV	SV Ck	# lanes BG Needs	# lanes Total Needs
972250	Florida's Turnpike/ HEFT/SR 821	SW 8th St	SR 836	`	6+4	D	9160		Pass										Pass								
972526		SR 836	NW 12th Street	8	6+4	D	9160		Pass										Pass								
972230		NW 12th Street	NW 41th Street	8	6+4	D	9160		Pass										Pass								
972269		NW 41th Street	NW 74th Street	8	6+4	D	9160		Pass										Pass								
972268		NW 74th Street	NW 106th Street	8	6+4	D	9160		Pass										Pass								
972272		NW 106th Street	US 27/ Okeechobee Rd	6	6+4	D	9160		Pass										Pass								
972248		US 27/ Okeechobee Rd	NW 170th St	6	6+4	D	9160	Y	Pass									Y	Pass								
972248		NW 170th St	Interstate 75	6	6+4	D	9160	Y	Pass									Y	Pass								
972285		Interstate 75	CR 823/Red Rd	4	6+2	D	7330	Y	Pass									Y	Pass								
971996		CR 823/Red Rd	CR 817/NW 27th Ave	4	6+2	D	7330	Y	Pass									Y	Pass								
971998		CR 817/NW 27th Ave	Florida's Turnpike/SR 91	6	6+2	D	7330		Pass										Pass								
971904	Florida's Turnpike/ SR 91	I-595	Griffin Rd	8	8	D	7320		Pass										Pass								
971902		Griffin Rd	Pines Blvd	6	6	D	5500		Fail	Y	7170	7320	Y			8	8		Fail	Y	7528	7320	N	9220	Y	10	10
971900		Pines Blvd	Florida's Turnpike/HEFT/SR 821	8	8	D	7320		Pass										Pass								
970502		Florida's Turnpike/HEFT/SR 821	NW 203rd St	8	8	D	7320		Pass										Pass								
862005	Interstate 75	I-595	Royal Palm Blvd	8	8+4	D	10980		Pass										Pass								
862004		Royal Palm Blvd	Griffin Rd	8	8+4	D	10980		Pass										Pass								
862003		Griffin Rd	Sheridan St	8	8+4	D	10980		Pass										Pass								
862002		Sheridan St	Pines Blvd	8	10+4	D	12880		Pass										Pass								
862001		Pines Blvd	Miramar Pkwy/ S 33rd St	8	10+4	D	12880		Pass										Pass								
860362		Miramar Pkwy/ S 33rd St	Florida's Turnpike	12	12+4	D	15720	Y	Pass									Y	Pass								
872503		Florida's Turnpike	Miami Gardens Dr/NW 186 St	10	10+4	D	12880	Y	Pass									Y	Pass								
872501		Miami Gardens Dr/NW 186 St	NW 178th St	8	8+4	D	10980	Y	Pass									Y	Pass								
872501		NW 178th St	NW 138th Street	8	8+4	D	10980		Pass										Pass								
872500		NW 138th Street	SR 826	8	8+4	D	10980		Pass										Pass								
872511	SR 924/Gratigny Pkwy	SR 826	NW 57th Ave (Red Road)	6	6	D	5500		Pass										Pass								
872512		NW 57th Ave (Red Road)	Douglas(Le Jeune Connector)	6	6	D	5500		Pass										Pass								
872510		Douglas(Le Jeune Connector)	NW 32nd Ave	6	6	D	5500		Pass										Pass								
n/a	NW 107th Ave	US 27/ Okeechobee Rd	NW 138th St	4	4	D	1800		Pass										Pass								
n/a		NW 138th St	NW 170th St	-	-	n/a	n/a																				
n/a	NW 102nd Ave	NW 170th St	NW 178th St	-	-	n/a	n/a																				
n/a		NW 178th St	ADM Project Access Rd	-	New 4	D	1800	Y	Pass									Y	Pass								
n/a	Miami Gardens Dr	ADM Project Access Rd	Interstate 75 Western Ramps	-	New 6	E	3624	Y	Pass									Y	Pass								
n/a		Interstate 75 Western Ramps	Interstate 75 Eastern Ramps	-	New 6	E	3624	Y	Pass									Y	Pass								
872518		Interstate 75 Eastern Ramps	NW 87th Ave	4	4	E	2400	Y	Fail	Y	3154	3624	Y			6*	6*	Y	Fail	Y	2920	3624	Y			6*	6*
872518		NW 87th Ave	NW 82nd Ave	4	4	E	2400	Y	Fail	Y	2757	3624	Y			6*	6*	Y	Fail	Y	2736	3624	Y			6*	6*
872517		NW 82nd Ave	NW 77nd Ave	4	4	E	2400	Y	Pass									Y	Pass								
872517		NW 77nd Ave	NW 67nd Ave	4	4	E	2400	Y	Pass									Y	Pass								
872516		NW 67nd Ave	NW 57nd Ave	4	4	E	2400		Pass										Pass								
871233		NW 57th Ave	NW 47th Ave	6	6	E	3624		Pass										Pass								
n.a	NW 170th St	Florida Turnpike	NW 102 Ave/NW 107 Ave	-	New 6	D	2718	Y	Pass									Y	Pass								
n./a		NW 102 Ave/NW 107 Ave	NW 97th Ave	-	New 6	D	2718	Y	Pass									Y	Pass								
878177		NW 87th Ave	NW 82nd Ave	2	2	D	675		Pass										Pass								
9552		NW 82nd Ave	NW 78th Ave	2	2	D	675		Pass										Pass								
9550	NW 169th St	NW 77th Ct	NW 67th Ave	4	4	D	1800		Pass										Pass								
877037	NW 154th St	NW 87th Ave	NW 82nd Ave	4	4	D	1800		Pass										Pass								
877037		NW 82nd Ave	SR 826	4	4	D	1800		Pass										Pass								
878673		SR 826	NW 67th Ave	4	4	E	1700		Pass										Pass								
9256		NW 67th Ave	NW 57th Ave (Red Road)	4	4	E	1700		Pass										Pass								
878684	NW 138th St	US 27/ Okeechobee Rd	NW 107th Ave	4	4	E	2000		Pass										Pass								
877048		NW 107th Ave	NW 97th Ave	6	6	E	3020		Pass										Pass								
877048		NW 97th Ave	Hialeah Gardens Blvd	6	6	E	3020		Pass										Pass								
877065	Hialeah Gardens Blvd	NW 106th Terrace	US 27/ Okeechobee Rd	6	6	E	3020		Pass										Pass								
878620		US 27/ Okeechobee Rd	NW 138th St	4	4	E	2000		Pass										Pass								
878243	NW 97th Ave	NW 122nd St	NW 130th St	2	2	D	792		Pass										Pass								
878243		NW 130th St	NW 138th St	2	2	D	792		Pass										Pass								
878243		NW 138th St	NW 154th St	4	4	D	1800		Pass										Pass								
878243		NW 154th St	NW 170th St	2	2	D	792	Y	Pass									Y	Pass								
n/a		NW 170th St	Graham Access	-	New 4	D	1800	Y	Pass									Y	Fail		1826	2718	Y				6
n/a		Graham Access	NW 178th St	-	New 4	D	1800	Y	Pass									Y	Fail		1828	2718	Y				6
878176	NW 87th Ave	Miami Gardens Dr/NW 186 St	NW 170th St	4	4	D	1800	Y	Fail	Y	2123	2718	Y			6	6	Y	Fail	Y	1930	2718	Y			6	6
878112		NW 170th St	NW 154th St	4	4	D	1800		Pass										Pass								

Short Term (Year 2020) Study Area Roadway Segment LOS Analysis - ADM PM Mitigation Summary

								2020 Concurrency										2020 CDMP/Zoning									
								Link Anlaysis Results				Add 2L?		Add 4L?		Final Mitigated		Link Anlaysis Results				Add 2L?		Add 4L?		Final Mitigated	
STA ID	Roadway	From	To	Exist NL	2020 NL	Adopted LOS	2020 Service Volume	Study Area Link?	Pass/ Fail	Backlog Facility	Fail Pk Dir Total Trips	Improv SV	SV Ck	Improv SV	SV Ck	# lanes BG Needs	# lanes Total Needs	Study Area Link?	Pass/ Fail	Backlog Facility	Fail Pk Dir Total Trips	Improv SV	SV Ck	Improv SV	SV Ck	# lanes BG Needs	# lanes Total Needs
n/a	NW178th St	Graham Access	NW 97th Ave	-	New 4	D	1800	Y	Pass									Y	Pass								
n/a		NW 97th Ave	Iinterstate 75	-	New 4	D	1800	Y	Pass									Y	Pass								
869688	Miramar Pkwy	SW 172nd Ave	SW 160th Ave	6	6	D	3020		Pass										Pass								
n/a		SW 160th Ave	Interstate 75	6	6	D	3020		Fail	Y	3312	4040	Y			8	8		Fail	Y	3478	4040	Y			8	8
n/a		Interstate 75	SW 148th Ave	6	8	D	4040		Pass										Pass								
867326		SW 148th Ave	Flamingo Rd	6	6	D	3020		Pass										Pass								
877076	NW 122nd St	NW 97th Ave	Hialeah Gardens Blvd	4	4	D	1467		Pass										Pass								
877076		Hialeah Gardens Blvd	NW 89th Ave	4	4	D	1467		Pass										Pass								
878193		NW 89th Ave	NW 87th Ave	4	4	D	1467		Pass										Pass								
877041		NW 87th Ave	SR 826	4	4	D	1467		Pass										Pass								
877076		N Okeechobee Rd	NW 97th Ave	2	2	D	792	Y	Fail	Y	1169	1800	Y			4	4	Y	Fail	Y	1345	1800	Y			4	4
870575	SR 826	I-75	NW 122nd St	8	6+4	D	9160		Pass										Pass								
870574		NW 122nd St	NW 103rd St	10	6+4	D	9160		Fail		9195	10980	Y				8+4		Fail	Y	9524	10980	Y			8+4	8+4
870553		NW 103rd St	N Okeechobee Rd	10	8+4	D	10980		Fail	Y	11769	12880	Y			10+4	10+4		Fail	Y	13284	12880	N	15720	Y	12+4	12+4
860088	Pines Blvd	I-75	SW 160th Ave	6	6	D	3020		Pass										Pass								
860087		SW 160th Ave	SW 172th Ave	6	6	D	3020		Pass										Pass								
870585	Okeechobee Rd	NW 154th St	Florida's Turnpike	4	4	C	1580		Pass										Pass								
872536		Florida's Turnpike	NW 138th St	6	6	D	3020	Y	Pass									Y	Pass								
872536		NW 138th St	NW 107th Ave	6	6	D	3020	Y	Pass									Y	Pass								
872536		NW 107th Ave	Hialeah Gardens Blvd	6	6	D	3020	Y	Pass									Y	Pass								
870109		Hialeah Gardens Blvd	NW 103rd St	6	6	D	3020		Pass										Pass								
870109		NW 103rd St	SR 826	6	6	D	3020		Pass										Pass								
870528		SR 826	W 16th Ave (Milam Dairy Rd)	6	6	E	3020	Y	Pass									Y	Pass								
875252		W 16th Ave (Milam Dairy Rd)	Hialeah Expy	6	6	E	3020		Pass										Pass								
875252		Hialeah Expy	NW 57th Ave (Red Road)	6	6	E	3020		Pass										Pass								
875252		NW 57th Ave (Red Road)	Hialeah Dr	6	6	E	3020		Pass										Pass								
870200		Hialeah Dr	SW 42nd Ave (Le Jeune Rd)	6	6	E	3020		Pass										Fail	Y	3458	4040	Y			8	8
860494	SW 67th Ave/Flamingo	NW 191st St	Miami Gardens Dr/NW 186 St	6	6	D	2718		Pass										Pass								
877036		Miami Gardens Dr/NW 186 St	NW 173rd Dr	6	6	E	3624		Pass										Pass								
865216	SW 57th Ave/Red Rd	Miramar Pkwy/ S 33rd St	Florida's Turnpike/HEFT/SR 821	6	6	E	3020		Pass										Pass								
872515		Florida's Turnpike/HEFT/SR 821	NW 202nd St	6	6	E	3020		Pass										Pass								
872514		NW 202nd St	Miami Gardens Dr/NW 186 St	6	6	D	2718		Pass										Pass								
871190		Miami Gardens Dr/NW 186 St	NW 177th St	6	6	D	2718		Pass										Pass								

*	Miami Garden Dr planned to be widened to 6L
	Fails due to Project traffic
	Capacity needs more than 4 additional lanes or reasonable maximum number of lanes reached (e.g. NL Max); additional ITS, transit or other mitigation options should be considered
	Fails due to Combined Project traffic; but neither ADM nor Graham fails thus netiher is responsible for widening
	Fails due to total traffic but Study Area Link 5% of Adopted LOS significance test not met

APPENDIX II-D2:
Long Term (Year 2040) Study Area Roadway Segment LOS Analysis - ADM PM Mitigation Summary

Long Term (Year 2040) Study Area Roadway Segment LOS Analysis - ADM PM Mitigation Summary

					2040 CDMP													2040 Zoning												
								Link Anlaysis Results				Add 2L?		Add 4L?		Final Mitigated					Link Anlaysis Results				Add 2L?		Add 4L?		Final Mitigated	
STA ID	Roadway	From	To	Exist NL	2040 NL	Adopted LOS	2040 Service Volume	Study Area Link?	Pass/ Fail	Backlog Facility	Fail Pk Dir Total Trips	Improv SV	SV Ck	Improv SV	SV Ck	# lanes BG Needs	# lanes Total Needs	2020 NL	Adopted LOS	2020 Service Volume	Study Area Link?	Pass/ Fail	Backlog Facility	Fail Pk Dir Total Trips	Improv SV	SV Ck	Improv SV	SV Ck	# lanes BG Needs	# lanes Total Needs
972250	Florida's Turnpike/ HEFT/SR 821	SW 8th St	SR 836	`	6+4	D	9160		Fail	Y	14361	10980	N	12880	N	10+4	10+4	6+4	D	9160		Fail	Y	14355	10980	N	12880	N	10+4	10+4
972526		SR 836	NW 12th Street	8	6+4	D	9160		Fail	Y	10047	10980	Y			8+4	8+4	6+4	D	9160		Fail	Y	10042	10980	Y			8+4	8+4
972230		NW 12th Street	NW 41th Street	8	6+4	D	9160		Fail	Y	15876	10980	N	12880	N	10+4	10+4	6+4	D	9160		Fail	Y	15875	10980	N	12880	N	10+4	10+4
972269		NW 41th Street	NW 74th Street	8	6+4	D	9160		Fail	Y	15228	10980	N	12880	N	10+4	10+4	6+4	D	9160		Fail	Y	15221	10980	N	12880	N	10+4	10+4
972268		NW 74th Street	NW 106th Street	8	6+4	D	9160		Fail	Y	13984	10980	N	12880	N	10+4	10+4	6+4	D	9160		Fail	Y	13975	10980	N	12880	N	10+4	10+4
972272		NW 106th Street	US 27/ Okeechobee Rd	6	6+4	D	9160		Fail	Y	15730	10980	N	12880	N	10+4	10+4	6+4	D	9160		Fail	Y	15720	10980	N	12880	N	10+4	10+4
972248		US 27/ Okeechobee Rd	NW 170th St	6	6+4	D	9160	Y	Fail	Y	13675	10980	N	12880	N	10+4	10+4	6+4	D	9160	Y	Fail	Y	13674	10980	N	12880	N	10+4	10+4
972248		NW 170th St	Interstate 75	6	6+4	D	9160	Y	Fail	Y	14514	10980	N	12880	N	10+4	10+4	6+4	D	9160	Y	Fail	Y	14515	10980	N	12880	N	10+4	10+4
972285		Interstate 75	CR 823/Red Rd	4	6+2	D	7330	Y	Fail	Y	8016	9160	Y			6+4	6+4	6+2	D	7330	Y	Fail	Y	8016	9160	Y			6+4	6+4
971996		CR 823/Red Rd	CR 817/NW 27th Ave	4	6+2	D	7330	Y	Fail	Y	8838	9160	Y			6+4	6+4	6+2	D	7330	Y	Fail	Y	8839	9160	Y			6+4	6+4
971998		CR 817/NW 27th Ave	Florida's Turnpike/SR 91	6	6+2	D	7330		Fail	Y	8661	9160	Y			6+4	6+4	6+2	D	7330		Fail	Y	8662	9160	Y			6+4	6+4
971904	Florida's Turnpike/ SR 91	I-595	Griffin Rd	8	8	D	7320		Fail	Y	8584	9220	Y			10	10	8	D	7320		Fail	Y	8585	9220	Y			10	10
971902		Griffin Rd	Pines Blvd	6	6	D	5500		Fail	Y	9122	7320	N	9220	Y	10	10	6	D	5500		Fail	Y	9123	7320	N	9220	Y	10	10
971900		Pines Blvd	Florida's Turnpike/HEFT/SR 821	8	8	D	7320		Fail	Y	8640	9220	Y			10	10	8	D	7320		Fail	Y	8640	9220	Y			10	10
970502		Florida's Turnpike/HEFT/SR 821	NW 203rd St	8	8	D	7320		Fail	Y	7485	9220	Y			10	10	8	D	7320		Fail	Y	7485	9220	Y			10	10
862005	Interstate 75	I-595	Royal Palm Blvd	8	8+4	D	10980		Pass									8+4	D	10980		Pass								
862004		Royal Palm Blvd	Griffin Rd	8	8+4	D	10980		Pass									8+4	D	10980		Pass								
862003		Griffin Rd	Sheridan St	8	8+4	D	10980		Pass									8+4	D	10980		Pass								
862002		Sheridan St	Pines Blvd	8	10+4	D	12880		Pass									10+4	D	12880		Pass								
862001		Pines Blvd	Miramar Pkwy/ S 33rd St	8	10+4	D	12880		Pass									10+4	D	12880		Pass								
860362		Miramar Pkwy/ S 33rd St	Florida's Turnpike	12	12+4	D	15720	Y	Pass									12+4	D	15720	Y	Pass								
872503		Florida's Turnpike	Miami Gardens Dr/NW 186 St	10	10+4	D	12880	Y	Pass									10+4	D	12880	Y	Pass								
872501		Miami Gardens Dr/NW 186 St	NW 178th St	8	8+4	D	10980	Y	Pass									8+4	D	10980	Y	Pass								
872501		NW 178th St	NW 138th Street	8	8+4	D	10980		Pass									8+4	D	10980		Pass								
872500		NW 138th Street	SR 826	8	8+4	D	10980		Pass									8+4	D	10980		Pass								
872511	SR 924/Gratigny Pkwy	SR 826	NW 57th Ave (Red Road)	6	6	D	5500		Pass									6	D	5500		Pass								
872512		NW 57th Ave (Red Road)	Douglas(Le Jeune Connector)	6	6	D	5500		Pass									6	D	5500		Pass								
872510		Douglas(Le Jeune Connector)	NW 32nd Ave	6	6	D	5500		Pass									6	D	5500		Pass								
n/a		NW 122nd St	NW 138th St	4	4	D	1800		Pass									4	D	1800		Pass								
n/a		NW 138th St	NW 170th St	-	New 2L	D	792		Pass									-	n/a	n/a										
n/a	NW 102nd Ave	NW 170th St	NW 178th St	-	New 4	D	1800	Y	Pass									-	n/a	n/a										
n/a		NW 178th St	ADM Project Access Rd	-	New 4	D	1800	Y	Pass									New 4	D	1800	Y	Pass								
n/a	Miami Gardens Dr	ADM Project Access Rd	Interstate 75 Western Ramps	-	New 6	E	3624	Y	Pass									New 6	E	3624	Y	Pass								
n/a		Interstate 75 Western Ramps	Interstate 75 Eastern Ramps	-	New 6	E	3624	Y	Pass									New 6	E	3624	Y	Pass								
872518		Interstate 75 Eastern Ramps	NW 87th Ave	4	4	E	2400	Y	Fail	Y	3434	3624	Y			6*	6*	4	E	2400	Y	Fail	Y	3449	3624	Y			6*	6*
872518		NW 87th Ave	NW 82nd Ave	4	4	E	2400	Y	Fail	Y	3286	3624	Y			6*	6*	4	E	2400	Y	Fail	Y	3292	3624	Y			6*	6*
872517		NW 82nd Ave	NW 77nd Ave	4	4	E	2400	Y	Pass									4	E	2400	Y	Pass								
872517		NW 77nd Ave	NW 67nd Ave	4	4	E	2400	Y	Pass									4	E	2400	Y	Pass								
872516		NW 67nd Ave	NW 57nd Ave	4	4	E	2400		Pass									4	E	2400		Pass								
871233		NW 57th Ave	NW 47th Ave	6	6	E	3624		Pass									6	E	3624		Pass								
n.a	NW 170th St	Florida Turnpike	NW 102 Ave/NW 107 Ave	-	New 6	D	2718	Y	Pass									New 6	D	2718	Y	Pass								
n./a		NW 102 Ave/NW 107 Ave	NW 97th Ave	-	New 6	D	2718	Y	Pass									New 6	D	2718	Y	Pass								
878177		NW 87th Ave	NW 82nd Ave	2	2	D	675		Pass									2	D	675		Pass								
9552		NW 82nd Ave	NW 78th Ave	2	2	D	675		Pass									2	D	675		Pass								
9550	NW 169th St	NW 77th Ct	NW 67th Ave	4	4	D	1800		Pass									4	D	1800		Pass								
877037	NW 154th St	NW 87th Ave	NW 82nd Ave	4	4	D	1800		Pass									4	D	1800		Pass								
877037		NW 82nd Ave	SR 826	4	4	D	1800		Pass									4	D	1800		Pass								
878673		SR 826	NW 67th Ave	4	4	E	1700		Pass									4	E	1700		Pass								
9256		NW 67th Ave	NW 57th Ave (Red Road)	4	4	E	1700		Pass									4	E	1700		Pass								
878684	NW 138th St	US 27/ Okeechobee Rd	NW 107th Ave	4	6	D	5500		Pass									4	E	2000		Pass								
877048		NW 107th Ave	NW 97th Ave	6	6	D	5500		Pass									6	E	3020		Pass								
877048		NW 97th Ave	Hialeah Gardens Blvd	6	6	D	5500		Pass									6	E	3020		Pass								
877065	Hialeah Gardens Blvd	NW 106th Terrace	US 27/ Okeechobee Rd	6	6	E	3020		Pass									6	E	3020		Pass								
878620		US 27/ Okeechobee Rd	NW 138th St	4	4	E	2000		Pass									4	E	2000		Pass								
878243	NW 97th Ave	NW 122nd St	NW 130th St	2	2	D	792		Pass									2	D	792		Pass								
878243		NW 130th St	NW 138th St	2	2	D	792		Pass									2	D	792		Pass								
878243		NW 138th St	NW 154th St	4	4	D	1800		Pass									4	D	1800		Pass								
878243		NW 154th St	NW 170th St	2	2	D	792	Y	Pass									2	D	792	Y	Pass								
n/a		NW 170th St	Graham Access	-	New 4	D	1800	Y	Pass									New 4	D	1800	Y	Pass								
n/a		Graham Access	NW 178th St	-	New 4	D	1800	Y	Pass									New 4	D	1800	Y	Pass								
878176	NW 87th Ave	Miami Gardens Dr/NW 186 St	NW 170th St	4	4	D	1800	Y	Fail	Y	2318	2718	Y			6	6	4	D	1800	Y	Fail	Y	2324	2718	Y			6	6
878112		NW 170th St	NW 154th St	4	4	D	1800		Pass									4	D	1800		Pass								
n/a	NW178th St	Graham Access	NW 97th Ave	-	New 4	D	1800	Y	Pass									New 4	D	1800	Y	Pass								
n/a		NW 97th Ave	Iinterstate 75	-	New 4	D	1800	Y	Pass									New 4	D	1800	Y	Pass								
869688	Miramar Pkwy	SW 172nd Ave	SW 160th Ave	6	6	D	3020		Pass									6	D	3020		Pass								
n/a		SW 160th Ave	Interstate 75	6	6	D	3020		Fail	Y	4220	4040	N	4040	N	8 Max	8 Max	6	D	3020		Fail	Y	4221	4040	N	4040	N	8 Max	8 Max
n/a		Interstate 75	SW 148th Ave	6	8	D	4040		Pass									8	D	4040		Pass								
867326		SW 148th Ave	Flamingo Rd	6	6	D	3020		Pass									6	D	3020		Fail		3023	4040	Y				8

Long Term (Year 2040) Study Area Roadway Segment LOS Analysis - ADM PM Mitigation Summary

					2040 CDMP													2040 Zoning											
								Link Anlaysis Results				Add 2L?		Add 4L?		Final Mitigated					Link Anlaysis Results				Add 2L?		Add 4L?		Final Mitigated	
STA ID	Roadway	From	To	Exist NL	2040 NL	Adopted LOS	2040 Service Volume	Study Area Link?	Pass/ Fail	Backlog Facility	Fail Pk Dir Total Trips	Improv SV	SV Ck	Improv SV	SV Ck	# lanes BG Needs	# lanes Total Needs	2020 NL	Adopted LOS	2020 Service Volume	Study Area Link?	Pass/ Fail	Backlog Facility	Fail Pk Dir Total Trips	Improv SV	SV Ck	Improv SV	SV Ck	# lanes BG Needs	# lanes Total Needs
877076	NW 122nd St	NW 97th Ave	Hialeah Gardens Blvd	4	4	D	1467		Pass									4	D	1467		Pass								
877076		Hialeah Gardens Blvd	NW 89th Ave	4	4	D	1467		Pass									4	D	1467		Pass								
878193		NW 89th Ave	NW 87th Ave	4	4	D	1467		Pass									4	D	1467		Pass								
877041		NW 87th Ave	SR 826	4	4	D	1467		Pass									4	D	1467		Pass								
877076		N Okeechobee Rd	NW 97th Ave	2	2	D	792		Fail	Y	1972	1800	N	2718	Y	6	6	2	D	792		Fail	Y	1972	1800	N	2718	Y	6	6
870575	SR 826	I-75	NW 122nd St	8	6+4	D	9160		Fail	Y	10184	10980	Y			8+4	8+4	6+4	D	9160		Fail	Y	10184	10980	Y			8+4	8+4
870574		NW 122nd St	NW 103rd St	10	6+4	D	9160		Fail	Y	11560	10980	N	12880	Y	10+4	10+4	6+4	D	9160		Fail	Y	11562	10980	N	12880	Y	10+4	10+4
870553		NW 103rd St	N Okeechobee Rd	10	8+4	D	10980		Fail	Y	16933	12880	N	15720	N	12+4	12+4	8+4	D	10980		Fail	Y	16935	12880	N	15720	N	12+4	12+4
860088	Pines Blvd	I-75	SW 160th Ave	6	6	D	3020		Fail	Y	3250	4040	Y			8	8	6	D	3020		Fail	Y	3250	4040	Y			8	8
860087		SW 160th Ave	SW 172th Ave	6	6	D	3020		Pass									6	D	3020		Pass								
870585	Okeechobee Rd	NW 154th St	Florida's Turnpike	4	4	C	1580		Pass									4	C	1580		Pass								
872536		Florida's Turnpike	NW 138th St	6	6	D	3020	Y	Pass									6	D	3020	Y	Pass								
872536		NW 138th St	NW 107th Ave	6	6	D	3020	Y	Pass									6	D	3020	Y	Pass								
872536		NW 107th Ave	Hialeah Gardens Blvd	6	6	D	3020	Y	Pass									6	D	3020	Y	Pass								
870109		Hialeah Gardens Blvd	NW 103rd St	6	6	D	3020		Pass									6	D	3020		Pass								
870109		NW 103rd St	SR 826	6	6	D	3020		Pass									6	D	3020		Pass								
870528		SR 826	W 16th Ave (Milam Dairy Rd)	6	6	E	3020		Pass									6	E	3020		Pass								
875252		W 16th Ave (Milam Dairy Rd)	Hialeah Expy	6	6	E	3020		Fail	Y	3128	4040	Y			8	8	6	E	3020		Fail	Y	3131	4040	Y			8	8
875252		Hialeah Expy	NW 57th Ave (Red Road)	6	6	E	3020		Fail	Y	3116	4040	Y			8	8	6	E	3020		Fail	Y	3120	4040	Y			8	8
875252		NW 57th Ave (Red Road)	Hialeah Dr	6	6	E	3020		Fail	Y	3115	4040	Y			8	8	6	E	3020		Fail	Y	3118	4040	Y			8	8
870200		Hialeah Dr	SW 42nd Ave (Le Jeune Rd)	6	6	E	3020		Fail	Y	5076	4040	N	4040	N	8 Max	8 Max	6	E	3020		Fail	Y	5078	4040	N	4040	N	8 Max	8 Max
860494	SW 67th Ave/Flamingo	NW 191st St	Miami Gardens Dr/NW 186 St	6	6	D	2718		Pass									6	D	2718		Pass								
877036		Miami Gardens Dr/NW 186 St	NW 173rd Dr	6	6	E	3624		Pass									6	E	3624		Pass								
865216	SW 57th Ave/Red Rd	Miramar Pkwy/ S 33rd St	Florida's Turnpike/HEFT/SR 821	6	6	E	3020		Pass									6	E	3020		Pass								
872515		Florida's Turnpike/HEFT/SR 821	NW 202nd St	6	6	E	3020		Pass									6	E	3020		Pass								
872514		NW 202nd St	Miami Gardens Dr/NW 186 St	6	6	D	2718		Pass									6	D	2718		Pass								
871190		Miami Gardens Dr/NW 186 St	NW 177th St	6	6	D	2718		Pass									6	D	2718		Pass								

*	Miami Garden Dr planned to be widened to 6L
	Fails due to Project traffic
	Capacity needs more than 4 additional lanes or reasonable maximum number of lanes reached (e.g. NL Max); additional ITS, transit or other mitigation options should be considered
	Fails due to Combined Project traffic; but neither ADM nor Graham fails thus netiher is responsible for widening
	Fails due to total traffic but Study Area Link 5% of Adopted LOS significance test not met

Miami-Dade County

Appendix III

October 10, 2016

Leftwich Consulting Engineers, Inc.

APPENDIX III-A:
Graham Preliminary Impact Fee Analysis
06142016

Graham Preliminary Impact Fee Assessment

A preliminary traffic impact fee assessment has been prepared for the Graham Project. The impact fee estimate is based on Miami-Dade County's impact fee formula as reported in its guidelines titled "Chapter 33E-Road Impact Fee Ordinance" (source: Miami-Dade County's website).

In accordance with the Miami-Dade County Impact Fee Ordinance, impact fees are identified in the Section 33E-7 Road Impact Fee Formula. It specifically states that "The feepayer shall pay a road impact fee amount based on the formulas set forth below. Such fee will be based on the capital cost of roadway improvements required to serve any increase in transportation requirements resulting from proposed development activities together with impact fee administrate costs." Impact fee costs are determined by applying the following formulas:

1. **Total Trips = Proposed Units of Development x Trip Generation Rate x 97% Trips Non-transit x 1/2 x Percent New Trips**
2. **(Outside UIA) New Lane Miles = Total Trips × Trip Length ÷ 8,100 Average Daily Vehicles Capacity per Lane Mile**
   (Within UIA) New Lane Miles = Total Trips × Trip Length ÷ 8,500 Average Daily Vehicles Capacity per Lane Mile
3. **Road Cost = New Lane Miles × $1,951,500 per Lane Mile (Including $151,500 per lane mile for Right-of-Way Costs)**
4. **(Outside UIA) Net Road Cost = Road Cost - $265,680 per New Lane Mile credited from Motor Fuels Tax and Vehicle License Fees**
   (Within UIA) = Net Road Cost = Road Cost - $278,800 per New Lane Mile credited from Motor Fuels Tax and Vehicle License Fees
5. **Inflation Factor = PDC Multiplier from Table of Present Day Cost (PDC) Multipliers by Calendar Year in subsection 33E-8(d)**
6. **Road Impact Fee = Net Road Costs × Inflation Factor + 2% Administrative Costs**

The Graham site is located outside the MDC Urban Infill Area and as such the "Outside UIA" equations apply. The standard per unit impact fee costs and referenced PDC Multipliers are presented in the Appendix.

<u>Adjustment for Trip Generation Rate and Percent New Trips</u>

The standard impact fee costs per development unit as determined by Miami-Dade County for new developments are based on general land uses typically built within the County boundaries. Furthermore, the per unit costs are based on the traditional Institute of Transportation Engineers (ITE) Manual Edition 7th Edition dated 2003. The ITE trip generation rates are average rates based on studies performed throughout the United States and therefore are not specific to the Graham Project.

Trip generation associated with the Graham Project for the analysis years 2020 and 2040 has been forecast per Institute of Transportation's (ITE) methodology as outlined in the Trip Generation Manual, 9th Edition. In Year 2020, the project estimates a partial build-out of uses to include 150 KSF of commercial use, 250 KSF of business park use, and 500 multi-family dwelling units. In Year 2040, full

build-out of the Graham Project will include 1,000 KSF of commercial use, 3,000 KSF of business park use, and 2,000 multi-family dwelling units.

For each year, the internal trip capture rate was calculated for the site by utilizing the Multi-Use Development Internal Capture Matrix methodology outlined in the Trip Generation Handbook. The resulting capture rate was applied to total project trips generated by land uses. The quantity of captured trips was then deducted from total trip quantities to derive the net external trips generated by the site. Next, a reduction for diverted trips was applied to account for future project trips on I-75 and HEFT that are already in the background traffic. This project trip type is expected to "divert" from their primary trip on the freeways to a retail use(s) onsite before returning to their primary trip route. The percentage of diverted trips was derived from ITE's fitted curve equation for Land Use 820 (Shopping Center) as provided in ITE's Trip Generation Handbook. The diverted trips shown below are new external trips to the ramps and project roadways, but they are already in the background traffic on the adjacent freeways from which they divert from. The quantity of diverted trips calculated was confirmed to be less than 10% of the background traffic volumes. **Table 1** presents the final trip generation rates. The site-specific trip generation rate serves as the basis for the Graham impact fee calculation.

Table 1
Graham Final Trip Generation

LAND USE	UNITS	DU/KSF	ITE LUC	ITE 9TH EDITION	DAILY	% IN	TRIPS IN	% OUT	TRIPS OUT
APARTMENTS	500 DU	500	220	T = 6.06 (X) + 123.56	3,154	50%	1,577	50%	1,577
RETAIL	150,000 SQ.	150	820	Ln (T) = 0.65 Ln (X) +	8,839	50%	4,420	50%	4,419
BUSINESS PARK	250,000 SQ.	250	770	T = 10.62 (X) + 715.61	3,371	50%	1,685	50%	1,686
GROSS DRIVEWAY TRIPS					**15,363**	50%	**7,682**	50%	**7,681**
INTERNALIZATION	**See Note 1**		**15.97%**	Internalization See Table 1B	2,453	50%	1,227	50%	1,226
DIVERTED TRIPS TO RETAIL USE	**See Note 2**		**35.00%**	Ln (TP) = 0.29 Ln (X) + 5.00	2,600	50%	1,300	50%	1,300
NET EXTERNAL TRIPS					**10,310**	50%	**5,155**	50%	**5,155**

Note 1 - See attached Tables 1B for the Daily Internalization calculations provided using the ITE Multi-Use Spreadsheets and the internalization factors from the ITE Trip Generation Handbook. The Daily internalization Factors are found in Tables 7.1 and 7.2 from the ITE Trip Generation Handbook 2nd Edition.

Note 2 - Diverted Trips to Retail Use for the Year 2020 proposed development program is Limited to 35% of the External Retail Trips (calculated using the ITE Pass-by Formula) and is further limited to 10% of the Adjacent Street Traffic calculated using the closest adjacent FDOT Count Stations 2518 on Miami Gardens Drive and 7048 on NW 138 Street. See Table 1E for the calculations to show compliance with the 10% threshold.

Based on final Trip Generation for each of the three land uses, an equivalent per unit trip rate and percent new trips were derived as shown in **Table 2** below.

Table 2
Graham Final Trip Generation

LAND USE	Trip Gen Rate	Initial Trips	Internal Percentage	External Trips	Diverted Percentage	Diverted Trips	Final Net External trips	Final Trip Gen Rate	Percent New Trips
APARTMENTS	6.31	3,154	29%	2,236			2,236	4.47	70.9%
RETAIL	58.93	8,839	14%	7,646	35.0%	2,600	5,046	33.64	57.1%
BUSINESS PARK	13.48	3,371	10%	3,028			3,028	12.11	89.8%

Adjusted Present Day Cost Multiplier

Attached are the Present Day Cost (PDC) Multipliers outlined in the County's Impact Fee Ordinance. The multipliers are calculated using 2006 as the base year. Acknowledging that the actual historical information is now available for these earlier projected multipliers, FDOT's PDCs were compiled and are attached. The report is titled "Advisory Inflation Factors for Previous Years (1987-2015)." Based on the information, the PDC values are 1.34 for 2006 and 1.00 for 2015; meaning that there was a 34 percent growth in costs in the 19 year period. To determine the PDC Multiplier from 2006 to 2016, an additional 1 percent was added based on the inflation observed between 2014 and 2015. The resulting 1.35 PDC Multiplier was applied to the Graham development's impact fee projections.

Final Recommended Road Impact Fee Costs

To obtain a preliminary impact fee estimate for the Graham development, the Trip Generation Rates and Percent New Trips per unit were utilized to prepare a refined impact fee cost, along with the adjusted PDC Multiplier. The standard trip length used by MDC were used for the Graham impact fee projections. **Table 3** shows the calculated impact fee cost corresponding to Graham. The resulting preliminary impact fee cost for the Project equates to $1,941,359+ $2,877,557+ $2,620,362=$7,439,278.

The above information has been prepared at the request of Miami-Dade County and represents the preliminary cost that should serve as the basis for evaluating Graham's impact on local roadways.

Detailed coordination will be made with the County to establish how the impact fee costs will be applied within the parameters coordinated between the County and representatives of the Graham development.

Table 3
Graham Impact Fee Calculations

Apartments					
(1) Total Trips =	Proposed Units of Development	× Trip Generation Rate	× (100)% Trips Non-transit	× 1/2	× Percent New Trips
	500	6.31	100%	0.50	70.9%
					1,118
(2) (Outside UIA) New Lane Miles =	Total Trips	× Trip Length	÷ 8,100 Average Daily Vehicles Capacity per Lane Mile		
	1,118	6.09			8,100
					0.8
(3) Road Cost =	New Lane Miles	× $1,951,500 per Lane Mile (Including $151,500 per lane mile for Right-of-Way Costs)			
	0.84				$1,951,500
					$1,640,373
(4) (Outside UIA) Net Road Cost =	Road Cost	- $265,680 per New Lane Mile credited from Motor Fuels Tax and Vehicle License Fees			
	$1,640,373				$223,323
					$1,417,050
(5) Inflation Factor =	PDC Multiplier from Table of Present Day Cost (PDC) Multipliers by Calendar Year in subsection 33E-8(d).				
					1.35
					1.35
(6) Road Impact Fee =	Net Road Costs	× Inflation Factor	+ 2% Administrative Costs		
	$1,417,050	1.35			$28,341
					$1,941,359
Impact Fee Per Unit of Dev =	Road Impact Fee	÷ Proposed Units of Development			
	$1,941,359				500.00
					$3,882.72

Retail					
(1) Total Trips =	Proposed Units of Development	× Trip Generation Rate	× (100)% Trips Non-transit	× 1/2	× Percent New Trips
	150	58.93	100%	0.50	57.1%
					2,523
(2) (Outside UIA) New Lane Miles =	Total Trips	× Trip Length	÷ 8,100 Average Daily Vehicles Capacity per Lane Mile		
	2,523	4.00			8,100
					1.2
(3) Road Cost =	New Lane Miles	× $1,951,500 per Lane Mile (Including $151,500 per lane mile for Right-of-Way Costs)			
	1.25				$1,951,500
					$2,431,424
(4) (Outside UIA) Net Road Cost =	Road Cost	- $265,680 per New Lane Mile credited from Motor Fuels Tax and Vehicle License Fees			
	$2,431,424				$331,018
					$2,100,407
(5) Inflation Factor =	PDC Multiplier from Table of Present Day Cost (PDC) Multipliers by Calendar Year in subsection 33E-8(d).				
					1.35
					1.35
(6) Road Impact Fee =	Net Road Costs	× Inflation Factor	+ 2% Administrative Costs		
	$2,100,407	1.35			$42,008
					$2,877,557
Impact Fee Per Unit of Dev =	Road Impact Fee	÷ Proposed Units of Development			
	$2,877,557				150.00
					$19,183.72

Business Park					
(1) Total Trips =	Proposed Units of Development	× Trip Generation Rate	× (100)% Trips Non-transit	× 1/2	× Percent New Trips
	250	13.48	100%	0.50	89.8%
					1,514
(2) (Outside UIA) New Lane Miles =	Total Trips	× Trip Length	÷ 8,100 Average Daily Vehicles Capacity per Lane Mile		
	1,514	6.07			8,100
					1.1
(3) Road Cost =	New Lane Miles	× $1,951,500 per Lane Mile (Including $151,500 per lane mile for Right-of-Way Costs)			
	1.13				$1,951,500
					$2,214,104
(4) (Outside UIA) Net Road Cost =	Road Cost	- $265,680 per New Lane Mile credited from Motor Fuels Tax and Vehicle License Fees			
	$2,214,104				$301,431
					$1,912,673
(5) Inflation Factor =	PDC Multiplier from Table of Present Day Cost (PDC) Multipliers by Calendar Year in subsection 33E-8(d).				
					1.35
					1.35
(6) Road Impact Fee =	Net Road Costs	× Inflation Factor	+ 2% Administrative Costs		
	$1,912,673	1.35			$38,253
					$2,620,362
Impact Fee Per Unit of Dev =	Road Impact Fee	÷ Proposed Units of Development			
	$2,620,362				250.00
					$10,481.45

APPENDICES

Sec. 33E-8. - Fee computation by adopted schedule.

The feepayer may elect to allow the County Public Works Director to use the impact fee schedule set forth below developed pursuant to the formula set forth in Section 33E-7(a). The Impact Fee Per Unit of Development shall be multiplied by the Present Day Cost (PDC) Multiplier for the year in which the fee is paid in accordance with the table in subsection 33E-8(d).

(a) The following impact fee schedule shall be used by the County Public Works Director in computing the road impact fee:

TABLE 100

ROAD IMPACT FEE SCHEDULE
OUTSIDE URBAN INFILL AREA

ITE Code	ITE Land Use Type	Trip Generation Rate[1] (ADT)[2] Per Unit of Dev.	Trip Length (mile)	% New Trip[3]	Impact Fee Per Unit of Dev. ($)[6]
	Port and Terminal				
30	Truck Terminals	9.85/1,000 GSF[4]	6.25	100%	6,338
	Industrial				
130	Industrial Park	6.96/1,000 GSF	6.16	100%	4,414
140	Manufacturing	3.82/1,000 GSF	6.16	100%	2,423
150	Warehousing	4.96/1,000 GSF	6.16	100%	3,146
151	Mini-Warehouse	2.50/1,000 GSF	5.90	100%	1,519
	Residential				
210	Single-Family Detached	9.57/unit	6.09	100%	6,001
220	Apartment (Rentals)	6.72/unit	6.09	100%	4,214
222	High-Rise Apartment or Condominium (more than three floors)	4.20/unit	6.09	100%	2,634

230	Condominium, Townhouse	5.86/unit	6.09	100%	3,674
240	Mobile Home	4.99/unit	6.09	100%	3,129
251	Senior Adult Housing—Detached	3.68/unit	6.09	100%	2,307
252	Senior Adult Housing—Attached	3.44/unit	6.09	100%	2,157
253	Congregate Care Facility	2.02/unit	6.2	100%	1,289
254	Assisted Living Facility	2.66/bed	6.2	100%	1,698
255	Continuing Care Retirement Community	2.28/unit	6.09	100%	1,532
	Lodging				
310	Hotel	8.92/available room	6.09	100%	5,593
311	All Suites Hotel	6.24/available room	6.09	100%	3,913
320	Motel	9.11/ available room	6.09	100%	5,712
	Recreational				
420	Marina	2.96/berth	6.30	100%	1,920
430	Golf Course	35.74/hole	6.30	100%	23,183
480	Amusement Park	75.76/acre	6.30	100%	49,142
490	Tennis Courts (open to public; no ancillary facilities)	31.04/court	6.30	100%	20,134
491	Racquet Club	38.70/court	6.30	100%	25,103
492	Health/Fitness	4.02/1,000 GSF	6.30	100%	2,608

	Institutional				
520	Elementary School	1.29/student	1.25	75%	125
530	High School	1.71/student	4.00	100%	704
540	Jr./Community College	1.20/student	6.07	100%	750
550	University	2.38/student	6.07	100%	1,487
560	Church/Synagogue	9.11/1,000 GSF	4.00	100%	3,752
565	Day Care Center	79.26/1,000 GSF	1.25	50%	5,100
	Medical				
610	Hospital	17.57/1,000 GSF	6.20	100%	11,216
620	Nursing Home	2.37/bed	6.20	100%	1,513
630	Clinic	31.45/1,000 GSF	6.20	100%	20,076
	Office				
710	General Office Building				
	1—50,000	15.65/1,000 GSF	6.07	100%	9,778
	50,001—100,000	13.34/1,000 GSF	6.07	100%	8,337
	100,001—200,000	11.37/1,000 GSF	6.07	100%	7,109
	200,001—300,000	10.36/1,000 GSF	6.07	100%	6,476
	300,001—400,000	9.70/1,000 GSF	6.07	100%	6,061
	400,001—500,000	9.21/1,000 GSF	6.07	100%	5,758
	500,001—600,000	8.83/1,000 GSF	6.07	100%	5,521

	600,001—700,000	8.53/1,000 GSF	6.07	100%	5,329
	700,001—more	8.27/1,000 GSF	6.07	100%	5,168
720	Medical Office Building	36.13/1,000 GSF	6.07	100%	22,580
750	Office Park[7]	11.42/GSF	6.07	100%	7,137
760	Research Center	8.11/1,000 GSF	6.07	100%	5,068
770	Business Park	12.76/1,000 GSF	6.07	100%	7,975
	Retail				
813	Discount Superstore (free standing)	50.75/1,000 GSF	5.9	42%	12,948
816	Hardware/Paint Store/Pool Supply (free standing)	51.29/1,000 GSF	2.36	75%	9,347
817	Nursery/Garden Center	36.08/1,000 GSF	4.00	75%	11,144
820	Shopping Center/General Retail				
	1—10,000	152.03/1,000 GSF	2.36	32%	11,821
	10,001—50,000	86.56/1,000 GSF	2.36	42%	8,833
	50,001—100,000	67.91/1,000 GSF	2.36	51%	8,416
	100,001—200,000	53.28/1,000 GSF	4.00	58%	12,727
	200,001—300,000	46.23/1,000 GSF	4.00	62%	11,805
	300,001—400,000	41.80/1,000 GSF	5.90	64%	16,252
	400,001—500,000	38.66/1,000 GSF	5.90	66%	15,501
	500,001—600,000	36.27/1,000 GSF	5.90	67%	14,763
	600,001—800,000	32.80/1,000 GSF	5.90	69%	13,748

	800,001—1,000,000	30.33/1,000 GSF	5.90	70%	12,899
	1,000,001—1,200,000	28.46/1,000 GSF	5.90	71%	12,274
	1,200,001—more	27.67/1,000 GSF	5.90	72%	12,103
841	Car Sales[5]				
	Car Sales (new and used car sales area)	33.56/1,000 GSF	5.90	75%	15,290
	Car Sales (services and parts sales area)	21.44/1,000 GSF	5.90	75%	9,768
848	Tire Store	24.87/1,000 GSF	5.9	100%	15,108
850	Supermarket (free standing)	102.24/1,000 GSF	2.36	50%	12,422
851	Convenience Market	737.99/1,000 GSF	1.25	35%	33,243
853	Convenience Market with Gasoline	845.60/1,000 GSF	1.25	35%	38,090
862	Home Improvement Superstore	30.74/1,000 GSF	5.9	75%	14,005
875	Department Store (free standing)	22.88/1,000 GSF	5.9	42%	5,838
880	Pharmacy/Drugstore (no Drive thru)	90.06/1,000 GSF	2.36	32%	7,003
881	Pharmacy/Drugstore (with Drive thru)	96.91/1,000 GSF	2.36	32%	7,535
890	Furniture Store (free standing)	5.06/1,000 GSF	4.00	50%	1,042
	Services				
911	Bank (Walk-in)	156.48/1,000 GSF	1.25	50%	10,069
912	Bank (Drive-in)	246.49/1,000 GSF	1.25	50%	15,862
931	Quality Restaurant	89.95/1,000 GSF - or-	6.16	75%	42,787
	Quality Restaurant	2.86/seat[8]	6.16	75%	1,360

932	High Turnover Restaurant	158.37/1,000 GSF -or-	4.00	50%	32,612
	High Turnover Restaurant	4.83/seat[8]	4.00	50%	995
933	Fast Food Restaurant No Drive Thru	716.00/1,000 GSF	1.25	50%	46,075
934	Fast Food Restaurant with Drive Thru	496.12/1,000 GSF	1.25	50%	31,925
937	Coffee/Donut Shop	818.58/1,000 GSF	1.25	35%	36,838
944	Service Stations w/Gasoline	168.56/pump	1.25	35%	7,593

Notes:

1. Rates are derived from Trip Generation, An Informational Report, 7th Edition by the Institute of Transportation Engineers (ITE), 2003.
2. ADT = Average Daily Traffic.
3. Percentage of New Trips from ITE Generation Handbook, 2nd Edition (retail assumes 10% diverted-link trips in addition to pass-by trips from the formula) and Dade County existing Road Impact Fee Schedule.
4. GSF = Gross Square Feet.
5. The trip generation rates of services and sales areas for Car Sales were obtained from a survey study of Miami-Dade County car dealerships.
6. Base year for Impact Fee Per Unit of Development is 2006.
7. Office Park means a planned development including offices together with support services such as banks, restaurants and service stations in a campus-like arrangement.
8. Seats = Maximum occupancy. For Quality Restaurants and High Turnover Restaurants, the Fee may be computed per seat at the option of the feepayer as provided herein.

(d) Table of Present Day Cost (PDC) Multipliers.

Calendar Year	PDC Multiplier
2006 Base Year	1.000
2007	1.035 not used[1]
2008	1.094 not used[1]

2009	1.141 used after April 22, 2009[1]
2010	1.184
2011	1.225
2012	1.267
2013	1.308
2014 through September 2015	1.351
Fiscal Year (October 1—September 30)	
2015—2016	1.430
2016—2017	1.477
2017—2018	1.527
2018—2019	1.577
2019—2020	1.628
2020—2021	1.682

Source: This table is based on the table of Construction Cost Inflation Factors published August 3, 2006 by Florida Department of Transportation (FDOT) Office of Policy Planning for FDOT Fiscal Year 2007 (July 1, 2006 to June 30, 2007). PDC Multiplier values have been interpolated onto a calendar year intervalor onto a Miami-Dade County Fiscal Year respectively.

Note:

1. Use of the Present Day Cost multiplier was first implemented upon the April 22, 2009 effective date of Ordinance No. 09-08.

(Ord. No. 88-112, § 1(8), 12-6-88; Ord. No. 94-134, § 1, 6-21-94; Ord. No. 95-215, § 1, 12-5-95; Ord. No. 98-125, § 26, 9-3-98; Ord. No. 09-08, § 5, 1-22-09; Ord. No. 14-122, § 1, 12-2-14; Ord. No. 15-144, § 1, 12-1-15)

Analyst	**Sweetapple**
Date	**1/24/2016**
Project	**CDMP No. 2**
Timeframe	**Daily**

TABLE 1B - DAILY INTERNALIZATION - THE GRAHAM COMPANIES - 2020
MULTI-USE DEVELOPMENT TRIP GENERATION AND INTERNAL CAPTURE SUMMARY

LAND USE A		**Residential Apts**	
ITE LU Code		**220**	
Size		**500 DU**	
	Total	Internal	External
Enter	1,577	520	1,057
Exit	1,577	398	1,179
Total	3,154	918	2,236
%	100%	29%	71%

Exit to External: 1,179

Enter from External: 1,057

38% 599 Demand

398 Balanced

9% 398 / 0

33% 520 Demand

486 Balanced

11% 486 / 0

0% 0 Demand

0 Balanced

3% 47 Demand

34 Balanced

2% 34 Demand

0% 0 Demand

LAND USE B		**Retail**	
ITE LU Code		**820**	
Size		**150,000 SF**	
	Total	Internal	External
Enter	4,420	575	3,845
Exit	4,419	619	3,800
Total	8,839	1,193	7,646
%	100%	14%	86%

Exit to External: 3,800

Enter from External: 3,845

4% 177 Demand

177 Balanced

22% 371 Demand

3% 133 Demand

133 Balanced

15% 253 Demand

LAND USE C		**Business Park**	
ITE LU Code		**770**	
Size		**250,000 SF**	
	Total	Internal	External
Enter	1,685	133	1,552
Exit	1,686	211	1,476
Total	3,371	343	3,028
%	100%	10%	90%

Enter to External: 1,552

Exit from External: 1,476

NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT					
	LAND USE A	**LAND USE B**	**LAND USE C**	**TOTAL**	
Enter	1,057	3,845	1,552	6,455	
Exit	1,179	3,800	1,476	6,455	
Total	2,236	7,646	3,028	12,910	**INTERNAL CAPTURE**
Single Use	**3,154**	**8,839**	**3,371**	**15,364**	**15.97%**
	Residential	**Retail**	**Business Park**		

Note - The Internal Capture Rates have been obtained from Tables 7.1 and 7.2 from the ITE Trip Generation Handbook, 2nd Edition.

Table 1B
Daily Internalization
November 2015 CDMP Amendment Application No. 2

Advisory Inflation Factors For Previous Years (1987-2015)

This *"Transportation Costs"* report is one of a series of reports issued by the Transportation Policy Planning office. This report provides an opportunity to approximately adjust costs, or estimated costs, for a project from prior years to a current or recent Fiscal Year. Such adjusted cost estimates may be appropriate for planning purposes, but they do not substitute for formal project cost estimates generated using the Long Range Estimates (LRE) system or other software systems.

In this report, cost inflation factors are also referred to as Present Day Cost (PDC) multipliers. They are purely advisory. The Florida Department of Transportation does not estimate previous years' highway construction cost inflation for the State of Florida. However, because of the occasional need to express prior costs, or prior cost estimates, in today's dollars (technically those of a current or recent Fiscal Year), we provide multipliers for doing so. The multipliers on Page 2 are based on estimates from several sources of prior and current cost inflation on a national level.

This report does not include inflation factors to use in estimating future costs for construction projects such as those included in the Department's Work Program. Factors for use in estimating future costs are available in a separate report entitled "Inflation Factors".

CONTACTS

If you have any questions about the use of the multipliers on Page 2, please contact:

Martin Markovich, Office of Policy Planning, (850) 414-4918,
martin.markovich@dot.state.fl.us

Prior Year Construction Cost Inflation Factors

Fiscal Year	PDC Multiplier
1987	2.33
1988	2.32
1989	2.26
1990	2.18
1991	2.11
1992	2.11
1993	2.12
1994	2.09
1995	2.04
1996	1.97
1997	1.91
1998	1.87
1999	1.89
2000	1.84
2001	1.79
2002	1.74
2003	1.70
2004	1.59
2005	1.44
2006	1.34
2007	1.23
2008	1.17
2009	1.15
2010	1.14
2011	1.10
2012	1.06
2013	1.04
2014	1.01
2015	1.00

PDC stands for Present Day Cost
Fiscal Years run from July 1 of the previous year to June 30 of the designated year. For example, Fiscal Year 2014 runs from July 1, 2013 to June 30, 2014.

The above table can be used to estimate present or recent costs based on costs in prior years. Cost in the prior year should be multiplied by the PDC multiplier for that year in order to generate a planning cost for a recent or current year. For example, for a project that cost exactly one million dollars in Fiscal Year 2000, the $1.00 million would be multiplied by the PDC multiplier of 1.84 to generate an estimated cost of $1.84 million for the recent Fiscal Year of 2015.

APPENDIX III-B:
Q22 - Air Impacts - Graham 06 22 16

Question 22 –Air Quality Impacts
Graham Project

Question 22 of the Development of Regional Impact (DRI) process dates back to when major developments were required to submit a DRI. The DRI process is technically no longer in place for State requirements. For the Graham Project, a "mini-DRI" set of analyses are required to meet Zoning requirements for the project. As such, Question 22 of the original DRI process is being addressed to meet these requirements.

A. Document the steps which will be taken to contain fugitive dust during site preparation and construction of the project. If site preparation includes demolition activities, provide a copy of any notice of demolition sent to the Florida Department of Environmental Regulation (FDER) as required by the National Emission Standards for Asbestos, 40 CFR Part 61, Subpart M.

Fugitive dust from site preparation and from wind erosion will cause minor short-term air quality impacts during the construction period. To reduce any adverse effects, cleared and disturbed areas will be periodically sprayed with water where appropriate after clearing. After completion of construction, all project areas will be grassed, mulched, or paved depending on land use, thus containing fugitive dust.

B. Specify structural or operational measures that will be implemented by the development to minimize air quality impacts (e.g., road widening and other traffic flow improvements on existing roadways, etc.). Any roadway improvements identified here should be consistent with those utilized in Question 21, Transportation.

The Amendment Site is fortunate to be surrounded by regional roadway network improvements that are programmed and/or planned in the Miami-Dade Metropolitan Planning Organization's Transportation Improvement Program (TIP) and its Year Long Range Transportation Plan (LRTP) to add regional roadway network capacity to Florida's Turnpike (HEFT), Interstate-75 and SR-826, along with other significant roadways in the area.

To compliment the regional network improvements, the development will provide additional roadway and interchange improvements to improve access to the site and to address network capacity on adjacent local roadways to accommodate project impacts. A preliminary listing of the roadway and interchange improvements which are currently under review to provide access to the amendment site are presented in the main part of the report. The final determination of required roadway and interchange improvements will be made during the agency review and approval process for the CDMP Amendment Transportation Impact Analysis. Once finalized, a detailed listing of the roadway improvements will be presented in response to Question 22.

C. Complete Table 22-1 for all substantially impacted intersections within the study area, as defined in Map J, and all parking facilities associated with the project. Using the guidance supplied or approved by the Florida Department of Environmental Regulation, determine if detailed air quality modeling for carbon monoxide (CO) is to be completed for any of the facilities listed in the table.

Detailed information on impacted intersections and surface and structured parking areas will be provided during the zoning and/or site plan approval and permitting process (if requested and/or required by reviewing agencies). After the CDMP Amendment Transportation Impact Analysis has been reviewed and determined to be sufficient, the Applicant will meet with applicable review agencies (e.g. DERM and FDEP as necessary) to discuss applicable guidelines and to identify those study intersections and parking facilities which are anticipated to be substantially impacted by project traffic. As part of the original DRI process, FDEP guidelines required that the following be considered for air quality modeling:

- LOS E and F intersections impacted by 5% or more of project traffic;
- Surface parking areas accommodating 1500 vehicle trips per hour; or
- Parking garages accommodating 750 vehicle trips per hour.

Coordination with review agencies will determine the exact parameters used to identify whether air quality impacts apply for the Graham Site.

D. If detailed modeling is required, estimate the worst case one-hour and eight-hour CO concentrations expected for each phase through buildout for comparison with the state and federal ambient air quality standards. Utilize methodology supplied or approved by the Florida Department of Environmental Regulation for making such estimates. Submit all air quality modeling input and output data along with associated calculations to support the modeling and explain any deviations from guidance. Provide drawings of site geometry and coordinate information for each area modeled. Show the location of the sources and receptor sites. Modeling assumptions should consider federal, state, and local government programmed link and intersection improvements with respect to project phasing. Any roadway improvements utilized in the model should be consistent with those used in Question 21, Transportation. Provide verification of any assumptions in the modeling which consider such programmed improvements. It is recommended that air quality analyses be completed concurrently and in conjunction with the traffic analyses for the project.

If applicable, this information will be provided after the CDMP Amendment Transportation Analysis has been reviewed and determined to be sufficient, and the Applicant has met with the applicable review agencies to determine which intersections and/or parking facilities need to be modeled and have established parameters for the carbon monoxide analysis.

E. If initial detailed modeling shows projected exceedance(s) of ambient air quality standards, identify appropriate mitigation measures and provide assurances that appropriate mitigating measures will be employed so as to maintain compliance with air quality standards. Submit further modeling demonstrating the adequacy of such measures.

This information will be provided, as applicable, after the CDMP Amendment Transportation Analysis has been reviewed and determined to be sufficient, and the modeling (if applicable) has been completed.

APPENDIX III-C:
Graham Link Mitigation Summary

APPENDIX III-C1:
Short Term (Year 2020) Study Area Roadway Segment LOS Analysis - Graham PM Mitigation Summary

Short Term (Year 2020) Study Area Roadway Segment LOS Analysis - Graham PM Mitigation Summary

								2020 Concurrency										2020 CDMP/Zoning									
								Link Anlaysis Results				Add 2L?		Add 4L?		Final Mitigated		Link Anlaysis Results				Add 2L?		Add 4L?		Final Mitigated	
STA ID	Roadway	From	To	Exist NL	2020 NL	Adopted LOS	2020 Service Volume	Study Area Link?	Pass/ Fail	Backlog Facility	Fail Pk Dir Total Trips	Improv SV	SV Ck	Improv SV	SV Ck	# lanes BG Needs	# lanes Total Needs	Study Area Link?	Pass/ Fail	Backlog Facility	Fail Pk Dir Total Trips	Improv SV	SV Ck	Improv SV	SV Ck	# lanes BG Needs	# lanes Total Needs
972250	Florida's Turnpike/ HEFT/SR 821	SW 8th St	SR 836	`	6+4	D	9160		Pass										Pass								
972526		SR 836	NW 12th Street	8	6+4	D	9160		Pass										Pass								
972230		NW 12th Street	NW 41th Street	8	6+4	D	9160		Pass										Pass								
972269		NW 41th Street	NW 74th Street	8	6+4	D	9160		Pass										Pass								
972268		NW 74th Street	NW 106th Street	8	6+4	D	9160		Pass										Pass								
972272		NW 106th Street	US 27/ Okeechobee Rd	6	6+4	D	9160		Pass										Pass								
972248		US 27/ Okeechobee Rd	NW 170th St	6	6+4	D	9160		Pass										Pass								
972248		NW 170th St	Interstate 75	6	6+4	D	9160		Pass										Pass								
972285		Interstate 75	CR 823/Red Rd	4	6+2	D	7330		Pass										Pass								
971996		CR 823/Red Rd	CR 817/NW 27th Ave	4	6+2	D	7330		Pass										Pass								
971998		CR 817/NW 27th Ave	Florida's Turnpike/SR 91	6	6+2	D	7330		Pass										Pass								
971904	Florida's Turnpike/ SR 91	I-595	Griffin Rd	8	8	D	7320		Pass										Pass								
971902		Griffin Rd	Pines Blvd	6	6	D	5500		Fail	Y	7030	7320	Y			8	8		Fail	Y	7388	7320	N	9220	Y	10	10
971900		Pines Blvd	Florida's Turnpike/HEFT/SR 821	8	8	D	7320		Pass										Pass								
970502		Florida's Turnpike/HEFT/SR 821	NW 203rd St	8	8	D	7320		Pass										Pass								
862005	Interstate 75	I-595	Royal Palm Blvd	8	8+4	D	10980		Pass										Pass								
862004		Royal Palm Blvd	Griffin Rd	8	8+4	D	10980		Pass										Pass								
862003		Griffin Rd	Sheridan St	8	8+4	D	10980		Pass										Pass								
862002		Sheridan St	Pines Blvd	8	10+4	D	12880		Pass										Pass								
862001		Pines Blvd	Miramar Pkwy/ S 33rd St	8	10+4	D	12880		Pass										Pass								
860362		Miramar Pkwy/ S 33rd St	Florida's Turnpike	12	12+4	D	15720		Pass										Pass								
872503		Florida's Turnpike	Miami Gardens Dr/NW 186 St	10	10+4	D	12880		Pass										Pass								
872501		Miami Gardens Dr/NW 186 St	NW 178th St	8	8+4	D	10980		Pass										Pass								
872501		NW 178th St	NW 138th Street	8	8+4	D	10980		Pass										Pass								
872500		NW 138th Street	SR 826	8	8+4	D	10980		Pass										Pass								
872511	SR 924/Gratigny Pkwy	SR 826	NW 57th Ave (Red Road)	6	6	D	5500		Pass										Pass								
872512		NW 57th Ave (Red Road)	Douglas(Le Jeune Connector)	6	6	D	5500		Pass										Pass								
872510		Douglas(Le Jeune Connector)	NW 32nd Ave	6	6	D	5500		Pass										Pass								
n/a	NW 107th Ave	US 27/ Okeechobee Rd	NW 138th St	4	4	D	1800		Pass										Pass								
n/a		NW 138th St	NW 170th St	-	-	n/a	n/a																				
n/a	NW 102nd Ave	NW 170th St	NW 178th St	-	-	n/a	n/a																				
n/a		NW 178th St	ADM Project Access Rd	-	New 4	D	1800	Y	Pass									Y	Pass								
n/a	Miami Gardens Dr	ADM Project Access Rd	Interstate 75 Western Ramps	-	New 6	E	3624	Y	Pass									Y	Pass								
n/a		Interstate 75 Western Ramps	Interstate 75 Eastern Ramps	-	New 6	E	3624	Y	Pass									Y	Pass								
872518		Interstate 75 Eastern Ramps	NW 87th Ave	4	4	E	2400		Fail	Y	2861	3624	Y			6*	6*		Fail	Y	2626	3624	Y			6*	6*
872518		NW 87th Ave	NW 82nd Ave	4	4	E	2400		Fail	Y	2623	3624	Y			6*	6*		Fail	Y	2602	3624	Y			6*	6*
872517		NW 82nd Ave	NW 77nd Ave	4	4	E	2400		Pass										Pass								
872517		NW 77nd Ave	NW 67nd Ave	4	4	E	2400		Pass										Pass								
872516		NW 67nd Ave	NW 57nd Ave	4	4	E	2400		Pass										Pass								
871233		NW 57th Ave	NW 47th Ave	6	6	E	3624		Pass										Pass								
n.a	NW 170th St	Florida Turnpike	NW 102 Ave/NW 107 Ave	-	New 6	D	2718		Pass										Pass								
n./a		NW 102 Ave/NW 107 Ave	NW 97th Ave	-	New 6	D	2718		Pass										Pass								
878177		NW 87th Ave	NW 82nd Ave	2	2	D	675		Pass										Pass								
9552		NW 82nd Ave	NW 78th Ave	2	2	D	675		Pass										Pass								
9550	NW 169th St	NW 77th Ct	NW 67th Ave	4	4	D	1800		Pass										Pass								
877037	NW 154th St	NW 87th Ave	NW 82nd Ave	4	4	D	1800		Pass										Pass								
877037		NW 82nd Ave	SR 826	4	4	D	1800		Pass										Pass								
878673		SR 826	NW 67th Ave	4	4	E	1700		Pass										Pass								
9256		NW 67th Ave	NW 57th Ave (Red Road)	4	4	E	1700		Pass										Pass								
878684	NW 138th St	US 27/ Okeechobee Rd	NW 107th Ave	4	4	E	2000		Pass										Pass								
877048		NW 107th Ave	NW 97th Ave	6	6	E	3020		Pass										Pass								
877048		NW 97th Ave	Hialeah Gardens Blvd	6	6	E	3020		Pass										Pass								
877065	Hialeah Gardens Blvd	NW 106th Terrace	US 27/ Okeechobee Rd	6	6	E	3020		Pass										Pass								
878620		US 27/ Okeechobee Rd	NW 138th St	4	4	E	2000		Pass										Pass								
878243	NW 97th Ave	NW 122nd St	NW 130th St	2	2	D	792		Pass										Pass								
878243		NW 130th St	NW 138th St	2	2	D	792		Pass										Pass								
878243		NW 138th St	NW 154th St	4	4	D	1800		Pass										Pass								
878243		NW 154th St	NW 170th St	2	2	D	792	Y	Pass									Y	Pass								
n/a		NW 170th St	Graham Access	-	New 4	D	1800		Pass										Pass								
n/a		Graham Access	NW 178th St	-	New 4	D	1800	Y	Pass									Y	Pass								
878176	NW 87th Ave	Miami Gardens Dr/NW 186 St	NW 170th St	4	4	D	1800		Fail	Y	2048	2718	Y			6	6		Fail	Y	1855	2718	Y			6	6
878112		NW 170th St	NW 154th St	4	4	D	1800		Pass										Pass								

Short Term (Year 2020) Study Area Roadway Segment LOS Analysis - Graham PM Mitigation Summary

								2020 Concurrency										2020 CDMP/Zoning									
								Link Anlaysis Results				Add 2L?		Add 4L?		Final Mitigated		Link Anlaysis Results				Add 2L?		Add 4L?		Final Mitigated	
STA ID	Roadway	From	To	Exist NL	2020 NL	Adopted LOS	2020 Service Volume	Study Area Link?	Pass/ Fail	Backlog Facility	Fail Pk Dir Total Trips	Improv SV	SV Ck	Improv SV	SV Ck	# lanes BG Needs	# lanes Total Needs	Study Area Link?	Pass/ Fail	Backlog Facility	Fail Pk Dir Total Trips	Improv SV	SV Ck	Improv SV	SV Ck	# lanes BG Needs	# lanes Total Needs
n/a	NW178th St	Graham Access	NW 97th Ave	-	New 4	D	1800	Y	Pass									Y	Pass								
n/a		NW 97th Ave	Iinterstate 75	-	New 4	D	1800		Pass										Pass								
869688	Miramar Pkwy	SW 172nd Ave	SW 160th Ave	6	6	D	3020		Pass										Pass								
n/a		SW 160th Ave	Interstate 75	6	6	D	3020		Fail	Y	3266	4040	Y			8	8		Fail	Y	3432	4040	Y			8	8
n/a		Interstate 75	SW 148th Ave	6	8	D	4040		Pass										Pass								
867326		SW 148th Ave	Flamingo Rd	6	6	D	3020		Pass										Pass								
877076	NW 122nd St	NW 97th Ave	Hialeah Gardens Blvd	4	4	D	1467		Pass										Pass								
877076		Hialeah Gardens Blvd	NW 89th Ave	4	4	D	1467		Pass										Pass								
878193		NW 89th Ave	NW 87th Ave	4	4	D	1467		Pass										Pass								
877041		NW 87th Ave	SR 826	4	4	D	1467		Pass										Pass								
877076		N Okeechobee Rd	NW 97th Ave	2	2	D	792		Fail	Y	1129	1800	Y			4	4		Fail	Y	1305	1800	Y			4	4
870575	SR 826	I-75	NW 122nd St	8	6+4	D	9160		Pass										Pass								
870574		NW 122nd St	NW 103rd St	10	6+4	D	9160		Pass										Fail	Y	9396	10980	Y			8+4	8+4
870553		NW 103rd St	N Okeechobee Rd	10	8+4	D	10980		Fail	Y	11561	12880	Y			10+4	10+4		Fail	Y	13076	12880	N	15720	Y	12+4	12+4
860088	Pines Blvd	I-75	SW 160th Ave	6	6	D	3020		Pass										Pass								
860087		SW 160th Ave	SW 172th Ave	6	6	D	3020		Pass										Pass								
870585	Okeechobee Rd	NW 154th St	Florida's Turnpike	4	4	C	1580		Pass										Pass								
872536		Florida's Turnpike	NW 138th St	6	6	D	3020		Pass										Pass								
872536		NW 138th St	NW 107th Ave	6	6	D	3020		Pass										Pass								
872536		NW 107th Ave	Hialeah Gardens Blvd	6	6	D	3020		Pass										Pass								
870109		Hialeah Gardens Blvd	NW 103rd St	6	6	D	3020		Pass										Pass								
870109		NW 103rd St	SR 826	6	6	D	3020		Pass										Pass								
870528		SR 826	W 16th Ave (Milam Dairy Rd)	6	6	E	3020		Pass										Pass								
875252		W 16th Ave (Milam Dairy Rd)	Hialeah Expy	6	6	E	3020		Pass										Pass								
875252		Hialeah Expy	NW 57th Ave (Red Road)	6	6	E	3020		Pass										Pass								
875252		NW 57th Ave (Red Road)	Hialeah Dr	6	6	E	3020		Pass										Pass								
870200		Hialeah Dr	SW 42nd Ave (Le Jeune Rd)	6	6	E	3020		Pass										Fail	Y	3396	4040	Y			8	8
860494	SW 67th Ave/Flamingo	NW 191st St	Miami Gardens Dr/NW 186 St	6	6	D	2718		Pass										Pass								
877036		Miami Gardens Dr/NW 186 St	NW 173rd Dr	6	6	E	3624		Pass										Pass								
865216	SW 57th Ave/Red Rd	Miramar Pkwy/ S 33rd St	Florida's Turnpike/HEFT/SR 821	6	6	E	3020		Pass										Pass								
872515		Florida's Turnpike/HEFT/SR 821	NW 202nd St	6	6	E	3020		Pass										Pass								
872514		NW 202nd St	Miami Gardens Dr/NW 186 St	6	6	D	2718		Pass										Pass								
871190		Miami Gardens Dr/NW 186 St	NW 177th St	6	6	D	2718		Pass										Pass								

*	Miami Garden Dr planned to be widened to 6L
	Fails due to Project traffic
	Capacity needs more than 4 additional lanes or reasonable maximum number of lanes reached (e.g. NL Max); additional ITS, transit or other mitigation options should be considered
	Fails due to Combined Project traffic; but neither ADM nor Graham fails thus netiher is responsible for widening
	Fails due to total traffic but Study Area Link 5% of Adopted LOS significance test not met

APPENDIX III-C2:
Long Term (Year 2040) Study Area Roadway Segment LOS Analysis - Graham PM Mitigation Summary

Long Term (Year 2040) Study Area Roadway Segment LOS Analysis - Graham PM Mitigation Summary

					2040 CDMP													2040 Zoning											
								Link Anlaysis Results				Add 2L?		Add 4L?		Final Mitigated					Link Anlaysis Results				Add 2L?		Add 4L?		Final Mitigated	
STA ID	Roadway	From	To	Exist NL	2040 NL	Adopted LOS	2040 Service Volume	Study Area Link?	Pass/ Fail	Backlog Facility	Fail Pk Dir Total Trips	Improv SV	SV Ck	Improv SV	SV Ck	# lanes BG Needs	# lanes Total Needs	2020 NL	Adopted LOS	2020 Service Volume	Study Area Link?	Pass/ Fail	Backlog Facility	Fail Pk Dir Total Trips	Improv SV	SV Ck	Improv SV	SV Ck	# lanes BG Needs	# lanes Total Needs
972250	Florida's Turnpike/ HEFT/SR 821	SW 8th St	SR 836	`	6+4	D	9160		Fail	Y	14365	10980	N	12880	N	10+4	10+4	6+4	D	9160		Fail	Y	14365	10980	N	12880	N	10+4	10+4
972526		SR 836	NW 12th Street	8	6+4	D	9160		Fail	Y	10054	10980	Y			8+4	8+4	6+4	D	9160		Fail	Y	10054	10980	Y			8+4	8+4
972230		NW 12th Street	NW 41th Street	8	6+4	D	9160		Fail	Y	15937	10980	N	12880	N	10+4	10+4	6+4	D	9160		Fail	Y	15950	10980	N	12880	N	10+4	10+4
972269		NW 41th Street	NW 74th Street	8	6+4	D	9160		Fail	Y	15308	10980	N	12880	N	10+4	10+4	6+4	D	9160		Fail	Y	15313	10980	N	12880	N	10+4	10+4
972268		NW 74th Street	NW 106th Street	8	6+4	D	9160		Fail	Y	13888	10980	N	12880	N	10+4	10+4	6+4	D	9160		Fail	Y	13893	10980	N	12880	N	10+4	10+4
972272		NW 106th Street	US 27/ Okeechobee Rd	6	6+4	D	9160		Fail	Y	15610	10980	N	12880	N	10+4	10+4	6+4	D	9160		Fail	Y	15628	10980	N	12880	N	10+4	10+4
972248		US 27/ Okeechobee Rd	NW 170th St	6	6+4	D	9160		Fail	Y	13489	10980	N	12880	N	10+4	10+4	6+4	D	9160	Y	Fail	Y	13632	10980	N	12880	N	10+4	10+4
972248		NW 170th St	Interstate 75	6	6+4	D	9160		Fail	Y	14551	10980	N	12880	N	10+4	10+4	6+4	D	9160		Fail	Y	14543	10980	N	12880	N	10+4	10+4
972285		Interstate 75	CR 823/Red Rd	4	6+2	D	7330	Y	Fail	Y	8096	9160	Y			6+4	6+4	6+2	D	7330	Y	Fail	Y	8101	9160	Y			6+4	6+4
971996		CR 823/Red Rd	CR 817/NW 27th Ave	4	6+2	D	7330		Fail	Y	8919	9160	Y			6+4	6+4	6+2	D	7330		Fail	Y	8923	9160	Y			6+4	6+4
971998		CR 817/NW 27th Ave	Florida's Turnpike/SR 91	6	6+2	D	7330		Fail	Y	8718	9160	Y			6+4	6+4	6+2	D	7330		Fail	Y	8720	9160	Y			6+4	6+4
971904	Florida's Turnpike/ SR 91	I-595	Griffin Rd	8	8	D	7320		Fail	Y	8616	9220	Y			10	10	8	D	7320		Fail	Y	8615	9220	Y			10	10
971902		Griffin Rd	Pines Blvd	6	6	D	5500		Fail	Y	9059	7320	N	9220	Y	10	10	6	D	5500		Fail	Y	9059	7320	N	9220	Y	10	10
971900		Pines Blvd	Florida's Turnpike/HEFT/SR 821	8	8	D	7320		Fail	Y	8665	9220	Y			10	10	8	D	7320		Fail	Y	8665	9220	Y			10	10
970502		Florida's Turnpike/HEFT/SR 821	NW 203rd St	8	8	D	7320		Fail	Y	7446	9220	Y			10	10	8	D	7320		Fail	Y	7448	9220	Y			10	10
862005	Interstate 75	I-595	Royal Palm Blvd	8	8+4	D	10980		Pass									8+4	D	10980		Pass								
862004		Royal Palm Blvd	Griffin Rd	8	8+4	D	10980		Pass									8+4	D	10980		Pass								
862003		Griffin Rd	Sheridan St	8	8+4	D	10980		Pass									8+4	D	10980		Pass								
862002		Sheridan St	Pines Blvd	8	10+4	D	12880		Pass									10+4	D	12880		Pass								
862001		Pines Blvd	Miramar Pkwy/ S 33rd St	8	10+4	D	12880		Pass									10+4	D	12880		Pass								
860362		Miramar Pkwy/ S 33rd St	Florida's Turnpike	12	12+4	D	15720		Pass									12+4	D	15720		Pass								
872503		Florida's Turnpike	Miami Gardens Dr/NW 186 St	10	10+4	D	12880	Y	Pass									10+4	D	12880	Y	Pass								
872501		Miami Gardens Dr/NW 186 St	NW 178th St	8	8+4	D	10980	Y	Pass									8+4	D	10980	Y	Pass								
872501		NW 178th St	NW 138th Street	8	8+4	D	10980		Pass									8+4	D	10980	Y	Pass								
872500		NW 138th Street	SR 826	8	8+4	D	10980		Pass									8+4	D	10980		Pass								
872511	SR 924/Gratigny Pkwy	SR 826	NW 57th Ave (Red Road)	6	6	D	5500		Pass									6	D	5500		Pass								
872512		NW 57th Ave (Red Road)	Douglas(Le Jeune Connector)	6	6	D	5500		Pass									6	D	5500		Pass								
872510		Douglas(Le Jeune Connector)	NW 32nd Ave	6	6	D	5500		Pass									6	D	5500		Pass								
n/a	NW 107th Ave	US 27/ Okeechobee Rd	NW 138th St	4	4	D	1800	Y	Pass									4	D	1800		Pass								
n/a		NW 138th St	NW 170th St	-	New 2L	D	792	Y	Pass									-	n/a	n/a										
n/a	NW 102nd Ave	NW 170th St	NW 178th St	-	New 4	D	1800	Y	Pass									-	n/a	n/a										
n/a		NW 178th St	ADM Project Access Rd	-	New 4	D	1800	Y	Pass									New 4	D	1800	Y	Pass								
n/a	Miami Gardens Dr	ADM Project Access Rd	Interstate 75 Western Ramps	-	New 6	E	3624	Y	Pass									New 6	E	3624	Y	Pass								
n/a		Interstate 75 Western Ramps	Interstate 75 Eastern Ramps	-	New 6	E	3624	Y	Pass									New 6	E	3624	Y	Pass								
872518		Interstate 75 Eastern Ramps	NW 87th Ave	4	4	E	2400	Y	Fail	Y	3477	3624	Y			6*	6*	4	E	2400	Y	Fail	Y	3515	3624	Y			6*	6*
872518		NW 87th Ave	NW 82nd Ave	4	4	E	2400	Y	Fail	Y	3424	3624	Y			6*	6*	4	E	2400	Y	Fail	Y	3450	3624	Y			6*	6*
872517		NW 82nd Ave	NW 77nd Ave	4	4	E	2400	Y	Pass									4	E	2400	Y	Pass								
872517		NW 77nd Ave	NW 67nd Ave	4	4	E	2400	Y	Pass									4	E	2400	Y	Pass								
872516		NW 67nd Ave	NW 57nd Ave	4	4	E	2400		Pass									4	E	2400		Pass								
871233		NW 57th Ave	NW 47th Ave	6	6	E	3624		Pass									6	E	3624		Pass								
n.a	NW 170th St	Florida Turnpike	NW 102 Ave/NW 107 Ave	-	New 6	D	2718	Y	Pass									New 6	D	2718	Y	Pass								
n./a		NW 102 Ave/NW 107 Ave	NW 97th Ave	-	New 6	D	2718	Y	Pass									New 6	D	2718	Y	Pass								
878177		NW 87th Ave	NW 82nd Ave	2	2	D	675		Pass									2	D	675		Pass								
9552		NW 82nd Ave	NW 78th Ave	2	2	D	675		Pass									2	D	675		Pass								
9550	NW 169th St	NW 77th Ct	NW 67th Ave	4	4	D	1800		Pass									4	D	1800		Pass								
877037	NW 154th St	NW 87th Ave	NW 82nd Ave	4	4	D	1800		Pass									4	D	1800		Pass								
877037		NW 82nd Ave	SR 826	4	4	D	1800		Pass									4	D	1800		Pass								
878673		SR 826	NW 67th Ave	4	4	E	1700		Pass									4	E	1700		Pass								
9256		NW 67th Ave	NW 57th Ave (Red Road)	4	4	E	1700		Pass									4	E	1700		Pass								
878684	NW 138th St	US 27/ Okeechobee Rd	NW 107th Ave	4	6	D	5500		Pass									4	E	2000		Pass								
877048		NW 107th Ave	NW 97th Ave	6	6	D	5500		Pass									6	E	3020		Pass								
877048		NW 97th Ave	Hialeah Gardens Blvd	6	6	D	5500		Pass									6	E	3020		Pass								
877065	Hialeah Gardens Blvd	NW 106th Terrace	US 27/ Okeechobee Rd	6	6	E	3020		Pass									6	E	3020		Pass								
878620		US 27/ Okeechobee Rd	NW 138th St	4	4	E	2000		Pass									4	E	2000		Pass								
878243	NW 97th Ave	NW 122nd St	NW 130th St	2	2	D	792		Pass									2	D	792		Pass								
878243		NW 130th St	NW 138th St	2	2	D	792		Pass									2	D	792		Pass								
878243		NW 138th St	NW 154th St	4	4	D	1800		Pass									4	D	1800	Y	Pass								
878243		NW 154th St	NW 170th St	2	2	D	792	Y	Fail		800	1800	Y				4	2	D	792	Y	Fail		836	1800	Y				4
n/a		NW 170th St	Graham Access	-	New 4	D	1800	Y	Pass									New 4	D	1800	Y	Pass								
n/a		Graham Access	NW 178th St	-	New 4	D	1800	Y	Pass									New 4	D	1800	Y	Pass								
878176	NW 87th Ave	Miami Gardens Dr/NW 186 St	NW 170th St	4	4	D	1800	Y	Fail	Y	2385	2718	Y			6	6	4	D	1800	Y	Fail	Y	2406	2718	Y			6	6
878112		NW 170th St	NW 154th St	4	4	D	1800		Pass									4	D	1800		Pass								
n/a	NW178th St	Graham Access	NW 97th Ave	-	New 4	D	1800	Y	Pass									New 4	D	1800	Y	Pass								
n/a		NW 97th Ave	Iinterstate 75	-	New 4	D	1800	Y	Pass									New 4	D	1800	Y	Pass								
869688	Miramar Pkwy	SW 172nd Ave	SW 160th Ave	6	6	D	3020		Pass									6	D	3020		Pass								
n/a		SW 160th Ave	Interstate 75	6	6	D	3020		Fail	Y	4233	4040	N	4040	N	8 Max	8 Max	6	D	3020		Fail	Y	4236	4040	N	4040	N	8 Max	8 Max
n/a		Interstate 75	SW 148th Ave	6	8	D	4040		Pass									8	D	4040		Pass								
867326		SW 148th Ave	Flamingo Rd	6	6	D	3020		Pass									6	D	3020		Pass								

Long Term (Year 2040) Study Area Roadway Segment LOS Analysis - Graham PM Mitigation Summary

					2040 CDMP													2040 Zoning												
								Link Anlaysis Results				Add 2L?		Add 4L?		Final Mitigated					Link Anlaysis Results				Add 2L?		Add 4L?		Final Mitigated	
STA ID	Roadway	From	To	Exist NL	2040 NL	Adopted LOS	2040 Service Volume	Study Area Link?	Pass/ Fail	Backlog Facility	Fail Pk Dir Total Trips	Improv SV	SV Ck	Improv SV	SV Ck	# lanes BG Needs	# lanes Total Needs	2020 NL	Adopted LOS	2020 Service Volume	Study Area Link?	Pass/ Fail	Backlog Facility	Fail Pk Dir Total Trips	Improv SV	SV Ck	Improv SV	SV Ck	# lanes BG Needs	# lanes Total Needs
877076	NW 122nd St	NW 97th Ave	Hialeah Gardens Blvd	4	4	D	1467		Pass									4	D	1467		Pass								
877076		Hialeah Gardens Blvd	NW 89th Ave	4	4	D	1467		Pass									4	D	1467		Pass								
878193		NW 89th Ave	NW 87th Ave	4	4	D	1467		Pass									4	D	1467		Pass								
877041		NW 87th Ave	SR 826	4	4	D	1467		Pass									4	D	1467		Pass								
877076		N Okeechobee Rd	NW 97th Ave	2	2	D	792		Fail	Y	1950	1800	N	2718	Y	6	6	2	D	792		Fail	Y	1942	1800	N	2718	Y	6	6
870575	SR 826	I-75	NW 122nd St	8	6+4	D	9160		Fail	Y	10038	10980	Y			8+4	8+4	6+4	D	9160		Fail	Y	10115	10980	Y			8+4	8+4
870574		NW 122nd St	NW 103rd St	10	6+4	D	9160		Fail	Y	11544	10980	N	12880	Y	10+4	10+4	6+4	D	9160		Fail	Y	11636	10980	N	12880	Y	10+4	10+4
870553		NW 103rd St	N Okeechobee Rd	10	8+4	D	10980		Fail	Y	16797	12880	N	15720	N	12+4	12+4	8+4	D	10980		Fail	Y	16853	12880	N	15720	N	12+4	12+4
860088	Pines Blvd	I-75	SW 160th Ave	6	6	D	3020		Fail	Y	3271	4040	Y			8	8	6	D	3020		Fail	Y	3273	4040	Y			8	8
860087		SW 160th Ave	SW 172th Ave	6	6	D	3020		Pass									6	D	3020		Pass								
870585	Okeechobee Rd	NW 154th St	Florida's Turnpike	4	4	C	1580		Pass									4	C	1580		Pass								
872536		Florida's Turnpike	NW 138th St	6	6	D	3020		Pass									6	D	3020		Pass								
872536		NW 138th St	NW 107th Ave	6	6	D	3020		Pass									6	D	3020		Pass								
872536		NW 107th Ave	Hialeah Gardens Blvd	6	6	D	3020	Y	Pass									6	D	3020		Pass								
870109		Hialeah Gardens Blvd	NW 103rd St	6	6	D	3020	Y	Pass									6	D	3020		Pass								
870109		NW 103rd St	SR 826	6	6	D	3020	Y	Pass									6	D	3020		Pass								
870528		SR 826	W 16th Ave (Milam Dairy Rd)	6	6	E	3020		Pass									6	E	3020		Pass								
875252		W 16th Ave (Milam Dairy Rd)	Hialeah Expy	6	6	E	3020		Fail	Y	3102	4040	Y			8	8	6	E	3020		Fail	Y	3078	4040	Y			8	8
875252		Hialeah Expy	NW 57th Ave (Red Road)	6	6	E	3020		Fail	Y	3094	4040	Y			8	8	6	E	3020		Fail	Y	3075	4040	Y			8	8
875252		NW 57th Ave (Red Road)	Hialeah Dr	6	6	E	3020		Fail	Y	3093	4040	Y			8	8	6	E	3020		Fail	Y	3074	4040	Y			8	8
870200		Hialeah Dr	SW 42nd Ave (Le Jeune Rd)	6	6	E	3020		Fail	Y	5112	4040	N	4040	N	8 Max	8 Max	6	E	3020		Fail	Y	5091	4040	N	4040	N	8 Max	8 Max
860494	SW 67th Ave/Flamingo	NW 191st St	Miami Gardens Dr/NW 186 St	6	6	D	2718		Pass									6	D	2718		Pass								
877036		Miami Gardens Dr/NW 186 St	NW 173rd Dr	6	6	E	3624		Pass									6	E	3624		Pass								
865216	SW 57th Ave/Red Rd	Miramar Pkwy/ S 33rd St	Florida's Turnpike/HEFT/SR 821	6	6	E	3020		Pass									6	E	3020		Pass								
872515		Florida's Turnpike/HEFT/SR 821	NW 202nd St	6	6	E	3020		Pass									6	E	3020		Pass								
872514		NW 202nd St	Miami Gardens Dr/NW 186 St	6	6	D	2718		Pass									6	D	2718		Pass								
871190		Miami Gardens Dr/NW 186 St	NW 177th St	6	6	D	2718		Pass									6	D	2718		Pass								

*	Miami Garden Dr planned to be widened to 6L
	Fails due to Project traffic
	Capacity needs more than 4 additional lanes or reasonable maximum number of lanes has been reached (e.g. NL Max); additional ITS, transit or other mitigation options should be considered
	Fails due to Combined Project traffic; but neither ADM nor Graham fails thus netiher is responsible for widening
	Fails due to total traffic but Study Area Link 5% of Adopted LOS significance test not met

Miami-Dade County

Appendix IV

October 10, 2016

Leftwich Consulting Engineers, Inc.

APPENDIX IV-A:
COMBINED LINK MITIGATION SUMMARY

APPENDIX IV-A1:
Short Term (Year 2020) Study Area Roadway Segment LOS Analysis - Combined ADM/Graham PM Mitigation Summary

Short Term (Year 2020) Study Area Roadway Segment LOS Analysis - Combined ADM/Graham PM Mitigation Summary

								2020 Concurrency										2020 CDMP/Zoning									
								Link Anlaysis Results				Add 2L?		Add 4L?		Final Mitigated		Link Anlaysis Results				Add 2L?		Add 4L?		Final Mitigated	
STA ID	Roadway	From	To	Exist NL	2020 NL	Adopted LOS	2020 Service Volume	Study Area Link?	Pass/ Fail	Backlog Facility	Fail Pk Dir Total Trips	Improv SV	SV Ck	Improv SV	SV Ck	# lanes BG Needs	# lanes Total Needs	Study Area Link?	Pass/ Fail	Backlog Facility	Fail Pk Dir Total Trips	Improv SV	SV Ck	Improv SV	SV Ck	# lanes BG Needs	# lanes Total Needs
972250	Florida's Turnpike/ HEFT/SR 821	SW 8th St	SR 836	`	6+4	D	9160		Pass										Pass								
972526		SR 836	NW 12th Street	8	6+4	D	9160		Pass										Pass								
972230		NW 12th Street	NW 41th Street	8	6+4	D	9160		Pass										Pass								
972269		NW 41th Street	NW 74th Street	8	6+4	D	9160		Pass										Pass								
972268		NW 74th Street	NW 106th Street	8	6+4	D	9160		Pass										Pass								
972272		NW 106th Street	US 27/ Okeechobee Rd	6	6+4	D	9160		Pass										Pass								
972248		US 27/ Okeechobee Rd	NW 170th St	6	6+4	D	9160	Y	Pass									Y	Pass								
972248		NW 170th St	Interstate 75	6	6+4	D	9160	Y	Pass									Y	Pass								
972285		Interstate 75	CR 823/Red Rd	4	6+2	D	7330	Y	Pass									Y	Pass								
971996		CR 823/Red Rd	CR 817/NW 27th Ave	4	6+2	D	7330	Y	Pass									Y	Pass								
971998		CR 817/NW 27th Ave	Florida's Turnpike/SR 91	6	6+2	D	7330		Pass										Pass								
971904	Florida's Turnpike/ SR 91	I-595	Griffin Rd	8	8	D	7320		Pass										Pass								
971902		Griffin Rd	Pines Blvd	6	6	D	5500		Fail	Y	7185	7320	Y			8	8		Fail	Y	7543	7320	N	9220	Y	10	10
971900		Pines Blvd	Florida's Turnpike/HEFT/SR 821	8	8	D	7320		Pass										Pass								
970502		Florida's Turnpike/HEFT/SR 821	NW 203rd St	8	8	D	7320		Pass										Pass								
862005	Interstate 75	I-595	Royal Palm Blvd	8	8+4	D	10980		Pass										Pass								
862004		Royal Palm Blvd	Griffin Rd	8	8+4	D	10980		Pass										Pass								
862003		Griffin Rd	Sheridan St	8	8+4	D	10980		Pass										Pass								
862002		Sheridan St	Pines Blvd	8	10+4	D	12880		Pass										Pass								
862001		Pines Blvd	Miramar Pkwy/ S 33rd St	8	10+4	D	12880		Pass										Pass								
860362		Miramar Pkwy/ S 33rd St	Florida's Turnpike	12	12+4	D	15720	Y	Pass									Y	Pass								
872503		Florida's Turnpike	Miami Gardens Dr/NW 186 St	10	10+4	D	12880	Y	Pass									Y	Pass								
872501		Miami Gardens Dr/NW 186 St	NW 178th St	8	8+4	D	10980	Y	Pass									Y	Pass								
872501		NW 178th St	NW 138th Street	8	8+4	D	10980	Y	Pass									Y	Pass								
872500		NW 138th Street	SR 826	8	8+4	D	10980		Pass										Pass								
872511	SR 924/Gratigny Pkwy	SR 826	NW 57th Ave (Red Road)	6	6	D	5500		Pass										Pass								
872512		NW 57th Ave (Red Road)	Douglas(Le Jeune Connector)	6	6	D	5500		Pass										Pass								
872510		Douglas(Le Jeune Connector)	NW 32nd Ave	6	6	D	5500		Pass										Pass								
n/a	NW 107th Ave	US 27/ Okeechobee Rd	NW 138th St	4	4	D	1800		Pass										Pass								
n/a		NW 138th St	NW 170th St	-	-	n/a	n/a																				
n/a	NW 102nd Ave	NW 170th St	NW 178th St	-	-	n/a	n/a																				
n/a		NW 178th St	ADM Project Access Rd	-	New 4	D	1800	Y	Pass									Y	Pass								
n/a	Miami Gardens Dr	ADM Project Access Rd	Interstate 75 Western Ramps	-	New 6	E	3624	Y	Pass									Y	Pass								
n/a		Interstate 75 Western Ramps	Interstate 75 Eastern Ramps	-	New 6	E	3624	Y	Pass									Y	Pass								
872518		Interstate 75 Eastern Ramps	NW 87th Ave	4	4	E	2400	Y	Fail	Y	3229	3624	Y			6*	6*	Y	Fail	Y	2995	3624	Y			6*	6*
872518		NW 87th Ave	NW 82nd Ave	4	4	E	2400	Y	Fail	Y	2807	3624	Y			6*	6*	Y	Fail	Y	2787	3624	Y			6*	6*
872517		NW 82nd Ave	NW 77nd Ave	4	4	E	2400	Y	Pass									Y	Pass								
872517		NW 77nd Ave	NW 67nd Ave	4	4	E	2400	Y	Pass									Y	Pass								
872516		NW 67nd Ave	NW 57nd Ave	4	4	E	2400		Pass										Pass								
871233		NW 57th Ave	NW 47th Ave	6	6	E	3624		Pass										Pass								
n.a	NW 170th St	Florida Turnpike	NW 102 Ave/NW 107 Ave	-	New 6	D	2718	Y	Pass									Y	Pass								
n./a		NW 102 Ave/NW 107 Ave	NW 97th Ave	-	New 6	D	2718	Y	Pass									Y	Pass								
878177		NW 87th Ave	NW 82nd Ave	2	2	D	675		Pass										Pass								
9552		NW 82nd Ave	NW 78th Ave	2	2	D	675		Pass										Pass								
9550	NW 169th St	NW 77th Ct	NW 67th Ave	4	4	D	1800	Y	Pass									Y	Pass								
877037	NW 154th St	NW 87th Ave	NW 82nd Ave	4	4	D	1800		Pass										Pass								
877037		NW 82nd Ave	SR 826	4	4	D	1800		Pass										Pass								
878673		SR 826	NW 67th Ave	4	4	E	1700		Pass										Pass								
9256		NW 67th Ave	NW 57th Ave (Red Road)	4	4	E	1700		Pass										Pass								
878684	NW 138th St	US 27/ Okeechobee Rd	NW 107th Ave	4	4	E	2000		Pass										Pass								
877048		NW 107th Ave	NW 97th Ave	6	6	E	3020		Pass										Pass								
877048		NW 97th Ave	Hialeah Gardens Blvd	6	6	E	3020		Pass										Pass								
877065	Hialeah Gardens Blvd	NW 106th Terrace	US 27/ Okeechobee Rd	6	6	E	3020		Pass										Pass								
878620		US 27/ Okeechobee Rd	NW 138th St	4	4	E	2000		Pass										Pass								
878243	NW 97th Ave	NW 122nd St	NW 130th St	2	2	D	792		Pass										Pass								
878243		NW 130th St	NW 138th St	2	2	D	792		Pass										Pass								
878243		NW 138th St	NW 154th St	4	4	D	1800	Y	Pass									Y	Pass								
878243		NW 154th St	NW 170th St	2	2	D	792	Y	Pass									Y	Pass								
n/a		NW 170th St	Graham Access	-	New 4	D	1800	Y	Pass									Y	Fail		1859	2718	Y				6
n/a		Graham Access	NW 178th St	-	New 4	D	1800	Y	Pass									Y	Fail		1935	2718	Y				6
878176	NW 87th Ave	Miami Gardens Dr/NW 186 St	NW 170th St	4	4	D	1800	Y	Fail	Y	2152	2718	Y			6	6	Y	Fail	Y	1959	2718	Y			6	6
878112		NW 170th St	NW 154th St	4	4	D	1800		Pass										Pass								

Short Term (Year 2020) Study Area Roadway Segment LOS Analysis - Combined ADM/Graham PM Mitigation Summary

								2020 Concurrency										2020 CDMP/Zoning									
								Link Anlaysis Results				Add 2L?		Add 4L?		Final Mitigated		Link Anlaysis Results				Add 2L?		Add 4L?		Final Mitigated	
STA ID	Roadway	From	To	Exist NL	2020 NL	Adopted LOS	2020 Service Volume	Study Area Link?	Pass/ Fail	Backlog Facility	Fail Pk Dir Total Trips	Improv SV	SV Ck	Improv SV	SV Ck	# lanes BG Needs	# lanes Total Needs	Study Area Link?	Pass/ Fail	Backlog Facility	Fail Pk Dir Total Trips	Improv SV	SV Ck	Improv SV	SV Ck	# lanes BG Needs	# lanes Total Needs
n/a	NW178th St	Graham Access	NW 97th Ave	-	New 4	D	1800	Y	Pass									Y	Pass								
n/a		NW 97th Ave	Iinterstate 75	-	New 4	D	1800	Y	Pass									Y	Pass								
869688	Miramar Pkwy	SW 172nd Ave	SW 160th Ave	6	6	D	3020		Pass										Pass								
n/a		SW 160th Ave	Interstate 75	6	6	D	3020		Fail	Y	3321	4040	Y			8	8		Fail	Y	3487	4040	Y			8	8
n/a		Interstate 75	SW 148th Ave	6	8	D	4040		Pass										Pass								
867326		SW 148th Ave	Flamingo Rd	6	6	D	3020		Pass										Pass								
877076	NW 122nd St	NW 97th Ave	Hialeah Gardens Blvd	4	4	D	1467		Pass										Pass								
877076		Hialeah Gardens Blvd	NW 89th Ave	4	4	D	1467		Pass										Pass								
878193		NW 89th Ave	NW 87th Ave	4	4	D	1467		Pass										Pass								
877041		NW 87th Ave	SR 826	4	4	D	1467		Pass										Pass								
877076		N Okeechobee Rd	NW 97th Ave	2	2	D	792	Y	Fail	Y	1169	1800	Y			4	4	Y	Fail	Y	1345	1800	Y			4	4
870575	SR 826	I-75	NW 122nd St	8	6+4	D	9160		Pass										Pass								
870574		NW 122nd St	NW 103rd St	10	6+4	D	9160		Fail		9243	10980	Y				8+4		Fail	Y	9572	10980	Y			8+4	8+4
870553		NW 103rd St	N Okeechobee Rd	10	8+4	D	10980		Fail	Y	11803	12880	Y			10+4	10+4		Fail	Y	13318	12880	N	15720	Y	12+4	12+4
860088	Pines Blvd	I-75	SW 160th Ave	6	6	D	3020		Pass										Pass								
860087		SW 160th Ave	SW 172th Ave	6	6	D	3020		Pass										Pass								
870585	Okeechobee Rd	NW 154th St	Florida's Turnpike	4	4	C	1580		Pass										Pass								
872536		Florida's Turnpike	NW 138th St	6	6	D	3020	Y	Pass									Y	Pass								
872536		NW 138th St	NW 107th Ave	6	6	D	3020	Y	Pass									Y	Pass								
872536		NW 107th Ave	Hialeah Gardens Blvd	6	6	D	3020	Y	Pass									Y	Pass								
870109		Hialeah Gardens Blvd	NW 103rd St	6	6	D	3020	Y	Pass									Y	Pass								
870109		NW 103rd St	SR 826	6	6	D	3020		Pass										Pass								
870528		SR 826	W 16th Ave (Milam Dairy Rd)	6	6	E	3020	Y	Pass									Y	Pass								
875252		W 16th Ave (Milam Dairy Rd)	Hialeah Expy	6	6	E	3020	Y	Pass									Y	Pass								
875252		Hialeah Expy	NW 57th Ave (Red Road)	6	6	E	3020		Pass										Pass								
875252		NW 57th Ave (Red Road)	Hialeah Dr	6	6	E	3020		Pass										Pass								
870200		Hialeah Dr	SW 42nd Ave (Le Jeune Rd)	6	6	E	3020		Pass										Fail	Y	3472	4040	Y			8	8
860494	SW 67th Ave/Flamingo	NW 191st St	Miami Gardens Dr/NW 186 St	6	6	D	2718		Pass										Pass								
877036		Miami Gardens Dr/NW 186 St	NW 173rd Dr	6	6	E	3624		Pass										Pass								
865216	SW 57th Ave/Red Rd	Miramar Pkwy/ S 33rd St	Florida's Turnpike/HEFT/SR 821	6	6	E	3020		Pass										Pass								
872515		Florida's Turnpike/HEFT/SR 821	NW 202nd St	6	6	E	3020		Pass										Pass								
872514		NW 202nd St	Miami Gardens Dr/NW 186 St	6	6	D	2718		Pass										Pass								
871190		Miami Gardens Dr/NW 186 St	NW 177th St	6	6	D	2718		Pass										Pass								

*	Miami Garden Dr planned to be widened to 6L
	Fails due to Project traffic
	Capacity needs more than 4 additional lanes or reasonable maximum number of lanes reached (e.g. NL Max); additional ITS, transit or other mitigation options should be considered
	Fails due to Combined Project traffic; but neither ADM nor Graham fails thus netiher is responsible for widening
	Fails due to total traffic but Study Area Link 5% of Adopted LOS significance test not met

APPENDIX IV-A2:
Long Term (Year 2040) Study Area Roadway Segment LOS Analysis - Combined ADM/Graham PM Mitigation Summary

Long Term (Year 2040) Study Area Roadway Segment LOS Analysis - Combined ADM/Graham PM Mitigation Summary

					2040 CDMP													2040 Zoning											
								Link Anlaysis Results				Add 2L?		Add 4L?		Final Mitigated					Link Anlaysis Results				Add 2L?		Add 4L?		Final Mitigated	
STA ID	Roadway	From	To	Exist NL	2040 NL	Adopted LOS	2040 Service Volume	Study Area Link?	Pass/ Fail	Backlog Facility	Fail Pk Dir Total Trips	Improv SV	SV Ck	Improv SV	SV Ck	# lanes BG Needs	# lanes Total Needs	2020 NL	Adopted LOS	2020 Service Volume	Study Area Link?	Pass/ Fail	Backlog Facility	Fail Pk Dir Total Trips	Improv SV	SV Ck	Improv SV	SV Ck	# lanes BG Needs	# lanes Total Needs
972250	Florida's Turnpike/ HEFT/SR 821	SW 8th St	SR 836	`	6+4	D	9160		Fail	Y	14517	10980	N	12880	N	10+4	10+4	6+4	D	9160		Fail	Y	14510	10980	N	12880	N	10+4	10+4
972526		SR 836	NW 12th Street	8	6+4	D	9160		Fail	Y	10202	10980	Y			8+4	8+4	6+4	D	9160		Fail	Y	10197	10980	Y			8+4	8+4
972230		NW 12th Street	NW 41th Street	8	6+4	D	9160		Fail	Y	16116	10980	N	12880	N	10+4	10+4	6+4	D	9160		Fail	Y	16127	10980	N	12880	N	10+4	10+4
972269		NW 41th Street	NW 74th Street	8	6+4	D	9160	Y	Fail	Y	15507	10980	N	12880	N	10+4	10+4	6+4	D	9160	Y	Fail	Y	15505	10980	N	12880	N	10+4	10+4
972268		NW 74th Street	NW 106th Street	8	6+4	D	9160	Y	Fail	Y	14205	10980	N	12880	N	10+4	10+4	6+4	D	9160	Y	Fail	Y	14201	10980	N	12880	N	10+4	10+4
972272		NW 106th Street	US 27/ Okeechobee Rd	6	6+4	D	9160	Y	Fail	Y	15970	10980	N	12880	N	10+4	10+4	6+4	D	9160	Y	Fail	Y	15978	10980	N	12880	N	10+4	10+4
972248		US 27/ Okeechobee Rd	NW 170th St	6	6+4	D	9160	Y	Fail	Y	14048	10980	N	12880	N	10+4	10+4	6+4	D	9160	Y	Fail	Y	14190	10980	N	12880	N	10+4	10+4
972248		NW 170th St	Interstate 75	6	6+4	D	9160	Y	Fail	Y	14887	10980	N	12880	N	10+4	10+4	6+4	D	9160	Y	Fail	Y	14880	10980	N	12880	N	10+4	10+4
972285		Interstate 75	CR 823/Red Rd	4	6+2	D	7330	Y	Fail	Y	8447	9160	Y			6+4	6+4	6+2	D	7330	Y	Fail	Y	8452	9160	Y			6+4	6+4
971996		CR 823/Red Rd	CR 817/NW 27th Ave	4	6+2	D	7330	Y	Fail	Y	9160	9160	Y			6+4	6+4	6+2	D	7330	Y	Fail	Y	9165	9160	N	10980	Y	8+4	8+4
971998		CR 817/NW 27th Ave	Florida's Turnpike/SR 91	6	6+2	D	7330		Fail	Y	8865	9160	Y			6+4	6+4	6+2	D	7330		Fail	Y	8867	9160	Y			6+4	6+4
971904	Florida's Turnpike/ SR 91	I-595	Griffin Rd	8	8	D	7320		Fail	Y	8676	9220	Y			10	10	8	D	7320		Fail	Y	8675	9220	Y			10	10
971902		Griffin Rd	Pines Blvd	6	6	D	5500		Fail	Y	9183	7320	N	9220	Y	10	10	6	D	5500		Fail	Y	9184	7320	N	9220	Y	10	10
971900		Pines Blvd	Florida's Turnpike/HEFT/SR 821	8	8	D	7320		Fail	Y	8779	9220	Y			10	10	8	D	7320		Fail	Y	8780	9220	Y			10	10
970502		Florida's Turnpike/HEFT/SR 821	NW 203rd St	8	8	D	7320		Fail	Y	7528	9220	Y			10	10	8	D	7320		Fail	Y	7529	9220	Y			10	10
862005	Interstate 75	I-595	Royal Palm Blvd	8	8+4	D	10980		Pass									8+4	D	10980		Pass								
862004		Royal Palm Blvd	Griffin Rd	8	8+4	D	10980		Pass									8+4	D	10980		Pass								
862003		Griffin Rd	Sheridan St	8	8+4	D	10980	Y	Pass									8+4	D	10980	Y	Pass								
862002		Sheridan St	Pines Blvd	8	10+4	D	12880		Pass									10+4	D	12880		Pass								
862001		Pines Blvd	Miramar Pkwy/ S 33rd St	8	10+4	D	12880	Y	Pass									10+4	D	12880	Y	Pass								
860362		Miramar Pkwy/ S 33rd St	Florida's Turnpike	12	12+4	D	15720	Y	Pass									12+4	D	15720	Y	Pass								
872503		Florida's Turnpike	Miami Gardens Dr/NW 186 St	10	10+4	D	12880	Y	Pass									10+4	D	12880	Y	Pass								
872501		Miami Gardens Dr/NW 186 St	NW 178th St	8	8+4	D	10980	Y	Pass									8+4	D	10980	Y	Pass								
872501		NW 178th St	NW 138th Street	8	8+4	D	10980	Y	Pass									8+4	D	10980	Y	Pass								
872500		NW 138th Street	SR 826	8	8+4	D	10980	Y	Pass									8+4	D	10980	Y	Pass								
872511	SR 924/Gratigny Pkwy	SR 826	NW 57th Ave (Red Road)	6	6	D	5500		Pass									6	D	5500		Pass								
872512		NW 57th Ave (Red Road)	Douglas(Le Jeune Connector)	6	6	D	5500		Pass									6	D	5500		Pass								
872510		Douglas(Le Jeune Connector)	NW 32nd Ave	6	6	D	5500		Pass									6	D	5500		Pass								
n/a	NW 107th Ave	US 27/ Okeechobee Rd	NW 138th St	4	4	D	1800	Y	Pass									4	D	1800		Pass								
n/a		NW 138th St	NW 170th St	-	New 2L	D	792	Y	Pass									-	n/a	n/a										
n/a	NW 102nd Ave	NW 170th St	NW 178th St	-	New 4	D	1800	Y	Fail		1837	2718	Y				6	-	n/a	n/a										
n/a		NW 178th St	ADM Project Access Rd	-	New 4	D	1800	Y	Fail		1886	2718	Y				6	New 4	D	1800	Y	Pass								
n/a	Miami Gardens Dr	ADM Project Access Rd	Interstate 75 Western Ramps	-	New 6	E	3624	Y	Pass									New 6	E	3624	Y	Pass								
n/a		Interstate 75 Western Ramps	Interstate 75 Eastern Ramps	-	New 6	E	3624	Y	Pass									New 6	E	3624	Y	Pass								
872518		Interstate 75 Eastern Ramps	NW 87th Ave	4	4	E	2400	Y	Fail	Y	3798	3624	N	3624	N	6*	6*	4	E	2400	Y	Fail	Y	3852	3624	N	3624	N	6*	6*
872518		NW 87th Ave	NW 82nd Ave	4	4	E	2400	Y	Fail	Y	3597	3624	Y			6*	6*	4	E	2400	Y	Fail	Y	3629	3624	N	3624	N	6*	6*
872517		NW 82nd Ave	NW 77nd Ave	4	4	E	2400	Y	Fail		2491	3624	Y				6*	4	E	2400	Y	Fail		2517	3624	Y				6*
872517		NW 77nd Ave	NW 67nd Ave	4	4	E	2400	Y	Pass									4	E	2400	Y	Pass								
872516		NW 67nd Ave	NW 57nd Ave	4	4	E	2400	Y	Pass									4	E	2400	Y	Pass								
871233		NW 57th Ave	NW 47th Ave	6	6	E	3624		Pass									6	E	3624		Pass								
n.a	NW 170th St	Florida Turnpike	NW 102 Ave/NW 107 Ave	-	New 6	D	2718	Y	Pass									New 6	D	2718	Y	Pass								
n./a		NW 102 Ave/NW 107 Ave	NW 97th Ave	-	New 6	D	2718	Y	Pass									New 6	D	2718	Y	Pass								
878177		NW 87th Ave	NW 82nd Ave	2	2	D	675		Pass									2	D	675		Pass								
9552		NW 82nd Ave	NW 78th Ave	2	2	D	675		Pass									2	D	675		Pass								
9550	NW 169th St	NW 77th Ct	NW 67th Ave	4	4	D	1800	Y	Pass									4	D	1800	Y	Pass								
877037	NW 154th St	NW 87th Ave	NW 82nd Ave	4	4	D	1800		Pass									4	D	1800		Pass								
877037		NW 82nd Ave	SR 826	4	4	D	1800		Pass									4	D	1800		Pass								
878673		SR 826	NW 67th Ave	4	4	E	1700		Pass									4	E	1700		Pass								
9256		NW 67th Ave	NW 57th Ave (Red Road)	4	4	E	1700		Pass									4	E	1700		Pass								
878684	NW 138th St	US 27/ Okeechobee Rd	NW 107th Ave	4	6	D	5500		Pass									4	E	2000		Pass								
877048		NW 107th Ave	NW 97th Ave	6	6	D	5500		Pass									6	E	3020		Pass								
877048		NW 97th Ave	Hialeah Gardens Blvd	6	6	D	5500		Pass									6	E	3020		Pass								
877065	Hialeah Gardens Blvd	NW 106th Terrace	US 27/ Okeechobee Rd	6	6	E	3020		Pass									6	E	3020		Pass								
878620		US 27/ Okeechobee Rd	NW 138th St	4	4	E	2000		Pass									4	E	2000		Pass								
878243	NW 97th Ave	NW 122nd St	NW 130th St	2	2	D	792		Pass									2	D	792		Pass								
878243		NW 130th St	NW 138th St	2	2	D	792		Pass									2	D	792		Pass								
878243		NW 138th St	NW 154th St	4	4	D	1800	Y	Pass									4	D	1800	Y	Pass								
878243		NW 154th St	NW 170th St	2	2	D	792	Y	Fail		897	1800	Y				4	2	D	792	Y	Fail		933	1800	Y				4
n/a		NW 170th St	Graham Access	-	New 4	D	1800	Y	Pass									New 4	D	1800	Y	Pass								
n/a		Graham Access	NW 178th St	-	New 4	D	1800	Y	Pass									New 4	D	1800	Y	Fail		2008	2718	Y				6
878176	NW 87th Ave	Miami Gardens Dr/NW 186 St	NW 170th St	4	4	D	1800	Y	Fail	Y	2474	2718	Y			6	6	4	D	1800	Y	Fail	Y	2502	2718	Y			6	6
878112		NW 170th St	NW 154th St	4	4	D	1800		Pass									4	D	1800	Y	Pass								
n/a	NW178th St	Graham Access	NW 97th Ave	-	New 4	D	1800	Y	Pass									New 4	D	1800	Y	Pass								
n/a		NW 97th Ave	Iinterstate 75	-	New 4	D	1800	Y	Pass									New 4	D	1800	Y	Pass								
869688	Miramar Pkwy	SW 172nd Ave	SW 160th Ave	6	6	D	3020		Pass									6	D	3020		Pass								
n/a		SW 160th Ave	Interstate 75	6	6	D	3020		Fail	Y	4276	4040	N	4040	N	8 Max	8 Max	6	D	3020		Fail	Y	4280	4040	N	4040	N	8 Max	8 Max
n/a		Interstate 75	SW 148th Ave	6	8	D	4040	Y	Pass									8	D	4040	Y	Pass								
867326		SW 148th Ave	Flamingo Rd	6	6	D	3020		Fail		3059	4040	Y				8	6	D	3020		Fail		3075	4040	Y				8

Long Term (Year 2040) Study Area Roadway Segment LOS Analysis - Combined ADM/Graham PM Mitigation Summary

					2040 CDMP													2040 Zoning											
								Link Anlaysis Results				Add 2L?		Add 4L?		Final Mitigated					Link Anlaysis Results				Add 2L?		Add 4L?		Final Mitigated	
STA ID	Roadway	From	To	Exist NL	2040 NL	Adopted LOS	2040 Service Volume	Study Area Link?	Pass/ Fail	Backlog Facility	Fail Pk Dir Total Trips	Improv SV	SV Ck	Improv SV	SV Ck	# lanes BG Needs	# lanes Total Needs	2020 NL	Adopted LOS	2020 Service Volume	Study Area Link?	Pass/ Fail	Backlog Facility	Fail Pk Dir Total Trips	Improv SV	SV Ck	Improv SV	SV Ck	# lanes BG Needs	# lanes Total Needs
877076	NW 122nd St	NW 97th Ave	Hialeah Gardens Blvd	4	4	D	1467		Pass									4	D	1467		Pass								
877076		Hialeah Gardens Blvd	NW 89th Ave	4	4	D	1467		Pass									4	D	1467		Pass								
878193		NW 89th Ave	NW 87th Ave	4	4	D	1467		Pass									4	D	1467		Pass								
877041		NW 87th Ave	SR 826	4	4	D	1467		Pass									4	D	1467		Pass								
877076		N Okeechobee Rd	NW 97th Ave	2	2	D	792	Y	Fail	Y	1982	1800	N	2718	Y	6	6	2	D	792		Fail	Y	1974	1800	N	2718	Y	6	6
870575	SR 826	I-75	NW 122nd St	8	6+4	D	9160		Fail	Y	10297	10980	Y			8+4	8+4	6+4	D	9160		Fail	Y	10356	10980	Y			8+4	8+4
870574		NW 122nd St	NW 103rd St	10	6+4	D	9160		Fail	Y	11698	10980	N	12880	Y	10+4	10+4	6+4	D	9160		Fail	Y	11791	10980	N	12880	Y	10+4	10+4
870553		NW 103rd St	N Okeechobee Rd	10	8+4	D	10980		Fail	Y	17006	12880	N	15720	N	12+4	12+4	8+4	D	10980		Fail	Y	17064	12880	N	15720	N	12+4	12+4
860088	Pines Blvd	I-75	SW 160th Ave	6	6	D	3020	Y	Fail	Y	3338	4040	Y			8	8	6	D	3020	Y	Fail	Y	3341	4040	Y			8	8
860087		SW 160th Ave	SW 172th Ave	6	6	D	3020		Pass									6	D	3020		Pass								
870585	Okeechobee Rd	NW 154th St	Florida's Turnpike	4	4	C	1580		Pass									4	C	1580		Pass								
872536		Florida's Turnpike	NW 138th St	6	6	D	3020	Y	Pass									6	D	3020	Y	Pass								
872536		NW 138th St	NW 107th Ave	6	6	D	3020	Y	Pass									6	D	3020	Y	Pass								
872536		NW 107th Ave	Hialeah Gardens Blvd	6	6	D	3020	Y	Pass									6	D	3020	Y	Pass								
870109		Hialeah Gardens Blvd	NW 103rd St	6	6	D	3020	Y	Pass									6	D	3020	Y	Pass								
870109		NW 103rd St	SR 826	6	6	D	3020	Y	Pass									6	D	3020		Pass								
870528		SR 826	W 16th Ave (Milam Dairy Rd)	6	6	E	3020	Y	Pass									6	E	3020	Y	Pass								
875252		W 16th Ave (Milam Dairy Rd)	Hialeah Expy	6	6	E	3020	Y	Fail	Y	3207	4040	Y			8	8	6	E	3020	Y	Fail	Y	3187	4040	Y			8	8
875252		Hialeah Expy	NW 57th Ave (Red Road)	6	6	E	3020	Y	Fail	Y	3188	4040	Y			8	8	6	E	3020		Fail	Y	3172	4040	Y			8	8
875252		NW 57th Ave (Red Road)	Hialeah Dr	6	6	E	3020	Y	Fail	Y	3185	4040	Y			8	8	6	E	3020		Fail	Y	3170	4040	Y			8	8
870200		Hialeah Dr	SW 42nd Ave (Le Jeune Rd)	6	6	E	3020		Fail	Y	5163	4040	N	4040	N	8 Max	8 Max	6	E	3020		Fail	Y	5144	4040	N	4040	N	8 Max	8 Max
860494	SW 67th Ave/Flamingo	NW 191st St	Miami Gardens Dr/NW 186 St	6	6	D	2718		Pass									6	D	2718		Pass								
877036		Miami Gardens Dr/NW 186 St	NW 173rd Dr	6	6	E	3624		Pass									6	E	3624		Pass								
865216	SW 57th Ave/Red Rd	Miramar Pkwy/ S 33rd St	Florida's Turnpike/HEFT/SR 821	6	6	E	3020	Y	Pass									6	E	3020	Y	Pass								
872515		Florida's Turnpike/HEFT/SR 821	NW 202nd St	6	6	E	3020		Pass									6	E	3020		Pass								
872514		NW 202nd St	Miami Gardens Dr/NW 186 St	6	6	D	2718		Pass									6	D	2718		Pass								
871190		Miami Gardens Dr/NW 186 St	NW 177th St	6	6	D	2718		Pass									6	D	2718		Pass								

*	Miami Garden Dr planned to be widened to 6L
	Fails due to Project traffic
	Capacity needs more than 4 additional lanes or reasonable maximum number of lanes reached (e.g. NL Max); additional ITS, transit or other mitigation options should be considered
	Fails due to Combined Project traffic; but neither ADM nor Graham fails thus netiher is responsible for widening
	Fails due to total traffic but Study Area Link 5% of Adopted LOS significance test not met

APPENDIX IV-B:
Year 2020 Zoning Intersection Total with Combined ADM and Graham LOS

APPENDIX IV-B1:
Year 2020 Zoning Intersection Total with Combined LOS AM Analysis without Mitigation

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	229	507	406	160	1619	35	544	316	163	97	316	566
Future Volume (veh/h)	229	507	406	160	1619	35	544	316	163	97	316	566
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1743	1743	1900	1743	1743	1743
Adj Flow Rate, veh/h	236	523	419	165	1669	36	561	326	168	100	326	584
Adj No. of Lanes	2	2	1	1	3	0	1	2	0	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	9	9	9	9	9	9
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	133	1240	555	69	1794	39	125	638	322	55	447	380
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.04	0.35	0.35	0.04	0.35	0.35	0.08	0.30	0.30	0.03	0.26	0.26
Ln Grp Delay, s/veh	421.7	24.5	36.4	719.4	43.6	51.5	1625.0	30.9	31.5	479.6	42.0	289.6
Ln Grp LOS	F	C	D	F	D	D	F	C	C	F	D	F
Approach Vol, veh/h		1178			1870			1055			1010	
Approach Delay, s/veh		108.3			105.8			878.7			228.5	
Approach LOS		F			F			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	3.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	10.0	35.0	10.0	39.0	14.0	31.0	10.0	39.0
Change Period (Y+Rc), s	6.9	6.9	6.4	6.4	6.9	6.9	6.4	6.4
Max Green (Gmax), s	3.1	28.1	3.6	32.6	7.1	24.1	3.6	32.6
Max Allow Headway (MAH), s	3.8	4.8	3.7	4.9	3.8	4.8	3.8	4.9
Max Q Clear (g_c+I1), s	5.1	14.2	5.6	23.8	9.1	26.1	5.6	31.2
Green Ext Time (g_e), s	0.0	6.5	0.0	7.7	0.0	0.0	0.0	1.3
Prob of Phs Call (p_c)	0.93	1.00	0.99	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	1660	1792	1660	3476

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	2133	3574	1743	5174

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	1076	1599	1482	112

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	2	0
Grp Vol (v), veh/h	100	0	165	0	561	0	236	0
Grp Sat Flow (s), veh/h/ln	1660	0	1792	0	1660	0	1738	0
Q Serve Time (g_s), s	3.1	0.0	3.6	0.0	7.1	0.0	3.6	0.0
Cycle Q Clear Time (g_c), s	3.1	0.0	3.6	0.0	7.1	0.0	3.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	55	0	69	0	125	0	133	0
V/C Ratio (X)	1.83	0.00	2.40	0.00	4.47	0.00	1.77	0.00
Avail Cap (c_a), veh/h	55	0	69	0	125	0	133	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	45.5	0.0	45.2	0.0	43.5	0.0	45.2	0.0
Incr Delay (d2), s/veh	434.2	0.0	674.2	0.0	1581.6	0.0	376.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	479.6	0.0	719.4	0.0	1625.0	0.0	421.7	0.0
1st-Term Q (Q1), veh/ln	1.4	0.0	1.8	0.0	3.2	0.0	1.7	0.0
2nd-Term Q (Q2), veh/ln	6.6	0.0	12.9	0.0	55.1	0.0	7.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	8.0	0.0	14.6	0.0	58.3	0.0	8.7	0.0
%ile Storage Ratio (RQ%)	0.63	0.00	1.54	0.00	5.21	0.00	0.35	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	11.3	0.0	24.1	0.0	108.9	0.0	25.7	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.5	0.0	0.6	0.0	1.1	0.0	0.4	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	1	0	2
Grp Vol (v), veh/h	0	252	0	523	0	326	0	1104
Grp Sat Flow (s), veh/h/ln	0	1656	0	1787	0	1743	0	1712
Q Serve Time (g_s), s	0.0	11.8	0.0	10.5	0.0	16.1	0.0	29.2
Cycle Q Clear Time (g_c), s	0.0	11.8	0.0	10.5	0.0	16.1	0.0	29.2
Lane Grp Cap (c), veh/h	0	495	0	1240	0	447	0	1187
V/C Ratio (X)	0.00	0.51	0.00	0.42	0.00	0.73	0.00	0.93
Avail Cap (c_a), veh/h	0	495	0	1240	0	447	0	1187
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	27.2	0.0	23.5	0.0	32.0	0.0	29.6
Incr Delay (d2), s/veh	0.0	3.7	0.0	1.1	0.0	10.0	0.0	14.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	30.9	0.0	24.5	0.0	42.0	0.0	43.6
1st-Term Q (Q1), veh/ln	0.0	5.4	0.0	5.2	0.0	7.7	0.0	13.8

2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.2	0.0	1.2	0.0	2.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	5.9	0.0	5.3	0.0	8.9	0.0	16.1
%ile Storage Ratio (RQ%)	0.00	0.21	0.00	0.12	0.00	0.34	0.00	0.74
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	242	0	419	0	584	0	601
Grp Sat Flow (s), veh/h/ln	0	1553	0	1599	0	1482	0	1861
Q Serve Time (g_s), s	0.0	12.2	0.0	21.8	0.0	24.1	0.0	29.2
Cycle Q Clear Time (g_c), s	0.0	12.2	0.0	21.8	0.0	24.1	0.0	29.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.69	0.00	1.00	0.00	1.00	0.00	0.06
Lane Grp Cap (c), veh/h	0	464	0	555	0	380	0	646
V/C Ratio (X)	0.00	0.52	0.00	0.76	0.00	1.54	0.00	0.93
Avail Cap (c_a), veh/h	0	464	0	555	0	380	0	646
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	27.4	0.0	27.2	0.0	35.0	0.0	29.6
Incr Delay (d2), s/veh	0.0	4.2	0.0	9.3	0.0	254.7	0.0	21.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	31.5	0.0	36.4	0.0	289.6	0.0	51.5
1st-Term Q (Q1), veh/ln	0.0	5.2	0.0	9.6	0.0	9.8	0.0	15.0
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	1.4	0.0	26.9	0.0	3.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	5.7	0.0	11.0	0.0	36.7	0.0	18.9
%ile Storage Ratio (RQ%)	0.00	0.21	0.00	0.53	0.00	1.41	0.00	0.87
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	51.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		290.1						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	106	641	144	219	1263	255	278	129	159	226	186	197
Future Volume (veh/h)	106	641	144	219	1263	255	278	129	159	226	186	197
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	109	661	148	226	1302	263	287	133	164	233	192	203
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	119	1072	240	221	1266	253	259	120	149	236	272	231
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.07	0.37	0.37	0.12	0.43	0.43	0.15	0.16	0.16	0.13	0.15	0.15
Ln Grp Delay, s/veh	114.5	36.2	36.3	78.5	50.9	58.5	141.9	0.0	138.2	108.7	65.2	86.9
Ln Grp LOS	F	D	D	F	F	F	F		F	F	E	F
Approach Vol, veh/h		918			1791			584			628	
Approach Delay, s/veh		45.5			57.7			140.1			88.3	
Approach LOS		D			E			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	23.4	26.6	22.0	53.0	25.0	25.0	14.8	60.2
Change Period (Y+Rc), s	6.6	6.6	6.4	6.4	6.6	6.6	6.4	6.4
Max Green (Gmax), s	16.8	20.0	15.6	46.6	18.4	18.4	8.4	53.8
Max Allow Headway (MAH), s	3.8	5.0	3.7	5.1	3.8	5.0	3.7	5.1
Max Q Clear (g_c+I1), s	18.5	22.0	17.6	25.4	20.4	17.9	9.6	55.8
Green Ext Time (g_e), s	0.0	0.0	0.0	15.8	0.0	0.2	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	0.98	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1757		1774		1757		1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		753		2876		1845		2942

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		928		643		1568		587

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	233	0	226	0	287	0	109	0
Grp Sat Flow (s), veh/h/ln	1757	0	1774	0	1757	0	1774	0
Q Serve Time (g_s), s	16.5	0.0	15.6	0.0	18.4	0.0	7.6	0.0
Cycle Q Clear Time (g_c), s	16.5	0.0	15.6	0.0	18.4	0.0	7.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	236	0	221	0	259	0	119	0
V/C Ratio (X)	0.99	0.00	1.02	0.00	1.11	0.00	0.91	0.00
Avail Cap (c_a), veh/h	236	0	221	0	259	0	119	0
Upstream Filter (I)	1.00	0.00	0.09	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	54.0	0.0	54.7	0.0	53.3	0.0	57.9	0.0
Incr Delay (d2), s/veh	54.7	0.0	23.6	0.0	88.6	0.0	56.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	108.7	0.0	78.5	0.0	141.9	0.0	114.5	0.0
1st-Term Q (Q1), veh/ln	8.0	0.0	7.6	0.0	8.9	0.0	3.8	0.0
2nd-Term Q (Q2), veh/ln	3.6	0.0	1.5	0.0	6.4	0.0	1.9	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	11.6	0.0	9.1	0.0	15.3	0.0	5.6	0.0
%ile Storage Ratio (RQ%)	2.20	0.00	0.85	0.00	2.90	0.00	0.45	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	1.1	0.0	7.1	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.3	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T		T		T
Lanes in Grp	0	0	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	406	0	192	0	777
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	1845	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	23.4	0.0	12.4	0.0	53.8
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	23.4	0.0	12.4	0.0	53.8
Lane Grp Cap (c), veh/h	0	0	0	660	0	272	0	762
V/C Ratio (X)	0.00	0.00	0.00	0.62	0.00	0.71	0.00	1.02
Avail Cap (c_a), veh/h	0	0	0	660	0	272	0	762
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	0.0	0.0	31.9	0.0	50.7	0.0	35.6
Incr Delay (d2), s/veh	0.0	0.0	0.0	4.3	0.0	14.4	0.0	15.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	36.2	0.0	65.2	0.0	50.9
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	11.4	0.0	6.3	0.0	26.2

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.8	0.0	1.1	0.0	3.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	12.2	0.0	7.4	0.0	29.5
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.16	0.00	0.26	0.00	0.50
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	297	0	403	0	203	0	788
Grp Sat Flow (s), veh/h/ln	0	1681	0	1749	0	1568	0	1759
Q Serve Time (g_s), s	0.0	20.0	0.0	23.4	0.0	15.9	0.0	53.8
Cycle Q Clear Time (g_c), s	0.0	20.0	0.0	23.4	0.0	15.9	0.0	53.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.55	0.00	0.37	0.00	1.00	0.00	0.33
Lane Grp Cap (c), veh/h	0	269	0	652	0	231	0	757
V/C Ratio (X)	0.00	1.10	0.00	0.62	0.00	0.88	0.00	1.04
Avail Cap (c_a), veh/h	0	269	0	652	0	231	0	757
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	52.5	0.0	31.9	0.0	52.2	0.0	35.6
Incr Delay (d2), s/veh	0.0	85.7	0.0	4.3	0.0	34.7	0.0	22.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	138.2	0.0	36.3	0.0	86.9	0.0	58.5
1st-Term Q (Q1), veh/ln	0.0	9.3	0.0	11.3	0.0	6.9	0.0	26.1
2nd-Term Q (Q2), veh/ln	0.0	6.4	0.0	0.8	0.0	2.2	0.0	4.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	15.7	0.0	12.1	0.0	9.1	0.0	30.9
%ile Storage Ratio (RQ%)	0.00	0.52	0.00	0.16	0.00	0.32	0.00	0.52
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	7.0	0.0	0.0	0.0	0.0	0.0	7.8
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.3
Intersection Summary								
HCM 2010 Ctrl Delay		72.0						
HCM 2010 LOS		E						

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	82	921	1507	415	345	163
Future Volume (veh/h)	82	921	1507	415	345	163
Number	7	4	8	18	1	16
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00			1.00	1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1676	1676	1676	1710	1660	1660
Adj Flow Rate, veh/h	87	980	1603	441	367	173
Adj No. of Lanes	1	2	2	0	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	3	3
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	40	1919	1239	326	370	330
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.60	0.50	0.50	0.23	0.23
Ln Grp Delay, s/veh	605.9	9.6	138.5	180.3	74.8	32.2
Ln Grp LOS	F	A	F	F	E	C
Approach Vol, veh/h		1067	2044		540	
Approach Delay, s/veh		58.3	159.9		61.2	
Approach LOS		E	F		E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	6			4			7	8
Case No	9.0			4.0			2.0	8.0
Phs Duration (G+Y+Rc), s	25.0			54.0			8.4	45.6
Change Period (Y+Rc), s	6.5			6.4			6.4	6.4
Max Green (Gmax), s	18.5			46.6			2.0	39.2
Max Allow Headway (MAH), s	3.9			5.1			3.7	5.1
Max Q Clear (g_c+I1), s	20.3			16.0			4.0	41.2
Green Ext Time (g_e), s	0.0			26.7			0.0	0.0
Prob of Phs Call (p_c)	1.00			1.00			0.85	1.00
Prob of Max Out (p_x)	0.00			0.00			1.00	0.00
Left-Turn Movement Data								
Assigned Mvmt	1						7	3
Mvmt Sat Flow, veh/h	1581						1597	0
Through Movement Data								
Assigned Mvmt	6			4				8
Mvmt Sat Flow, veh/h	0			3269				2580
Right-Turn Movement Data								
Assigned Mvmt	16			14				18
Mvmt Sat Flow, veh/h	1411			0				657
Left Lane Group Data								
Assigned Mvmt	1	0	0	0	0	0	7	3
Lane Assignment							(Prot)	

Lanes in Grp	1	0	0	0	0	0	1	0
Grp Vol (v), veh/h	367	0	0	0	0	0	87	0
Grp Sat Flow (s), veh/h/ln	1581	0	0	0	0	0	1597	0
Q Serve Time (g_s), s	18.3	0.0	0.0	0.0	0.0	0.0	2.0	0.0
Cycle Q Clear Time (g_c), s	18.3	0.0	0.0	0.0	0.0	0.0	2.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1581	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.2
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	370	0	0	0	0	0	40	0
V/C Ratio (X)	0.99	0.00	0.00	0.00	0.00	0.00	2.15	0.00
Avail Cap (c_a), veh/h	370	0	0	0	0	0	40	0
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.64	0.00
Uniform Delay (d1), s/veh	30.2	0.0	0.0	0.0	0.0	0.0	38.5	0.0
Incr Delay (d2), s/veh	44.6	0.0	0.0	0.0	0.0	0.0	567.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	74.8	0.0	0.0	0.0	0.0	0.0	605.9	0.0
1st-Term Q (Q1), veh/ln	8.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0
2nd-Term Q (Q2), veh/ln	4.6	0.0	0.0	0.0	0.0	0.0	6.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	12.5	0.0	0.0	0.0	0.0	0.0	7.2	0.0
%ile Storage Ratio (RQ%)	0.62	0.00	0.00	0.00	0.00	0.00	0.84	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	11.6	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0
Middle Lane Group Data								
Assigned Mvmt	6	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	1
Grp Vol (v), veh/h	0	0	0	980	0	0	0	996
Grp Sat Flow (s), veh/h/ln	0	0	0	1593	0	0	0	1593
Q Serve Time (g_s), s	0.0	0.0	0.0	14.0	0.0	0.0	0.0	39.2
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	14.0	0.0	0.0	0.0	39.2
Lane Grp Cap (c), veh/h	0	0	0	1919	0	0	0	790
V/C Ratio (X)	0.00	0.00	0.00	0.51	0.00	0.00	0.00	1.26
Avail Cap (c_a), veh/h	0	0	0	1919	0	0	0	790
Upstream Filter (I)	0.00	0.00	0.00	0.64	0.00	0.00	0.00	0.14
Uniform Delay (d1), s/veh	0.0	0.0	0.0	9.0	0.0	0.0	0.0	19.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.6	0.0	0.0	0.0	118.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	9.6	0.0	0.0	0.0	138.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	6.1	0.0	0.0	0.0	17.1

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	26.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	6.3	0.0	0.0	0.0	43.2
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.62
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.4
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	16	0	0	14	0	0	0	18
Lane Assignment	R							T+R
Lanes in Grp	1	0	0	0	0	0	0	1
Grp Vol (v), veh/h	173	0	0	0	0	0	0	1048
Grp Sat Flow (s), veh/h/ln	1411	0	0	0	0	0	0	1561
Q Serve Time (g_s), s	8.5	0.0	0.0	0.0	0.0	0.0	0.0	39.2
Cycle Q Clear Time (g_c), s	8.5	0.0	0.0	0.0	0.0	0.0	0.0	39.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42
Lane Grp Cap (c), veh/h	330	0	0	0	0	0	0	774
V/C Ratio (X)	0.52	0.00	0.00	0.00	0.00	0.00	0.00	1.35
Avail Cap (c_a), veh/h	330	0	0	0	0	0	0	774
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14
Uniform Delay (d1), s/veh	26.4	0.0	0.0	0.0	0.0	0.0	0.0	19.9
Incr Delay (d2), s/veh	5.8	0.0	0.0	0.0	0.0	0.0	0.0	160.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	32.2	0.0	0.0	0.0	0.0	0.0	0.0	180.3
1st-Term Q (Q1), veh/ln	6.7	0.0	0.0	0.0	0.0	0.0	0.0	16.8
2nd-Term Q (Q2), veh/ln	0.5	0.0	0.0	0.0	0.0	0.0	0.0	34.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	7.2	0.0	0.0	0.0	0.0	0.0	0.0	51.3
%ile Storage Ratio (RQ%)	0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.74
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	68.5
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Intersection Summary								
HCM 2010 Ctrl Delay		115.6						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	1050	33	44	1580	27	129	7	14	56	22	52
Future Volume (veh/h)	34	1050	33	44	1580	27	129	7	14	56	22	52
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1845	1845	1900	1845	1845
Adj Flow Rate, veh/h	35	1071	34	45	1612	28	132	7	14	57	22	53
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	42	2171	69	55	2234	39	133	7	125	86	33	105
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.02	0.62	0.62	0.03	0.63	0.63	0.08	0.08	0.08	0.07	0.07	0.07
Ln Grp Delay, s/veh	73.7	7.8	7.8	75.8	10.9	10.8	102.9	0.0	29.2	54.3	0.0	45.0
Ln Grp LOS	E	A	A	E	B	B	F		C	D		D
Approach Vol, veh/h		1140			1685			153			132	
Approach Delay, s/veh		9.8			12.6			96.2			50.5	
Approach LOS		A			B			F			D	

Timer:		1	2	3	4	5	6	7	8			
Assigned Phs		6	2	3	4			7	8			
Case No		11.0	11.0	2.0	4.0			2.0	4.0			
Phs Duration (G+Y+Rc), s		11.0	12.0	8.4	46.7			7.9	47.2			
Change Period (Y+Rc), s		6.7	6.9	6.4	* 6.6			6.4	* 6.6			
Max Green (Gmax), s		4.3	5.1	2.0	* 26			2.0	* 26			
Max Allow Headway (MAH), s		4.8	5.2	3.8	5.2			3.7	5.2			
Max Q Clear (g_c+I1), s		4.8	7.0	3.6	12.7			3.3	21.8			
Green Ext Time (g_e), s		0.0	0.0	0.0	12.1			0.0	4.4			
Prob of Phs Call (p_c)		1.00	1.00	0.55	1.00			0.46	1.00			
Prob of Max Out (p_x)		0.00	0.00	1.00	0.00			1.00	0.00			

Left-Turn Movement Data												
Assigned Mvmt		1	5	3				7				
Mvmt Sat Flow, veh/h		1285	1672	1774				1774				

Through Movement Data												
Assigned Mvmt		6	2		4				8			
Mvmt Sat Flow, veh/h		496	89		3502				3560			

Right-Turn Movement Data												
Assigned Mvmt		16	12		14				18			
Mvmt Sat Flow, veh/h		1568	1568		111				62			

Left Lane Group Data												
Assigned Mvmt		1	5	3	0	0	0	7	0			
Lane Assignment		L+T	L+T	(Prot)				(Prot)				

Lanes in Grp	1	1	1	0	0	0	1	0
Grp Vol (v), veh/h	79	139	45	0	0	0	35	0
Grp Sat Flow (s), veh/h/ln	1780	1761	1774	0	0	0	1774	0
Q Serve Time (g_s), s	2.8	5.0	1.6	0.0	0.0	0.0	1.3	0.0
Cycle Q Clear Time (g_c), s	2.8	5.0	1.6	0.0	0.0	0.0	1.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.72	0.95	1.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	120	140	55	0	0	0	42	0
V/C Ratio (X)	0.66	0.99	0.82	0.00	0.00	0.00	0.84	0.00
Avail Cap (c_a), veh/h	120	140	55	0	0	0	55	0
Upstream Filter (I)	1.00	1.00	0.68	0.00	0.00	0.00	0.72	0.00
Uniform Delay (d1), s/veh	29.1	29.4	30.8	0.0	0.0	0.0	31.1	0.0
Incr Delay (d2), s/veh	25.1	73.5	44.9	0.0	0.0	0.0	42.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	54.3	102.9	75.8	0.0	0.0	0.0	73.7	0.0
1st-Term Q (Q1), veh/ln	1.4	2.4	0.8	0.0	0.0	0.0	0.6	0.0
2nd-Term Q (Q2), veh/ln	0.8	2.9	0.7	0.0	0.0	0.0	0.5	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	2.2	5.3	1.5	0.0	0.0	0.0	1.1	0.0
%ile Storage Ratio (RQ%)	0.11	0.29	0.11	0.00	0.00	0.00	0.16	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	6	2	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	541	0	0	0	800
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	10.7	0.0	0.0	0.0	19.7
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	10.7	0.0	0.0	0.0	19.7
Lane Grp Cap (c), veh/h	0	0	0	1097	0	0	0	1110
V/C Ratio (X)	0.00	0.00	0.00	0.49	0.00	0.00	0.00	0.72
Avail Cap (c_a), veh/h	0	0	0	1097	0	0	0	1110
Upstream Filter (I)	0.00	0.00	0.00	0.72	0.00	0.00	0.00	0.68
Uniform Delay (d1), s/veh	0.0	0.0	0.0	6.7	0.0	0.0	0.0	8.1
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.1	0.0	0.0	0.0	2.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	7.8	0.0	0.0	0.0	10.9
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	5.1	0.0	0.0	0.0	9.3

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	5.5	0.0	0.0	0.0	10.2
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.60
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	16	12	0	14	0	0	0	18
Lane Assignment	R	R		T+R				T+R
Lanes in Grp	1	1	0	1	0	0	0	1
Grp Vol (v), veh/h	53	14	0	564	0	0	0	840
Grp Sat Flow (s), veh/h/ln	1568	1568	0	1843	0	0	0	1852
Q Serve Time (g_s), s	2.1	0.5	0.0	10.7	0.0	0.0	0.0	19.8
Cycle Q Clear Time (g_c), s	2.1	0.5	0.0	10.7	0.0	0.0	0.0	19.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	1.00	0.00	0.06	0.00	0.00	0.00	0.03
Lane Grp Cap (c), veh/h	105	125	0	1143	0	0	0	1162
V/C Ratio (X)	0.50	0.11	0.00	0.49	0.00	0.00	0.00	0.72
Avail Cap (c_a), veh/h	105	125	0	1143	0	0	0	1162
Upstream Filter (I)	1.00	1.00	0.00	0.72	0.00	0.00	0.00	0.68
Uniform Delay (d1), s/veh	28.8	27.3	0.0	6.7	0.0	0.0	0.0	8.1
Incr Delay (d2), s/veh	16.1	1.8	0.0	1.1	0.0	0.0	0.0	2.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	45.0	29.2	0.0	7.8	0.0	0.0	0.0	10.8
1st-Term Q (Q1), veh/ln	0.9	0.2	0.0	5.3	0.0	0.0	0.0	9.8
2nd-Term Q (Q2), veh/ln	0.5	0.1	0.0	0.3	0.0	0.0	0.0	0.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	1.4	0.3	0.0	5.7	0.0	0.0	0.0	10.7
%ile Storage Ratio (RQ%)	0.88	0.07	0.00	0.08	0.00	0.00	0.00	0.63
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	17.3
HCM 2010 LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	957	143	421	1382	205	299
Future Volume (veh/h)	957	143	421	1382	205	299
Number	4	14	3	8	5	12
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)		1.00	1.00		1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1845	1845
Adj Flow Rate, veh/h	977	146	430	1410	209	305
Adj No. of Lanes	2	0	1	2	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	3	3
Opposing Right Turn Influence			Yes		Yes	
Cap, veh/h	1133	169	196	1978	484	432
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.37	0.37	0.11	0.56	0.28	0.28
Ln Grp Delay, s/veh	32.4	32.5	575.5	12.8	26.0	34.7
Ln Grp LOS	C	C	F	B	C	C
Approach Vol, veh/h	1123			1840	514	
Approach Delay, s/veh	32.5			144.3	31.2	
Approach LOS	C			F	C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Case No		9.0	2.0	8.0				4.0
Phs Duration (G+Y+Rc), s		28.0	15.0	35.0				50.0
Change Period (Y+Rc), s		6.5	6.4	6.4				6.4
Max Green (Gmax), s		21.5	8.6	28.6				43.6
Max Allow Headway (MAH), s		4.0	3.8	5.3				5.3
Max Q Clear (g_c+I1), s		15.6	10.6	24.9				24.8
Green Ext Time (g_e), s		1.0	0.0	3.5				15.8
Prob of Phs Call (p_c)		1.00	1.00	1.00				1.00
Prob of Max Out (p_x)		0.00	1.00	0.00				0.00
Left-Turn Movement Data								
Assigned Mvmt		5	3	7				
Mvmt Sat Flow, veh/h		1757	1774	0				
Through Movement Data								
Assigned Mvmt		2		4				8
Mvmt Sat Flow, veh/h		0		3183				3632
Right-Turn Movement Data								
Assigned Mvmt		12		14				18
Mvmt Sat Flow, veh/h		1568		461				0
Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	0	0	0
Lane Assignment			(Prot)					

Lanes in Grp	0	1	1	0	0	0	0	0
Grp Vol (v), veh/h	0	209	430	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1757	1774	0	0	0	0	0
Q Serve Time (g_s), s	0.0	7.6	8.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	7.6	8.6	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1757	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	28.6	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	484	196	0	0	0	0	0
V/C Ratio (X)	0.00	0.43	2.20	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	484	196	0	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.09	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	23.2	34.7	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.8	540.8	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	26.0	575.5	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.7	4.2	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	29.4	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	4.0	33.6	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.17	3.71	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	58.6	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	2
Grp Vol (v), veh/h	0	0	0	559	0	0	0	1410
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	22.8	0.0	0.0	0.0	22.8
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	22.8	0.0	0.0	0.0	22.8
Lane Grp Cap (c), veh/h	0	0	0	649	0	0	0	1978
V/C Ratio (X)	0.00	0.00	0.00	0.86	0.00	0.00	0.00	0.71
Avail Cap (c_a), veh/h	0	0	0	649	0	0	0	1978
Upstream Filter (I)	0.00	0.00	0.00	0.64	0.00	0.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	0.0	0.0	22.9	0.0	0.0	0.0	12.6
Incr Delay (d2), s/veh	0.0	0.0	0.0	9.6	0.0	0.0	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	32.4	0.0	0.0	0.0	12.8
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	11.0	0.0	0.0	0.0	11.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	12.8	0.0	0.0	0.0	11.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.28
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	0	0	18
Lane Assignment		R		T+R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	305	0	564	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1568	0	1781	0	0	0	0
Q Serve Time (g_s), s	0.0	13.6	0.0	22.9	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	13.6	0.0	22.9	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.26	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	432	0	653	0	0	0	0
V/C Ratio (X)	0.00	0.71	0.00	0.86	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	432	0	653	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.64	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	25.4	0.0	22.9	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	9.3	0.0	9.6	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	34.7	0.0	32.5	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	5.9	0.0	11.1	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.1	0.0	1.7	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.0	0.0	12.9	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.29	0.00	0.76	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		91.5						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	1116	172	51	1636	8	268	2	88	7	5	44
Future Volume (veh/h)	28	1116	172	51	1636	8	268	2	88	7	5	44
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1900	1900	1845	1900
Adj Flow Rate, veh/h	29	1151	177	53	1687	8	276	2	91	7	5	45
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	0	1	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	35	1838	282	48	2185	10	509	10	462	83	71	375
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.02	0.60	0.60	0.03	0.60	0.60	0.30	0.30	0.30	0.30	0.30	0.30
Ln Grp Delay, s/veh	72.1	11.0	11.1	173.8	14.3	14.2	26.5	0.0	20.2	19.2	0.0	0.0
Ln Grp LOS	E	B	B	F	B	B	C		C	B		
Approach Vol, veh/h		1357			1748			369			57	
Approach Delay, s/veh		12.4			19.1			24.9			19.2	
Approach LOS		B			B			C			B	

Timer:		1	2	3	4	5	6	7	8
Assigned Phs			2	3	4		6	7	8
Case No			6.0	2.0	4.0		8.0	2.0	4.0
Phs Duration (G+Y+Rc), s			29.0	8.4	51.0		29.0	7.8	51.6
Change Period (Y+Rc), s			* 6.8	6.4	6.4		* 6.8	6.4	6.4
Max Green (Gmax), s			* 22	2.0	30.6		* 22	2.0	30.6
Max Allow Headway (MAH), s			4.5	3.8	5.3		4.5	3.8	5.3
Max Q Clear (g_c+I1), s			14.7	4.0	19.9		3.9	3.2	27.6
Green Ext Time (g_e), s			1.1	0.0	10.1		1.7	0.0	2.9
Prob of Phs Call (p_c)			1.00	0.66	1.00		1.00	0.45	1.00
Prob of Max Out (p_x)			0.00	1.00	0.00		0.00	1.00	0.00
Left-Turn Movement Data									
Assigned Mvmt			5	3			1	7	
Mvmt Sat Flow, veh/h			1336	1774			96	1774	
Through Movement Data									
Assigned Mvmt			2		4		6		8
Mvmt Sat Flow, veh/h			34		3077		237		3612
Right-Turn Movement Data									
Assigned Mvmt			12		14		16		18
Mvmt Sat Flow, veh/h			1539		472		1249		17
Left Lane Group Data									
Assigned Mvmt		0	5	3	0	0	1	7	0
Lane Assignment				(Prot)			L+T+R	(Prot)	

Lanes in Grp	0	1	1	0	0	1	1	0
Grp Vol (v), veh/h	0	276	53	0	0	57	29	0
Grp Sat Flow (s), veh/h/ln	0	1336	1774	0	0	1582	1774	0
Q Serve Time (g_s), s	0.0	10.8	2.0	0.0	0.0	0.0	1.2	0.0
Cycle Q Clear Time (g_c), s	0.0	12.7	2.0	0.0	0.0	1.9	1.2	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1336	0	0	0	1324	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	1757	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	22.2	0.0	0.0	0.0	22.2	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	20.3	0.0	0.0	0.0	18.9	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	10.8	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	10.9	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	0.00	0.12	1.00	0.00
Lane Grp Cap (c), veh/h	0	509	48	0	0	529	35	0
V/C Ratio (X)	0.00	0.54	1.11	0.00	0.00	0.11	0.84	0.00
Avail Cap (c_a), veh/h	0	509	48	0	0	529	48	0
Upstream Filter (I)	0.00	1.00	0.63	0.00	0.00	1.00	0.52	0.00
Uniform Delay (d1), s/veh	0.0	22.4	36.0	0.0	0.0	18.8	36.2	0.0
Incr Delay (d2), s/veh	0.0	4.1	134.7	0.0	0.0	0.4	35.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	3.1	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	26.5	173.8	0.0	0.0	19.2	72.1	0.0
1st-Term Q (Q1), veh/ln	0.0	4.9	1.0	0.0	0.0	0.8	0.6	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.6	1.8	0.0	0.0	0.1	0.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	5.5	2.8	0.0	0.0	0.9	0.9	0.0
%ile Storage Ratio (RQ%)	0.00	0.64	0.29	0.00	0.00	0.07	0.12	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	660	0	0	0	826
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	17.7	0.0	0.0	0.0	25.6
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	17.7	0.0	0.0	0.0	25.6
Lane Grp Cap (c), veh/h	0	0	0	1057	0	0	0	1070
V/C Ratio (X)	0.00	0.00	0.00	0.62	0.00	0.00	0.00	0.77
Avail Cap (c_a), veh/h	0	0	0	1057	0	0	0	1070
Upstream Filter (I)	0.00	0.00	0.00	0.52	0.00	0.00	0.00	0.63
Uniform Delay (d1), s/veh	0.0	0.0	0.0	9.6	0.0	0.0	0.0	10.8
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.5	0.0	0.0	0.0	3.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	11.0	0.0	0.0	0.0	14.3
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	8.4	0.0	0.0	0.0	12.4

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.4	0.0	0.0	0.0	1.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	8.9	0.0	0.0	0.0	13.4
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.18
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R				T+R
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	93	0	668	0	0	0	869
Grp Sat Flow (s), veh/h/ln	0	1573	0	1780	0	0	0	1860
Q Serve Time (g_s), s	0.0	3.3	0.0	17.9	0.0	0.0	0.0	25.6
Cycle Q Clear Time (g_c), s	0.0	3.3	0.0	17.9	0.0	0.0	0.0	25.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.98	0.00	0.27	0.00	0.79	0.00	0.01
Lane Grp Cap (c), veh/h	0	472	0	1063	0	0	0	1125
V/C Ratio (X)	0.00	0.20	0.00	0.63	0.00	0.00	0.00	0.77
Avail Cap (c_a), veh/h	0	472	0	1063	0	0	0	1125
Upstream Filter (I)	0.00	1.00	0.00	0.52	0.00	0.00	0.00	0.63
Uniform Delay (d1), s/veh	0.0	19.3	0.0	9.6	0.0	0.0	0.0	10.8
Incr Delay (d2), s/veh	0.0	0.9	0.0	1.5	0.0	0.0	0.0	3.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	20.2	0.0	11.1	0.0	0.0	0.0	14.2
1st-Term Q (Q1), veh/ln	0.0	1.4	0.0	8.7	0.0	0.0	0.0	13.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.4	0.0	0.0	0.0	1.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.5	0.0	9.2	0.0	0.0	0.0	14.1
%ile Storage Ratio (RQ%)	0.00	0.13	0.00	0.24	0.00	0.00	0.00	0.19
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	17.1
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	1186	103	184	1304	5	206	0	342	1	1	0
Future Volume (veh/h)	4	1186	103	184	1304	5	206	0	342	1	1	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1845	1900	1845	1900
Adj Flow Rate, veh/h	4	1289	112	200	1417	5	224	0	372	1	1	0
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	179	1479	128	173	1925	7	585	650	553	281	259	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.45	0.45	0.45	0.03	0.53	0.53	0.35	0.00	0.35	0.35	0.35	0.00
Ln Grp Delay, s/veh	23.4	23.3	23.4	103.6	14.5	14.5	21.4	0.0	27.9	16.4	0.0	0.0
Ln Grp LOS	C	C	C	F	B	B	C		C	B		
Approach Vol, veh/h		1405			1622			596			2	
Approach Delay, s/veh		23.3			25.5			25.4			16.4	
Approach LOS		C			C			C			B	

Timer:		1	2	3	4	5	6	7	8			
Assigned Phs			2	3	4		6		8			
Case No			5.0	1.2	6.0		8.0		4.0			
Phs Duration (G+Y+Rc), s			32.0	6.5	39.5		32.0		46.0			
Change Period (Y+Rc), s			4.5	4.5	4.5		4.5		4.5			
Max Green (Gmax), s			27.5	2.0	29.5		27.5		41.5			
Max Allow Headway (MAH), s			4.0	3.8	5.3		4.0		5.3			
Max Q Clear (g_c+I1), s			17.7	4.0	29.7		2.1		25.5			
Green Ext Time (g_e), s			1.6	0.0	0.0		2.1		14.3			
Prob of Phs Call (p_c)			1.00	0.99	1.00		1.00		1.00			
Prob of Max Out (p_x)			0.00	1.00	0.00		0.00		0.00			
Left-Turn Movement Data												
Assigned Mvmt			5	3	7		1					
Mvmt Sat Flow, veh/h			1397	1774	376		600					
Through Movement Data												
Assigned Mvmt			2		4		6		8			
Mvmt Sat Flow, veh/h			1845		3296		734		3617			
Right-Turn Movement Data												
Assigned Mvmt			12		14		16		18			
Mvmt Sat Flow, veh/h			1568		286		0		13			
Left Lane Group Data												
Assigned Mvmt		0	5	3	7	0	1	0	0			
Lane Assignment				(Pr/Pm)			L+T					

Lanes in Grp	0	1	1	1	0	1	0	0
Grp Vol (v), veh/h	0	224	200	4	0	2	0	0
Grp Sat Flow (s), veh/h/ln	0	1397	1774	376	0	1334	0	0
Q Serve Time (g_s), s	0.0	9.6	2.0	0.6	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	9.6	2.0	17.7	0.0	0.1	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1397	383	376	0	1026	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	1757	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	27.5	37.0	35.0	0.0	27.5	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	27.4	7.3	18.0	0.0	27.5	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	9.6	7.3	0.6	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	1.00	0.00	0.50	0.00	0.00
Lane Grp Cap (c), veh/h	0	585	173	179	0	540	0	0
V/C Ratio (X)	0.00	0.38	1.15	0.02	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	585	173	179	0	540	0	0
Upstream Filter (I)	0.00	1.00	0.09	0.27	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	19.5	28.3	23.3	0.0	16.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.9	75.3	0.1	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	21.4	103.6	23.4	0.0	16.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.7	0.0	0.1	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	3.6	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	4.0	3.6	0.1	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.73	0.29	0.01	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	6.6	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T				T
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	690	0	0	0	693
Grp Sat Flow (s), veh/h/ln	0	1845	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	27.5	0.0	0.0	0.0	23.5
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	27.5	0.0	0.0	0.0	23.5
Lane Grp Cap (c), veh/h	0	650	0	794	0	0	0	942
V/C Ratio (X)	0.00	0.00	0.00	0.87	0.00	0.00	0.00	0.74
Avail Cap (c_a), veh/h	0	650	0	794	0	0	0	942
Upstream Filter (I)	0.00	0.00	0.00	0.27	0.00	0.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	0.0	0.0	19.4	0.0	0.0	0.0	14.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	23.3	0.0	0.0	0.0	14.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	13.2	0.0	0.0	0.0	11.4

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	14.1	0.0	0.0	0.0	11.5
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.19	0.00	0.00	0.00	0.30
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R				T+R
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	372	0	711	0	0	0	729
Grp Sat Flow (s), veh/h/ln	0	1568	0	1812	0	0	0	1860
Q Serve Time (g_s), s	0.0	15.7	0.0	27.7	0.0	0.0	0.0	23.5
Cycle Q Clear Time (g_c), s	0.0	15.7	0.0	27.7	0.0	0.0	0.0	23.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.16	0.00	0.00	0.00	0.01
Lane Grp Cap (c), veh/h	0	553	0	813	0	0	0	990
V/C Ratio (X)	0.00	0.67	0.00	0.87	0.00	0.00	0.00	0.74
Avail Cap (c_a), veh/h	0	553	0	813	0	0	0	990
Upstream Filter (I)	0.00	1.00	0.00	0.27	0.00	0.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	21.4	0.0	19.5	0.0	0.0	0.0	14.0
Incr Delay (d2), s/veh	0.0	6.4	0.0	3.9	0.0	0.0	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	27.9	0.0	23.4	0.0	0.0	0.0	14.5
1st-Term Q (Q1), veh/ln	0.0	6.8	0.0	13.8	0.0	0.0	0.0	11.9
2nd-Term Q (Q2), veh/ln	0.0	1.0	0.0	0.9	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.8	0.0	14.7	0.0	0.0	0.0	12.1
%ile Storage Ratio (RQ%)	0.00	0.63	0.00	0.20	0.00	0.00	0.00	0.31
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		24.6						
HCM 2010 LOS		C						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	1569	0	12	1385	100	12	0	56	173	0	58
Future Volume (veh/h)	26	1569	0	12	1385	100	12	0	56	173	0	58
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	28	1669	0	13	1473	106	13	0	60	184	0	62
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	55	1311	0	29	1191	85	117	37	384	532	0	470
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.37	0.00	0.02	0.36	0.36	0.30	0.00	0.30	0.30	0.00	0.30
Ln Grp Delay, s/veh	31.8	144.5	0.0	39.9	136.9	141.1	15.9	0.0	0.0	18.4	0.0	15.9
Ln Grp LOS	C	F		D	F	F	B			B		B
Approach Vol, veh/h		1697			1592			73			246	
Approach Delay, s/veh		142.7			138.3			15.9			17.8	
Approach LOS		F			F			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		8.0	2.0	4.0		6.0	2.0	4.0
Phs Duration (G+Y+Rc), s		24.0	7.4	28.6		24.0	8.3	27.7
Change Period (Y+Rc), s		6.0	6.4	6.4		6.0	6.4	6.4
Max Green (Gmax), s		18.0	5.0	18.6		18.0	5.0	18.6
Max Allow Headway (MAH), s		4.6	3.8	5.3		4.6	3.8	5.3
Max Q Clear (g_c+I1), s		4.0	2.4	24.2		8.0	2.9	23.3
Green Ext Time (g_e), s		1.2	0.0	0.0		1.0	0.0	0.0
Prob of Phs Call (p_c)		1.00	0.19	1.00		1.00	0.37	1.00
Prob of Max Out (p_x)		0.00	1.00	0.00		0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		155	1774			1324	1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		122		3632		0		3350

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1280		0		1568		240

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0
Lane Assignment		L+T+R	(Prot)				(Prot)	

Lanes in Grp	0	1	1	0	0	1	1	0
Grp Vol (v), veh/h	0	73	13	0	0	184	28	0
Grp Sat Flow (s), veh/h/ln	0	1557	1774	0	0	1324	1774	0
Q Serve Time (g_s), s	0.0	0.0	0.4	0.0	0.0	4.0	0.9	0.0
Cycle Q Clear Time (g_c), s	0.0	2.0	0.4	0.0	0.0	6.0	0.9	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1362	0	0	0	1324	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	1757	0	0
Perm LT Eff Green (g_p), s	0.0	18.0	0.0	0.0	0.0	18.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	16.3	0.0	0.0	0.0	16.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0
Time to First Blk (g_f), s	0.0	7.7	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.18	1.00	0.00	0.00	1.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	538	29	0	0	532	55	0
V/C Ratio (X)	0.00	0.14	0.45	0.00	0.00	0.35	0.51	0.00
Avail Cap (c_a), veh/h	0	538	148	0	0	532	148	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	0.00	1.00	0.45	0.00
Uniform Delay (d1), s/veh	0.0	15.4	29.2	0.0	0.0	16.7	28.6	0.0
Incr Delay (d2), s/veh	0.0	0.5	10.7	0.0	0.0	1.8	3.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	15.9	39.9	0.0	0.0	18.4	31.8	0.0
1st-Term Q (Q1), veh/ln	0.0	0.9	0.2	0.0	0.0	2.4	0.5	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.1	0.0	0.0	0.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	1.0	0.3	0.0	0.0	2.7	0.5	0.0
%ile Storage Ratio (RQ%)	0.00	0.06	0.04	0.00	0.00	0.45	0.07	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	1
Grp Vol (v), veh/h	0	0	0	1669	0	0	0	775
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	22.2	0.0	0.0	0.0	21.3
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	22.2	0.0	0.0	0.0	21.3
Lane Grp Cap (c), veh/h	0	0	0	1311	0	0	0	629
V/C Ratio (X)	0.00	0.00	0.00	1.27	0.00	0.00	0.00	1.23
Avail Cap (c_a), veh/h	0	0	0	1311	0	0	0	629
Upstream Filter (I)	0.00	0.00	0.00	0.45	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	18.9	0.0	0.0	0.0	19.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	125.7	0.0	0.0	0.0	117.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	144.5	0.0	0.0	0.0	136.9
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	10.7	0.0	0.0	0.0	10.3

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	22.9	0.0	0.0	0.0	20.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	33.6	0.0	0.0	0.0	30.9
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.88	0.00	0.00	0.00	2.55
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	89.5	0.0	0.0	0.0	36.4
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment						T+R		T+R
Lanes in Grp	0	0	0	0	0	1	0	1
Grp Vol (v), veh/h	0	0	0	0	0	62	0	804
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	1568	0	1820
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	1.7	0.0	21.3
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	1.7	0.0	21.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.82	0.00	0.00	0.00	1.00	0.00	0.13
Lane Grp Cap (c), veh/h	0	0	0	0	0	470	0	647
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.13	0.00	1.24
Avail Cap (c_a), veh/h	0	0	0	0	0	470	0	647
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	15.3	0.0	19.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.6	0.0	121.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	15.9	0.0	141.1
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.7	0.0	10.6
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	21.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.8	0.0	32.5
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.06	0.00	2.68
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.2
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Intersection Summary								
HCM 2010 Ctrl Delay		129.7						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	414	1073	174	268	761	122	209	683	229	291	887	397
Future Volume (veh/h)	414	1073	174	268	761	122	209	683	229	291	887	397
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	431	1118	181	279	793	127	218	711	239	303	924	414
Adj No. of Lanes	2	3	0	2	3	0	2	3	0	2	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	485	1455	235	341	1274	203	276	967	321	362	967	433
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.14	0.33	0.33	0.10	0.29	0.29	0.08	0.26	0.26	0.11	0.28	0.28
Ln Grp Delay, s/veh	67.6	41.2	45.7	61.7	40.0	43.0	63.9	46.2	52.3	64.6	62.5	75.3
Ln Grp LOS	E	D	D	E	D	D	E	D	D	E	E	E
Approach Vol, veh/h		1730			1199			1168			1641	
Approach Delay, s/veh		48.9			45.9			51.1			66.2	
Approach LOS		D			D			D			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	4.0
Phs Duration (G+Y+Rc), s	18.7	37.0	18.3	46.0	15.7	40.0	23.3	40.9
Change Period (Y+Rc), s	6.0	6.0	6.4	6.4	6.0	6.0	6.4	6.4
Max Green (Gmax), s	15.0	31.0	15.6	33.6	12.0	34.0	17.6	31.6
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.3	3.8	5.3	3.8	5.3
Max Q Clear (g_c+I1), s	12.5	23.2	11.5	29.3	9.5	34.0	16.8	20.8
Green Ext Time (g_e), s	0.3	6.8	0.4	3.8	0.2	0.0	0.2	8.9
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	0.83	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3408		3442		3408		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3742		4413		3408		4425

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1241		714		1525		704

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	303	0	279	0	218	0	431	0
Grp Sat Flow (s), veh/h/ln	1704	0	1721	0	1704	0	1721	0
Q Serve Time (g_s), s	10.5	0.0	9.5	0.0	7.5	0.0	14.8	0.0
Cycle Q Clear Time (g_c), s	10.5	0.0	9.5	0.0	7.5	0.0	14.8	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	362	0	341	0	276	0	485	0
V/C Ratio (X)	0.84	0.00	0.82	0.00	0.79	0.00	0.89	0.00
Avail Cap (c_a), veh/h	426	0	447	0	341	0	505	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	52.6	0.0	53.0	0.0	54.2	0.0	50.6	0.0
Incr Delay (d2), s/veh	12.0	0.0	8.7	0.0	9.8	0.0	17.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	64.6	0.0	61.7	0.0	63.9	0.0	67.6	0.0
1st-Term Q (Q1), veh/ln	4.9	0.0	4.5	0.0	3.5	0.0	7.0	0.0
2nd-Term Q (Q2), veh/ln	0.6	0.0	0.4	0.0	0.4	0.0	1.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	5.5	0.0	4.9	0.0	3.9	0.0	8.1	0.0
%ile Storage Ratio (RQ%)	0.48	0.00	0.37	0.00	0.29	0.00	0.69	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	2	0	2
Grp Vol (v), veh/h	0	637	0	859	0	910	0	606
Grp Sat Flow (s), veh/h/ln	0	1679	0	1695	0	1679	0	1695
Q Serve Time (g_s), s	0.0	20.8	0.0	27.3	0.0	32.0	0.0	18.6
Cycle Q Clear Time (g_c), s	0.0	20.8	0.0	27.3	0.0	32.0	0.0	18.6
Lane Grp Cap (c), veh/h	0	867	0	1117	0	952	0	976
V/C Ratio (X)	0.00	0.73	0.00	0.77	0.00	0.96	0.00	0.62
Avail Cap (c_a), veh/h	0	867	0	1117	0	952	0	976
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	40.7	0.0	36.1	0.0	42.2	0.0	37.1
Incr Delay (d2), s/veh	0.0	5.5	0.0	5.1	0.0	20.3	0.0	3.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	46.2	0.0	41.2	0.0	62.5	0.0	40.0
1st-Term Q (Q1), veh/ln	0.0	9.6	0.0	12.8	0.0	14.8	0.0	8.7

2nd-Term Q (Q2), veh/ln	0.0	0.7	0.0	0.8	0.0	2.7	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	10.3	0.0	13.6	0.0	17.5	0.0	9.1
%ile Storage Ratio (RQ%)	0.00	0.58	0.00	0.54	0.00	0.66	0.00	1.44
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	313	0	440	0	428	0	314
Grp Sat Flow (s), veh/h/ln	0	1626	0	1737	0	1576	0	1739
Q Serve Time (g_s), s	0.0	21.2	0.0	27.3	0.0	32.0	0.0	18.8
Cycle Q Clear Time (g_c), s	0.0	21.2	0.0	27.3	0.0	32.0	0.0	18.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.76	0.00	0.41	0.00	0.97	0.00	0.40
Lane Grp Cap (c), veh/h	0	420	0	572	0	447	0	500
V/C Ratio (X)	0.00	0.75	0.00	0.77	0.00	0.96	0.00	0.63
Avail Cap (c_a), veh/h	0	420	0	572	0	447	0	500
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	40.9	0.0	36.1	0.0	42.3	0.0	37.1
Incr Delay (d2), s/veh	0.0	11.4	0.0	9.6	0.0	33.0	0.0	5.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	52.3	0.0	45.7	0.0	75.3	0.0	43.0
1st-Term Q (Q1), veh/ln	0.0	9.5	0.0	13.1	0.0	13.9	0.0	9.1
2nd-Term Q (Q2), veh/ln	0.0	1.3	0.0	1.5	0.0	4.1	0.0	0.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	10.8	0.0	14.6	0.0	18.0	0.0	9.9
%ile Storage Ratio (RQ%)	0.00	0.60	0.00	0.59	0.00	0.68	0.00	1.57
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		53.7						
HCM 2010 LOS		D						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	1683	15	1	793	98	94	32	0	222	94	245
Future Volume (veh/h)	89	1683	15	1	793	98	94	32	0	222	94	245
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	97	1829	16	1	862	107	102	35	0	241	102	266
Adj No. of Lanes	1	2	0	0	2	0	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	73	2671	23	23	2054	255	36	223	190	36	223	190
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.04	0.74	0.74	0.66	0.66	0.66	0.02	0.12	0.00	0.02	0.12	0.12
Ln Grp Delay, s/veh	295.5	13.7	13.6	13.5	0.0	13.6	974.6	64.9	0.0	2698.0	72.4	279.7
Ln Grp LOS	F	B	B	B		B	F	E		F	E	F
Approach Vol, veh/h		1942			970			137			609	
Approach Delay, s/veh		27.8			13.5			742.2			1202.0	
Approach LOS		C			B			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6	7	8
Case No	2.0	3.0		4.0	2.0	3.0	2.0	8.0
Phs Duration (G+Y+Rc), s	9.0	26.0		126.0	9.0	26.0	13.0	113.0
Change Period (Y+Rc), s	* 5.7	6.5		6.4	* 5.7	6.5	6.4	6.4
Max Green (Gmax), s	* 3.3	19.5		119.6	* 3.3	19.5	6.6	100.6
Max Allow Headway (MAH), s	3.8	4.4		5.3	3.8	4.4	3.8	5.3
Max Q Clear (g_c+I1), s	5.3	4.7		45.0	5.3	21.5	8.6	23.0
Green Ext Time (g_e), s	0.0	1.5		50.6	0.0	0.0	0.0	52.0
Prob of Phs Call (p_c)	1.00	1.00		1.00	0.99	1.00	0.99	1.00
Prob of Max Out (p_x)	0.00	0.00		0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1				5		7	3
Mvmt Sat Flow, veh/h	1757				1757		1774	0

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1845		3595		1845		3102

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		31		1568		385

Left Lane Group Data								
Assigned Mvmt	1	0	0	0	5	0	7	3
Lane Assignment	(Prot)				(Prot)		(Prot)	L+T

Lanes in Grp	1	0	0	0	1	0	1	1
Grp Vol (v), veh/h	241	0	0	0	102	0	97	517
Grp Sat Flow (s), veh/h/ln	1757	0	0	0	1757	0	1774	1860
Q Serve Time (g_s), s	3.3	0.0	0.0	0.0	3.3	0.0	6.6	0.0
Cycle Q Clear Time (g_c), s	3.3	0.0	0.0	0.0	3.3	0.0	6.6	20.9
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	254
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	106.6
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	76.6
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	94.9
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.9
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	36	0	0	0	36	0	73	1254
V/C Ratio (X)	6.69	0.00	0.00	0.00	2.83	0.00	1.33	0.41
Avail Cap (c_a), veh/h	36	0	0	0	36	0	73	1254
Upstream Filter (I)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.73
Uniform Delay (d1), s/veh	78.8	0.0	0.0	0.0	78.8	0.0	77.2	12.7
Incr Delay (d2), s/veh	2619.2	0.0	0.0	0.0	895.8	0.0	218.3	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	2698.0	0.0	0.0	0.0	974.6	0.0	295.5	13.5
1st-Term Q (Q1), veh/ln	1.6	0.0	0.0	0.0	1.6	0.0	3.2	10.6
2nd-Term Q (Q2), veh/ln	26.2	0.0	0.0	0.0	9.0	0.0	4.4	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	27.8	0.0	0.0	0.0	10.6	0.0	7.6	10.9
%ile Storage Ratio (RQ%)	7.12	0.00	0.00	0.00	1.93	0.00	0.46	0.14
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	51.2	0.0	0.0	0.0	16.5	0.0	6.1	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	1.7	0.0	0.0	0.0	0.7	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	35	0	899	0	102	0	0
Grp Sat Flow (s), veh/h/ln	0	1845	0	1770	0	1845	0	0
Q Serve Time (g_s), s	0.0	2.7	0.0	42.8	0.0	8.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	2.7	0.0	42.8	0.0	8.3	0.0	0.0
Lane Grp Cap (c), veh/h	0	223	0	1315	0	223	0	0
V/C Ratio (X)	0.00	0.16	0.00	0.68	0.00	0.46	0.00	0.00
Avail Cap (c_a), veh/h	0	223	0	1315	0	223	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	63.4	0.0	10.8	0.0	65.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.5	0.0	2.9	0.0	6.6	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	64.9	0.0	13.7	0.0	72.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.4	0.0	20.7	0.0	4.2	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	1.1	0.0	0.4	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.5	0.0	21.8	0.0	4.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.16	0.00	0.26	0.00	0.24	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	946	0	266	0	453
Grp Sat Flow (s), veh/h/ln	0	1568	0	1857	0	1568	0	1627
Q Serve Time (g_s), s	0.0	0.0	0.0	43.0	0.0	19.5	0.0	21.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	43.0	0.0	19.5	0.0	21.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.02	0.00	1.00	0.00	0.24
Lane Grp Cap (c), veh/h	0	190	0	1380	0	190	0	1077
V/C Ratio (X)	0.00	0.00	0.00	0.69	0.00	1.40	0.00	0.42
Avail Cap (c_a), veh/h	0	190	0	1380	0	190	0	1077
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.73
Uniform Delay (d1), s/veh	0.0	0.0	0.0	10.8	0.0	70.8	0.0	12.7
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.8	0.0	208.9	0.0	0.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	13.6	0.0	279.7	0.0	13.6
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	21.8	0.0	8.5	0.0	9.3
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.1	0.0	11.0	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	22.9	0.0	19.5	0.0	9.6
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.27	0.00	1.01	0.00	0.13
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	19.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	246.2
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	405	910	169	141	531	99	221	1030	123	367	1690	216
Future Volume (veh/h)	405	910	169	141	531	99	221	1030	123	367	1690	216
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	418	938	174	145	547	102	228	1062	127	378	1742	223
Adj No. of Lanes	2	3	0	2	3	1	2	3	0	2	3	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	348	799	148	190	707	220	274	2197	262	399	2344	299
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.10	0.19	0.19	0.06	0.14	0.14	0.08	0.48	0.48	0.12	0.52	0.52
Ln Grp Delay, s/veh	166.4	146.5	150.3	82.7	71.5	66.5	83.7	29.7	30.7	103.7	33.8	36.6
Ln Grp LOS	F	F	F	F	E	E	F	C	C	F	C	D
Approach Vol, veh/h		1530			794			1417			2343	
Approach Delay, s/veh		152.9			72.9			38.7			45.9	
Approach LOS		F			E			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	26.0	85.8	15.4	36.8	20.0	91.8	23.0	29.2
Change Period (Y+Rc), s	6.8	6.8	6.4	6.4	6.8	6.8	6.4	6.4
Max Green (Gmax), s	19.2	73.2	16.6	28.6	19.2	73.2	16.6	28.6
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.2	3.8	5.3	3.8	5.2
Max Q Clear (g_c+I1), s	20.1	27.8	8.8	32.4	12.8	51.9	18.6	19.0
Green Ext Time (g_e), s	0.0	37.7	0.2	0.0	0.4	19.4	0.0	3.8
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	0.02	1.00	0.13	0.00	1.00	0.82

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3408		3442		3408		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		4561		4315		4524		5085

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		545		798		576		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	378	0	145	0	228	0	418	0
Grp Sat Flow (s), veh/h/ln	1704	0	1721	0	1704	0	1721	0
Q Serve Time (g_s), s	18.1	0.0	6.8	0.0	10.8	0.0	16.6	0.0
Cycle Q Clear Time (g_c), s	18.1	0.0	6.8	0.0	10.8	0.0	16.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	399	0	190	0	274	0	348	0
V/C Ratio (X)	0.95	0.00	0.76	0.00	0.83	0.00	1.20	0.00
Avail Cap (c_a), veh/h	399	0	348	0	399	0	348	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	0.09	0.00
Uniform Delay (d1), s/veh	71.9	0.0	76.4	0.0	74.3	0.0	73.7	0.0
Incr Delay (d2), s/veh	31.8	0.0	6.3	0.0	9.4	0.0	92.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	103.7	0.0	82.7	0.0	83.7	0.0	166.4	0.0
1st-Term Q (Q1), veh/ln	8.5	0.0	3.2	0.0	5.1	0.0	7.9	0.0
2nd-Term Q (Q2), veh/ln	1.8	0.0	0.2	0.0	0.4	0.0	4.5	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	10.3	0.0	3.4	0.0	5.5	0.0	12.4	0.0
%ile Storage Ratio (RQ%)	0.46	0.00	0.18	0.00	0.35	0.00	0.63	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	17.4	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	2	0	3
Grp Vol (v), veh/h	0	781	0	736	0	1291	0	547
Grp Sat Flow (s), veh/h/ln	0	1679	0	1695	0	1679	0	1695
Q Serve Time (g_s), s	0.0	25.8	0.0	30.4	0.0	49.3	0.0	17.0
Cycle Q Clear Time (g_c), s	0.0	25.8	0.0	30.4	0.0	49.3	0.0	17.0
Lane Grp Cap (c), veh/h	0	1617	0	628	0	1740	0	707
V/C Ratio (X)	0.00	0.48	0.00	1.17	0.00	0.74	0.00	0.77
Avail Cap (c_a), veh/h	0	1617	0	628	0	1740	0	887
Upstream Filter (I)	0.00	1.00	0.00	0.09	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	28.7	0.0	66.8	0.0	30.9	0.0	68.1
Incr Delay (d2), s/veh	0.0	1.0	0.0	79.7	0.0	2.9	0.0	3.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	29.7	0.0	146.5	0.0	33.8	0.0	71.5
1st-Term Q (Q1), veh/ln	0.0	11.9	0.0	14.2	0.0	22.8	0.0	8.0

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	6.9	0.0	0.7	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	12.2	0.0	21.2	0.0	23.5	0.0	8.2
%ile Storage Ratio (RQ%)	0.00	0.55	0.00	0.28	0.00	0.91	0.00	0.14
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	27.2	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	408	0	376	0	674	0	102
Grp Sat Flow (s), veh/h/ln	0	1749	0	1722	0	1743	0	1583
Q Serve Time (g_s), s	0.0	25.8	0.0	30.4	0.0	49.9	0.0	9.7
Cycle Q Clear Time (g_c), s	0.0	25.8	0.0	30.4	0.0	49.9	0.0	9.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.31	0.00	0.46	0.00	0.33	0.00	1.00
Lane Grp Cap (c), veh/h	0	842	0	319	0	903	0	220
V/C Ratio (X)	0.00	0.48	0.00	1.18	0.00	0.75	0.00	0.46
Avail Cap (c_a), veh/h	0	842	0	319	0	903	0	276
Upstream Filter (I)	0.00	1.00	0.00	0.09	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	28.7	0.0	66.8	0.0	31.0	0.0	65.0
Incr Delay (d2), s/veh	0.0	2.0	0.0	83.5	0.0	5.6	0.0	1.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	30.7	0.0	150.3	0.0	36.6	0.0	66.5
1st-Term Q (Q1), veh/ln	0.0	12.5	0.0	14.4	0.0	24.0	0.0	4.3
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	7.4	0.0	1.4	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	12.9	0.0	21.8	0.0	25.4	0.0	4.3
%ile Storage Ratio (RQ%)	0.00	0.59	0.00	0.29	0.00	0.98	0.00	0.15
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	14.2	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		74.6						
HCM 2010 LOS		E						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	109	576	80	193	1035	113	146	76	265	221	155	151
Future Volume (veh/h)	109	576	80	193	1035	113	146	76	265	221	155	151
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1900	1712	1712	1712	1776	1776	1900	1776	1776	1776
Adj Flow Rate, veh/h	112	594	82	199	1067	116	151	78	273	228	160	156
Adj No. of Lanes	2	3	0	2	3	1	1	2	0	2	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	11	11	11	11	11	11	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	104	1006	137	104	1130	352	188	703	629	316	1357	607
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.24	0.24	0.03	0.24	0.24	0.11	0.42	0.42	0.10	0.40	0.40
Ln Grp Delay, s/veh	153.8	31.7	33.1	486.4	49.2	29.0	47.2	16.5	21.0	43.0	17.2	19.2
Ln Grp LOS	F	C	C	F	D	C	D	B	C	D	B	B
Approach Vol, veh/h		788			1382			502			544	
Approach Delay, s/veh		49.5			110.5			28.2			28.6	
Approach LOS		D			F			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	12.8	43.2	7.0	28.0	14.1	41.9	7.0	28.0
Change Period (Y+Rc), s	4.0	5.3	4.0	* 6	4.0	5.3	4.0	* 6
Max Green (Gmax), s	23.0	23.7	3.0	* 22	32.0	14.7	3.0	* 22
Max Allow Headway (MAH), s	3.8	5.1	3.8	5.2	3.8	5.1	3.8	5.2
Max Q Clear (g_c+I1), s	8.1	13.7	5.0	13.7	9.9	8.3	5.0	22.4
Green Ext Time (g_e), s	0.6	2.8	0.0	6.4	0.4	2.1	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	0.99	1.00	0.98	1.00	0.94	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.88	0.00	0.00	1.00	1.00

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	3281	3163	1691	3163

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	1687	4160	3374	4673

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	1509	567	1509	1455

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	1	0	2	0
Grp Vol (v), veh/h	228	0	199	0	151	0	112	0
Grp Sat Flow (s), veh/h/ln	1640	0	1581	0	1691	0	1581	0
Q Serve Time (g_s), s	6.1	0.0	3.0	0.0	7.9	0.0	3.0	0.0
Cycle Q Clear Time (g_c), s	6.1	0.0	3.0	0.0	7.9	0.0	3.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	316	0	104	0	188	0	104	0
V/C Ratio (X)	0.72	0.00	1.91	0.00	0.81	0.00	1.07	0.00
Avail Cap (c_a), veh/h	829	0	104	0	595	0	104	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.97	0.00	1.00	0.00
Uniform Delay (d1), s/veh	39.9	0.0	44.0	0.0	39.5	0.0	44.0	0.0
Incr Delay (d2), s/veh	3.1	0.0	442.4	0.0	7.7	0.0	109.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0
Control Delay (d), s/veh	43.0	0.0	486.4	0.0	47.2	0.0	153.8	0.0
1st-Term Q (Q1), veh/ln	2.8	0.0	1.3	0.0	3.7	0.0	1.3	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	6.4	0.0	0.4	0.0	1.6	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	2.9	0.0	7.7	0.0	4.1	0.0	2.9	0.0
%ile Storage Ratio (RQ%)	0.40	0.00	1.08	0.00	0.68	0.00	0.23	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	23.7	0.0	0.0	0.0	1.9	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.5	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	2	0	3
Grp Vol (v), veh/h	0	78	0	443	0	160	0	1067
Grp Sat Flow (s), veh/h/ln	0	1687	0	1558	0	1687	0	1558
Q Serve Time (g_s), s	0.0	2.6	0.0	11.4	0.0	2.7	0.0	20.4
Cycle Q Clear Time (g_c), s	0.0	2.6	0.0	11.4	0.0	2.7	0.0	20.4
Lane Grp Cap (c), veh/h	0	703	0	753	0	1357	0	1130
V/C Ratio (X)	0.00	0.11	0.00	0.59	0.00	0.12	0.00	0.94
Avail Cap (c_a), veh/h	0	703	0	753	0	1357	0	1130
Upstream Filter (I)	0.00	0.97	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	16.2	0.0	30.5	0.0	17.1	0.0	33.9
Incr Delay (d2), s/veh	0.0	0.3	0.0	1.2	0.0	0.2	0.0	15.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	16.5	0.0	31.7	0.0	17.2	0.0	49.2
1st-Term Q (Q1), veh/ln	0.0	1.2	0.0	4.9	0.0	1.3	0.0	8.8

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.0	0.0	0.0	1.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.3	0.0	5.0	0.0	1.3	0.0	10.4
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.05	0.00	0.02	0.00	0.18
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	273	0	233	0	156	0	116
Grp Sat Flow (s), veh/h/ln	0	1509	0	1612	0	1509	0	1455
Q Serve Time (g_s), s	0.0	11.7	0.0	11.7	0.0	6.3	0.0	6.0
Cycle Q Clear Time (g_c), s	0.0	11.7	0.0	11.7	0.0	6.3	0.0	6.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.35	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	629	0	390	0	607	0	352
V/C Ratio (X)	0.00	0.43	0.00	0.60	0.00	0.26	0.00	0.33
Avail Cap (c_a), veh/h	0	629	0	390	0	607	0	352
Upstream Filter (I)	0.00	0.97	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	18.9	0.0	30.6	0.0	18.1	0.0	28.4
Incr Delay (d2), s/veh	0.0	2.1	0.0	2.5	0.0	1.0	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	21.0	0.0	33.1	0.0	19.2	0.0	29.0
1st-Term Q (Q1), veh/ln	0.0	4.9	0.0	5.2	0.0	2.6	0.0	2.4
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.3	0.0	0.2	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	5.2	0.0	5.5	0.0	2.8	0.0	2.4
%ile Storage Ratio (RQ%)	0.00	0.05	0.00	0.06	0.00	0.46	0.00	0.04
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	68.8
HCM 2010 LOS	E

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	71	57	105	58	90	46	239	55	57	227	39
Future Volume (veh/h)	53	71	57	105	58	90	46	239	55	57	227	39
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1900	1900	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	55	73	59	108	60	93	47	246	57	59	234	40
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	159	149	94	314	147	332	696	820	190	671	869	149
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.59	0.59	0.59	0.59	0.59	0.59
Ln Grp Delay, s/veh	16.9	0.0	0.0	16.0	0.0	15.3	5.8	0.0	5.4	6.0	0.0	4.6
Ln Grp LOS	B			B		B	A		A	A		A
Approach Vol, veh/h		187			261			350			333	
Approach Delay, s/veh		16.9			15.7			5.5			4.8	
Approach LOS		B			B			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		8.0		6.0		7.0
Phs Duration (G+Y+Rc), s		31.0		14.0		31.0		14.0
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green (Gmax), s		18.0		18.0		18.0		18.0
Max Allow Headway (MAH), s		5.2		5.2		5.2		5.2
Max Q Clear (g_c+I1), s		6.5		7.8		7.3		6.0
Green Ext Time (g_e), s		3.2		1.8		3.0		2.0
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.23		0.00		0.13

Left-Turn Movement Data				
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		1049		263		1022		861

Through Movement Data				
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1395		704		1478		692

Right-Turn Movement Data				
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		323		446		253		1568

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment				L+T+R				L+T

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	47	0	187	0	59	0	168
Grp Sat Flow (s), veh/h/ln	0	1049	0	1412	0	1022	0	1552
Q Serve Time (g_s), s	0.0	1.0	0.0	1.8	0.0	1.4	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	4.5	0.0	5.8	0.0	5.3	0.0	4.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1049	0	1254	0	1022	0	1278
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	1603
Perm LT Eff Green (g_p), s	0.0	26.5	0.0	9.5	0.0	26.5	0.0	9.5
Perm LT Serve Time (g_u), s	0.0	23.0	0.0	5.6	0.0	22.5	0.0	3.8
Perm LT Q Serve Time (g_ps), s	0.0	1.0	0.0	1.8	0.0	1.4	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	2.8	0.0	0.0	0.0	1.1
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	2.8	0.0	0.0	0.0	1.1
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	0.29	0.00	1.00	0.00	0.64
Lane Grp Cap (c), veh/h	0	696	0	403	0	671	0	461
V/C Ratio (X)	0.00	0.07	0.00	0.46	0.00	0.09	0.00	0.36
Avail Cap (c_a), veh/h	0	696	0	690	0	671	0	725
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	5.6	0.0	16.0	0.0	6.0	0.0	15.5
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.8	0.0	0.0	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	5.8	0.0	16.9	0.0	6.0	0.0	16.0
1st-Term Q (Q1), veh/ln	0.0	0.3	0.0	2.1	0.0	0.4	0.0	1.8
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.3	0.0	2.2	0.0	0.4	0.0	1.9
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.10	0.00	0.00	0.00	0.07
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment								
Lanes in Grp	0	0	0	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R				T+R		R
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	303	0	0	0	274	0	93
Grp Sat Flow (s), veh/h/ln	0	1719	0	0	0	1731	0	1568
Q Serve Time (g_s), s	0.0	4.0	0.0	0.0	0.0	3.5	0.0	2.2
Cycle Q Clear Time (g_c), s	0.0	4.0	0.0	0.0	0.0	3.5	0.0	2.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.19	0.00	0.32	0.00	0.15	0.00	1.00
Lane Grp Cap (c), veh/h	0	1010	0	0	0	1018	0	332
V/C Ratio (X)	0.00	0.30	0.00	0.00	0.00	0.27	0.00	0.28
Avail Cap (c_a), veh/h	0	1010	0	0	0	1018	0	627
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	4.6	0.0	0.0	0.0	4.5	0.0	14.9
Incr Delay (d2), s/veh	0.0	0.8	0.0	0.0	0.0	0.1	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	5.4	0.0	0.0	0.0	4.6	0.0	15.3
1st-Term Q (Q1), veh/ln	0.0	1.9	0.0	0.0	0.0	1.6	0.0	1.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.1	0.0	0.0	0.0	1.6	0.0	1.0
%ile Storage Ratio (RQ%)	0.00	0.09	0.00	0.00	0.00	0.02	0.00	0.04
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		9.5						
HCM 2010 LOS		A						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	752	1233	28	85	594	458	15	15	129	371	27	25
Future Volume (veh/h)	752	1233	28	85	594	458	15	15	129	371	27	25
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1696	1696	1696	1696	1696	1696	1900	1696	1900	1696	1696	1696
Adj Flow Rate, veh/h	783	1284	29	89	619	0	16	16	134	386	28	0
Adj No. of Lanes	1	2	1	1	2	1	0	1	0	2	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	12	12	12	12	12	12	12	12	12	12	12	12
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	802	1884	843	110	504	225	0	15	129	132	320	272
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.50	0.58	0.58	0.07	0.16	0.00	0.00	0.10	0.10	0.04	0.19	0.00
Ln Grp Delay, s/veh	58.1	21.1	11.8	62.4	160.5	0.0	0.0	0.0	146.0	950.1	44.6	0.0
Ln Grp LOS	E	C	B	E	F				F	F	D	
Approach Vol, veh/h		2096			708			150			414	
Approach Delay, s/veh		34.8			148.1			146.0			888.9	
Approach LOS		C			F			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	4.0	2.0	3.0	0.0	3.0
Phs Duration (G+Y+Rc), s	73.1	27.9	12.0	20.0	16.2	84.8	0.0	32.0
Change Period (Y+Rc), s	7.1	7.1	6.4	6.9	7.1	7.1	6.9	* 6.9
Max Green (Gmax), s	67.9	18.9	5.6	13.1	30.9	55.9	13.1	* 5.6
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.5	3.8	5.3	0.0	5.5
Max Q Clear (g_c+I1), s	65.0	22.8	7.6	15.1	9.2	38.6	0.0	3.8
Green Ext Time (g_e), s	1.0	0.0	0.0	0.0	0.2	12.4	0.0	0.2
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.96	1.00	0.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1616		3134		1616		0	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3223		156		3223		1696

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1442		1309		1442		1442

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)			

Lanes in Grp	1	0	2	0	1	0	0	0
Grp Vol (v), veh/h	783	0	386	0	89	0	0	0
Grp Sat Flow (s), veh/h/ln	1616	0	1567	0	1616	0	0	0
Q Serve Time (g_s), s	63.0	0.0	5.6	0.0	7.2	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	63.0	0.0	5.6	0.0	7.2	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	802	0	132	0	110	0	0	0
V/C Ratio (X)	0.98	0.00	2.92	0.00	0.81	0.00	0.00	0.00
Avail Cap (c_a), veh/h	825	0	132	0	375	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.09	0.00	0.00	0.00
Uniform Delay (d1), s/veh	32.7	0.0	63.7	0.0	61.1	0.0	0.0	0.0
Incr Delay (d2), s/veh	25.3	0.0	886.4	0.0	1.3	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	58.1	0.0	950.1	0.0	62.4	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	28.1	0.0	2.4	0.0	3.2	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	5.6	0.0	16.2	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	33.7	0.0	18.7	0.0	3.3	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	1.07	0.00	0.82	0.00	0.26	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	63.5	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	2	0	0	0	2	0	1
Grp Vol (v), veh/h	0	619	0	0	0	1284	0	28
Grp Sat Flow (s), veh/h/ln	0	1612	0	0	0	1612	0	1696
Q Serve Time (g_s), s	0.0	20.8	0.0	0.0	0.0	36.6	0.0	1.8
Cycle Q Clear Time (g_c), s	0.0	20.8	0.0	0.0	0.0	36.6	0.0	1.8
Lane Grp Cap (c), veh/h	0	504	0	0	0	1884	0	320
V/C Ratio (X)	0.00	1.23	0.00	0.00	0.00	0.68	0.00	0.09
Avail Cap (c_a), veh/h	0	504	0	0	0	1884	0	320
Upstream Filter (I)	0.00	0.09	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	56.1	0.0	0.0	0.0	19.1	0.0	44.5
Incr Delay (d2), s/veh	0.0	104.4	0.0	0.0	0.0	2.0	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	160.5	0.0	0.0	0.0	21.1	0.0	44.6
1st-Term Q (Q1), veh/ln	0.0	9.2	0.0	0.0	0.0	16.2	0.0	0.8

2nd-Term Q (Q2), veh/ln	0.0	7.3	0.0	0.0	0.0	0.5	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	16.5	0.0	0.0	0.0	16.8	0.0	0.9
%ile Storage Ratio (RQ%)	0.00	0.23	0.00	0.00	0.00	0.15	0.00	0.04
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	28.7	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	150	0	29	0	0
Grp Sat Flow (s), veh/h/ln	0	1442	0	1465	0	1442	0	1442
Q Serve Time (g_s), s	0.0	0.0	0.0	13.1	0.0	1.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	13.1	0.0	1.1	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.89	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	225	0	144	0	843	0	272
V/C Ratio (X)	0.00	0.00	0.00	1.04	0.00	0.03	0.00	0.00
Avail Cap (c_a), veh/h	0	225	0	144	0	843	0	272
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	60.0	0.0	11.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	85.7	0.0	0.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	146.0	0.0	11.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	5.3	0.0	0.5	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	3.4	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	8.7	0.0	0.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.56	0.00	0.05	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	168.6
HCM 2010 LOS	F

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	239	1546	1203	154	644	110
Future Volume (veh/h)	239	1546	1203	154	644	110
Number	1	6	2	12	3	18
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00			1.00	1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1696	1696	1696	1696	1696	1696
Adj Flow Rate, veh/h	249	1610	1253	0	671	0
Adj No. of Lanes	1	2	2	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	12	12	12	12	12	12
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	160	1897	1293	578	776	357
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.10	0.59	0.40	0.00	0.25	0.00
Ln Grp Delay, s/veh	291.2	14.0	39.0	0.0	36.1	0.0
Ln Grp LOS	F	B	D		D	
Approach Vol, veh/h		1859	1253		671	
Approach Delay, s/veh		51.1	39.0		36.1	
Approach LOS		D	D		D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8			6		
Case No	2.0	7.0	9.0			4.0		
Phs Duration (G+Y+Rc), s	15.0	39.2	25.8			54.2		
Change Period (Y+Rc), s	7.1	7.1	6.0			7.1		
Max Green (Gmax), s	7.9	27.9	24.0			42.9		
Max Allow Headway (MAH), s	3.8	5.3	3.8			5.3		
Max Q Clear (g_c+I1), s	9.9	32.5	18.4			34.8		
Green Ext Time (g_e), s	0.0	0.0	1.4			7.7		
Prob of Phs Call (p_c)	1.00	1.00	1.00			1.00		
Prob of Max Out (p_x)	1.00	0.00	0.52			0.00		

Left-Turn Movement Data			
Assigned Mvmt	1	5	3
Mvmt Sat Flow, veh/h	1616	0	3134

Through Movement Data			
Assigned Mvmt		2	8	6
Mvmt Sat Flow, veh/h		3308	0	3308

Right-Turn Movement Data			
Assigned Mvmt		12	18	16
Mvmt Sat Flow, veh/h		1442	1442	0

Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	0	0
Lane Assignment	(Prot)							

Lanes in Grp	1	0	2	0	0	0	0	0
Grp Vol (v), veh/h	249	0	671	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1616	0	1567	0	0	0	0	0
Q Serve Time (g_s), s	7.9	0.0	16.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	7.9	0.0	16.4	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1567	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	32.1	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	160	0	776	0	0	0	0	0
V/C Ratio (X)	1.56	0.00	0.86	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	160	0	940	0	0	0	0	0
Upstream Filter (I)	0.09	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	36.0	0.0	28.8	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	255.1	0.0	7.3	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	291.2	0.0	36.1	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	3.5	0.0	7.1	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	11.3	0.0	0.8	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	14.8	0.0	7.9	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.86	0.00	0.48	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	22.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1253	0	0	0	1610	0	0
Grp Sat Flow (s), veh/h/ln	0	1612	0	0	0	1612	0	0
Q Serve Time (g_s), s	0.0	30.5	0.0	0.0	0.0	32.8	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	30.5	0.0	0.0	0.0	32.8	0.0	0.0
Lane Grp Cap (c), veh/h	0	1293	0	0	0	1897	0	0
V/C Ratio (X)	0.00	0.97	0.00	0.00	0.00	0.85	0.00	0.00
Avail Cap (c_a), veh/h	0	1293	0	0	0	1897	0	0
Upstream Filter (I)	0.00	0.75	0.00	0.00	0.00	0.09	0.00	0.00
Uniform Delay (d1), s/veh	0.0	23.5	0.0	0.0	0.0	13.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	15.5	0.0	0.0	0.0	0.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	39.0	0.0	0.0	0.0	14.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	13.4	0.0	0.0	0.0	14.3	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	2.8	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	16.2	0.0	0.0	0.0	14.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.13	0.00	0.00	0.00	0.20	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lane Assignment		R	R					
Lanes in Grp	0	1	1	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1442	1442	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	578	357	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	578	433	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		44.4						
HCM 2010 LOS		D						

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	314	91	648	1742	1464	635
Future Volume (veh/h)	314	91	648	1742	1464	635
Number	7	14	5	2	6	16
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00	1.00			1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1827	1827	1827	1827
Adj Flow Rate, veh/h	338	0	697	1873	1574	0
Adj No. of Lanes	2	1	2	3	3	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	4	4	4	4
Opposing Right Turn Influence	Yes		Yes			
Cap, veh/h	396	182	788	3981	2608	812
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.12	0.00	0.23	0.80	0.52	0.00
Ln Grp Delay, s/veh	71.4	0.0	56.5	5.1	24.4	0.0
Ln Grp LOS	E		E	A	C	
Approach Vol, veh/h	338			2570	1574	
Approach Delay, s/veh	71.4			19.0	24.4	
Approach LOS	E			B	C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Case No		4.0		9.0	2.0	7.0		
Phs Duration (G+Y+Rc), s		120.1		22.9	39.4	80.8		
Change Period (Y+Rc), s		6.0		6.4	6.0	6.0		
Max Green (Gmax), s		108.0		22.6	84.0	18.0		
Max Allow Headway (MAH), s		5.2		3.8	3.8	5.2		
Max Q Clear (g_c+I1), s		19.4		15.8	30.5	33.5		
Green Ext Time (g_e), s		72.0		0.7	2.8	0.0		
Prob of Phs Call (p_c)		1.00		1.00	1.00	1.00		
Prob of Max Out (p_x)		0.00		0.15	0.00	0.00		
Left-Turn Movement Data								
Assigned Mvmt				7	5	1		
Mvmt Sat Flow, veh/h				3442	3375	0		
Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		5152		0		5152		
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		0		1583		1553		
Left Lane Group Data								
Assigned Mvmt	0	0	0	7	5	1	0	0
Lane Assignment					(Prot)			

Lanes in Grp	0	0	0	2	2	0	0	0
Grp Vol (v), veh/h	0	0	0	338	697	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1721	1688	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	13.8	28.5	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	13.8	28.5	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1721	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	74.8	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	396	788	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.85	0.88	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	544	1983	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	62.1	53.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	9.4	3.6	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	71.4	56.5	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	6.6	13.3	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.5	0.4	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	7.1	13.7	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.55	0.82	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	3	0	0	0	3	0	0
Grp Vol (v), veh/h	0	1873	0	0	0	1574	0	0
Grp Sat Flow (s), veh/h/ln	0	1663	0	0	0	1663	0	0
Q Serve Time (g_s), s	0.0	17.4	0.0	0.0	0.0	31.5	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	17.4	0.0	0.0	0.0	31.5	0.0	0.0
Lane Grp Cap (c), veh/h	0	3981	0	0	0	2608	0	0
V/C Ratio (X)	0.00	0.47	0.00	0.00	0.00	0.60	0.00	0.00
Avail Cap (c_a), veh/h	0	3981	0	0	0	2608	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.56	0.00	0.00
Uniform Delay (d1), s/veh	0.0	4.7	0.0	0.0	0.0	23.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.0	0.0	0.6	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	5.1	0.0	0.0	0.0	24.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	7.8	0.0	0.0	0.0	14.4	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	8.0	0.0	0.0	0.0	14.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.24	0.00	0.00	0.00	0.23	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment				R		R		
Lanes in Grp	0	0	0	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1583	0	1553	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	182	0	812	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	250	0	812	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		24.9						
HCM 2010 LOS		C						

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	318	1131	1615	274	492	2303
Future Volume (veh/h)	318	1131	1615	274	492	2303
Number	3	18	2	12	1	6
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1845	1845	1845	1845
Adj Flow Rate, veh/h	331	1178	1682	0	512	2399
Adj No. of Lanes	2	2	3	1	2	3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	3	3	3	3
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	881	713	2481	773	623	3839
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.26	0.26	0.49	0.00	0.18	0.76
Ln Grp Delay, s/veh	21.2	325.3	14.6	0.0	33.5	4.5
Ln Grp LOS	C	F	B		C	A
Approach Vol, veh/h	1509		1682			2911
Approach Delay, s/veh	258.6		14.6			9.6
Approach LOS	F		B			A

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8			6		
Case No	2.0	7.0	9.0			4.0		
Phs Duration (G+Y+Rc), s	18.6	40.4	24.4			59.0		
Change Period (Y+Rc), s	6.0	6.0	6.4			6.0		
Max Green (Gmax), s	15.0	18.0	18.0			39.0		
Max Allow Headway (MAH), s	3.8	5.2	4.0			5.2		
Max Q Clear (g_c+I1), s	12.0	19.6	20.0			16.9		
Green Ext Time (g_e), s	0.6	0.0	0.0			21.6		
Prob of Phs Call (p_c)	1.00	1.00	1.00			1.00		
Prob of Max Out (p_x)	1.00	0.00	1.00			0.00		

Left-Turn Movement Data								
Assigned Mvmt	1	5	3					
Mvmt Sat Flow, veh/h	3408	0	3375					

Through Movement Data								
Assigned Mvmt		2	8			6		
Mvmt Sat Flow, veh/h		5202	0			5202		

Right-Turn Movement Data								
Assigned Mvmt		12	18			16		
Mvmt Sat Flow, veh/h		1568	2733			0		

Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	0	0
Lane Assignment	(Prot)							

Lanes in Grp	2	0	2	0	0	0	0	0
Grp Vol (v), veh/h	512	0	331	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1704	0	1688	0	0	0	0	0
Q Serve Time (g_s), s	10.0	0.0	5.5	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	10.0	0.0	5.5	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1688	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	34.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	623	0	881	0	0	0	0	0
V/C Ratio (X)	0.82	0.00	0.38	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	741	0	881	0	0	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	27.1	0.0	20.9	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	6.4	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	33.5	0.0	21.2	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	4.7	0.0	2.6	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	5.2	0.0	2.6	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.31	0.00	0.14	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	3	0	0	0	3	0	0
Grp Vol (v), veh/h	0	1682	0	0	0	2399	0	0
Grp Sat Flow (s), veh/h/ln	0	1679	0	0	0	1679	0	0
Q Serve Time (g_s), s	0.0	17.6	0.0	0.0	0.0	14.9	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	17.6	0.0	0.0	0.0	14.9	0.0	0.0
Lane Grp Cap (c), veh/h	0	2481	0	0	0	3839	0	0
V/C Ratio (X)	0.00	0.68	0.00	0.00	0.00	0.62	0.00	0.00
Avail Cap (c_a), veh/h	0	2481	0	0	0	3839	0	0
Upstream Filter (I)	0.00	0.84	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	13.3	0.0	0.0	0.0	3.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.3	0.0	0.0	0.0	0.8	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	14.6	0.0	0.0	0.0	4.5	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	8.1	0.0	0.0	0.0	6.7	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	8.4	0.0	0.0	0.0	6.9	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.13	0.00	0.00	0.00	0.17	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lane Assignment		R	R					
Lanes in Grp	0	1	2	0	0	0	0	0
Grp Vol (v), veh/h	0	0	1178	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1568	1367	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	18.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	18.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	773	713	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	1.65	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	773	713	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	25.5	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	299.8	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	325.3	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	6.7	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	29.7	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	36.4	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	1.45	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	116.3	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		72.5						
HCM 2010 LOS		E						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	581	1069	247	143	387	93	79	89	60	194	216	712
Future Volume (veh/h)	581	1069	247	143	387	93	79	89	60	194	216	712
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1712	1712	1712	1712	1712	1712	1900	1900	1712	1712
Adj Flow Rate, veh/h	605	1114	257	149	403	0	82	93	62	202	225	742
Adj No. of Lanes	1	3	1	1	3	1	1	2	0	0	1	2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	11	11	11	11	11	11	11	11	11	11	11	11
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	433	2219	691	171	1469	457	100	543	335	0	293	439
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.27	0.47	0.47	0.10	0.31	0.00	0.06	0.28	0.28	0.00	0.17	0.17
Ln Grp Delay, s/veh	243.1	29.3	27.4	83.2	41.6	0.0	89.1	43.6	43.9	0.0	74.9	387.5
Ln Grp LOS	F	C	C	F	D		F	D	D		E	F
Approach Vol, veh/h		1976			552			237			967	
Approach Delay, s/veh		94.5			52.8			59.4			314.7	
Approach LOS		F			D			E			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	0.0	4.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	50.0	57.4	0.0	52.6	24.3	83.1	17.5	35.1
Change Period (Y+Rc), s	7.5	7.1	7.6	* 7.7	7.5	7.1	* 7.7	* 7.7
Max Green (Gmax), s	42.5	37.9	27.4	* 22	42.5	37.9	* 22	* 27
Max Allow Headway (MAH), s	3.8	5.1	0.0	4.5	3.8	5.1	3.8	4.5
Max Q Clear (g_c+I1), s	44.5	12.4	0.0	8.3	16.4	28.3	10.0	29.4
Green Ext Time (g_e), s	0.0	13.8	0.0	4.9	0.4	7.0	0.1	0.0
Prob of Phs Call (p_c)	1.00	1.00	0.00	1.00	1.00	1.00	0.97	1.00
Prob of Max Out (p_x)	1.00	0.00	0.00	0.24	0.00	0.00	0.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1630		0		1630		1630	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		4673		1933		4673		1712

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1455		1194		1455		2561

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)				(Prot)		(Prot)	

Lanes in Grp	1	0	0	0	1	0	1	0
Grp Vol (v), veh/h	605	0	0	0	149	0	82	0
Grp Sat Flow (s), veh/h/ln	1630	0	0	0	1630	0	1630	0
Q Serve Time (g_s), s	42.5	0.0	0.0	0.0	14.4	0.0	8.0	0.0
Cycle Q Clear Time (g_c), s	42.5	0.0	0.0	0.0	14.4	0.0	8.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	433	0	0	0	171	0	100	0
V/C Ratio (X)	1.40	0.00	0.00	0.00	0.87	0.00	0.82	0.00
Avail Cap (c_a), veh/h	433	0	0	0	433	0	227	0
Upstream Filter (I)	0.40	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	58.8	0.0	0.0	0.0	70.5	0.0	74.2	0.0
Incr Delay (d2), s/veh	184.4	0.0	0.0	0.0	12.6	0.0	14.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	243.1	0.0	0.0	0.0	83.2	0.0	89.1	0.0
1st-Term Q (Q1), veh/ln	19.1	0.0	0.0	0.0	6.5	0.0	3.6	0.0
2nd-Term Q (Q2), veh/ln	22.2	0.0	0.0	0.0	0.6	0.0	0.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	41.3	0.0	0.0	0.0	7.1	0.0	4.0	0.0
%ile Storage Ratio (RQ%)	1.53	0.00	0.00	0.00	0.46	0.00	0.22	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	43.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	1	0	3	0	1
Grp Vol (v), veh/h	0	403	0	77	0	1114	0	225
Grp Sat Flow (s), veh/h/ln	0	1558	0	1626	0	1558	0	1712
Q Serve Time (g_s), s	0.0	10.4	0.0	5.7	0.0	26.3	0.0	20.1
Cycle Q Clear Time (g_c), s	0.0	10.4	0.0	5.7	0.0	26.3	0.0	20.1
Lane Grp Cap (c), veh/h	0	1469	0	457	0	2219	0	293
V/C Ratio (X)	0.00	0.27	0.00	0.17	0.00	0.50	0.00	0.77
Avail Cap (c_a), veh/h	0	1469	0	457	0	2219	0	293
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.40	0.00	1.00
Uniform Delay (d1), s/veh	0.0	41.2	0.0	43.4	0.0	29.0	0.0	63.3
Incr Delay (d2), s/veh	0.0	0.5	0.0	0.2	0.0	0.3	0.0	11.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	41.6	0.0	43.6	0.0	29.3	0.0	74.9
1st-Term Q (Q1), veh/ln	0.0	4.5	0.0	2.6	0.0	11.3	0.0	9.5

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	4.5	0.0	2.6	0.0	11.4	0.0	10.4
%ile Storage Ratio (RQ%)	0.00	0.05	0.00	0.14	0.00	0.09	0.00	0.31
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	2
Grp Vol (v), veh/h	0	0	0	78	0	257	0	742
Grp Sat Flow (s), veh/h/ln	0	1455	0	1501	0	1455	0	1280
Q Serve Time (g_s), s	0.0	0.0	0.0	6.3	0.0	18.0	0.0	27.4
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	6.3	0.0	18.0	0.0	27.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.80	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	457	0	421	0	691	0	439
V/C Ratio (X)	0.00	0.00	0.00	0.18	0.00	0.37	0.00	1.69
Avail Cap (c_a), veh/h	0	457	0	421	0	691	0	439
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.40	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	43.7	0.0	26.8	0.0	66.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.6	0.0	321.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	43.9	0.0	27.4	0.0	387.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	2.6	0.0	7.2	0.0	9.7
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	19.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	2.6	0.0	7.3	0.0	29.3
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.14	0.00	0.41	0.00	0.87
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	75.9
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	143.2
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	165	834	127	418	880	152	109	450	132	538	1220	162
Future Volume (veh/h)	165	834	127	418	880	152	109	450	132	538	1220	162
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1776	1776	1776	1776	1776	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	174	878	134	440	926	160	115	474	139	566	1284	171
Adj No. of Lanes	2	3	1	2	3	2	2	2	0	2	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	7	7	7	7	7	7	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	220	1248	389	213	1237	678	157	960	280	374	1298	172
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.07	0.26	0.26	0.06	0.26	0.26	0.05	0.37	0.37	0.11	0.43	0.43
Ln Grp Delay, s/veh	75.9	54.2	48.1	566.4	55.9	45.4	80.1	37.0	37.1	311.8	71.9	74.4
Ln Grp LOS	E	D	D	F	E	D	F	D	D	F	E	E
Approach Vol, veh/h		1186			1526			728			2021	
Approach Delay, s/veh		56.7			202.0			43.9			140.0	
Approach LOS		E			F			D			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	4.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	17.3	45.8	24.0	63.8	17.0	46.2	14.8	73.0
Change Period (Y+Rc), s	7.2	* 7.3	6.8	* 7.6	7.2	* 7.3	* 7.6	* 7.6
Max Green (Gmax), s	15.8	* 31	17.2	* 59	9.8	* 37	* 9.4	* 65
Max Allow Headway (MAH), s	3.8	5.1	3.8	5.3	3.8	5.1	3.8	5.3
Max Q Clear (g_c+I1), s	9.9	28.6	19.2	23.5	11.8	26.8	7.2	66.8
Green Ext Time (g_e), s	0.3	1.9	0.0	21.0	0.0	7.9	0.1	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00
Prob of Max Out (p_x)	0.15	0.00	1.00	0.51	1.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3281		3281		3281		3281	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		4848		2579		4848		2996

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		2656		751		1509		397

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	174	0	566	0	440	0	115	0
Grp Sat Flow (s), veh/h/ln	1640	0	1640	0	1640	0	1640	0
Q Serve Time (g_s), s	7.9	0.0	17.2	0.0	9.8	0.0	5.2	0.0
Cycle Q Clear Time (g_c), s	7.9	0.0	17.2	0.0	9.8	0.0	5.2	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	220	0	374	0	213	0	157	0
V/C Ratio (X)	0.79	0.00	1.51	0.00	2.07	0.00	0.73	0.00
Avail Cap (c_a), veh/h	343	0	374	0	213	0	204	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	69.4	0.0	66.9	0.0	70.6	0.0	70.9	0.0
Incr Delay (d2), s/veh	6.5	0.0	244.9	0.0	495.8	0.0	9.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	75.9	0.0	311.8	0.0	566.4	0.0	80.1	0.0
1st-Term Q (Q1), veh/ln	3.6	0.0	7.8	0.0	4.4	0.0	2.4	0.0
2nd-Term Q (Q2), veh/ln	0.2	0.0	12.7	0.0	14.7	0.0	0.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	3.8	0.0	20.5	0.0	19.1	0.0	2.6	0.0
%ile Storage Ratio (RQ%)	0.22	0.00	0.41	0.00	0.97	0.00	0.07	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	48.1	0.0	56.8	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.4	0.0	0.5	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	1	0	3	0	1
Grp Vol (v), veh/h	0	926	0	309	0	878	0	720
Grp Sat Flow (s), veh/h/ln	0	1616	0	1687	0	1616	0	1687
Q Serve Time (g_s), s	0.0	26.6	0.0	21.3	0.0	24.8	0.0	63.7
Cycle Q Clear Time (g_c), s	0.0	26.6	0.0	21.3	0.0	24.8	0.0	63.7
Lane Grp Cap (c), veh/h	0	1237	0	628	0	1248	0	731
V/C Ratio (X)	0.00	0.75	0.00	0.49	0.00	0.70	0.00	0.99
Avail Cap (c_a), veh/h	0	1237	0	661	0	1248	0	731
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	51.8	0.0	36.4	0.0	50.8	0.0	42.3
Incr Delay (d2), s/veh	0.0	4.2	0.0	0.6	0.0	3.3	0.0	29.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	55.9	0.0	37.0	0.0	54.2	0.0	71.9
1st-Term Q (Q1), veh/ln	0.0	11.8	0.0	9.9	0.0	11.1	0.0	29.6

2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.1	0.0	0.4	0.0	6.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	12.3	0.0	10.0	0.0	11.4	0.0	35.6
%ile Storage Ratio (RQ%)	0.00	0.06	0.00	0.27	0.00	0.10	0.00	0.70
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		T+R
Lanes in Grp	0	2	0	1	0	1	0	1
Grp Vol (v), veh/h	0	160	0	304	0	134	0	735
Grp Sat Flow (s), veh/h/ln	0	1328	0	1643	0	1509	0	1706
Q Serve Time (g_s), s	0.0	7.2	0.0	21.5	0.0	10.9	0.0	64.8
Cycle Q Clear Time (g_c), s	0.0	7.2	0.0	21.5	0.0	10.9	0.0	64.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.46	0.00	1.00	0.00	0.23
Lane Grp Cap (c), veh/h	0	678	0	612	0	389	0	739
V/C Ratio (X)	0.00	0.24	0.00	0.50	0.00	0.34	0.00	1.00
Avail Cap (c_a), veh/h	0	678	0	644	0	389	0	739
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	44.6	0.0	36.5	0.0	45.7	0.0	42.6
Incr Delay (d2), s/veh	0.0	0.8	0.0	0.6	0.0	2.4	0.0	31.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	45.4	0.0	37.1	0.0	48.1	0.0	74.4
1st-Term Q (Q1), veh/ln	0.0	2.7	0.0	9.8	0.0	4.5	0.0	30.4
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.0	0.3	0.0	6.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.7	0.0	9.9	0.0	4.8	0.0	36.9
%ile Storage Ratio (RQ%)	0.00	0.11	0.00	0.26	0.00	0.30	0.00	0.73
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		126.4						
HCM 2010 LOS		F						

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	502	1491	8	13	2064	743	0	0	1053	0	0	0
Future Volume (veh/h)	502	1491	8	13	2064	743	0	0	1053	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q, veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1845	1845	1900	1900	1845	1845	0	0	1845			
Adj Flow Rate, veh/h	518	1537	8	13	2128	0	0	0	1086			
Adj No. of Lanes	2	3	0	0	3	1	0	0	2			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97			
Percent Heavy Veh, %	3	3	3	3	3	3	0	0	3			
Opposing Right Turn Influence	Yes			Yes			No					
Cap, veh/h	559	4939	26	35	3605	1170	0	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Prop Arrive On Green	0.16	0.96	0.96	0.75	0.75	0.00	0.00	0.00	0.00			
Ln Grp Delay, s/veh	80.4	0.5	0.7	9.9	9.4	0.0	0.0	0.0	0.0			
Ln Grp LOS	F	A	A	A	A							

Approach Vol, veh/h	2063	2141	0	Timer:
Approach Delay, s/veh	20.6	9.6	0.0	Assigned Phs
Approach LOS	C	A		Case No
Phs Duration (G+Y+Rc), s		143.0	29.9	113.1
Change Period (Y+Rc), s		6.4	6.4	6.4
Max Green (Gmax), s		76.6	23.6	46.6
Max Allow Headway (MAH), s		5.3	3.8	5.3
Max Q Clear (g_c+I1), s		4.7	23.4	30.6
Green Ext Time (g_e), s		62.6	0.0	15.4
Prob of Phs Call (p_c)		1.00	1.00	1.00
Prob of Max Out (p_x)		0.00	1.00	0.00

Left-Turn Movement Data				
Assigned Mvmt			7	3
Mvmt Sat Flow, veh/h			3408	12

Through Movement Data				
Assigned Mvmt		4		8
Mvmt Sat Flow, veh/h		5170		4831

Right-Turn Movement Data				
Assigned Mvmt		14		18
Mvmt Sat Flow, veh/h		27		1568

Left Lane Group Data									
Assigned Mvmt	0	0	0	0	0	0	7	3	
Lane Assignment							(Prot)	L+T	
Lanes in Grp	0	0	0	0	0	0	2	1	
Grp Vol (v), veh/h	0	0	0	0	0	0	518	794	
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	1704	1788	

Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	21.4	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	21.4	27.4
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	340
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	106.7
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	106.7
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	59.6
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.4
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.02
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	559	1360
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.93	0.58
Avail Cap (c_a), veh/h	0	0	0	0	0	0	562	1360
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	58.9	8.1
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	21.5	1.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	80.4	9.9
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	10.1	13.7
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	11.7	14.4
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.38	1.06
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	2
Grp Vol (v), veh/h	0	0	0	998	0	0	0	1347
Grp Sat Flow (s), veh/h/ln	0	0	0	1679	0	0	0	1528
Q Serve Time (g_s), s	0.0	0.0	0.0	2.7	0.0	0.0	0.0	28.6
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	2.7	0.0	0.0	0.0	28.6
Lane Grp Cap (c), veh/h	0	0	0	3207	0	0	0	2280
V/C Ratio (X)	0.00	0.00	0.00	0.31	0.00	0.00	0.00	0.59
Avail Cap (c_a), veh/h	0	0	0	3207	0	0	0	2280
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	8.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.3	0.0	0.0	0.0	1.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.5	0.0	0.0	0.0	9.4
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.1	0.0	0.0	0.0	12.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00

%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	1.2	0.0	0.0	0.0	12.3
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.91
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	0	0	18
Lane Assignment				T+R				R
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	547	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1840	0	0	0	1568
Q Serve Time (g_s), s	0.0	0.0	0.0	2.7	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	2.7	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.01	0.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	0	0	1758	0	0	0	1170
V/C Ratio (X)	0.00	0.00	0.00	0.31	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	1758	0	0	0	1170
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		15.0						
HCM 2010 LOS		B						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1300	818	1218	1842	0	0	0	565	0	0	266
Future Volume (veh/h)	0	1300	818	1218	1842	0	0	0	565	0	0	266
Number	7	4	14	3	8	18				1	6	16
Initial Q, veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1845	1845	1845	1845	0				0	0	1845
Adj Flow Rate, veh/h	0	1340	0	1256	1899	0				0	0	274
Adj No. of Lanes	0	3	1	2	3	0				0	0	2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97				0.97	0.97	0.97
Percent Heavy Veh, %	0	3	3	3	3	0				0	0	3
Opposing Right Turn Influence	No			Yes						No		
Cap, veh/h	0	2216	690	1237	4540	0				0	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Prop Arrive On Green	0.00	0.44	0.00	0.36	0.90	0.00				0.00	0.00	0.00
Ln Grp Delay, s/veh	0.0	15.1	0.0	50.1	0.8	0.0				0.0	0.0	0.0
Ln Grp LOS		B		F	A							
Approach Vol, veh/h		1340			3155						0	
Approach Delay, s/veh		15.1			20.4						0.0	
Approach LOS		B			C							

Timer:	1	2	3	4	5	6	7	8
Assigned Phs			3	4				8
Case No			2.0	7.0				4.0
Phs Duration (G+Y+Rc), s			30.0	35.0				65.0
Change Period (Y+Rc), s			6.4	6.4				6.4
Max Green (Gmax), s			23.6	18.0				48.0
Max Allow Headway (MAH), s			3.8	5.2				5.2
Max Q Clear (g_c+I1), s			25.6	15.2				5.9
Green Ext Time (g_e), s			0.0	2.8				36.7
Prob of Phs Call (p_c)			1.00	1.00				1.00
Prob of Max Out (p_x)			1.00	0.00				0.00

Left-Turn Movement Data		
Assigned Mvmt	3	7
Mvmt Sat Flow, veh/h	3408	0

Through Movement Data		
Assigned Mvmt	4	8
Mvmt Sat Flow, veh/h	5202	5202

Right-Turn Movement Data		
Assigned Mvmt	14	18
Mvmt Sat Flow, veh/h	1568	0

Left Lane Group Data								
Assigned Mvmt	0	0	3	7	0	0	0	0
Lane Assignment			(Prot)					

Lanes in Grp	0	0	2	0	0	0	0	0
Grp Vol (v), veh/h	0	0	1256	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1704	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	23.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	23.6	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	28.6	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	1237	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	1.01	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	1237	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	20.7	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	29.4	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	50.1	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	11.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	16.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.56	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	4.6	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	3	0	0	0	3
Grp Vol (v), veh/h	0	0	0	1340	0	0	0	1899
Grp Sat Flow (s), veh/h/ln	0	0	0	1679	0	0	0	1679
Q Serve Time (g_s), s	0.0	0.0	0.0	13.2	0.0	0.0	0.0	3.9
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	13.2	0.0	0.0	0.0	3.9
Lane Grp Cap (c), veh/h	0	0	0	2216	0	0	0	4540
V/C Ratio (X)	0.00	0.00	0.00	0.60	0.00	0.00	0.00	0.42
Avail Cap (c_a), veh/h	0	0	0	2216	0	0	0	4540
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	13.9	0.0	0.0	0.0	0.5
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	15.1	0.0	0.0	0.0	0.8
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	6.1	0.0	0.0	0.0	1.6

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	6.3	0.0	0.0	0.0	1.7
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.27	0.00	0.00	0.00	0.11
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	0	0	18
Lane Assignment				R				
Lanes in Grp	0	0	0	1	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1568	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	690	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	690	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		18.8						
HCM 2010 LOS		B						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	801	2791	0	0	2348	659	0	0	406	0	2	302
Future Volume (veh/h)	801	2791	0	0	2348	659	0	0	406	0	2	302
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	0	0	1863	0	1900	1863
Adj Flow Rate, veh/h	880	3067	0	0	2580	724	0	0	446	0	2	332
Adj No. of Lanes	2	3	0	0	3	2	0	0	3	0	0	3
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	0	0	2	2	0	0	2	0	2	2
Opposing Right Turn Influence	Yes			No			No			No		
Cap, veh/h	683	4842	0	0	3590	1967	0	0	0	0	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.20	0.95	0.00	0.00	0.71	0.71	0.00	0.00	0.00	0.00	0.00	0.00
Ln Grp Delay, s/veh	184.4	0.4	0.0	0.0	13.0	8.4	0.0	0.0	0.0	0.0	0.0	0.0
Ln Grp LOS	F	A			B	A						
Approach Vol, veh/h		3947			3304			0			0	
Approach Delay, s/veh		41.5			12.0			0.0			0.0	
Approach LOS		D			B							

Timer:	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Case No				4.0		0.0	2.0	7.0
Phs Duration (G+Y+Rc), s				134.0		0.0	33.0	101.0
Change Period (Y+Rc), s				6.4		4.5	6.4	6.4
Max Green (Gmax), s				81.6		18.0	26.6	48.6
Max Allow Headway (MAH), s				5.1		0.0	3.8	5.1
Max Q Clear (g_c+I1), s				11.7		0.0	28.6	42.6
Green Ext Time (g_e), s				69.4		0.0	0.0	6.0
Prob of Phs Call (p_c)				1.00		0.00	1.00	1.00
Prob of Max Out (p_x)				0.00		0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt						1	7	3
Mvmt Sat Flow, veh/h						0	3442	0

Through Movement Data								
Assigned Mvmt				4		6		8
Mvmt Sat Flow, veh/h				5253		0		5253

Right-Turn Movement Data								
Assigned Mvmt				14		16		18
Mvmt Sat Flow, veh/h				0		0		2787

Left Lane Group Data								
Assigned Mvmt	0	0	0	0	0	1	7	3
Lane Assignment							(Prot)	

Lanes in Grp	0	0	0	0	0	0	2	0
Grp Vol (v), veh/h	0	0	0	0	0	0	880	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	1721	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	26.6	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	26.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	94.6
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	683	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	1.29	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	683	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	53.7	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	130.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	184.4	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	12.6	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	12.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	1.20	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	49.2	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	3	0	0	0	3
Grp Vol (v), veh/h	0	0	0	3067	0	0	0	2580
Grp Sat Flow (s), veh/h/ln	0	0	0	1695	0	0	0	1695
Q Serve Time (g_s), s	0.0	0.0	0.0	9.7	0.0	0.0	0.0	40.6
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	9.7	0.0	0.0	0.0	40.6
Lane Grp Cap (c), veh/h	0	0	0	4842	0	0	0	3590
V/C Ratio (X)	0.00	0.00	0.00	0.63	0.00	0.00	0.00	0.72
Avail Cap (c_a), veh/h	0	0	0	4842	0	0	0	3590
Upstream Filter (I)	0.00	0.00	0.00	0.09	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.4	0.0	0.0	0.0	11.8
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.0	0.0	1.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.4	0.0	0.0	0.0	13.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	4.0	0.0	0.0	0.0	18.6

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	4.0	0.0	0.0	0.0	19.1
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.31
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	16	0	18
Lane Assignment								R
Lanes in Grp	0	0	0	0	0	0	0	2
Grp Vol (v), veh/h	0	0	0	0	0	0	0	724
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	1393
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.8
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	1967
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	1967
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.8
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.4
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.4
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		28.0						
HCM 2010 LOS		C						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2661	352	992	1611	1	14	0	822	0	0	210
Future Volume (veh/h)	0	2661	352	992	1611	1	14	0	822	0	0	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	1900	1900	0	1863	0	0	1863
Adj Flow Rate, veh/h	0	2743	363	1023	1661	1	14	0	847	0	0	216
Adj No. of Lanes	0	3	2	2	3	0	0	0	3	0	0	3
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	2	2	2	2	2	2	0	2	0	0	2
Opposing Right Turn Influence	No			Yes			Yes			No		
Cap, veh/h	0	3518	1928	836	5078	3	0	0	0	0	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.00	0.69	0.69	0.24	0.97	0.97	0.00	0.00	0.00	0.00	0.00	0.00
Ln Grp Delay, s/veh	0.0	22.0	10.9	176.0	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Ln Grp LOS		C	B	F	A	A						
Approach Vol, veh/h		3106			2685			0			0	
Approach Delay, s/veh		20.7			67.2			0.0			0.0	
Approach LOS		C			E							

Timer:	1	2	3	4	5	6	7	8
Assigned Phs			3	4				8
Case No			2.0	7.0				4.0
Phs Duration (G+Y+Rc), s			54.0	142.0				196.0
Change Period (Y+Rc), s			6.4	6.4				6.4
Max Green (Gmax), s			47.6	93.6				147.6
Max Allow Headway (MAH), s			3.8	5.2				5.2
Max Q Clear (g_c+I1), s			49.6	72.7				5.0
Green Ext Time (g_e), s			0.0	20.7				135.1
Prob of Phs Call (p_c)			1.00	1.00				1.00
Prob of Max Out (p_x)			1.00	0.00				0.00

Left-Turn Movement Data		
Assigned Mvmt	3	7
Mvmt Sat Flow, veh/h	3442	0

Through Movement Data		
Assigned Mvmt	4	8
Mvmt Sat Flow, veh/h	5253	5249

Right-Turn Movement Data		
Assigned Mvmt	14	18
Mvmt Sat Flow, veh/h	2787	3

Left Lane Group Data								
Assigned Mvmt	0	0	3	7	0	0	0	0
Lane Assignment			(Prot)					

Lanes in Grp	0	0	2	0	0	0	0	0
Grp Vol (v), veh/h	0	0	1023	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1721	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	47.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	47.6	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	135.6	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	836	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	1.22	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	836	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	74.2	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	101.8	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	176.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	22.6	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	11.8	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	34.5	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	1.48	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	46.8	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	3	0	0	0	2
Grp Vol (v), veh/h	0	0	0	2743	0	0	0	1073
Grp Sat Flow (s), veh/h/ln	0	0	0	1695	0	0	0	1695
Q Serve Time (g_s), s	0.0	0.0	0.0	70.7	0.0	0.0	0.0	3.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	70.7	0.0	0.0	0.0	3.0
Lane Grp Cap (c), veh/h	0	0	0	3518	0	0	0	3279
V/C Ratio (X)	0.00	0.00	0.00	0.78	0.00	0.00	0.00	0.33
Avail Cap (c_a), veh/h	0	0	0	3518	0	0	0	3279
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	0.0	0.0	20.2	0.0	0.0	0.0	0.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	22.0	0.0	0.0	0.0	0.2
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	32.8	0.0	0.0	0.0	1.2

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	33.3	0.0	0.0	0.0	1.2
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.56	0.00	0.00	0.00	0.02
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	0	0	18
Lane Assignment				R				T+R
Lanes in Grp	0	0	0	2	0	0	0	1
Grp Vol (v), veh/h	0	0	0	363	0	0	0	589
Grp Sat Flow (s), veh/h/ln	0	0	0	1393	0	0	0	1862
Q Serve Time (g_s), s	0.0	0.0	0.0	9.0	0.0	0.0	0.0	3.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	9.0	0.0	0.0	0.0	3.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	1928	0	0	0	1801
V/C Ratio (X)	0.00	0.00	0.00	0.19	0.00	0.00	0.00	0.33
Avail Cap (c_a), veh/h	0	0	0	1928	0	0	0	1801
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	0.0	0.0	10.7	0.0	0.0	0.0	0.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	10.9	0.0	0.0	0.0	0.2
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.4	0.0	0.0	0.0	1.3
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	3.5	0.0	0.0	0.0	1.3
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.02
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	42.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	279	210	304	306	262	105	604	283	169	1159	10
Future Volume (veh/h)	21	279	210	304	306	262	105	604	283	169	1159	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	24	317	239	345	348	298	119	686	322	192	1317	11
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	31	403	297	72	420	354	90	1082	508	90	1663	14
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.02	0.21	0.21	0.04	0.23	0.23	0.05	0.48	0.48	0.05	0.48	0.48
Ln Grp Delay, s/veh	73.0	40.8	43.4	1767.8	44.2	47.1	246.6	20.0	20.2	590.5	26.0	25.7
Ln Grp LOS	E	D	D	F	D	D	F	C	C	F	C	C
Approach Vol, veh/h		580			991			1127			1520	
Approach Delay, s/veh		43.4			645.2			44.0			97.2	
Approach LOS		D			F			D			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	4.0
Phs Duration (G+Y+Rc), s	9.0	45.7	8.0	22.3	9.0	45.7	6.0	24.3
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green (Gmax), s	4.5	39.5	3.5	19.5	4.5	39.5	3.5	19.5
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.4	3.8	5.3	3.8	5.4
Max Q Clear (g_c+I1), s	6.5	21.4	5.5	15.6	6.5	29.3	3.2	17.9
Green Ext Time (g_e), s	0.0	14.2	0.0	2.2	0.0	8.7	0.0	1.1
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.94	1.00	0.43	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1691		1757		1691		1757	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2231		1927		3429		1806

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1047		1420		29		1522

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	192	0	345	0	119	0	24	0
Grp Sat Flow (s), veh/h/ln	1691	0	1757	0	1691	0	1757	0
Q Serve Time (g_s), s	4.5	0.0	3.5	0.0	4.5	0.0	1.2	0.0
Cycle Q Clear Time (g_c), s	4.5	0.0	3.5	0.0	4.5	0.0	1.2	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	90	0	72	0	90	0	31	0
V/C Ratio (X)	2.14	0.00	4.77	0.00	1.33	0.00	0.77	0.00
Avail Cap (c_a), veh/h	90	0	72	0	90	0	72	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	40.3	0.0	40.8	0.0	40.3	0.0	41.6	0.0
Incr Delay (d2), s/veh	550.3	0.0	1727.0	0.0	206.4	0.0	31.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	590.5	0.0	1767.8	0.0	246.6	0.0	73.0	0.0
1st-Term Q (Q1), veh/ln	2.1	0.0	1.7	0.0	2.1	0.0	0.6	0.0
2nd-Term Q (Q2), veh/ln	13.7	0.0	34.7	0.0	5.1	0.0	0.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	15.8	0.0	36.4	0.0	7.2	0.0	0.8	0.0
%ile Storage Ratio (RQ%)	1.28	0.00	3.96	0.00	1.16	0.00	0.17	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	25.6	0.0	68.2	0.0	7.4	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.5	0.0	1.2	0.0	0.3	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	519	0	288	0	648	0	337
Grp Sat Flow (s), veh/h/ln	0	1687	0	1752	0	1687	0	1752
Q Serve Time (g_s), s	0.0	19.4	0.0	13.2	0.0	27.3	0.0	15.6
Cycle Q Clear Time (g_c), s	0.0	19.4	0.0	13.2	0.0	27.3	0.0	15.6
Lane Grp Cap (c), veh/h	0	818	0	367	0	818	0	408
V/C Ratio (X)	0.00	0.63	0.00	0.78	0.00	0.79	0.00	0.83
Avail Cap (c_a), veh/h	0	818	0	402	0	818	0	408
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	16.3	0.0	31.8	0.0	18.3	0.0	31.0
Incr Delay (d2), s/veh	0.0	3.7	0.0	9.0	0.0	7.7	0.0	13.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	20.0	0.0	40.8	0.0	26.0	0.0	44.2
1st-Term Q (Q1), veh/ln	0.0	8.9	0.0	6.4	0.0	12.6	0.0	7.5

2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	0.9	0.0	1.8	0.0	1.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	9.8	0.0	7.3	0.0	14.4	0.0	9.0
%ile Storage Ratio (RQ%)	0.00	0.77	0.00	0.17	0.00	1.10	0.00	0.18
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	489	0	268	0	680	0	309
Grp Sat Flow (s), veh/h/ln	0	1591	0	1594	0	1771	0	1576
Q Serve Time (g_s), s	0.0	19.4	0.0	13.6	0.0	27.3	0.0	15.9
Cycle Q Clear Time (g_c), s	0.0	19.4	0.0	13.6	0.0	27.3	0.0	15.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.66	0.00	0.89	0.00	0.02	0.00	0.97
Lane Grp Cap (c), veh/h	0	771	0	334	0	859	0	367
V/C Ratio (X)	0.00	0.63	0.00	0.80	0.00	0.79	0.00	0.84
Avail Cap (c_a), veh/h	0	771	0	366	0	859	0	367
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	16.3	0.0	32.0	0.0	18.3	0.0	31.1
Incr Delay (d2), s/veh	0.0	4.0	0.0	11.4	0.0	7.4	0.0	16.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	20.2	0.0	43.4	0.0	25.7	0.0	47.1
1st-Term Q (Q1), veh/ln	0.0	8.4	0.0	6.0	0.0	13.2	0.0	6.9
2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	1.1	0.0	1.8	0.0	1.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	9.3	0.0	7.0	0.0	15.0	0.0	8.5
%ile Storage Ratio (RQ%)	0.00	0.73	0.00	0.16	0.00	1.15	0.00	0.17
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		204.3						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	176	283	343	63	214	71	447	301	120	472	14
Future Volume (veh/h)	45	176	283	343	63	214	71	447	301	120	472	14
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1900	1712	1712	1712	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	47	185	298	361	66	225	75	471	317	126	497	15
Adj No. of Lanes	1	1	0	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	11	11	11	11	11	11	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	62	152	245	101	482	410	74	715	480	74	1236	37
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.04	0.26	0.26	0.06	0.28	0.28	0.04	0.37	0.37	0.04	0.37	0.37
Ln Grp Delay, s/veh	60.9	0.0	151.8	1225.8	24.8	29.6	154.8	29.5	30.1	415.9	23.4	23.3
Ln Grp LOS	E		F	F	C	C	F	C	C	F	C	C
Approach Vol, veh/h		530			652			863			638	
Approach Delay, s/veh		143.7			691.4			40.7			100.9	
Approach LOS		F			F			D			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	10.0	40.0	12.0	30.0	10.0	40.0	9.8	32.2
Change Period (Y+Rc), s	6.0	6.0	* 6.3	* 6.3	6.0	6.0	* 6.3	* 6.3
Max Green (Gmax), s	4.0	34.0	* 5.7	* 24	4.0	34.0	* 5.7	* 24
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.1	3.8	5.3	3.8	5.1
Max Q Clear (g_c+I1), s	6.0	20.7	7.7	25.7	6.0	12.1	4.6	14.1
Green Ext Time (g_e), s	0.0	6.8	0.0	0.0	0.0	9.0	0.0	3.2
Prob of Phs Call (p_c)	0.96	1.00	1.00	1.00	0.85	1.00	0.70	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.46

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1691		1630		1691		1630	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1936		591		3344		1712

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1298		952		101		1455

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	126	0	361	0	75	0	47	0
Grp Sat Flow (s), veh/h/ln	1691	0	1630	0	1691	0	1630	0
Q Serve Time (g_s), s	4.0	0.0	5.7	0.0	4.0	0.0	2.6	0.0
Cycle Q Clear Time (g_c), s	4.0	0.0	5.7	0.0	4.0	0.0	2.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	74	0	101	0	74	0	62	0
V/C Ratio (X)	1.71	0.00	3.57	0.00	1.02	0.00	0.76	0.00
Avail Cap (c_a), veh/h	74	0	101	0	74	0	101	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	44.0	0.0	43.2	0.0	44.0	0.0	43.8	0.0
Incr Delay (d2), s/veh	371.9	0.0	1182.6	0.0	110.6	0.0	17.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0
Control Delay (d), s/veh	415.9	0.0	1225.8	0.0	154.8	0.0	60.9	0.0
1st-Term Q (Q1), veh/ln	1.9	0.0	2.6	0.0	1.9	0.0	1.2	0.0
2nd-Term Q (Q2), veh/ln	7.6	0.0	33.2	0.0	2.3	0.0	0.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	9.5	0.0	35.7	0.0	4.1	0.0	1.5	0.0
%ile Storage Ratio (RQ%)	1.10	0.00	6.94	0.00	0.34	0.00	0.27	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	13.1	0.0	65.0	0.0	0.4	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.4	0.0	0.9	0.0	0.3	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	410	0	0	0	250	0	66
Grp Sat Flow (s), veh/h/ln	0	1687	0	0	0	1687	0	1712
Q Serve Time (g_s), s	0.0	18.6	0.0	0.0	0.0	10.1	0.0	2.7
Cycle Q Clear Time (g_c), s	0.0	18.6	0.0	0.0	0.0	10.1	0.0	2.7
Lane Grp Cap (c), veh/h	0	623	0	0	0	623	0	482
V/C Ratio (X)	0.00	0.66	0.00	0.00	0.00	0.40	0.00	0.14
Avail Cap (c_a), veh/h	0	623	0	0	0	623	0	482
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	24.2	0.0	0.0	0.0	21.5	0.0	24.7
Incr Delay (d2), s/veh	0.0	5.4	0.0	0.0	0.0	1.9	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	29.5	0.0	0.0	0.0	23.4	0.0	24.8
1st-Term Q (Q1), veh/ln	0.0	8.7	0.0	0.0	0.0	4.7	0.0	1.2

2nd-Term Q (Q2), veh/ln	0.0	0.9	0.0	0.0	0.0	0.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	9.6	0.0	0.0	0.0	5.0	0.0	1.3
%ile Storage Ratio (RQ%)	0.00	0.31	0.00	0.00	0.00	0.15	0.00	0.04
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	378	0	483	0	262	0	225
Grp Sat Flow (s), veh/h/ln	0	1547	0	1544	0	1758	0	1455
Q Serve Time (g_s), s	0.0	18.7	0.0	23.7	0.0	10.1	0.0	12.1
Cycle Q Clear Time (g_c), s	0.0	18.7	0.0	23.7	0.0	10.1	0.0	12.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.84	0.00	0.62	0.00	0.06	0.00	1.00
Lane Grp Cap (c), veh/h	0	572	0	398	0	650	0	410
V/C Ratio (X)	0.00	0.66	0.00	1.21	0.00	0.40	0.00	0.55
Avail Cap (c_a), veh/h	0	572	0	398	0	650	0	410
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	24.2	0.0	34.2	0.0	21.5	0.0	28.1
Incr Delay (d2), s/veh	0.0	5.9	0.0	117.6	0.0	1.9	0.0	1.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	30.1	0.0	151.8	0.0	23.3	0.0	29.6
1st-Term Q (Q1), veh/ln	0.0	8.0	0.0	10.1	0.0	4.9	0.0	4.8
2nd-Term Q (Q2), veh/ln	0.0	0.9	0.0	13.0	0.0	0.3	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	8.9	0.0	23.0	0.0	5.2	0.0	5.0
%ile Storage Ratio (RQ%)	0.00	0.29	0.00	0.56	0.00	0.15	0.00	0.88
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	21.3	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		233.5						
HCM 2010 LOS		F						

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	249	50	206	161	164	74	667	146	280	1013	52
Future Volume (veh/h)	120	249	50	206	161	164	74	667	146	280	1013	52
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	122	254	51	210	164	167	76	681	149	286	1034	53
Adj No. of Lanes	1	1	0	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	61	312	63	61	385	327	39	1250	273	39	1483	76
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.21	0.21	0.03	0.21	0.21	0.02	0.45	0.45	0.02	0.45	0.45
Ln Grp Delay, s/veh	540.1	0.0	40.7	1173.5	30.3	31.4	541.3	19.8	19.8	2900.6	22.4	22.3
Ln Grp LOS	F		D	F	C	C	F	B	B	F	C	C
Approach Vol, veh/h		427			541			906			1373	
Approach Delay, s/veh		183.4			474.4			63.6			621.9	
Approach LOS		F			F			E			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	8.0	45.0	9.0	24.0	8.0	45.0	9.0	24.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green (Gmax), s	2.0	34.0	3.0	23.0	2.0	34.0	3.0	23.0
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.0	3.8	5.3	3.8	5.0
Max Q Clear (g_c+I1), s	4.0	17.4	5.0	16.0	4.0	23.8	5.0	10.1
Green Ext Time (g_e), s	0.0	11.3	0.0	2.0	0.0	7.7	0.0	2.8
Prob of Phs Call (p_c)	1.00	1.00	0.99	1.00	0.84	1.00	0.95	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.62	1.00	0.00	1.00	0.17

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1691		1757		1691		1757	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2754		1492		3266		1845

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		602		300		167		1568

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	286	0	210	0	76	0	122	0
Grp Sat Flow (s), veh/h/ln	1691	0	1757	0	1691	0	1757	0
Q Serve Time (g_s), s	2.0	0.0	3.0	0.0	2.0	0.0	3.0	0.0
Cycle Q Clear Time (g_c), s	2.0	0.0	3.0	0.0	2.0	0.0	3.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	39	0	61	0	39	0	61	0
V/C Ratio (X)	7.27	0.00	3.43	0.00	1.93	0.00	1.99	0.00
Avail Cap (c_a), veh/h	39	0	61	0	39	0	61	0
Upstream Filter (I)	0.69	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	42.0	0.0	41.5	0.0	42.0	0.0	41.5	0.0
Incr Delay (d2), s/veh	2858.6	0.0	1132.0	0.0	499.3	0.0	498.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	2900.6	0.0	1173.5	0.0	541.3	0.0	540.1	0.0
1st-Term Q (Q1), veh/ln	0.9	0.0	1.4	0.0	0.9	0.0	1.4	0.0
2nd-Term Q (Q2), veh/ln	31.2	0.0	19.3	0.0	5.5	0.0	8.5	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	32.2	0.0	20.7	0.0	6.4	0.0	9.9	0.0
%ile Storage Ratio (RQ%)	3.40	0.00	3.93	0.00	0.78	0.00	1.54	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	61.7	0.0	37.2	0.0	9.2	0.0	15.2	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	1.8	0.0	0.9	0.0	0.5	0.0	0.5	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	417	0	0	0	534	0	164
Grp Sat Flow (s), veh/h/ln	0	1687	0	0	0	1687	0	1845
Q Serve Time (g_s), s	0.0	15.4	0.0	0.0	0.0	21.8	0.0	6.6
Cycle Q Clear Time (g_c), s	0.0	15.4	0.0	0.0	0.0	21.8	0.0	6.6
Lane Grp Cap (c), veh/h	0	766	0	0	0	766	0	385
V/C Ratio (X)	0.00	0.54	0.00	0.00	0.00	0.70	0.00	0.43
Avail Cap (c_a), veh/h	0	766	0	0	0	766	0	493
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.69	0.00	1.00
Uniform Delay (d1), s/veh	0.0	17.0	0.0	0.0	0.0	18.8	0.0	29.5
Incr Delay (d2), s/veh	0.0	2.8	0.0	0.0	0.0	3.6	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	19.8	0.0	0.0	0.0	22.4	0.0	30.3
1st-Term Q (Q1), veh/ln	0.0	7.2	0.0	0.0	0.0	10.1	0.0	3.4

2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.0	0.0	0.8	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.8	0.0	0.0	0.0	10.9	0.0	3.5
%ile Storage Ratio (RQ%)	0.00	0.39	0.00	0.00	0.00	0.23	0.00	0.10
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	413	0	305	0	553	0	167
Grp Sat Flow (s), veh/h/ln	0	1669	0	1792	0	1746	0	1568
Q Serve Time (g_s), s	0.0	15.4	0.0	14.0	0.0	21.8	0.0	8.1
Cycle Q Clear Time (g_c), s	0.0	15.4	0.0	14.0	0.0	21.8	0.0	8.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.36	0.00	0.17	0.00	0.10	0.00	1.00
Lane Grp Cap (c), veh/h	0	758	0	374	0	793	0	327
V/C Ratio (X)	0.00	0.55	0.00	0.82	0.00	0.70	0.00	0.51
Avail Cap (c_a), veh/h	0	758	0	479	0	793	0	419
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.69	0.00	1.00
Uniform Delay (d1), s/veh	0.0	17.0	0.0	32.4	0.0	18.8	0.0	30.1
Incr Delay (d2), s/veh	0.0	2.8	0.0	8.3	0.0	3.5	0.0	1.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	19.8	0.0	40.7	0.0	22.3	0.0	31.4
1st-Term Q (Q1), veh/ln	0.0	7.1	0.0	6.9	0.0	10.4	0.0	3.5
2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.9	0.0	0.8	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.7	0.0	7.7	0.0	11.2	0.0	3.6
%ile Storage Ratio (RQ%)	0.00	0.39	0.00	0.22	0.00	0.23	0.00	0.10
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		383.9						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	260	44	67	204	169	65	840	49	225	1179	50
Future Volume (veh/h)	105	260	44	67	204	169	65	840	49	225	1179	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	113	280	47	72	219	182	70	903	53	242	1268	54
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	230	473	402	207	473	402	89	1563	92	193	1794	76
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.05	0.48	0.48	0.11	0.54	0.54
Ln Grp Delay, s/veh	38.7	31.4	26.3	39.0	29.5	29.6	51.9	18.9	18.8	172.1	17.5	17.5
Ln Grp LOS	D	C	C	D	C	C	D	B	B	F	B	B
Approach Vol, veh/h		440			473			1026			1564	
Approach Delay, s/veh		32.7			31.0			21.1			41.4	
Approach LOS		C			C			C			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Case No	2.0	4.0		5.0	2.0	4.0		5.0
Phs Duration (G+Y+Rc), s	15.0	48.9		28.1	9.3	54.6		28.1
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green (Gmax), s	10.5	41.5		26.5	10.5	41.5		26.5
Max Allow Headway (MAH), s	3.8	5.3		4.9	3.8	5.3		4.9
Max Q Clear (g_c+I1), s	12.5	20.4		21.4	5.8	28.2		20.2
Green Ext Time (g_e), s	0.0	15.7		2.2	0.0	10.7		2.5
Prob of Phs Call (p_c)	1.00	1.00		1.00	0.83	1.00		1.00
Prob of Max Out (p_x)	1.00	0.00		0.97	0.34	0.00		0.80

Left-Turn Movement Data								
Assigned Mvmt	1			7	5			3
Mvmt Sat Flow, veh/h	1691			970	1691			1038

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3239		1845		3298		1845

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		190		1568		140		1568

Left Lane Group Data								
Assigned Mvmt	1	0	0	7	5	0	0	3
Lane Assignment	(Prot)				(Prot)			

Lanes in Grp	1	0	0	1	1	0	0	1
Grp Vol (v), veh/h	242	0	0	113	70	0	0	72
Grp Sat Flow (s), veh/h/ln	1691	0	0	970	1691	0	0	1038
Q Serve Time (g_s), s	10.5	0.0	0.0	10.2	3.8	0.0	0.0	6.0
Cycle Q Clear Time (g_c), s	10.5	0.0	0.0	19.4	3.8	0.0	0.0	18.2
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	970	0	0	0	1038
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	23.6	0.0	0.0	0.0	23.6
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	14.4	0.0	0.0	0.0	11.4
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	10.2	0.0	0.0	0.0	6.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	193	0	0	230	89	0	0	207
V/C Ratio (X)	1.25	0.00	0.00	0.49	0.79	0.00	0.00	0.35
Avail Cap (c_a), veh/h	193	0	0	261	193	0	0	239
Upstream Filter (I)	0.43	0.00	0.00	1.00	0.60	0.00	0.00	1.00
Uniform Delay (d1), s/veh	40.8	0.0	0.0	37.0	43.1	0.0	0.0	38.0
Incr Delay (d2), s/veh	131.4	0.0	0.0	1.6	8.9	0.0	0.0	1.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	172.1	0.0	0.0	38.7	51.9	0.0	0.0	39.0
1st-Term Q (Q1), veh/ln	4.9	0.0	0.0	2.7	1.7	0.0	0.0	1.7
2nd-Term Q (Q2), veh/ln	7.0	0.0	0.0	0.1	0.2	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	11.9	0.0	0.0	2.8	2.0	0.0	0.0	1.8
%ile Storage Ratio (RQ%)	1.17	0.00	0.00	0.43	0.27	0.00	0.00	0.25
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	12.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	470	0	280	0	648	0	219
Grp Sat Flow (s), veh/h/ln	0	1687	0	1845	0	1687	0	1845
Q Serve Time (g_s), s	0.0	18.4	0.0	12.2	0.0	26.2	0.0	9.2
Cycle Q Clear Time (g_c), s	0.0	18.4	0.0	12.2	0.0	26.2	0.0	9.2
Lane Grp Cap (c), veh/h	0	814	0	473	0	918	0	473
V/C Ratio (X)	0.00	0.58	0.00	0.59	0.00	0.71	0.00	0.46
Avail Cap (c_a), veh/h	0	814	0	531	0	918	0	531
Upstream Filter (I)	0.00	0.60	0.00	1.00	0.00	0.43	0.00	1.00
Uniform Delay (d1), s/veh	0.0	17.1	0.0	30.0	0.0	15.5	0.0	28.8
Incr Delay (d2), s/veh	0.0	1.8	0.0	1.4	0.0	2.0	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	18.9	0.0	31.4	0.0	17.5	0.0	29.5
1st-Term Q (Q1), veh/ln	0.0	8.5	0.0	6.2	0.0	12.1	0.0	4.7

2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.2	0.0	0.5	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	8.9	0.0	6.4	0.0	12.6	0.0	4.8
%ile Storage Ratio (RQ%)	0.00	0.19	0.00	0.19	0.00	0.55	0.00	0.11
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	486	0	47	0	674	0	182
Grp Sat Flow (s), veh/h/ln	0	1742	0	1568	0	1751	0	1568
Q Serve Time (g_s), s	0.0	18.4	0.0	2.1	0.0	26.2	0.0	9.0
Cycle Q Clear Time (g_c), s	0.0	18.4	0.0	2.1	0.0	26.2	0.0	9.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.11	0.00	1.00	0.00	0.08	0.00	1.00
Lane Grp Cap (c), veh/h	0	841	0	402	0	953	0	402
V/C Ratio (X)	0.00	0.58	0.00	0.12	0.00	0.71	0.00	0.45
Avail Cap (c_a), veh/h	0	841	0	452	0	953	0	452
Upstream Filter (I)	0.00	0.60	0.00	1.00	0.00	0.43	0.00	1.00
Uniform Delay (d1), s/veh	0.0	17.1	0.0	26.2	0.0	15.5	0.0	28.8
Incr Delay (d2), s/veh	0.0	1.7	0.0	0.1	0.0	1.9	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	18.8	0.0	26.3	0.0	17.5	0.0	29.6
1st-Term Q (Q1), veh/ln	0.0	8.8	0.0	0.9	0.0	12.5	0.0	3.9
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.0	0.5	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	9.2	0.0	0.9	0.0	13.1	0.0	4.0
%ile Storage Ratio (RQ%)	0.00	0.19	0.00	0.16	0.00	0.57	0.00	0.56
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		33.0						
HCM 2010 LOS		C						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	126	44	23	80	13	525	17	1128	33	491	1382	51
Future Volume (veh/h)	126	44	23	80	13	525	17	1128	33	491	1382	51
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	131	46	24	83	14	547	18	1175	34	511	1440	53
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	74	269	141	106	14	548	124	957	28	293	1727	63
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.24	0.24	0.24	0.06	0.36	0.36	0.29	0.29	0.29	0.17	0.52	0.52
Ln Grp Delay, s/veh	440.6	0.0	30.0	63.2	0.0	68.9	39.1	151.2	151.0	375.6	20.8	20.8
Ln Grp LOS	F		C	E		E	D	F	F	F	C	C
Approach Vol, veh/h		201			644			1227			2004	
Approach Delay, s/veh		297.6			68.2			149.4			111.3	
Approach LOS		F			E			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4		6		8
Case No	2.0	6.0	2.0	6.0		4.0		4.0
Phs Duration (G+Y+Rc), s	23.0	34.0	11.9	29.1		57.0		41.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0		6.0		6.0
Max Green (Gmax), s	17.0	28.0	8.0	15.0		51.0		35.0
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.5		5.3		5.5
Max Q Clear (g_c+I1), s	19.0	30.0	6.6	25.1		38.1		36.9
Green Ext Time (g_e), s	0.0	0.0	0.0	0.0		11.6		0.0
Prob of Phs Call (p_c)	1.00	1.00	0.90	1.00		1.00		1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00		0.00		1.00

Left-Turn Movement Data				
Assigned Mvmt	1	5	3	7
Mvmt Sat Flow, veh/h	1691	334	1757	837

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	3349	1143	3319	39

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	97	596	122	1535

Left Lane Group Data								
Assigned Mvmt	1	5	3	7	0	0	0	0
Lane Assignment	(Prot)		(Prot)					

Lanes in Grp	1	1	1	1	0	0	0	0
Grp Vol (v), veh/h	511	18	83	131	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1691	334	1757	837	0	0	0	0
Q Serve Time (g_s), s	17.0	4.7	4.6	0.1	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	17.0	17.9	4.6	23.1	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	334	0	837	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	28.0	0.0	23.1	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	14.9	0.0	0.1	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	4.7	0.0	0.1	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	293	124	106	74	0	0	0	0
V/C Ratio (X)	1.74	0.14	0.78	1.76	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	293	124	143	74	0	0	0	0
Upstream Filter (I)	0.09	0.77	1.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	40.5	37.3	45.4	49.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	335.1	1.9	17.8	391.6	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	375.6	39.1	63.2	440.6	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	7.9	0.4	2.2	2.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	27.3	0.1	0.5	8.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	35.2	0.5	2.7	10.1	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	3.72	0.06	0.31	3.23	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	54.4	0.0	0.0	14.2	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.4	0.0	0.0	0.4	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	592	0	0	0	731	0	0
Grp Sat Flow (s), veh/h/ln	0	1687	0	0	0	1687	0	0
Q Serve Time (g_s), s	0.0	28.0	0.0	0.0	0.0	35.9	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	28.0	0.0	0.0	0.0	35.9	0.0	0.0
Lane Grp Cap (c), veh/h	0	482	0	0	0	878	0	0
V/C Ratio (X)	0.00	1.23	0.00	0.00	0.00	0.83	0.00	0.00
Avail Cap (c_a), veh/h	0	482	0	0	0	878	0	0
Upstream Filter (I)	0.00	0.77	0.00	0.00	0.00	0.09	0.00	0.00
Uniform Delay (d1), s/veh	0.0	35.0	0.0	0.0	0.0	19.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	116.2	0.0	0.0	0.0	0.9	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	151.2	0.0	0.0	0.0	20.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	13.0	0.0	0.0	0.0	16.6	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	15.6	0.0	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	28.5	0.0	0.0	0.0	16.9	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.25	0.00	0.00	0.00	0.86	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	27.4	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	617	0	70	0	762	0	561
Grp Sat Flow (s), veh/h/ln	0	1759	0	1739	0	1754	0	1574
Q Serve Time (g_s), s	0.0	28.0	0.0	3.1	0.0	36.1	0.0	34.9
Cycle Q Clear Time (g_c), s	0.0	28.0	0.0	3.1	0.0	36.1	0.0	34.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.06	0.00	0.34	0.00	0.07	0.00	0.98
Lane Grp Cap (c), veh/h	0	502	0	410	0	913	0	562
V/C Ratio (X)	0.00	1.23	0.00	0.17	0.00	0.84	0.00	1.00
Avail Cap (c_a), veh/h	0	502	0	410	0	913	0	562
Upstream Filter (I)	0.00	0.77	0.00	1.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	35.0	0.0	29.8	0.0	19.9	0.0	31.5
Incr Delay (d2), s/veh	0.0	116.0	0.0	0.2	0.0	0.9	0.0	37.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	151.0	0.0	30.0	0.0	20.8	0.0	68.9
1st-Term Q (Q1), veh/ln	0.0	13.5	0.0	1.5	0.0	17.4	0.0	15.1
2nd-Term Q (Q2), veh/ln	0.0	16.2	0.0	0.0	0.0	0.2	0.0	5.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	29.7	0.0	1.5	0.0	17.6	0.0	21.0
%ile Storage Ratio (RQ%)	0.00	1.30	0.00	0.20	0.00	0.90	0.00	2.24
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	28.7	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	125.1
HCM 2010 LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	273	519	249	510	671	7	209	957	2	2	1084	332
Future Volume (veh/h)	273	519	249	510	671	7	209	957	2	2	1084	332
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1759	1759	1759	1900	1776	1776	1776	1900	1776	1776
Adj Flow Rate, veh/h	281	535	257	526	692	7	215	987	0	2	1118	0
Adj No. of Lanes	2	2	1	2	2	0	1	2	1	0	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	8	8	8	8	8	8	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	365	492	220	633	778	8	165	1538	688	40	969	442
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.11	0.15	0.15	0.19	0.23	0.23	0.10	0.46	0.00	0.29	0.29	0.00
Ln Grp Delay, s/veh	43.1	105.3	152.3	39.2	54.0	53.3	180.4	19.4	0.0	93.2	125.1	0.0
Ln Grp LOS	D	F	F	D	D	D	F	B		F	F	
Approach Vol, veh/h		1073			1225			1202			1120	
Approach Delay, s/veh		100.2			47.4			48.2			108.0	
Approach LOS		F			D			D			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Case No		3.0	2.0	3.0	2.0	7.0	2.0	4.0
Phs Duration (G+Y+Rc), s		48.2	23.9	19.9	15.0	33.2	16.3	27.4
Change Period (Y+Rc), s		6.3	6.0	6.3	6.0	6.3	6.0	6.3
Max Green (Gmax), s		32.7	28.0	12.7	9.0	17.7	18.0	22.7
Max Allow Headway (MAH), s		5.3	3.8	5.1	3.8	5.3	3.8	5.1
Max Q Clear (g_c+I1), s		22.7	16.3	15.6	11.0	28.9	9.7	20.2
Green Ext Time (g_e), s		8.2	1.6	0.0	0.0	0.0	0.6	0.9
Prob of Phs Call (p_c)		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)		0.00	0.03	1.00	1.00	0.00	0.04	1.00

Left-Turn Movement Data								
Assigned Mvmt			3		5	1	7	
Mvmt Sat Flow, veh/h			3250		1691	1	3250	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3374		3343		3307		3390

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1509		1495		1509		34

Left Lane Group Data								
Assigned Mvmt	0	0	3	0	5	1	7	0
Lane Assignment			(Prot)		(Prot)	L+T	(Prot)	

Lanes in Grp	0	0	2	0	1	1	2	0
Grp Vol (v), veh/h	0	0	526	0	215	600	281	0
Grp Sat Flow (s), veh/h/ln	0	0	1625	0	1691	1773	1625	0
Q Serve Time (g_s), s	0.0	0.0	14.3	0.0	9.0	4.7	7.7	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	14.3	0.0	9.0	26.9	7.7	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	579	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	26.9	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	21.2	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	4.7	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	22.3	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	22.3	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	633	0	165	559	365	0
V/C Ratio (X)	0.00	0.00	0.83	0.00	1.30	1.07	0.77	0.00
Avail Cap (c_a), veh/h	0	0	989	0	165	559	636	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.09	1.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	35.6	0.0	41.5	33.5	39.7	0.0
Incr Delay (d2), s/veh	0.0	0.0	3.6	0.0	138.9	59.7	3.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	39.2	0.0	180.4	93.2	43.1	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	6.4	0.0	4.2	14.1	3.5	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.3	0.0	6.4	9.3	0.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	6.7	0.0	10.6	23.4	3.6	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.45	0.00	1.19	0.78	0.35	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	12.4	10.4	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	1	0	1
Grp Vol (v), veh/h	0	987	0	535	0	520	0	341
Grp Sat Flow (s), veh/h/ln	0	1687	0	1671	0	1535	0	1671
Q Serve Time (g_s), s	0.0	20.7	0.0	13.6	0.0	26.9	0.0	18.2
Cycle Q Clear Time (g_c), s	0.0	20.7	0.0	13.6	0.0	26.9	0.0	18.2
Lane Grp Cap (c), veh/h	0	1538	0	492	0	450	0	384
V/C Ratio (X)	0.00	0.64	0.00	1.09	0.00	1.16	0.00	0.89
Avail Cap (c_a), veh/h	0	1538	0	492	0	450	0	412
Upstream Filter (I)	0.00	0.09	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	19.2	0.0	39.2	0.0	32.5	0.0	34.3
Incr Delay (d2), s/veh	0.0	0.2	0.0	66.1	0.0	92.6	0.0	19.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	19.4	0.0	105.3	0.0	125.1	0.0	54.0
1st-Term Q (Q1), veh/ln	0.0	9.6	0.0	6.2	0.0	11.4	0.0	8.3

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	4.5	0.0	11.6	0.0	2.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	9.6	0.0	10.7	0.0	22.9	0.0	10.4
%ile Storage Ratio (RQ%)	0.00	0.49	0.00	0.37	0.00	0.77	0.00	0.32
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	10.7	0.0	17.5	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.3	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	257	0	0	0	358
Grp Sat Flow (s), veh/h/ln	0	1509	0	1495	0	1509	0	1753
Q Serve Time (g_s), s	0.0	0.0	0.0	13.6	0.0	0.0	0.0	18.2
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	13.6	0.0	0.0	0.0	18.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.02
Lane Grp Cap (c), veh/h	0	688	0	220	0	442	0	402
V/C Ratio (X)	0.00	0.00	0.00	1.17	0.00	0.00	0.00	0.89
Avail Cap (c_a), veh/h	0	688	0	220	0	442	0	433
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	39.2	0.0	0.0	0.0	34.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	113.0	0.0	0.0	0.0	19.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	152.3	0.0	0.0	0.0	53.3
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	5.6	0.0	0.0	0.0	8.7
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	6.9	0.0	0.0	0.0	2.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	12.5	0.0	0.0	0.0	10.9
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.43	0.00	0.00	0.00	0.33
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	9.2	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	74.6
HCM 2010 LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

APPENDIX IV-B2:
Year 2020 Zoning Intersection Total with Combined LOS AM Analysis with Mitigation

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	229	507	406	160	1619	35	544	316	163	97	316	566
Future Volume (veh/h)	229	507	406	160	1619	35	544	316	163	97	316	566
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1743	1743	1900	1743	1743	1743
Adj Flow Rate, veh/h	236	523	419	165	1669	36	561	326	168	100	326	584
Adj No. of Lanes	2	2	1	2	3	0	2	2	0	2	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	9	9	9	9	9	9
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	133	1240	555	133	1794	39	243	638	322	106	849	380
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.04	0.35	0.35	0.04	0.35	0.35	0.08	0.30	0.30	0.03	0.26	0.26
Ln Grp Delay, s/veh	421.7	24.5	36.4	201.3	43.6	51.5	644.0	30.9	31.5	114.0	30.1	289.6
Ln Grp LOS	F	C	D	F	D	D	F	C	C	F	C	F
Approach Vol, veh/h		1178			1870			1055			1010	
Approach Delay, s/veh		108.3			60.0			357.1			188.5	
Approach LOS		F			E			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	3.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	10.0	35.0	10.0	39.0	14.0	31.0	10.0	39.0
Change Period (Y+Rc), s	6.9	6.9	6.4	6.4	6.9	6.9	6.4	6.4
Max Green (Gmax), s	3.1	28.1	3.6	32.6	7.1	24.1	3.6	32.6
Max Allow Headway (MAH), s	3.8	4.8	3.7	4.9	3.8	4.8	3.8	4.9
Max Q Clear (g_c+I1), s	4.9	14.2	5.6	23.8	9.1	26.1	5.6	31.2
Green Ext Time (g_e), s	0.0	6.6	0.0	7.7	0.0	0.0	0.0	1.3
Prob of Phs Call (p_c)	0.93	1.00	0.99	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	3221	3476	3221	3476

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	2133	3574	3312	5174

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	1076	1599	1482	112

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	100	0	165	0	561	0	236	0
Grp Sat Flow (s), veh/h/ln	1610	0	1738	0	1610	0	1738	0
Q Serve Time (g_s), s	2.9	0.0	3.6	0.0	7.1	0.0	3.6	0.0
Cycle Q Clear Time (g_c), s	2.9	0.0	3.6	0.0	7.1	0.0	3.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	106	0	133	0	243	0	133	0
V/C Ratio (X)	0.94	0.00	1.24	0.00	2.31	0.00	1.77	0.00
Avail Cap (c_a), veh/h	106	0	133	0	243	0	133	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	45.4	0.0	45.2	0.0	43.5	0.0	45.2	0.0
Incr Delay (d2), s/veh	68.7	0.0	156.1	0.0	600.6	0.0	376.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	114.0	0.0	201.3	0.0	644.0	0.0	421.7	0.0
1st-Term Q (Q1), veh/ln	1.3	0.0	1.7	0.0	3.1	0.0	1.7	0.0
2nd-Term Q (Q2), veh/ln	1.0	0.0	2.9	0.0	20.3	0.0	7.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	2.3	0.0	4.6	0.0	23.4	0.0	8.7	0.0
%ile Storage Ratio (RQ%)	0.18	0.00	0.48	0.00	2.09	0.00	0.35	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	8.0	0.0	79.4	0.0	25.7	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.6	0.0	0.4	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	2	0	2
Grp Vol (v), veh/h	0	252	0	523	0	326	0	1104
Grp Sat Flow (s), veh/h/ln	0	1656	0	1787	0	1656	0	1712
Q Serve Time (g_s), s	0.0	11.8	0.0	10.5	0.0	7.6	0.0	29.2
Cycle Q Clear Time (g_c), s	0.0	11.8	0.0	10.5	0.0	7.6	0.0	29.2
Lane Grp Cap (c), veh/h	0	495	0	1240	0	849	0	1187
V/C Ratio (X)	0.00	0.51	0.00	0.42	0.00	0.38	0.00	0.93
Avail Cap (c_a), veh/h	0	495	0	1240	0	849	0	1187
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	27.2	0.0	23.5	0.0	28.8	0.0	29.6
Incr Delay (d2), s/veh	0.0	3.7	0.0	1.1	0.0	1.3	0.0	14.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	30.9	0.0	24.5	0.0	30.1	0.0	43.6
1st-Term Q (Q1), veh/ln	0.0	5.4	0.0	5.2	0.0	3.5	0.0	13.8

2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.2	0.0	0.2	0.0	2.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	5.9	0.0	5.3	0.0	3.6	0.0	16.1
%ile Storage Ratio (RQ%)	0.00	0.21	0.00	0.12	0.00	0.14	0.00	0.75
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	242	0	419	0	584	0	601
Grp Sat Flow (s), veh/h/ln	0	1553	0	1599	0	1482	0	1861
Q Serve Time (g_s), s	0.0	12.2	0.0	21.8	0.0	24.1	0.0	29.2
Cycle Q Clear Time (g_c), s	0.0	12.2	0.0	21.8	0.0	24.1	0.0	29.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.69	0.00	1.00	0.00	1.00	0.00	0.06
Lane Grp Cap (c), veh/h	0	464	0	555	0	380	0	646
V/C Ratio (X)	0.00	0.52	0.00	0.76	0.00	1.54	0.00	0.93
Avail Cap (c_a), veh/h	0	464	0	555	0	380	0	646
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	27.4	0.0	27.2	0.0	35.0	0.0	29.6
Incr Delay (d2), s/veh	0.0	4.2	0.0	9.3	0.0	254.7	0.0	21.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	31.5	0.0	36.4	0.0	289.6	0.0	51.5
1st-Term Q (Q1), veh/ln	0.0	5.2	0.0	9.6	0.0	9.8	0.0	15.0
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	1.4	0.0	26.9	0.0	3.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	5.7	0.0	11.0	0.0	36.7	0.0	18.9
%ile Storage Ratio (RQ%)	0.00	0.21	0.00	0.53	0.00	1.41	0.00	0.88
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	51.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	157.8
HCM 2010 LOS	F

Notes

User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	106	641	144	219	1263	255	278	129	159	226	186	197
Future Volume (veh/h)	106	641	144	219	1263	255	278	129	159	226	186	197
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	109	661	148	226	1302	263	287	133	164	233	192	203
Adj No. of Lanes	2	2	0	1	2	1	2	1	1	2	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	160	1200	268	221	1754	785	350	302	256	294	272	231
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.42	0.42	0.12	0.50	0.50	0.10	0.16	0.16	0.09	0.15	0.15
Ln Grp Delay, s/veh	63.7	30.5	30.5	80.6	25.5	19.2	62.1	51.7	60.5	61.1	65.2	86.9
Ln Grp LOS	E	C	C	F	C	B	E	D	E	E	E	F
Approach Vol, veh/h		918			1791			584			628	
Approach Delay, s/veh		34.4			31.5			59.3			70.7	
Approach LOS		C			C			E			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	4.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	17.4	27.0	22.0	58.6	19.4	25.0	12.2	68.3
Change Period (Y+Rc), s	6.6	6.6	6.4	6.4	6.6	6.6	6.4	6.4
Max Green (Gmax), s	16.8	20.0	15.6	46.6	18.4	18.4	8.4	53.8
Max Allow Headway (MAH), s	3.8	4.6	3.7	4.9	3.8	4.6	3.7	4.9
Max Q Clear (g_c+I1), s	10.4	14.2	17.6	23.8	12.3	17.9	5.9	38.7
Green Ext Time (g_e), s	0.4	1.7	0.0	16.1	0.5	0.2	0.1	11.7
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	0.98	1.00
Prob of Max Out (p_x)	0.13	0.00	1.00	0.00	0.20	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3408		1774		3408		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1845		2876		1845		3539

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		643		1568		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	1	0	2	0	2	0
Grp Vol (v), veh/h	233	0	226	0	287	0	109	0
Grp Sat Flow (s), veh/h/ln	1704	0	1774	0	1704	0	1721	0
Q Serve Time (g_s), s	8.4	0.0	15.6	0.0	10.3	0.0	3.9	0.0
Cycle Q Clear Time (g_c), s	8.4	0.0	15.6	0.0	10.3	0.0	3.9	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	294	0	221	0	350	0	160	0
V/C Ratio (X)	0.79	0.00	1.02	0.00	0.82	0.00	0.68	0.00
Avail Cap (c_a), veh/h	458	0	221	0	502	0	231	0
Upstream Filter (I)	1.00	0.00	0.11	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	56.0	0.0	54.7	0.0	55.0	0.0	58.7	0.0
Incr Delay (d2), s/veh	5.1	0.0	25.7	0.0	7.1	0.0	5.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	61.1	0.0	80.6	0.0	62.1	0.0	63.7	0.0
1st-Term Q (Q1), veh/ln	3.9	0.0	7.6	0.0	4.9	0.0	1.9	0.0
2nd-Term Q (Q2), veh/ln	0.2	0.0	1.6	0.0	0.3	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	4.2	0.0	9.2	0.0	5.2	0.0	2.0	0.0
%ile Storage Ratio (RQ%)	0.79	0.00	0.87	0.00	0.99	0.00	0.16	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	2
Grp Vol (v), veh/h	0	133	0	406	0	192	0	1302
Grp Sat Flow (s), veh/h/ln	0	1845	0	1770	0	1845	0	1770
Q Serve Time (g_s), s	0.0	8.1	0.0	21.7	0.0	12.4	0.0	36.7
Cycle Q Clear Time (g_c), s	0.0	8.1	0.0	21.7	0.0	12.4	0.0	36.7
Lane Grp Cap (c), veh/h	0	302	0	739	0	272	0	1754
V/C Ratio (X)	0.00	0.44	0.00	0.55	0.00	0.71	0.00	0.74
Avail Cap (c_a), veh/h	0	302	0	739	0	272	0	1754
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.11
Uniform Delay (d1), s/veh	0.0	47.1	0.0	27.5	0.0	50.7	0.0	25.2
Incr Delay (d2), s/veh	0.0	4.6	0.0	2.9	0.0	14.4	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	51.7	0.0	30.5	0.0	65.2	0.0	25.5
1st-Term Q (Q1), veh/ln	0.0	4.1	0.0	10.6	0.0	6.3	0.0	17.9

2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.6	0.0	1.1	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	4.5	0.0	11.2	0.0	7.4	0.0	18.0
%ile Storage Ratio (RQ%)	0.00	0.15	0.00	0.15	0.00	0.26	0.00	0.31
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	164	0	403	0	203	0	263
Grp Sat Flow (s), veh/h/ln	0	1568	0	1749	0	1568	0	1583
Q Serve Time (g_s), s	0.0	12.2	0.0	21.8	0.0	15.9	0.0	12.6
Cycle Q Clear Time (g_c), s	0.0	12.2	0.0	21.8	0.0	15.9	0.0	12.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.37	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	256	0	730	0	231	0	785
V/C Ratio (X)	0.00	0.64	0.00	0.55	0.00	0.88	0.00	0.34
Avail Cap (c_a), veh/h	0	256	0	730	0	231	0	785
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.11
Uniform Delay (d1), s/veh	0.0	48.8	0.0	27.6	0.0	52.2	0.0	19.1
Incr Delay (d2), s/veh	0.0	11.6	0.0	3.0	0.0	34.7	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	60.5	0.0	30.5	0.0	86.9	0.0	19.2
1st-Term Q (Q1), veh/ln	0.0	5.3	0.0	10.5	0.0	6.9	0.0	5.5
2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	0.6	0.0	2.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	6.1	0.0	11.1	0.0	9.1	0.0	5.5
%ile Storage Ratio (RQ%)	0.00	0.21	0.00	0.15	0.00	0.32	0.00	0.10
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		42.6						
HCM 2010 LOS		D						

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	82	921	1507	415	345	163
Future Volume (veh/h)	82	921	1507	415	345	163
Number	7	4	8	18	1	16
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00			1.00	1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1676	1676	1676	1676	1660	1660
Adj Flow Rate, veh/h	87	980	1603	441	367	173
Adj No. of Lanes	1	2	2	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	3	3
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	97	1966	1523	681	692	318
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.62	0.48	0.48	0.23	0.23
Ln Grp Delay, s/veh	87.8	9.4	56.0	19.4	30.8	34.5
Ln Grp LOS	F	A	F	B	C	C
Approach Vol, veh/h		1067	2044		540	
Approach Delay, s/veh		15.8	48.1		32.0	
Approach LOS		B	D		C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	6			4			7	8
Case No	9.0			4.0			2.0	7.0
Phs Duration (G+Y+Rc), s	25.0			57.0			11.4	45.6
Change Period (Y+Rc), s	6.5			6.4			6.4	6.4
Max Green (Gmax), s	18.5			46.6			5.0	39.2
Max Allow Headway (MAH), s	3.9			4.9			3.7	4.9
Max Q Clear (g_c+I1), s	10.9			16.0			6.4	41.2
Green Ext Time (g_e), s	1.3			25.1			0.0	0.0
Prob of Phs Call (p_c)	1.00			1.00			0.86	1.00
Prob of Max Out (p_x)	0.00			0.00			1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1						7	3
Mvmt Sat Flow, veh/h	3067						1597	0

Through Movement Data								
Assigned Mvmt	6			4				8
Mvmt Sat Flow, veh/h	0			3269				3269

Right-Turn Movement Data								
Assigned Mvmt	16			14				18
Mvmt Sat Flow, veh/h	1411			0				1425

Left Lane Group Data								
Assigned Mvmt	1	0	0	0	0	0	7	3
Lane Assignment							(Prot)	

Lanes in Grp	2	0	0	0	0	0	1	0
Grp Vol (v), veh/h	367	0	0	0	0	0	87	0
Grp Sat Flow (s), veh/h/ln	1534	0	0	0	0	0	1597	0
Q Serve Time (g_s), s	8.6	0.0	0.0	0.0	0.0	0.0	4.4	0.0
Cycle Q Clear Time (g_c), s	8.6	0.0	0.0	0.0	0.0	0.0	4.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1534	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.2
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	692	0	0	0	0	0	97	0
V/C Ratio (X)	0.53	0.00	0.00	0.00	0.00	0.00	0.89	0.00
Avail Cap (c_a), veh/h	692	0	0	0	0	0	97	0
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.78	0.00
Uniform Delay (d1), s/veh	27.9	0.0	0.0	0.0	0.0	0.0	38.2	0.0
Incr Delay (d2), s/veh	2.9	0.0	0.0	0.0	0.0	0.0	49.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	30.8	0.0	0.0	0.0	0.0	0.0	87.8	0.0
1st-Term Q (Q1), veh/ln	3.6	0.0	0.0	0.0	0.0	0.0	2.0	0.0
2nd-Term Q (Q2), veh/ln	0.3	0.0	0.0	0.0	0.0	0.0	1.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	3.9	0.0	0.0	0.0	0.0	0.0	3.3	0.0
%ile Storage Ratio (RQ%)	0.20	0.00	0.00	0.00	0.00	0.00	0.38	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	6	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	2
Grp Vol (v), veh/h	0	0	0	980	0	0	0	1603
Grp Sat Flow (s), veh/h/ln	0	0	0	1593	0	0	0	1593
Q Serve Time (g_s), s	0.0	0.0	0.0	14.0	0.0	0.0	0.0	39.2
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	14.0	0.0	0.0	0.0	39.2
Lane Grp Cap (c), veh/h	0	0	0	1966	0	0	0	1523
V/C Ratio (X)	0.00	0.00	0.00	0.50	0.00	0.00	0.00	1.05
Avail Cap (c_a), veh/h	0	0	0	1966	0	0	0	1523
Upstream Filter (I)	0.00	0.00	0.00	0.78	0.00	0.00	0.00	0.67
Uniform Delay (d1), s/veh	0.0	0.0	0.0	8.7	0.0	0.0	0.0	21.4
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.7	0.0	0.0	0.0	34.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	9.4	0.0	0.0	0.0	56.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	6.1	0.0	0.0	0.0	17.1

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	7.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	6.3	0.0	0.0	0.0	24.5
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.35
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.1
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	16	0	0	14	0	0	0	18
Lane Assignment	R							R
Lanes in Grp	1	0	0	0	0	0	0	1
Grp Vol (v), veh/h	173	0	0	0	0	0	0	441
Grp Sat Flow (s), veh/h/ln	1411	0	0	0	0	0	0	1425
Q Serve Time (g_s), s	8.9	0.0	0.0	0.0	0.0	0.0	0.0	19.2
Cycle Q Clear Time (g_c), s	8.9	0.0	0.0	0.0	0.0	0.0	0.0	19.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	318	0	0	0	0	0	0	681
V/C Ratio (X)	0.54	0.00	0.00	0.00	0.00	0.00	0.00	0.65
Avail Cap (c_a), veh/h	318	0	0	0	0	0	0	681
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67
Uniform Delay (d1), s/veh	28.0	0.0	0.0	0.0	0.0	0.0	0.0	16.2
Incr Delay (d2), s/veh	6.5	0.0	0.0	0.0	0.0	0.0	0.0	3.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	34.5	0.0	0.0	0.0	0.0	0.0	0.0	19.4
1st-Term Q (Q1), veh/ln	6.9	0.0	0.0	0.0	0.0	0.0	0.0	7.5
2nd-Term Q (Q2), veh/ln	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	7.5	0.0	0.0	0.0	0.0	0.0	0.0	8.1
%ile Storage Ratio (RQ%)	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.12
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		36.3						
HCM 2010 LOS		D						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	1050	33	44	1580	27	129	7	14	56	22	52
Future Volume (veh/h)	34	1050	33	44	1580	27	129	7	14	56	22	52
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1845	1845	1900	1845	1845
Adj Flow Rate, veh/h	35	1071	34	45	1612	28	132	7	14	57	22	53
Adj No. of Lanes	1	2	0	1	3	0	0	1	1	0	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	42	2171	69	55	3230	56	133	7	125	86	33	105
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.02	0.62	0.62	0.03	0.63	0.63	0.08	0.08	0.08	0.07	0.07	0.07
Ln Grp Delay, s/veh	79.1	8.0	8.0	75.8	7.0	7.5	102.9	0.0	29.2	54.3	0.0	45.0
Ln Grp LOS	E	A	A	E	A	A	F		C	D		D
Approach Vol, veh/h		1140			1685			153			132	
Approach Delay, s/veh		10.2			9.0			96.2			50.5	
Approach LOS		B			A			F			D	

Timer:		1	2	3	4	5	6	7	8			
Assigned Phs		6	2	3	4			7	8			
Case No		11.0	11.0	2.0	4.0			2.0	4.0			
Phs Duration (G+Y+Rc), s		11.0	12.0	8.4	46.7			7.9	47.2			
Change Period (Y+Rc), s		6.7	6.9	6.4	* 6.6			6.4	* 6.6			
Max Green (Gmax), s		4.3	5.1	2.0	* 26			2.0	* 26			
Max Allow Headway (MAH), s		4.8	5.2	3.8	5.2			3.7	5.2			
Max Q Clear (g_c+I1), s		4.8	7.0	3.6	12.7			3.3	12.9			
Green Ext Time (g_e), s		0.0	0.0	0.0	12.0			0.0	11.9			
Prob of Phs Call (p_c)		1.00	1.00	0.55	1.00			0.46	1.00			
Prob of Max Out (p_x)		0.00	0.00	1.00	0.00			1.00	0.00			

Left-Turn Movement Data												
Assigned Mvmt		1	5	3				7				
Mvmt Sat Flow, veh/h		1285	1672	1774				1774				

Through Movement Data												
Assigned Mvmt		6	2		4				8			
Mvmt Sat Flow, veh/h		496	89		3502				5148			

Right-Turn Movement Data												
Assigned Mvmt		16	12		14				18			
Mvmt Sat Flow, veh/h		1568	1568		111				89			

Left Lane Group Data												
Assigned Mvmt		1	5	3	0	0	0	7	0			
Lane Assignment		L+T	L+T	(Prot)				(Prot)				

Lanes in Grp	1	1	1	0	0	0	1	0
Grp Vol (v), veh/h	79	139	45	0	0	0	35	0
Grp Sat Flow (s), veh/h/ln	1780	1761	1774	0	0	0	1774	0
Q Serve Time (g_s), s	2.8	5.0	1.6	0.0	0.0	0.0	1.3	0.0
Cycle Q Clear Time (g_c), s	2.8	5.0	1.6	0.0	0.0	0.0	1.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.72	0.95	1.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	120	140	55	0	0	0	42	0
V/C Ratio (X)	0.66	0.99	0.82	0.00	0.00	0.00	0.84	0.00
Avail Cap (c_a), veh/h	120	140	55	0	0	0	55	0
Upstream Filter (I)	1.00	1.00	0.68	0.00	0.00	0.00	0.85	0.00
Uniform Delay (d1), s/veh	29.1	29.4	30.8	0.0	0.0	0.0	31.1	0.0
Incr Delay (d2), s/veh	25.1	73.5	44.9	0.0	0.0	0.0	48.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	54.3	102.9	75.8	0.0	0.0	0.0	79.1	0.0
1st-Term Q (Q1), veh/ln	1.4	2.4	0.8	0.0	0.0	0.0	0.6	0.0
2nd-Term Q (Q2), veh/ln	0.8	2.9	0.7	0.0	0.0	0.0	0.6	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	2.2	5.3	1.5	0.0	0.0	0.0	1.2	0.0
%ile Storage Ratio (RQ%)	0.11	0.29	0.11	0.00	0.00	0.00	0.17	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	6	2	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	2
Grp Vol (v), veh/h	0	0	0	541	0	0	0	1062
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1695
Q Serve Time (g_s), s	0.0	0.0	0.0	10.7	0.0	0.0	0.0	10.9
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	10.7	0.0	0.0	0.0	10.9
Lane Grp Cap (c), veh/h	0	0	0	1097	0	0	0	2127
V/C Ratio (X)	0.00	0.00	0.00	0.49	0.00	0.00	0.00	0.50
Avail Cap (c_a), veh/h	0	0	0	1097	0	0	0	2127
Upstream Filter (I)	0.00	0.00	0.00	0.85	0.00	0.00	0.00	0.68
Uniform Delay (d1), s/veh	0.0	0.0	0.0	6.7	0.0	0.0	0.0	6.5
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	8.0	0.0	0.0	0.0	7.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	5.1	0.0	0.0	0.0	5.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	5.5	0.0	0.0	0.0	5.2
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.31
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	16	12	0	14	0	0	0	18
Lane Assignment	R	R		T+R				T+R
Lanes in Grp	1	1	0	1	0	0	0	1
Grp Vol (v), veh/h	53	14	0	564	0	0	0	578
Grp Sat Flow (s), veh/h/ln	1568	1568	0	1843	0	0	0	1847
Q Serve Time (g_s), s	2.1	0.5	0.0	10.7	0.0	0.0	0.0	10.9
Cycle Q Clear Time (g_c), s	2.1	0.5	0.0	10.7	0.0	0.0	0.0	10.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	1.00	0.00	0.06	0.00	0.00	0.00	0.05
Lane Grp Cap (c), veh/h	105	125	0	1143	0	0	0	1159
V/C Ratio (X)	0.50	0.11	0.00	0.49	0.00	0.00	0.00	0.50
Avail Cap (c_a), veh/h	105	125	0	1143	0	0	0	1159
Upstream Filter (I)	1.00	1.00	0.00	0.85	0.00	0.00	0.00	0.68
Uniform Delay (d1), s/veh	28.8	27.3	0.0	6.7	0.0	0.0	0.0	6.5
Incr Delay (d2), s/veh	16.1	1.8	0.0	1.3	0.0	0.0	0.0	1.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	45.0	29.2	0.0	8.0	0.0	0.0	0.0	7.5
1st-Term Q (Q1), veh/ln	0.9	0.2	0.0	5.3	0.0	0.0	0.0	5.5
2nd-Term Q (Q2), veh/ln	0.5	0.1	0.0	0.4	0.0	0.0	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	1.4	0.3	0.0	5.7	0.0	0.0	0.0	5.8
%ile Storage Ratio (RQ%)	0.88	0.07	0.00	0.08	0.00	0.00	0.00	0.35
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	15.5
HCM 2010 LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	957	143	421	1382	205	299
Future Volume (veh/h)	957	143	421	1382	205	299
Number	4	14	3	8	5	12
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)		1.00	1.00		1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1845	1845
Adj Flow Rate, veh/h	977	146	430	1410	209	305
Adj No. of Lanes	2	0	2	2	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	3	3
Opposing Right Turn Influence			Yes		Yes	
Cap, veh/h	1133	169	379	1978	484	432
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.37	0.37	0.11	0.56	0.28	0.28
Ln Grp Delay, s/veh	32.4	32.5	98.1	12.8	26.0	34.7
Ln Grp LOS	C	C	F	B	C	C
Approach Vol, veh/h	1123			1840	514	
Approach Delay, s/veh	32.5			32.7	31.2	
Approach LOS	C			C	C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Case No		9.0	2.0	8.0				4.0
Phs Duration (G+Y+Rc), s		28.0	15.0	35.0				50.0
Change Period (Y+Rc), s		6.5	6.4	6.4				6.4
Max Green (Gmax), s		21.5	8.6	28.6				43.6
Max Allow Headway (MAH), s		4.0	3.8	5.3				5.3
Max Q Clear (g_c+I1), s		15.6	10.6	24.9				24.8
Green Ext Time (g_e), s		1.0	0.0	3.5				15.8
Prob of Phs Call (p_c)		1.00	1.00	1.00				1.00
Prob of Max Out (p_x)		0.00	1.00	0.00				0.00
Left-Turn Movement Data								
Assigned Mvmt		5	3	7				
Mvmt Sat Flow, veh/h		1757	3442	0				
Through Movement Data								
Assigned Mvmt		2		4				8
Mvmt Sat Flow, veh/h		0		3183				3632
Right-Turn Movement Data								
Assigned Mvmt		12		14				18
Mvmt Sat Flow, veh/h		1568		461				0
Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	0	0	0
Lane Assignment			(Prot)					

Lanes in Grp	0	1	2	0	0	0	0	0
Grp Vol (v), veh/h	0	209	430	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1757	1721	0	0	0	0	0
Q Serve Time (g_s), s	0.0	7.6	8.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	7.6	8.6	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1757	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	28.6	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	484	379	0	0	0	0	0
V/C Ratio (X)	0.00	0.43	1.13	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	484	379	0	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.09	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	23.2	34.7	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.8	63.4	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	26.0	98.1	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.7	4.1	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	3.3	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	4.0	7.4	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.17	0.82	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	12.6	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	2
Grp Vol (v), veh/h	0	0	0	559	0	0	0	1410
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	22.8	0.0	0.0	0.0	22.8
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	22.8	0.0	0.0	0.0	22.8
Lane Grp Cap (c), veh/h	0	0	0	649	0	0	0	1978
V/C Ratio (X)	0.00	0.00	0.00	0.86	0.00	0.00	0.00	0.71
Avail Cap (c_a), veh/h	0	0	0	649	0	0	0	1978
Upstream Filter (I)	0.00	0.00	0.00	0.64	0.00	0.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	0.0	0.0	22.9	0.0	0.0	0.0	12.6
Incr Delay (d2), s/veh	0.0	0.0	0.0	9.6	0.0	0.0	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	32.4	0.0	0.0	0.0	12.8
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	11.0	0.0	0.0	0.0	11.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	12.8	0.0	0.0	0.0	11.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.77	0.00	0.00	0.00	0.28
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	0	0	18
Lane Assignment		R		T+R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	305	0	564	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1568	0	1781	0	0	0	0
Q Serve Time (g_s), s	0.0	13.6	0.0	22.9	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	13.6	0.0	22.9	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.26	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	432	0	653	0	0	0	0
V/C Ratio (X)	0.00	0.71	0.00	0.86	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	432	0	653	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.64	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	25.4	0.0	22.9	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	9.3	0.0	9.6	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	34.7	0.0	32.5	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	5.9	0.0	11.1	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.1	0.0	1.7	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.0	0.0	12.9	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.29	0.00	0.78	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		32.4						
HCM 2010 LOS		C						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	1569	0	12	1385	100	12	0	56	173	0	58
Future Volume (veh/h)	26	1569	0	12	1385	100	12	0	56	173	0	58
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	28	1669	0	13	1473	106	13	0	60	184	0	62
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	55	1311	0	29	1191	85	117	37	384	532	0	470
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.37	0.00	0.02	0.36	0.36	0.30	0.00	0.30	0.30	0.00	0.30
Ln Grp Delay, s/veh	30.2	143.1	0.0	39.9	136.9	141.1	15.9	0.0	0.0	18.4	0.0	15.9
Ln Grp LOS	C	F		D	F	F	B			B		B
Approach Vol, veh/h		1697			1592			73			246	
Approach Delay, s/veh		141.3			138.3			15.9			17.8	
Approach LOS		F			F			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		8.0	2.0	4.0		6.0	2.0	4.0
Phs Duration (G+Y+Rc), s		24.0	7.4	28.6		24.0	8.3	27.7
Change Period (Y+Rc), s		6.0	6.4	6.4		6.0	6.4	6.4
Max Green (Gmax), s		18.0	5.0	18.6		18.0	5.0	18.6
Max Allow Headway (MAH), s		4.6	3.8	5.3		4.6	3.8	5.3
Max Q Clear (g_c+I1), s		4.0	2.4	24.2		8.0	2.9	23.3
Green Ext Time (g_e), s		1.2	0.0	0.0		1.0	0.0	0.0
Prob of Phs Call (p_c)		1.00	0.19	1.00		1.00	0.37	1.00
Prob of Max Out (p_x)		0.00	1.00	0.00		0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		155	1774			1324	1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		122		3632		0		3350

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1280		0		1568		240

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0
Lane Assignment		L+T+R	(Prot)				(Prot)	

Lanes in Grp	0	1	1	0	0	1	1	0
Grp Vol (v), veh/h	0	73	13	0	0	184	28	0
Grp Sat Flow (s), veh/h/ln	0	1557	1774	0	0	1324	1774	0
Q Serve Time (g_s), s	0.0	0.0	0.4	0.0	0.0	4.0	0.9	0.0
Cycle Q Clear Time (g_c), s	0.0	2.0	0.4	0.0	0.0	6.0	0.9	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1362	0	0	0	1324	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	1757	0	0
Perm LT Eff Green (g_p), s	0.0	18.0	0.0	0.0	0.0	18.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	16.3	0.0	0.0	0.0	16.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0
Time to First Blk (g_f), s	0.0	7.7	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.18	1.00	0.00	0.00	1.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	538	29	0	0	532	55	0
V/C Ratio (X)	0.00	0.14	0.45	0.00	0.00	0.35	0.51	0.00
Avail Cap (c_a), veh/h	0	538	148	0	0	532	148	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	0.00	1.00	0.22	0.00
Uniform Delay (d1), s/veh	0.0	15.4	29.2	0.0	0.0	16.7	28.6	0.0
Incr Delay (d2), s/veh	0.0	0.5	10.7	0.0	0.0	1.8	1.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	15.9	39.9	0.0	0.0	18.4	30.2	0.0
1st-Term Q (Q1), veh/ln	0.0	0.9	0.2	0.0	0.0	2.4	0.5	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.1	0.0	0.0	0.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	1.0	0.3	0.0	0.0	2.7	0.5	0.0
%ile Storage Ratio (RQ%)	0.00	0.06	0.04	0.00	0.00	0.45	0.07	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	1
Grp Vol (v), veh/h	0	0	0	1669	0	0	0	775
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	22.2	0.0	0.0	0.0	21.3
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	22.2	0.0	0.0	0.0	21.3
Lane Grp Cap (c), veh/h	0	0	0	1311	0	0	0	629
V/C Ratio (X)	0.00	0.00	0.00	1.27	0.00	0.00	0.00	1.23
Avail Cap (c_a), veh/h	0	0	0	1311	0	0	0	629
Upstream Filter (I)	0.00	0.00	0.00	0.22	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	18.9	0.0	0.0	0.0	19.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	124.3	0.0	0.0	0.0	117.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	143.1	0.0	0.0	0.0	136.9
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	10.7	0.0	0.0	0.0	10.3

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	22.6	0.0	0.0	0.0	20.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	33.4	0.0	0.0	0.0	30.9
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.87	0.00	0.00	0.00	2.55
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	89.5	0.0	0.0	0.0	36.4
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment						T+R		T+R
Lanes in Grp	0	0	0	0	0	1	0	1
Grp Vol (v), veh/h	0	0	0	0	0	62	0	804
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	1568	0	1820
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	1.7	0.0	21.3
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	1.7	0.0	21.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.82	0.00	0.00	0.00	1.00	0.00	0.13
Lane Grp Cap (c), veh/h	0	0	0	0	0	470	0	647
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.13	0.00	1.24
Avail Cap (c_a), veh/h	0	0	0	0	0	470	0	647
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	15.3	0.0	19.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.6	0.0	121.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	15.9	0.0	141.1
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.7	0.0	10.6
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	21.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.8	0.0	32.5
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.06	0.00	2.68
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.2
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Intersection Summary								
HCM 2010 Ctrl Delay		129.0						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	1683	15	1	793	98	94	32	0	222	94	245
Future Volume (veh/h)	89	1683	15	1	793	98	94	32	0	222	94	245
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1676	1676	1710	1710	1676	1710	1660	1660	1660	1660	1660	1660
Adj Flow Rate, veh/h	97	1829	16	1	862	107	102	35	0	241	102	266
Adj No. of Lanes	1	2	0	0	2	0	1	1	1	2	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	65	2404	21	23	1849	229	32	201	171	63	201	171
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.04	0.74	0.74	0.66	0.66	0.66	0.02	0.12	0.00	0.02	0.12	0.12
Ln Grp Delay, s/veh	359.1	16.8	16.7	14.4	0.0	14.6	1120.7	65.4	0.0	1391.4	75.1	347.7
Ln Grp LOS	F	B	B	B		B	F	E		F	E	F
Approach Vol, veh/h		1942			970			137			609	
Approach Delay, s/veh		33.9			14.5			851.1			715.1	
Approach LOS		C			B			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6	7	8
Case No	2.0	3.0		4.0	2.0	3.0	2.0	8.0
Phs Duration (G+Y+Rc), s	9.0	26.0		126.0	9.0	26.0	13.0	113.0
Change Period (Y+Rc), s	* 5.7	6.5		6.4	* 5.7	6.5	6.4	6.4
Max Green (Gmax), s	* 3.3	19.5		119.6	* 3.3	19.5	6.6	100.6
Max Allow Headway (MAH), s	3.8	4.4		5.3	3.8	4.4	3.8	5.3
Max Q Clear (g_c+I1), s	5.3	5.0		56.0	5.3	21.5	8.6	26.3
Green Ext Time (g_e), s	0.0	1.4		45.4	0.0	0.0	0.0	50.5
Prob of Phs Call (p_c)	1.00	1.00		1.00	0.99	1.00	0.99	1.00
Prob of Max Out (p_x)	0.00	0.00		0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1				5		7	3
Mvmt Sat Flow, veh/h	3067				1581		1597	0

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1660		3236		1660		2792

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1411		28		1411		346

Left Lane Group Data								
Assigned Mvmt	1	0	0	0	5	0	7	3
Lane Assignment	(Prot)				(Prot)		(Prot)	L+T

Lanes in Grp	2	0	0	0	1	0	1	1
Grp Vol (v), veh/h	241	0	0	0	102	0	97	517
Grp Sat Flow (s), veh/h/ln	1534	0	0	0	1581	0	1597	1674
Q Serve Time (g_s), s	3.3	0.0	0.0	0.0	3.3	0.0	6.6	0.0
Cycle Q Clear Time (g_c), s	3.3	0.0	0.0	0.0	3.3	0.0	6.6	24.3
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	254
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	106.6
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	65.6
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	94.9
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.3
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	63	0	0	0	32	0	65	1131
V/C Ratio (X)	3.83	0.00	0.00	0.00	3.15	0.00	1.48	0.46
Avail Cap (c_a), veh/h	63	0	0	0	32	0	65	1131
Upstream Filter (I)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.81
Uniform Delay (d1), s/veh	78.8	0.0	0.0	0.0	78.8	0.0	77.2	13.3
Incr Delay (d2), s/veh	1312.5	0.0	0.0	0.0	1041.8	0.0	281.9	1.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	1391.4	0.0	0.0	0.0	1120.7	0.0	359.1	14.4
1st-Term Q (Q1), veh/ln	1.4	0.0	0.0	0.0	1.4	0.0	2.9	11.2
2nd-Term Q (Q2), veh/ln	11.5	0.0	0.0	0.0	9.4	0.0	5.1	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	12.9	0.0	0.0	0.0	10.8	0.0	8.0	11.6
%ile Storage Ratio (RQ%)	3.29	0.00	0.00	0.00	1.98	0.00	0.49	0.15
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	44.5	0.0	0.0	0.0	17.4	0.0	7.9	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	1.0	0.0	0.0	0.0	0.8	0.0	0.4	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	35	0	899	0	102	0	0
Grp Sat Flow (s), veh/h/ln	0	1660	0	1593	0	1660	0	0
Q Serve Time (g_s), s	0.0	3.0	0.0	53.7	0.0	9.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	3.0	0.0	53.7	0.0	9.3	0.0	0.0
Lane Grp Cap (c), veh/h	0	201	0	1183	0	201	0	0
V/C Ratio (X)	0.00	0.17	0.00	0.76	0.00	0.51	0.00	0.00
Avail Cap (c_a), veh/h	0	201	0	1183	0	201	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	63.5	0.0	12.2	0.0	66.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.9	0.0	4.6	0.0	8.9	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	65.4	0.0	16.8	0.0	75.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.4	0.0	23.2	0.0	4.3	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	1.5	0.0	0.5	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.5	0.0	24.7	0.0	4.7	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.17	0.00	0.29	0.00	0.25	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	946	0	266	0	453
Grp Sat Flow (s), veh/h/ln	0	1411	0	1671	0	1411	0	1464
Q Serve Time (g_s), s	0.0	0.0	0.0	54.0	0.0	19.5	0.0	24.3
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	54.0	0.0	19.5	0.0	24.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.02	0.00	1.00	0.00	0.24
Lane Grp Cap (c), veh/h	0	171	0	1242	0	171	0	970
V/C Ratio (X)	0.00	0.00	0.00	0.76	0.00	1.56	0.00	0.47
Avail Cap (c_a), veh/h	0	171	0	1242	0	171	0	970
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.81
Uniform Delay (d1), s/veh	0.0	0.0	0.0	12.3	0.0	70.8	0.0	13.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	4.5	0.0	277.0	0.0	1.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	16.7	0.0	347.7	0.0	14.6
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	24.7	0.0	7.6	0.0	9.8
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.5	0.0	13.1	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	26.2	0.0	20.8	0.0	10.2
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.31	0.00	1.08	0.00	0.14
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	23.8	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	172.7
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	405	910	169	141	531	99	221	1030	123	367	1690	216
Future Volume (veh/h)	405	910	169	141	531	99	221	1030	123	367	1690	216
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	418	938	174	145	547	102	228	1062	127	378	1742	223
Adj No. of Lanes	2	3	1	2	3	1	2	2	1	2	3	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	348	941	293	190	707	220	274	1688	755	399	2610	813
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.10	0.19	0.19	0.06	0.14	0.14	0.08	0.48	0.48	0.12	0.52	0.52
Ln Grp Delay, s/veh	166.4	74.9	61.5	82.7	71.5	66.5	83.7	33.4	24.4	103.7	30.5	23.0
Ln Grp LOS	F	E	E	F	E	E	F	C	C	F	C	C
Approach Vol, veh/h		1530			794			1417			2343	
Approach Delay, s/veh		98.3			72.9			40.7			41.6	
Approach LOS		F			E			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	26.0	85.8	15.4	36.7	20.0	91.8	23.0	29.2
Change Period (Y+Rc), s	6.8	6.8	6.4	6.4	6.8	6.8	6.4	6.4
Max Green (Gmax), s	19.2	73.2	16.6	28.6	19.2	73.2	16.6	28.6
Max Allow Headway (MAH), s	3.8	5.1	3.8	5.1	3.8	5.1	3.8	5.1
Max Q Clear (g_c+I1), s	20.1	38.9	8.8	32.2	12.8	43.8	18.6	19.0
Green Ext Time (g_e), s	0.0	29.2	0.2	0.0	0.4	25.6	0.0	3.8
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	0.02	1.00	0.13	0.00	1.00	0.79

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3408		3442		3408		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3505		5085		5036		5085

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		1583		1568		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	378	0	145	0	228	0	418	0
Grp Sat Flow (s), veh/h/ln	1704	0	1721	0	1704	0	1721	0
Q Serve Time (g_s), s	18.1	0.0	6.8	0.0	10.8	0.0	16.6	0.0
Cycle Q Clear Time (g_c), s	18.1	0.0	6.8	0.0	10.8	0.0	16.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	399	0	190	0	274	0	348	0
V/C Ratio (X)	0.95	0.00	0.76	0.00	0.83	0.00	1.20	0.00
Avail Cap (c_a), veh/h	399	0	348	0	399	0	348	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	0.09	0.00
Uniform Delay (d1), s/veh	71.9	0.0	76.4	0.0	74.3	0.0	73.7	0.0
Incr Delay (d2), s/veh	31.8	0.0	6.3	0.0	9.4	0.0	92.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	103.7	0.0	82.7	0.0	83.7	0.0	166.4	0.0
1st-Term Q (Q1), veh/ln	8.5	0.0	3.2	0.0	5.1	0.0	7.9	0.0
2nd-Term Q (Q2), veh/ln	1.8	0.0	0.2	0.0	0.4	0.0	4.5	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	10.3	0.0	3.4	0.0	5.5	0.0	12.4	0.0
%ile Storage Ratio (RQ%)	0.46	0.00	0.18	0.00	0.35	0.00	0.63	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	17.4	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	3	0	3	0	3
Grp Vol (v), veh/h	0	1062	0	938	0	1742	0	547
Grp Sat Flow (s), veh/h/ln	0	1752	0	1695	0	1679	0	1695
Q Serve Time (g_s), s	0.0	36.9	0.0	30.2	0.0	41.8	0.0	17.0
Cycle Q Clear Time (g_c), s	0.0	36.9	0.0	30.2	0.0	41.8	0.0	17.0
Lane Grp Cap (c), veh/h	0	1688	0	941	0	2610	0	707
V/C Ratio (X)	0.00	0.63	0.00	1.00	0.00	0.67	0.00	0.77
Avail Cap (c_a), veh/h	0	1688	0	941	0	2610	0	887
Upstream Filter (I)	0.00	1.00	0.00	0.09	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	31.6	0.0	66.8	0.0	29.1	0.0	68.1
Incr Delay (d2), s/veh	0.0	1.8	0.0	8.1	0.0	1.4	0.0	3.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	33.4	0.0	74.9	0.0	30.5	0.0	71.5
1st-Term Q (Q1), veh/ln	0.0	17.8	0.0	14.2	0.0	19.4	0.0	8.0

2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.7	0.0	0.3	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	18.3	0.0	14.9	0.0	19.7	0.0	8.2
%ile Storage Ratio (RQ%)	0.00	0.85	0.00	0.20	0.00	0.76	0.00	0.14
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	127	0	174	0	223	0	102
Grp Sat Flow (s), veh/h/ln	0	1568	0	1583	0	1568	0	1583
Q Serve Time (g_s), s	0.0	7.5	0.0	16.5	0.0	13.1	0.0	9.7
Cycle Q Clear Time (g_c), s	0.0	7.5	0.0	16.5	0.0	13.1	0.0	9.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	755	0	293	0	813	0	220
V/C Ratio (X)	0.00	0.17	0.00	0.59	0.00	0.27	0.00	0.46
Avail Cap (c_a), veh/h	0	755	0	293	0	813	0	276
Upstream Filter (I)	0.00	1.00	0.00	0.09	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	24.0	0.0	61.2	0.0	22.2	0.0	65.0
Incr Delay (d2), s/veh	0.0	0.5	0.0	0.3	0.0	0.8	0.0	1.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	24.4	0.0	61.5	0.0	23.0	0.0	66.5
1st-Term Q (Q1), veh/ln	0.0	3.2	0.0	7.2	0.0	5.6	0.0	4.3
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.2	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	3.3	0.0	7.3	0.0	5.8	0.0	4.3
%ile Storage Ratio (RQ%)	0.00	0.16	0.00	0.10	0.00	0.22	0.00	0.15
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		59.7						
HCM 2010 LOS		E						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	752	1233	28	85	594	458	15	15	129	371	27	25
Future Volume (veh/h)	752	1233	28	85	594	458	15	15	129	371	27	25
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1696	1696	1696	1696	1696	1696	1900	1696	1900	1696	1696	1696
Adj Flow Rate, veh/h	783	1284	29	89	619	0	16	16	134	386	28	0
Adj No. of Lanes	2	2	1	1	2	1	0	1	0	2	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	12	12	12	12	12	12	12	12	12	12	12	12
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	876	1884	843	110	1202	538	0	15	129	132	320	272
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.28	0.58	0.58	0.07	0.37	0.00	0.00	0.10	0.10	0.04	0.19	0.00
Ln Grp Delay, s/veh	49.5	21.1	11.8	69.3	33.3	0.0	0.0	0.0	146.0	950.1	44.6	0.0
Ln Grp LOS	D	C	B	E	C				F	F	D	
Approach Vol, veh/h		2096			708			150			414	
Approach Delay, s/veh		31.6			37.8			146.0			888.9	
Approach LOS		C			D			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	4.0	2.0	3.0	0.0	3.0
Phs Duration (G+Y+Rc), s	44.3	56.7	12.0	20.0	16.2	84.8	0.0	32.0
Change Period (Y+Rc), s	7.1	7.1	6.4	6.9	7.1	7.1	6.9	* 6.9
Max Green (Gmax), s	67.9	18.9	5.6	13.1	30.9	55.9	13.1	* 5.6
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.5	3.8	5.3	0.0	5.5
Max Q Clear (g_c+I1), s	33.9	21.8	7.6	15.1	9.2	38.6	0.0	3.8
Green Ext Time (g_e), s	3.3	0.0	0.0	0.0	0.2	12.4	0.0	0.2
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.96	1.00	0.00	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3134		3134		1616		0	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3223		156		3223		1696

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1442		1309		1442		1442

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)			

Lanes in Grp	2	0	2	0	1	0	0	0
Grp Vol (v), veh/h	783	0	386	0	89	0	0	0
Grp Sat Flow (s), veh/h/ln	1567	0	1567	0	1616	0	0	0
Q Serve Time (g_s), s	31.9	0.0	5.6	0.0	7.2	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	31.9	0.0	5.6	0.0	7.2	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	876	0	132	0	110	0	0	0
V/C Ratio (X)	0.89	0.00	2.92	0.00	0.81	0.00	0.00	0.00
Avail Cap (c_a), veh/h	1600	0	132	0	375	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.61	0.00	0.00	0.00
Uniform Delay (d1), s/veh	46.0	0.0	63.7	0.0	61.1	0.0	0.0	0.0
Incr Delay (d2), s/veh	3.5	0.0	886.4	0.0	8.2	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	49.5	0.0	950.1	0.0	69.3	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	13.8	0.0	2.4	0.0	3.2	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.4	0.0	16.2	0.0	0.3	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	14.2	0.0	18.7	0.0	3.5	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.45	0.00	0.82	0.00	0.28	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	63.5	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	2	0	0	0	2	0	1
Grp Vol (v), veh/h	0	619	0	0	0	1284	0	28
Grp Sat Flow (s), veh/h/ln	0	1612	0	0	0	1612	0	1696
Q Serve Time (g_s), s	0.0	19.8	0.0	0.0	0.0	36.6	0.0	1.8
Cycle Q Clear Time (g_c), s	0.0	19.8	0.0	0.0	0.0	36.6	0.0	1.8
Lane Grp Cap (c), veh/h	0	1202	0	0	0	1884	0	320
V/C Ratio (X)	0.00	0.51	0.00	0.00	0.00	0.68	0.00	0.09
Avail Cap (c_a), veh/h	0	1202	0	0	0	1884	0	320
Upstream Filter (I)	0.00	0.61	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	32.4	0.0	0.0	0.0	19.1	0.0	44.5
Incr Delay (d2), s/veh	0.0	1.0	0.0	0.0	0.0	2.0	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	33.3	0.0	0.0	0.0	21.1	0.0	44.6
1st-Term Q (Q1), veh/ln	0.0	8.8	0.0	0.0	0.0	16.2	0.0	0.8

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.5	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	8.9	0.0	0.0	0.0	16.8	0.0	0.9
%ile Storage Ratio (RQ%)	0.00	0.12	0.00	0.00	0.00	0.15	0.00	0.04
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	150	0	29	0	0
Grp Sat Flow (s), veh/h/ln	0	1442	0	1465	0	1442	0	1442
Q Serve Time (g_s), s	0.0	0.0	0.0	13.1	0.0	1.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	13.1	0.0	1.1	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.89	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	538	0	144	0	843	0	272
V/C Ratio (X)	0.00	0.00	0.00	1.04	0.00	0.03	0.00	0.00
Avail Cap (c_a), veh/h	0	538	0	144	0	843	0	272
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	60.0	0.0	11.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	85.7	0.0	0.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	146.0	0.0	11.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	5.3	0.0	0.5	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	3.4	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	8.7	0.0	0.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.57	0.00	0.05	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	143.4
HCM 2010 LOS	F

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	239	1546	1203	154	644	110
Future Volume (veh/h)	239	1546	1203	154	644	110
Number	1	6	2	12	3	18
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00			1.00	1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1696	1696	1696	1696	1696	1696
Adj Flow Rate, veh/h	249	1610	1253	0	671	0
Adj No. of Lanes	1	2	3	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	12	12	12	12	12	12
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	160	1897	1858	578	776	357
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.10	0.59	0.40	0.00	0.25	0.00
Ln Grp Delay, s/veh	291.2	14.0	21.3	0.0	36.1	0.0
Ln Grp LOS	F	B	C		D	
Approach Vol, veh/h		1859	1253		671	
Approach Delay, s/veh		51.1	21.3		36.1	
Approach LOS		D	C		D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8			6		
Case No	2.0	7.0	9.0			4.0		
Phs Duration (G+Y+Rc), s	15.0	39.2	25.8			54.2		
Change Period (Y+Rc), s	7.1	7.1	6.0			7.1		
Max Green (Gmax), s	7.9	27.9	24.0			42.9		
Max Allow Headway (MAH), s	3.8	5.3	3.8			5.3		
Max Q Clear (g_c+I1), s	9.9	19.8	18.4			34.8		
Green Ext Time (g_e), s	0.0	7.7	1.4			7.6		
Prob of Phs Call (p_c)	1.00	1.00	1.00			1.00		
Prob of Max Out (p_x)	1.00	0.00	0.52			0.00		

Left-Turn Movement Data			
Assigned Mvmt	1	5	3
Mvmt Sat Flow, veh/h	1616	0	3134

Through Movement Data			
Assigned Mvmt		2	8			6
Mvmt Sat Flow, veh/h		4784	0			3308

Right-Turn Movement Data			
Assigned Mvmt		12	18			16
Mvmt Sat Flow, veh/h		1442	1442			0

Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	0	0
Lane Assignment	(Prot)							

Lanes in Grp	1	0	2	0	0	0	0	0
Grp Vol (v), veh/h	249	0	671	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1616	0	1567	0	0	0	0	0
Q Serve Time (g_s), s	7.9	0.0	16.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	7.9	0.0	16.4	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1567	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	32.1	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	160	0	776	0	0	0	0	0
V/C Ratio (X)	1.56	0.00	0.86	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	160	0	940	0	0	0	0	0
Upstream Filter (I)	0.09	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	36.0	0.0	28.8	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	255.1	0.0	7.3	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	291.2	0.0	36.1	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	3.5	0.0	7.1	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	11.3	0.0	0.8	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	14.8	0.0	7.9	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.86	0.00	0.48	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	22.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	3	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1253	0	0	0	1610	0	0
Grp Sat Flow (s), veh/h/ln	0	1544	0	0	0	1612	0	0
Q Serve Time (g_s), s	0.0	17.8	0.0	0.0	0.0	32.8	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	17.8	0.0	0.0	0.0	32.8	0.0	0.0
Lane Grp Cap (c), veh/h	0	1858	0	0	0	1897	0	0
V/C Ratio (X)	0.00	0.67	0.00	0.00	0.00	0.85	0.00	0.00
Avail Cap (c_a), veh/h	0	1858	0	0	0	1897	0	0
Upstream Filter (I)	0.00	0.84	0.00	0.00	0.00	0.09	0.00	0.00
Uniform Delay (d1), s/veh	0.0	19.7	0.0	0.0	0.0	13.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.7	0.0	0.0	0.0	0.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	21.3	0.0	0.0	0.0	14.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	7.5	0.0	0.0	0.0	14.3	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	7.8	0.0	0.0	0.0	14.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.06	0.00	0.00	0.00	0.20	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lane Assignment		R	R					
Lanes in Grp	0	1	1	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1442	1442	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	578	357	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	578	433	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		38.6						
HCM 2010 LOS		D						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	581	1069	247	143	387	93	79	89	60	194	216	712
Future Volume (veh/h)	581	1069	247	143	387	93	79	89	60	194	216	712
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1712	1712	1712	1712	1712	1712	1900	1712	1712	1712
Adj Flow Rate, veh/h	605	1114	257	149	403	0	82	93	62	202	225	742
Adj No. of Lanes	2	3	1	1	3	1	2	2	0	1	1	2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	11	11	11	11	11	11	11	11	11	11	11	11
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	666	2316	721	171	1823	568	121	147	91	222	297	445
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.21	0.50	0.50	0.10	0.39	0.00	0.04	0.08	0.08	0.14	0.17	0.17
Ln Grp Delay, s/veh	67.0	27.0	25.3	83.2	32.9	0.0	82.5	76.7	79.0	95.5	73.5	376.7
Ln Grp LOS	E	C	C	F	C		F	E	E	F	E	F
Approach Vol, veh/h		1976			552			237			1169	
Approach Delay, s/veh		39.0			46.4			79.5			269.8	
Approach LOS		D			D			E			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	4.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	41.2	69.5	29.4	19.9	24.3	86.4	13.8	35.5
Change Period (Y+Rc), s	7.5	7.1	7.6	* 7.7	7.5	7.1	* 7.7	* 7.7
Max Green (Gmax), s	42.5	37.9	27.4	* 22	42.5	37.9	* 22	* 27
Max Allow Headway (MAH), s	3.8	5.1	3.8	4.5	3.8	5.1	3.8	4.5
Max Q Clear (g_c+I1), s	31.9	11.2	21.5	10.1	16.4	27.3	6.1	29.8
Green Ext Time (g_e), s	1.8	14.2	0.3	2.1	0.4	7.6	0.2	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	0.97	1.00
Prob of Max Out (p_x)	0.06	0.00	0.21	0.32	0.00	0.00	0.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3163		1630		1630		3163	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		4673		1933		4673		1712

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1455		1194		1455		2561

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	1	0	1	0	2	0
Grp Vol (v), veh/h	605	0	202	0	149	0	82	0
Grp Sat Flow (s), veh/h/ln	1581	0	1630	0	1630	0	1581	0
Q Serve Time (g_s), s	29.9	0.0	19.5	0.0	14.4	0.0	4.1	0.0
Cycle Q Clear Time (g_c), s	29.9	0.0	19.5	0.0	14.4	0.0	4.1	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	666	0	222	0	171	0	121	0
V/C Ratio (X)	0.91	0.00	0.91	0.00	0.87	0.00	0.68	0.00
Avail Cap (c_a), veh/h	840	0	279	0	433	0	441	0
Upstream Filter (I)	0.40	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	61.6	0.0	68.1	0.0	70.5	0.0	76.0	0.0
Incr Delay (d2), s/veh	5.3	0.0	27.4	0.0	12.6	0.0	6.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	67.0	0.0	95.5	0.0	83.2	0.0	82.5	0.0
1st-Term Q (Q1), veh/ln	13.1	0.0	8.8	0.0	6.5	0.0	1.8	0.0
2nd-Term Q (Q2), veh/ln	0.5	0.0	1.7	0.0	0.6	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	13.6	0.0	10.5	0.0	7.1	0.0	1.9	0.0
%ile Storage Ratio (RQ%)	0.50	0.00	2.60	0.00	0.46	0.00	0.10	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	1	0	3	0	1
Grp Vol (v), veh/h	0	403	0	77	0	1114	0	225
Grp Sat Flow (s), veh/h/ln	0	1558	0	1626	0	1558	0	1712
Q Serve Time (g_s), s	0.0	9.2	0.0	7.4	0.0	25.3	0.0	20.0
Cycle Q Clear Time (g_c), s	0.0	9.2	0.0	7.4	0.0	25.3	0.0	20.0
Lane Grp Cap (c), veh/h	0	1823	0	124	0	2316	0	297
V/C Ratio (X)	0.00	0.22	0.00	0.62	0.00	0.48	0.00	0.76
Avail Cap (c_a), veh/h	0	1823	0	227	0	2316	0	297
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.40	0.00	1.00
Uniform Delay (d1), s/veh	0.0	32.6	0.0	71.7	0.0	26.7	0.0	62.9
Incr Delay (d2), s/veh	0.0	0.3	0.0	5.0	0.0	0.3	0.0	10.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	32.9	0.0	76.7	0.0	27.0	0.0	73.5
1st-Term Q (Q1), veh/ln	0.0	4.0	0.0	3.3	0.0	10.8	0.0	9.5

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.1	0.0	0.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	4.0	0.0	3.5	0.0	10.9	0.0	10.4
%ile Storage Ratio (RQ%)	0.00	0.04	0.00	0.19	0.00	0.09	0.00	0.32
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	2
Grp Vol (v), veh/h	0	0	0	78	0	257	0	742
Grp Sat Flow (s), veh/h/ln	0	1455	0	1501	0	1455	0	1280
Q Serve Time (g_s), s	0.0	0.0	0.0	8.1	0.0	17.3	0.0	27.8
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	8.1	0.0	17.3	0.0	27.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.80	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	568	0	114	0	721	0	445
V/C Ratio (X)	0.00	0.00	0.00	0.68	0.00	0.36	0.00	1.67
Avail Cap (c_a), veh/h	0	568	0	209	0	721	0	445
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.40	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	72.0	0.0	24.7	0.0	66.1
Incr Delay (d2), s/veh	0.0	0.0	0.0	7.0	0.0	0.6	0.0	310.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	79.0	0.0	25.3	0.0	376.7
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.4	0.0	7.0	0.0	9.8
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.1	0.0	19.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	3.6	0.0	7.1	0.0	29.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.20	0.00	0.39	0.00	0.88
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	74.3
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	111.1
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	165	834	127	418	880	152	109	450	132	538	1220	162
Future Volume (veh/h)	165	834	127	418	880	152	109	450	132	538	1220	162
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1776	1776	1776	1776	1776	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	174	878	134	440	926	160	115	474	139	566	1284	171
Adj No. of Lanes	2	3	1	2	3	2	2	2	0	2	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	7	7	7	7	7	7	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	220	1505	469	213	1494	819	157	823	240	374	1646	219
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.07	0.31	0.31	0.06	0.31	0.31	0.05	0.32	0.32	0.11	0.38	0.38
Ln Grp Delay, s/veh	75.9	45.5	40.9	566.4	46.6	39.0	80.1	43.8	43.9	311.8	43.8	46.1
Ln Grp LOS	E	D	D	F	D	D	F	D	D	F	D	D
Approach Vol, veh/h		1186			1526			728			2021	
Approach Delay, s/veh		49.4			195.7			49.6			119.4	
Approach LOS		D			F			D			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	4.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	17.3	53.8	24.0	55.8	17.0	54.2	14.8	65.0
Change Period (Y+Rc), s	7.2	* 7.3	6.8	* 7.6	7.2	* 7.3	* 7.6	* 7.6
Max Green (Gmax), s	15.8	* 31	17.2	* 59	9.8	* 37	* 9.4	* 65
Max Allow Headway (MAH), s	3.8	5.1	3.8	5.3	3.8	5.1	3.8	5.3
Max Q Clear (g_c+I1), s	9.9	26.7	19.2	25.3	11.8	25.0	7.2	41.5
Green Ext Time (g_e), s	0.3	3.5	0.0	19.9	0.0	9.1	0.1	15.9
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00
Prob of Max Out (p_x)	0.15	0.00	1.00	0.47	1.00	0.00	1.00	0.61

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	3281	3281	3281	3281

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	4848	2579	4848	4329

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	2656	751	1509	577

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	174	0	566	0	440	0	115	0
Grp Sat Flow (s), veh/h/ln	1640	0	1640	0	1640	0	1640	0
Q Serve Time (g_s), s	7.9	0.0	17.2	0.0	9.8	0.0	5.2	0.0
Cycle Q Clear Time (g_c), s	7.9	0.0	17.2	0.0	9.8	0.0	5.2	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	220	0	374	0	213	0	157	0
V/C Ratio (X)	0.79	0.00	1.51	0.00	2.07	0.00	0.73	0.00
Avail Cap (c_a), veh/h	343	0	374	0	213	0	204	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	69.4	0.0	66.9	0.0	70.6	0.0	70.9	0.0
Incr Delay (d2), s/veh	6.5	0.0	244.9	0.0	495.8	0.0	9.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	75.9	0.0	311.8	0.0	566.4	0.0	80.1	0.0
1st-Term Q (Q1), veh/ln	3.6	0.0	7.8	0.0	4.4	0.0	2.4	0.0
2nd-Term Q (Q2), veh/ln	0.2	0.0	12.7	0.0	14.7	0.0	0.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	3.8	0.0	20.5	0.0	19.1	0.0	2.6	0.0
%ile Storage Ratio (RQ%)	0.22	0.00	0.41	0.00	0.97	0.00	0.07	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	48.1	0.0	56.8	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.4	0.0	0.5	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	1	0	3	0	2
Grp Vol (v), veh/h	0	926	0	309	0	878	0	959
Grp Sat Flow (s), veh/h/ln	0	1616	0	1687	0	1616	0	1616
Q Serve Time (g_s), s	0.0	24.7	0.0	23.0	0.0	23.0	0.0	39.5
Cycle Q Clear Time (g_c), s	0.0	24.7	0.0	23.0	0.0	23.0	0.0	39.5
Lane Grp Cap (c), veh/h	0	1494	0	539	0	1505	0	1228
V/C Ratio (X)	0.00	0.62	0.00	0.57	0.00	0.58	0.00	0.78
Avail Cap (c_a), veh/h	0	1494	0	661	0	1505	0	1400
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	44.7	0.0	42.8	0.0	43.8	0.0	41.2
Incr Delay (d2), s/veh	0.0	1.9	0.0	1.0	0.0	1.7	0.0	2.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	46.6	0.0	43.8	0.0	45.5	0.0	43.8
1st-Term Q (Q1), veh/ln	0.0	11.0	0.0	10.7	0.0	10.3	0.0	17.6

2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.1	0.0	0.2	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	11.2	0.0	10.9	0.0	10.6	0.0	18.0
%ile Storage Ratio (RQ%)	0.00	0.06	0.00	0.29	0.00	0.10	0.00	0.36
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		T+R
Lanes in Grp	0	2	0	1	0	1	0	1
Grp Vol (v), veh/h	0	160	0	304	0	134	0	496
Grp Sat Flow (s), veh/h/ln	0	1328	0	1643	0	1509	0	1674
Q Serve Time (g_s), s	0.0	6.7	0.0	23.3	0.0	10.1	0.0	39.5
Cycle Q Clear Time (g_c), s	0.0	6.7	0.0	23.3	0.0	10.1	0.0	39.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.46	0.00	1.00	0.00	0.34
Lane Grp Cap (c), veh/h	0	819	0	525	0	469	0	636
V/C Ratio (X)	0.00	0.20	0.00	0.58	0.00	0.29	0.00	0.78
Avail Cap (c_a), veh/h	0	819	0	644	0	469	0	725
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	38.4	0.0	42.9	0.0	39.4	0.0	41.2
Incr Delay (d2), s/veh	0.0	0.5	0.0	1.0	0.0	1.5	0.0	4.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	39.0	0.0	43.9	0.0	40.9	0.0	46.1
1st-Term Q (Q1), veh/ln	0.0	2.5	0.0	10.6	0.0	4.2	0.0	18.2
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.0	0.2	0.0	0.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.5	0.0	10.7	0.0	4.4	0.0	19.1
%ile Storage Ratio (RQ%)	0.00	0.10	0.00	0.29	0.00	0.28	0.00	0.38
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	116.2
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	279	210	304	306	262	105	604	283	169	1159	10
Future Volume (veh/h)	21	279	210	304	306	262	105	604	283	169	1159	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	24	317	239	345	348	298	119	686	322	192	1317	11
Adj No. of Lanes	1	2	0	2	2	0	1	2	0	1	2	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	31	403	297	140	420	354	90	1082	508	90	1663	14
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.02	0.21	0.21	0.04	0.23	0.23	0.05	0.48	0.48	0.05	0.48	0.48
Ln Grp Delay, s/veh	73.0	40.8	43.4	718.0	44.2	47.1	246.6	20.0	20.2	590.5	26.0	25.7
Ln Grp LOS	E	D	D	F	D	D	F	C	C	F	C	C
Approach Vol, veh/h		580			991			1127			1520	
Approach Delay, s/veh		43.4			279.7			44.0			97.2	
Approach LOS		D			F			D			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	4.0
Phs Duration (G+Y+Rc), s	9.0	45.7	8.0	22.3	9.0	45.7	6.0	24.3
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green (Gmax), s	4.5	39.5	3.5	19.5	4.5	39.5	3.5	19.5
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.4	3.8	5.3	3.8	5.4
Max Q Clear (g_c+I1), s	6.5	21.4	5.5	15.6	6.5	29.3	3.2	17.9
Green Ext Time (g_e), s	0.0	14.2	0.0	2.2	0.0	8.7	0.0	1.1
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.94	1.00	0.43	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1691		3408		1691		1757	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2231		1927		3429		1806

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1047		1420		29		1522

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	2	0	1	0	1	0
Grp Vol (v), veh/h	192	0	345	0	119	0	24	0
Grp Sat Flow (s), veh/h/ln	1691	0	1704	0	1691	0	1757	0
Q Serve Time (g_s), s	4.5	0.0	3.5	0.0	4.5	0.0	1.2	0.0
Cycle Q Clear Time (g_c), s	4.5	0.0	3.5	0.0	4.5	0.0	1.2	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	90	0	140	0	90	0	31	0
V/C Ratio (X)	2.14	0.00	2.46	0.00	1.33	0.00	0.77	0.00
Avail Cap (c_a), veh/h	90	0	140	0	90	0	72	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	40.3	0.0	40.8	0.0	40.3	0.0	41.6	0.0
Incr Delay (d2), s/veh	550.3	0.0	677.2	0.0	206.4	0.0	31.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	590.5	0.0	718.0	0.0	246.6	0.0	73.0	0.0
1st-Term Q (Q1), veh/ln	2.1	0.0	1.6	0.0	2.1	0.0	0.6	0.0
2nd-Term Q (Q2), veh/ln	13.7	0.0	13.2	0.0	5.1	0.0	0.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	15.8	0.0	14.8	0.0	7.2	0.0	0.8	0.0
%ile Storage Ratio (RQ%)	1.28	0.00	1.62	0.00	1.16	0.00	0.17	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	25.6	0.0	51.2	0.0	7.4	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.5	0.0	0.6	0.0	0.3	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	519	0	288	0	648	0	337
Grp Sat Flow (s), veh/h/ln	0	1687	0	1752	0	1687	0	1752
Q Serve Time (g_s), s	0.0	19.4	0.0	13.2	0.0	27.3	0.0	15.6
Cycle Q Clear Time (g_c), s	0.0	19.4	0.0	13.2	0.0	27.3	0.0	15.6
Lane Grp Cap (c), veh/h	0	818	0	367	0	818	0	408
V/C Ratio (X)	0.00	0.63	0.00	0.78	0.00	0.79	0.00	0.83
Avail Cap (c_a), veh/h	0	818	0	402	0	818	0	408
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	16.3	0.0	31.8	0.0	18.3	0.0	31.0
Incr Delay (d2), s/veh	0.0	3.7	0.0	9.0	0.0	7.7	0.0	13.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	20.0	0.0	40.8	0.0	26.0	0.0	44.2
1st-Term Q (Q1), veh/ln	0.0	8.9	0.0	6.4	0.0	12.6	0.0	7.5

2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	0.9	0.0	1.8	0.0	1.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	9.8	0.0	7.3	0.0	14.4	0.0	9.0
%ile Storage Ratio (RQ%)	0.00	0.79	0.00	0.17	0.00	1.13	0.00	0.20
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	489	0	268	0	680	0	309
Grp Sat Flow (s), veh/h/ln	0	1591	0	1594	0	1771	0	1576
Q Serve Time (g_s), s	0.0	19.4	0.0	13.6	0.0	27.3	0.0	15.9
Cycle Q Clear Time (g_c), s	0.0	19.4	0.0	13.6	0.0	27.3	0.0	15.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.66	0.00	0.89	0.00	0.02	0.00	0.97
Lane Grp Cap (c), veh/h	0	771	0	334	0	859	0	367
V/C Ratio (X)	0.00	0.63	0.00	0.80	0.00	0.79	0.00	0.84
Avail Cap (c_a), veh/h	0	771	0	366	0	859	0	367
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	16.3	0.0	32.0	0.0	18.3	0.0	31.1
Incr Delay (d2), s/veh	0.0	4.0	0.0	11.4	0.0	7.4	0.0	16.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	20.2	0.0	43.4	0.0	25.7	0.0	47.1
1st-Term Q (Q1), veh/ln	0.0	8.4	0.0	6.0	0.0	13.2	0.0	6.9
2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	1.1	0.0	1.8	0.0	1.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	9.3	0.0	7.0	0.0	15.0	0.0	8.5
%ile Storage Ratio (RQ%)	0.00	0.75	0.00	0.16	0.00	1.18	0.00	0.19
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		118.5						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	176	283	343	63	214	71	447	301	120	472	14
Future Volume (veh/h)	45	176	283	343	63	214	71	447	301	120	472	14
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1900	1712	1712	1712	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	47	185	298	361	66	225	75	471	317	126	497	15
Adj No. of Lanes	1	1	0	2	1	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	11	11	11	11	11	11	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	62	152	245	196	482	410	74	715	480	74	1236	37
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.04	0.26	0.26	0.06	0.28	0.28	0.04	0.37	0.37	0.04	0.37	0.37
Ln Grp Delay, s/veh	60.9	0.0	151.8	441.3	24.8	29.6	154.8	29.5	30.1	415.9	23.4	23.3
Ln Grp LOS	E		F	F	C	C	F	C	C	F	C	C
Approach Vol, veh/h		530			652			863			638	
Approach Delay, s/veh		143.7			257.1			40.7			100.9	
Approach LOS		F			F			D			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	10.0	40.0	12.0	30.0	10.0	40.0	9.8	32.2
Change Period (Y+Rc), s	6.0	6.0	* 6.3	* 6.3	6.0	6.0	* 6.3	* 6.3
Max Green (Gmax), s	4.0	34.0	* 5.7	* 24	4.0	34.0	* 5.7	* 24
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.1	3.8	5.3	3.8	5.1
Max Q Clear (g_c+I1), s	6.0	20.7	7.7	25.7	6.0	12.1	4.6	14.1
Green Ext Time (g_e), s	0.0	6.8	0.0	0.0	0.0	9.0	0.0	3.2
Prob of Phs Call (p_c)	0.96	1.00	1.00	1.00	0.85	1.00	0.70	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.46

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1691		3163		1691		1630	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1936		591		3344		1712

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1298		952		101		1455

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	2	0	1	0	1	0
Grp Vol (v), veh/h	126	0	361	0	75	0	47	0
Grp Sat Flow (s), veh/h/ln	1691	0	1581	0	1691	0	1630	0
Q Serve Time (g_s), s	4.0	0.0	5.7	0.0	4.0	0.0	2.6	0.0
Cycle Q Clear Time (g_c), s	4.0	0.0	5.7	0.0	4.0	0.0	2.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	74	0	196	0	74	0	62	0
V/C Ratio (X)	1.71	0.00	1.84	0.00	1.02	0.00	0.76	0.00
Avail Cap (c_a), veh/h	74	0	196	0	74	0	101	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	44.0	0.0	43.2	0.0	44.0	0.0	43.8	0.0
Incr Delay (d2), s/veh	371.9	0.0	398.2	0.0	110.6	0.0	17.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0
Control Delay (d), s/veh	415.9	0.0	441.3	0.0	154.8	0.0	60.9	0.0
1st-Term Q (Q1), veh/ln	1.9	0.0	2.5	0.0	1.9	0.0	1.2	0.0
2nd-Term Q (Q2), veh/ln	7.6	0.0	10.8	0.0	2.3	0.0	0.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	9.5	0.0	13.3	0.0	4.1	0.0	1.5	0.0
%ile Storage Ratio (RQ%)	1.10	0.00	2.59	0.00	0.34	0.00	0.27	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	13.1	0.0	41.3	0.0	0.4	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.4	0.0	0.5	0.0	0.3	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	410	0	0	0	250	0	66
Grp Sat Flow (s), veh/h/ln	0	1687	0	0	0	1687	0	1712
Q Serve Time (g_s), s	0.0	18.6	0.0	0.0	0.0	10.1	0.0	2.7
Cycle Q Clear Time (g_c), s	0.0	18.6	0.0	0.0	0.0	10.1	0.0	2.7
Lane Grp Cap (c), veh/h	0	623	0	0	0	623	0	482
V/C Ratio (X)	0.00	0.66	0.00	0.00	0.00	0.40	0.00	0.14
Avail Cap (c_a), veh/h	0	623	0	0	0	623	0	482
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	24.2	0.0	0.0	0.0	21.5	0.0	24.7
Incr Delay (d2), s/veh	0.0	5.4	0.0	0.0	0.0	1.9	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	29.5	0.0	0.0	0.0	23.4	0.0	24.8
1st-Term Q (Q1), veh/ln	0.0	8.7	0.0	0.0	0.0	4.7	0.0	1.2

2nd-Term Q (Q2), veh/ln	0.0	0.9	0.0	0.0	0.0	0.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	9.6	0.0	0.0	0.0	5.0	0.0	1.3
%ile Storage Ratio (RQ%)	0.00	0.31	0.00	0.00	0.00	0.15	0.00	0.04
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	378	0	483	0	262	0	225
Grp Sat Flow (s), veh/h/ln	0	1547	0	1544	0	1758	0	1455
Q Serve Time (g_s), s	0.0	18.7	0.0	23.7	0.0	10.1	0.0	12.1
Cycle Q Clear Time (g_c), s	0.0	18.7	0.0	23.7	0.0	10.1	0.0	12.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.84	0.00	0.62	0.00	0.06	0.00	1.00
Lane Grp Cap (c), veh/h	0	572	0	398	0	650	0	410
V/C Ratio (X)	0.00	0.66	0.00	1.21	0.00	0.40	0.00	0.55
Avail Cap (c_a), veh/h	0	572	0	398	0	650	0	410
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	24.2	0.0	34.2	0.0	21.5	0.0	28.1
Incr Delay (d2), s/veh	0.0	5.9	0.0	117.6	0.0	1.9	0.0	1.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	30.1	0.0	151.8	0.0	23.3	0.0	29.6
1st-Term Q (Q1), veh/ln	0.0	8.0	0.0	10.1	0.0	4.9	0.0	4.8
2nd-Term Q (Q2), veh/ln	0.0	0.9	0.0	13.0	0.0	0.3	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	8.9	0.0	23.0	0.0	5.2	0.0	5.0
%ile Storage Ratio (RQ%)	0.00	0.29	0.00	0.56	0.00	0.15	0.00	0.88
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	21.3	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		127.9						
HCM 2010 LOS		F						

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	273	519	249	510	671	7	209	957	2	2	1084	332
Future Volume (veh/h)	273	519	249	510	671	7	209	957	2	2	1084	332
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1759	1759	1759	1900	1776	1776	1776	1900	1776	1776
Adj Flow Rate, veh/h	281	535	257	526	692	7	215	987	0	2	1118	0
Adj No. of Lanes	2	2	1	2	2	0	1	2	1	0	3	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	8	8	8	8	8	8	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	365	492	220	633	778	8	165	1538	688	40	1380	442
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.11	0.15	0.15	0.19	0.23	0.23	0.10	0.46	0.00	0.29	0.29	0.00
Ln Grp Delay, s/veh	43.1	105.3	152.3	39.2	54.0	53.3	180.4	19.4	0.0	39.3	38.4	0.0
Ln Grp LOS	D	F	F	D	D	D	F	B		D	D	
Approach Vol, veh/h		1073			1225			1202			1120	
Approach Delay, s/veh		100.2			47.4			48.2			38.7	
Approach LOS		F			D			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Case No		3.0	2.0	3.0	2.0	7.0	2.0	4.0
Phs Duration (G+Y+Rc), s		48.2	23.9	19.9	15.0	33.2	16.3	27.4
Change Period (Y+Rc), s		6.3	6.0	6.3	6.0	6.3	6.0	6.3
Max Green (Gmax), s		32.7	28.0	12.7	9.0	17.7	18.0	22.7
Max Allow Headway (MAH), s		5.3	3.8	5.1	3.8	5.3	3.8	5.1
Max Q Clear (g_c+I1), s		22.7	16.3	15.6	11.0	22.3	9.7	20.2
Green Ext Time (g_e), s		8.2	1.6	0.0	0.0	0.0	0.6	0.9
Prob of Phs Call (p_c)		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)		0.00	0.03	1.00	1.00	0.00	0.04	1.00

Left-Turn Movement Data								
Assigned Mvmt			3		5	1	7	
Mvmt Sat Flow, veh/h			3250		1691	1	3250	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3374		3343		4712		3390

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1509		1495		1509		34

Left Lane Group Data								
Assigned Mvmt	0	0	3	0	5	1	7	0
Lane Assignment			(Prot)		(Prot)	L+T	(Prot)	

Lanes in Grp	0	0	2	0	1	1	2	0
Grp Vol (v), veh/h	0	0	526	0	215	421	281	0
Grp Sat Flow (s), veh/h/ln	0	0	1625	0	1691	1772	1625	0
Q Serve Time (g_s), s	0.0	0.0	14.3	0.0	9.0	0.0	7.7	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	14.3	0.0	9.0	20.2	7.7	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	579	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	26.9	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	21.2	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	22.3	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	20.2	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	633	0	165	558	365	0
V/C Ratio (X)	0.00	0.00	0.83	0.00	1.30	0.75	0.77	0.00
Avail Cap (c_a), veh/h	0	0	989	0	165	558	636	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.09	1.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	35.6	0.0	41.5	30.2	39.7	0.0
Incr Delay (d2), s/veh	0.0	0.0	3.6	0.0	138.9	9.1	3.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	39.2	0.0	180.4	39.3	43.1	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	6.4	0.0	4.2	9.9	3.5	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.3	0.0	6.4	1.4	0.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	6.7	0.0	10.6	11.4	3.6	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.45	0.00	1.19	0.38	0.35	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	12.4	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	2	0	1
Grp Vol (v), veh/h	0	987	0	535	0	699	0	341
Grp Sat Flow (s), veh/h/ln	0	1687	0	1671	0	1470	0	1671
Q Serve Time (g_s), s	0.0	20.7	0.0	13.6	0.0	20.3	0.0	18.2
Cycle Q Clear Time (g_c), s	0.0	20.7	0.0	13.6	0.0	20.3	0.0	18.2
Lane Grp Cap (c), veh/h	0	1538	0	492	0	861	0	384
V/C Ratio (X)	0.00	0.64	0.00	1.09	0.00	0.81	0.00	0.89
Avail Cap (c_a), veh/h	0	1538	0	492	0	861	0	412
Upstream Filter (I)	0.00	0.09	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	19.2	0.0	39.2	0.0	30.2	0.0	34.3
Incr Delay (d2), s/veh	0.0	0.2	0.0	66.1	0.0	8.2	0.0	19.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	19.4	0.0	105.3	0.0	38.4	0.0	54.0
1st-Term Q (Q1), veh/ln	0.0	9.6	0.0	6.2	0.0	8.2	0.0	8.3

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	4.5	0.0	1.0	0.0	2.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	9.6	0.0	10.7	0.0	9.2	0.0	10.4
%ile Storage Ratio (RQ%)	0.00	0.49	0.00	0.38	0.00	0.31	0.00	0.32
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	10.7	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	257	0	0	0	358
Grp Sat Flow (s), veh/h/ln	0	1509	0	1495	0	1509	0	1753
Q Serve Time (g_s), s	0.0	0.0	0.0	13.6	0.0	0.0	0.0	18.2
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	13.6	0.0	0.0	0.0	18.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.02
Lane Grp Cap (c), veh/h	0	688	0	220	0	442	0	402
V/C Ratio (X)	0.00	0.00	0.00	1.17	0.00	0.00	0.00	0.89
Avail Cap (c_a), veh/h	0	688	0	220	0	442	0	433
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	39.2	0.0	0.0	0.0	34.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	113.0	0.0	0.0	0.0	19.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	152.3	0.0	0.0	0.0	53.3
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	5.6	0.0	0.0	0.0	8.7
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	6.9	0.0	0.0	0.0	2.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	12.5	0.0	0.0	0.0	10.9
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.44	0.00	0.00	0.00	0.33
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	9.2	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	57.8
HCM 2010 LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

APPENDIX IV-B3:
Year 2020 Zoning Intersection Total with Combined LOS PM Analysis without Mitigation

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	629	1477	796	198	953	77	487	281	192	156	188	211
Future Volume (veh/h)	629	1477	796	198	953	77	487	281	192	156	188	211
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1743	1743	1900	1743	1743	1743
Adj Flow Rate, veh/h	669	1571	847	211	1014	82	518	299	204	166	200	224
Adj No. of Lanes	2	2	1	1	3	0	1	2	0	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	9	9	9	9	9	9
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	733	1615	723	193	1690	136	109	472	314	33	352	299
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.21	0.45	0.45	0.11	0.35	0.35	0.07	0.25	0.25	0.02	0.20	0.20
Ln Grp Delay, s/veh	72.3	58.0	133.9	160.4	43.5	45.5	1783.6	58.9	60.4	1925.8	61.9	73.5
Ln Grp LOS	E	E	F	F	D	D	F	E	E	F	E	E
Approach Vol, veh/h		3087			1307			1021			590	
Approach Delay, s/veh		81.9			63.0			934.3			590.7	
Approach LOS		F			E			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	3.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	10.0	45.0	23.0	76.0	17.0	38.0	38.9	60.1
Change Period (Y+Rc), s	6.9	6.9	6.4	6.4	6.9	6.9	6.4	6.4
Max Green (Gmax), s	3.1	38.1	16.6	69.6	10.1	31.1	37.6	48.6
Max Allow Headway (MAH), s	3.8	5.1	3.7	4.8	3.8	5.1	3.8	4.8
Max Q Clear (g_c+I1), s	5.1	24.2	18.6	71.6	12.1	23.9	31.0	28.6
Green Ext Time (g_e), s	0.0	4.5	0.0	0.0	0.0	3.0	1.5	18.3
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	0.33	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1660		1792		1660		3476	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1908		3574		1743		4845

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1268		1599		1482		391

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	2	0
Grp Vol (v), veh/h	166	0	211	0	518	0	669	0
Grp Sat Flow (s), veh/h/ln	1660	0	1792	0	1660	0	1738	0
Q Serve Time (g_s), s	3.1	0.0	16.6	0.0	10.1	0.0	29.0	0.0
Cycle Q Clear Time (g_c), s	3.1	0.0	16.6	0.0	10.1	0.0	29.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	33	0	193	0	109	0	733	0
V/C Ratio (X)	4.97	0.00	1.09	0.00	4.76	0.00	0.91	0.00
Avail Cap (c_a), veh/h	33	0	193	0	109	0	849	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	75.4	0.0	68.7	0.0	72.0	0.0	59.4	0.0
Incr Delay (d2), s/veh	1850.4	0.0	91.7	0.0	1711.6	0.0	12.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	1925.8	0.0	160.4	0.0	1783.6	0.0	72.3	0.0
1st-Term Q (Q1), veh/ln	1.4	0.0	8.2	0.0	4.6	0.0	13.9	0.0
2nd-Term Q (Q2), veh/ln	17.2	0.0	4.9	0.0	51.8	0.0	1.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	18.6	0.0	13.1	0.0	56.4	0.0	15.2	0.0
%ile Storage Ratio (RQ%)	1.56	0.00	1.03	0.00	4.72	0.00	0.62	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	33.1	0.0	4.5	0.0	102.3	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	1.2	0.0	0.3	0.0	1.2	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	1	0	2
Grp Vol (v), veh/h	0	258	0	1571	0	200	0	716
Grp Sat Flow (s), veh/h/ln	0	1656	0	1787	0	1743	0	1712
Q Serve Time (g_s), s	0.0	21.4	0.0	66.2	0.0	15.9	0.0	26.5
Cycle Q Clear Time (g_c), s	0.0	21.4	0.0	66.2	0.0	15.9	0.0	26.5
Lane Grp Cap (c), veh/h	0	410	0	1615	0	352	0	1194
V/C Ratio (X)	0.00	0.63	0.00	0.97	0.00	0.57	0.00	0.60
Avail Cap (c_a), veh/h	0	410	0	1615	0	352	0	1194
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	51.7	0.0	41.3	0.0	55.4	0.0	41.3
Incr Delay (d2), s/veh	0.0	7.2	0.0	16.8	0.0	6.5	0.0	2.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	58.9	0.0	58.0	0.0	61.9	0.0	43.5
1st-Term Q (Q1), veh/ln	0.0	9.8	0.0	32.5	0.0	7.7	0.0	12.5

2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	3.8	0.0	0.6	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	10.7	0.0	36.3	0.0	8.3	0.0	12.9
%ile Storage Ratio (RQ%)	0.00	0.38	0.00	0.80	0.00	0.32	0.00	0.59
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	245	0	847	0	224	0	380
Grp Sat Flow (s), veh/h/ln	0	1519	0	1599	0	1482	0	1812
Q Serve Time (g_s), s	0.0	22.2	0.0	69.6	0.0	21.9	0.0	26.6
Cycle Q Clear Time (g_c), s	0.0	22.2	0.0	69.6	0.0	21.9	0.0	26.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.83	0.00	1.00	0.00	1.00	0.00	0.22
Lane Grp Cap (c), veh/h	0	376	0	723	0	299	0	632
V/C Ratio (X)	0.00	0.65	0.00	1.17	0.00	0.75	0.00	0.60
Avail Cap (c_a), veh/h	0	376	0	723	0	299	0	632
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	52.0	0.0	42.2	0.0	57.8	0.0	41.3
Incr Delay (d2), s/veh	0.0	8.5	0.0	91.7	0.0	15.7	0.0	4.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	60.4	0.0	133.9	0.0	73.5	0.0	45.5
1st-Term Q (Q1), veh/ln	0.0	9.3	0.0	30.6	0.0	9.0	0.0	13.3
2nd-Term Q (Q2), veh/ln	0.0	0.9	0.0	18.4	0.0	1.3	0.0	0.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	10.2	0.0	49.0	0.0	10.3	0.0	14.0
%ile Storage Ratio (RQ%)	0.00	0.37	0.00	5.15	0.00	1.15	0.00	0.65
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	31.1	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		272.7						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	158	1515	200	130	977	125	219	114	177	137	61	76
Future Volume (veh/h)	158	1515	200	130	977	125	219	114	177	137	61	76
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	168	1612	213	138	1039	133	233	121	188	146	65	81
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	99	1482	193	99	1485	190	257	136	211	170	292	248
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.47	0.47	0.06	0.47	0.47	0.15	0.21	0.21	0.10	0.16	0.16
Ln Grp Delay, s/veh	425.1	93.6	105.2	283.2	35.3	35.3	83.9	0.0	86.6	80.2	58.3	61.0
Ln Grp LOS	F	F	F	F	D	D	F		F	F	E	E
Approach Vol, veh/h		1993			1310			542			292	
Approach Delay, s/veh		126.9			61.4			85.4			70.0	
Approach LOS		F			E			F			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	21.5	38.7	15.0	78.8	29.2	31.0	15.0	78.8
Change Period (Y+Rc), s	6.6	6.6	6.4	6.4	6.6	6.6	6.4	6.4
Max Green (Gmax), s	32.4	24.4	8.6	62.6	32.4	24.4	8.6	62.6
Max Allow Headway (MAH), s	3.8	5.2	3.7	5.0	3.8	5.2	3.7	5.0
Max Q Clear (g_c+I1), s	14.6	29.8	10.6	74.4	22.1	9.1	10.6	42.1
Green Ext Time (g_e), s	0.3	0.0	0.0	0.0	0.5	2.3	0.0	18.1
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.00	0.01	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1757		1774		1757		1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		652		3151		1845		3157

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1014		409		1568		404

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	146	0	138	0	233	0	168	0
Grp Sat Flow (s), veh/h/ln	1757	0	1774	0	1757	0	1774	0
Q Serve Time (g_s), s	12.6	0.0	8.6	0.0	20.1	0.0	8.6	0.0
Cycle Q Clear Time (g_c), s	12.6	0.0	8.6	0.0	20.1	0.0	8.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	170	0	99	0	257	0	99	0
V/C Ratio (X)	0.86	0.00	1.39	0.00	0.90	0.00	1.70	0.00
Avail Cap (c_a), veh/h	370	0	99	0	370	0	99	0
Upstream Filter (I)	1.00	0.00	0.62	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	68.5	0.0	72.7	0.0	64.7	0.0	72.7	0.0
Incr Delay (d2), s/veh	11.7	0.0	210.5	0.0	19.3	0.0	352.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	80.2	0.0	283.2	0.0	83.9	0.0	425.1	0.0
1st-Term Q (Q1), veh/ln	6.1	0.0	4.2	0.0	9.8	0.0	4.2	0.0
2nd-Term Q (Q2), veh/ln	0.6	0.0	5.8	0.0	1.4	0.0	9.7	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	6.7	0.0	10.0	0.0	11.2	0.0	13.9	0.0
%ile Storage Ratio (RQ%)	1.27	0.00	0.94	0.00	2.11	0.00	1.10	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	9.7	0.0	0.0	0.0	17.2	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.4	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T		T		T
Lanes in Grp	0	0	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	893	0	65	0	582
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	1845	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	72.4	0.0	4.7	0.0	40.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	72.4	0.0	4.7	0.0	40.0
Lane Grp Cap (c), veh/h	0	0	0	832	0	292	0	832
V/C Ratio (X)	0.00	0.00	0.00	1.07	0.00	0.22	0.00	0.70
Avail Cap (c_a), veh/h	0	0	0	832	0	292	0	832
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.62
Uniform Delay (d1), s/veh	0.0	0.0	0.0	40.8	0.0	56.5	0.0	32.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	52.8	0.0	1.8	0.0	3.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	93.6	0.0	58.3	0.0	35.3
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	35.4	0.0	2.4	0.0	19.6

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	12.2	0.0	0.1	0.0	0.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	47.6	0.0	2.6	0.0	20.3
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.49	0.00	0.09	0.00	0.37
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	15.3	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	309	0	932	0	81	0	590
Grp Sat Flow (s), veh/h/ln	0	1666	0	1791	0	1568	0	1791
Q Serve Time (g_s), s	0.0	27.8	0.0	72.4	0.0	7.1	0.0	40.1
Cycle Q Clear Time (g_c), s	0.0	27.8	0.0	72.4	0.0	7.1	0.0	40.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.61	0.00	0.23	0.00	1.00	0.00	0.23
Lane Grp Cap (c), veh/h	0	347	0	842	0	248	0	843
V/C Ratio (X)	0.00	0.89	0.00	1.11	0.00	0.33	0.00	0.70
Avail Cap (c_a), veh/h	0	347	0	842	0	248	0	843
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.62
Uniform Delay (d1), s/veh	0.0	59.3	0.0	40.8	0.0	57.5	0.0	32.2
Incr Delay (d2), s/veh	0.0	27.3	0.0	64.4	0.0	3.5	0.0	3.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	86.6	0.0	105.2	0.0	61.0	0.0	35.3
1st-Term Q (Q1), veh/ln	0.0	12.8	0.0	35.8	0.0	3.1	0.0	19.8
2nd-Term Q (Q2), veh/ln	0.0	2.6	0.0	15.1	0.0	0.2	0.0	0.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	15.4	0.0	50.8	0.0	3.3	0.0	20.5
%ile Storage Ratio (RQ%)	0.00	0.51	0.00	0.53	0.00	0.12	0.00	0.38
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	22.4	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		96.7						
HCM 2010 LOS		F						

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	211	1600	1078	272	215	85
Future Volume (veh/h)	211	1600	1078	272	215	85
Number	7	4	8	18	1	16
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00			1.00	1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1676	1676	1676	1710	1660	1660
Adj Flow Rate, veh/h	218	1649	1111	280	222	88
Adj No. of Lanes	1	2	2	0	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	3	3
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	140	2300	1507	377	317	283
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.09	0.72	0.60	0.60	0.20	0.20
Ln Grp Delay, s/veh	332.2	13.5	28.4	28.9	74.2	59.8
Ln Grp LOS	F	B	C	C	E	E
Approach Vol, veh/h		1867	1391		310	
Approach Delay, s/veh		50.7	28.6		70.1	
Approach LOS		D	C		E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	6			4			7	8
Case No	9.0			4.0			2.0	8.0
Phs Duration (G+Y+Rc), s	40.0			127.0			21.0	106.0
Change Period (Y+Rc), s	6.5			6.4			6.4	6.4
Max Green (Gmax), s	33.5			120.6			14.6	99.6
Max Allow Headway (MAH), s	3.9			5.0			3.7	5.0
Max Q Clear (g_c+I1), s	23.8			51.8			16.6	55.7
Green Ext Time (g_e), s	0.7			49.5			0.0	35.2
Prob of Phs Call (p_c)	1.00			1.00			1.00	1.00
Prob of Max Out (p_x)	0.00			0.00			1.00	0.00
Left-Turn Movement Data								
Assigned Mvmt	1						7	3
Mvmt Sat Flow, veh/h	1581						1597	0
Through Movement Data								
Assigned Mvmt	6			4				8
Mvmt Sat Flow, veh/h	0			3269				2610
Right-Turn Movement Data								
Assigned Mvmt	16			14				18
Mvmt Sat Flow, veh/h	1411			0				632
Left Lane Group Data								
Assigned Mvmt	1	0	0	0	0	0	7	3
Lane Assignment							(Prot)	

Lanes in Grp	1	0	0	0	0	0	1	0
Grp Vol (v), veh/h	222	0	0	0	0	0	218	0
Grp Sat Flow (s), veh/h/ln	1581	0	0	0	0	0	1597	0
Q Serve Time (g_s), s	21.8	0.0	0.0	0.0	0.0	0.0	14.6	0.0
Cycle Q Clear Time (g_c), s	21.8	0.0	0.0	0.0	0.0	0.0	14.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1581	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	99.6
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	317	0	0	0	0	0	140	0
V/C Ratio (X)	0.70	0.00	0.00	0.00	0.00	0.00	1.56	0.00
Avail Cap (c_a), veh/h	317	0	0	0	0	0	140	0
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00
Uniform Delay (d1), s/veh	62.1	0.0	0.0	0.0	0.0	0.0	76.2	0.0
Incr Delay (d2), s/veh	12.1	0.0	0.0	0.0	0.0	0.0	256.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	74.2	0.0	0.0	0.0	0.0	0.0	332.2	0.0
1st-Term Q (Q1), veh/ln	9.6	0.0	0.0	0.0	0.0	0.0	6.4	0.0
2nd-Term Q (Q2), veh/ln	1.1	0.0	0.0	0.0	0.0	0.0	9.9	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	10.6	0.0	0.0	0.0	0.0	0.0	16.4	0.0
%ile Storage Ratio (RQ%)	0.52	0.00	0.00	0.00	0.00	0.00	1.89	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	19.6	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0
Middle Lane Group Data								
Assigned Mvmt	6	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	1
Grp Vol (v), veh/h	0	0	0	1649	0	0	0	697
Grp Sat Flow (s), veh/h/ln	0	0	0	1593	0	0	0	1593
Q Serve Time (g_s), s	0.0	0.0	0.0	49.8	0.0	0.0	0.0	52.5
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	49.8	0.0	0.0	0.0	52.5
Lane Grp Cap (c), veh/h	0	0	0	2300	0	0	0	950
V/C Ratio (X)	0.00	0.00	0.00	0.72	0.00	0.00	0.00	0.73
Avail Cap (c_a), veh/h	0	0	0	2300	0	0	0	950
Upstream Filter (I)	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.83
Uniform Delay (d1), s/veh	0.0	0.0	0.0	13.4	0.0	0.0	0.0	24.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	4.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	13.5	0.0	0.0	0.0	28.4
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	21.8	0.0	0.0	0.0	23.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	1.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	21.8	0.0	0.0	0.0	24.2
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.40	0.00	0.00	0.00	0.37
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	16	0	0	14	0	0	0	18
Lane Assignment	R							T+R
Lanes in Grp	1	0	0	0	0	0	0	1
Grp Vol (v), veh/h	88	0	0	0	0	0	0	694
Grp Sat Flow (s), veh/h/ln	1411	0	0	0	0	0	0	1565
Q Serve Time (g_s), s	8.9	0.0	0.0	0.0	0.0	0.0	0.0	53.7
Cycle Q Clear Time (g_c), s	8.9	0.0	0.0	0.0	0.0	0.0	0.0	53.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
Lane Grp Cap (c), veh/h	283	0	0	0	0	0	0	933
V/C Ratio (X)	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.74
Avail Cap (c_a), veh/h	283	0	0	0	0	0	0	933
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83
Uniform Delay (d1), s/veh	56.9	0.0	0.0	0.0	0.0	0.0	0.0	24.4
Incr Delay (d2), s/veh	2.8	0.0	0.0	0.0	0.0	0.0	0.0	4.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	59.8	0.0	0.0	0.0	0.0	0.0	0.0	28.9
1st-Term Q (Q1), veh/ln	7.3	0.0	0.0	0.0	0.0	0.0	0.0	23.1
2nd-Term Q (Q2), veh/ln	0.2	0.0	0.0	0.0	0.0	0.0	0.0	1.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	7.5	0.0	0.0	0.0	0.0	0.0	0.0	24.3
%ile Storage Ratio (RQ%)	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.37
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		43.8						
HCM 2010 LOS		D						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	1611	44	73	1238	88	66	17	68	60	6	58
Future Volume (veh/h)	64	1611	44	73	1238	88	66	17	68	60	6	58
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1845	1845	1900	1845	1845
Adj Flow Rate, veh/h	65	1644	48	74	1263	90	67	17	69	61	6	59
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.98	0.98	0.92	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	77	2488	72	77	2375	169	47	12	52	66	7	65
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.04	0.71	0.71	0.04	0.71	0.71	0.03	0.03	0.03	0.04	0.04	0.04
Ln Grp Delay, s/veh	112.8	13.9	13.9	156.2	11.8	11.8	337.1	0.0	306.1	158.5	0.0	162.5
Ln Grp LOS	F	B	B	F	B	B	F		F	F		F
Approach Vol, veh/h		1757			1427			153			126	
Approach Delay, s/veh		17.6			19.3			323.2			160.4	
Approach LOS		B			B			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	6	2	3	4			7	8
Case No	11.0	11.0	2.0	4.0			2.0	4.0
Phs Duration (G+Y+Rc), s	13.0	12.0	13.0	115.0			13.0	115.0
Change Period (Y+Rc), s	6.7	6.9	6.4	* 6.6			6.4	* 6.6
Max Green (Gmax), s	6.3	5.1	6.6	* 1.1E2			6.6	* 1.1E2
Max Allow Headway (MAH), s	4.7	4.7	3.8	5.1			3.7	5.1
Max Q Clear (g_c+I1), s	7.8	7.1	8.4	41.4			7.6	29.0
Green Ext Time (g_e), s	0.0	0.0	0.0	48.6			0.0	54.7
Prob of Phs Call (p_c)	1.00	1.00	0.96	1.00			0.94	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.00			1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1	5	3				7	
Mvmt Sat Flow, veh/h	1606	1415	1774				1774	

Through Movement Data								
Assigned Mvmt	6	2		4				8
Mvmt Sat Flow, veh/h	158	359		3512				3352

Right-Turn Movement Data								
Assigned Mvmt	16	12		14				18
Mvmt Sat Flow, veh/h	1568	1568		102				238

Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	7	0
Lane Assignment	L+T	L+T	(Prot)				(Prot)	

Lanes in Grp	1	1	1	0	0	0	1	0
Grp Vol (v), veh/h	67	84	74	0	0	0	65	0
Grp Sat Flow (s), veh/h/ln	1764	1774	1774	0	0	0	1774	0
Q Serve Time (g_s), s	5.8	5.1	6.4	0.0	0.0	0.0	5.6	0.0
Cycle Q Clear Time (g_c), s	5.8	5.1	6.4	0.0	0.0	0.0	5.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.91	0.80	1.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	73	59	77	0	0	0	77	0
V/C Ratio (X)	0.92	1.42	0.97	0.00	0.00	0.00	0.85	0.00
Avail Cap (c_a), veh/h	73	59	77	0	0	0	77	0
Upstream Filter (I)	1.00	1.00	0.84	0.00	0.00	0.00	0.63	0.00
Uniform Delay (d1), s/veh	73.1	74.0	73.1	0.0	0.0	0.0	72.7	0.0
Incr Delay (d2), s/veh	85.4	263.2	83.1	0.0	0.0	0.0	40.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	158.5	337.1	156.2	0.0	0.0	0.0	112.8	0.0
1st-Term Q (Q1), veh/ln	2.8	2.5	3.1	0.0	0.0	0.0	2.7	0.0
2nd-Term Q (Q2), veh/ln	1.7	4.3	1.8	0.0	0.0	0.0	0.9	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	4.6	6.8	4.9	0.0	0.0	0.0	3.6	0.0
%ile Storage Ratio (RQ%)	0.23	0.38	0.37	0.00	0.00	0.00	0.50	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	6.2	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	6	2	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	826	0	0	0	666
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	39.1	0.0	0.0	0.0	26.9
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	39.1	0.0	0.0	0.0	26.9
Lane Grp Cap (c), veh/h	0	0	0	1254	0	0	0	1254
V/C Ratio (X)	0.00	0.00	0.00	0.66	0.00	0.00	0.00	0.53
Avail Cap (c_a), veh/h	0	0	0	1254	0	0	0	1254
Upstream Filter (I)	0.00	0.00	0.00	0.63	0.00	0.00	0.00	0.84
Uniform Delay (d1), s/veh	0.0	0.0	0.0	12.2	0.0	0.0	0.0	10.4
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.7	0.0	0.0	0.0	1.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	13.9	0.0	0.0	0.0	11.8
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	18.8	0.0	0.0	0.0	12.9

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	19.4	0.0	0.0	0.0	13.4
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.28	0.00	0.00	0.00	0.79
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	16	12	0	14	0	0	0	18
Lane Assignment	R	R		T+R				T+R
Lanes in Grp	1	1	0	1	0	0	0	1
Grp Vol (v), veh/h	59	69	0	866	0	0	0	687
Grp Sat Flow (s), veh/h/ln	1568	1568	0	1845	0	0	0	1821
Q Serve Time (g_s), s	5.7	5.1	0.0	39.4	0.0	0.0	0.0	27.0
Cycle Q Clear Time (g_c), s	5.7	5.1	0.0	39.4	0.0	0.0	0.0	27.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	1.00	0.00	0.06	0.00	0.00	0.00	0.13
Lane Grp Cap (c), veh/h	65	52	0	1307	0	0	0	1290
V/C Ratio (X)	0.91	1.32	0.00	0.66	0.00	0.00	0.00	0.53
Avail Cap (c_a), veh/h	65	52	0	1307	0	0	0	1290
Upstream Filter (I)	1.00	1.00	0.00	0.63	0.00	0.00	0.00	0.84
Uniform Delay (d1), s/veh	73.1	73.9	0.0	12.3	0.0	0.0	0.0	10.4
Incr Delay (d2), s/veh	89.4	232.2	0.0	1.7	0.0	0.0	0.0	1.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	162.5	306.1	0.0	13.9	0.0	0.0	0.0	11.8
1st-Term Q (Q1), veh/ln	2.5	2.2	0.0	20.0	0.0	0.0	0.0	13.6
2nd-Term Q (Q2), veh/ln	1.6	3.4	0.0	0.6	0.0	0.0	0.0	0.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	4.1	5.6	0.0	20.6	0.0	0.0	0.0	14.0
%ile Storage Ratio (RQ%)	2.62	1.30	0.00	0.30	0.00	0.00	0.00	0.82
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	37.0
HCM 2010 LOS	D

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1500	224	258	1128	257	262
Future Volume (veh/h)	1500	224	258	1128	257	262
Number	4	14	3	8	5	12
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)		1.00	1.00		1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1845	1845
Adj Flow Rate, veh/h	1562	233	269	1175	268	273
Adj No. of Lanes	2	0	1	2	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	3	3
Opposing Right Turn Influence			Yes		Yes	
Cap, veh/h	1811	265	219	2641	310	277
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.58	0.58	0.12	0.75	0.18	0.18
Ln Grp Delay, s/veh	35.0	37.2	203.7	8.5	92.6	119.1
Ln Grp LOS	C	D	F	A	F	F
Approach Vol, veh/h	1795			1444	541	
Approach Delay, s/veh	36.1			44.9	106.0	
Approach LOS	D			D	F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Case No		9.0	2.0	8.0				4.0
Phs Duration (G+Y+Rc), s		36.0	27.0	104.0				131.0
Change Period (Y+Rc), s		6.5	6.4	6.4				6.4
Max Green (Gmax), s		29.5	20.6	97.6				124.6
Max Allow Headway (MAH), s		3.9	3.8	5.3				5.3
Max Q Clear (g_c+I1), s		31.0	22.6	75.2				23.1
Green Ext Time (g_e), s		0.0	0.0	20.3				68.6
Prob of Phs Call (p_c)		1.00	1.00	1.00				1.00
Prob of Max Out (p_x)		0.00	1.00	0.00				0.00

Left-Turn Movement Data			
Assigned Mvmt	5	3	7
Mvmt Sat Flow, veh/h	1757	1774	0

Through Movement Data			
Assigned Mvmt	2	4	8
Mvmt Sat Flow, veh/h	0	3191	3632

Right-Turn Movement Data			
Assigned Mvmt	12	14	18
Mvmt Sat Flow, veh/h	1568	454	0

Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	0	0	0
Lane Assignment			(Prot)					

Lanes in Grp	0	1	1	0	0	0	0	0
Grp Vol (v), veh/h	0	268	269	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1757	1774	0	0	0	0	0
Q Serve Time (g_s), s	0.0	24.8	20.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	24.8	20.6	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1757	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	97.6	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	310	219	0	0	0	0	0
V/C Ratio (X)	0.00	0.86	1.23	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	310	219	0	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.79	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	66.8	73.2	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	25.8	130.5	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	92.6	203.7	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	12.1	10.1	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	2.2	7.9	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	14.3	18.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.59	1.99	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	12.5	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	2
Grp Vol (v), veh/h	0	0	0	880	0	0	0	1175
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	68.7	0.0	0.0	0.0	21.1
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	68.7	0.0	0.0	0.0	21.1
Lane Grp Cap (c), veh/h	0	0	0	1034	0	0	0	2641
V/C Ratio (X)	0.00	0.00	0.00	0.85	0.00	0.00	0.00	0.44
Avail Cap (c_a), veh/h	0	0	0	1034	0	0	0	2641
Upstream Filter (I)	0.00	0.00	0.00	0.69	0.00	0.00	0.00	0.79
Uniform Delay (d1), s/veh	0.0	0.0	0.0	28.7	0.0	0.0	0.0	8.1
Incr Delay (d2), s/veh	0.0	0.0	0.0	6.3	0.0	0.0	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	35.0	0.0	0.0	0.0	8.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	33.5	0.0	0.0	0.0	10.1

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	35.3	0.0	0.0	0.0	10.3
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	2.08	0.00	0.00	0.00	0.26
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	0	0	18
Lane Assignment		R		T+R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	273	0	915	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1568	0	1783	0	0	0	0
Q Serve Time (g_s), s	0.0	29.0	0.0	73.2	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	29.0	0.0	73.2	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.25	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	277	0	1042	0	0	0	0
V/C Ratio (X)	0.00	0.99	0.00	0.88	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	277	0	1042	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.69	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	68.5	0.0	29.6	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	50.6	0.0	7.6	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	119.1	0.0	37.2	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	12.6	0.0	35.8	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	3.9	0.0	2.2	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	16.4	0.0	38.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.68	0.00	2.24	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		49.5						
HCM 2010 LOS		D						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	1579	265	87	1306	19	105	3	71	11	3	21
Future Volume (veh/h)	41	1579	265	87	1306	19	105	3	71	11	3	21
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1900	1900	1845	1900
Adj Flow Rate, veh/h	43	1662	279	92	1375	20	111	3	75	12	3	22
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	55	2237	365	55	2622	38	309	12	303	106	37	166
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.73	0.73	0.03	0.73	0.73	0.20	0.20	0.20	0.20	0.20	0.20
Ln Grp Delay, s/veh	102.9	13.8	14.8	436.5	10.5	10.5	60.0	0.0	56.1	53.5	0.0	0.0
Ln Grp LOS	F	B	B	F	B	B	E		E	D		
Approach Vol, veh/h		1984			1487			189			37	
Approach Delay, s/veh		16.2			36.8			58.4			53.5	
Approach LOS		B			D			E			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		6.0	2.0	4.0		8.0	2.0	4.0
Phs Duration (G+Y+Rc), s		39.0	11.4	125.0		39.0	11.4	125.0
Change Period (Y+Rc), s		* 6.8	6.4	6.4		* 6.8	6.4	6.4
Max Green (Gmax), s		* 32	5.0	104.6		* 32	5.0	104.6
Max Allow Headway (MAH), s		4.7	3.8	5.3		4.7	3.8	5.3
Max Q Clear (g_c+I1), s		14.6	7.0	56.6		8.8	5.9	28.8
Green Ext Time (g_e), s		0.9	0.0	42.4		1.0	0.0	62.8
Prob of Phs Call (p_c)		1.00	0.98	1.00		1.00	0.85	1.00
Prob of Max Out (p_x)		0.00	1.00	0.00		0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		1367	1774			382	1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		61		3047		183		3571

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1516		498		829		52

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0
Lane Assignment			(Prot)			L+T+R	(Prot)	

Lanes in Grp	0	1	1	0	0	1	1	0
Grp Vol (v), veh/h	0	111	92	0	0	37	43	0
Grp Sat Flow (s), veh/h/ln	0	1367	1774	0	0	1394	1774	0
Q Serve Time (g_s), s	0.0	5.8	5.0	0.0	0.0	0.1	3.9	0.0
Cycle Q Clear Time (g_c), s	0.0	12.6	5.0	0.0	0.0	6.8	3.9	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1367	0	0	0	1342	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	1147	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	32.2	0.0	0.0	0.0	32.2	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	25.4	0.0	0.0	0.0	25.5	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	5.8	0.0	0.0	0.0	0.1	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	4.2	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	2.9	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	0.00	0.32	1.00	0.00
Lane Grp Cap (c), veh/h	0	309	55	0	0	308	55	0
V/C Ratio (X)	0.00	0.36	1.67	0.00	0.00	0.12	0.78	0.00
Avail Cap (c_a), veh/h	0	309	55	0	0	308	55	0
Upstream Filter (I)	0.00	1.00	0.83	0.00	0.00	1.00	0.42	0.00
Uniform Delay (d1), s/veh	0.0	56.8	78.0	0.0	0.0	52.7	77.5	0.0
Incr Delay (d2), s/veh	0.0	3.2	358.5	0.0	0.0	0.8	25.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	60.0	436.5	0.0	0.0	53.5	102.9	0.0
1st-Term Q (Q1), veh/ln	0.0	4.3	2.4	0.0	0.0	1.3	1.9	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	5.5	0.0	0.0	0.1	0.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	4.6	7.9	0.0	0.0	1.4	2.3	0.0
%ile Storage Ratio (RQ%)	0.00	0.54	0.84	0.00	0.00	0.12	0.31	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	9.2	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	946	0	0	0	681
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	49.1	0.0	0.0	0.0	26.8
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	49.1	0.0	0.0	0.0	26.8
Lane Grp Cap (c), veh/h	0	0	0	1299	0	0	0	1299
V/C Ratio (X)	0.00	0.00	0.00	0.73	0.00	0.00	0.00	0.52
Avail Cap (c_a), veh/h	0	0	0	1299	0	0	0	1299
Upstream Filter (I)	0.00	0.00	0.00	0.42	0.00	0.00	0.00	0.83
Uniform Delay (d1), s/veh	0.0	0.0	0.0	12.2	0.0	0.0	0.0	9.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.5	0.0	0.0	0.0	1.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	13.8	0.0	0.0	0.0	10.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	23.6	0.0	0.0	0.0	12.9

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	24.2	0.0	0.0	0.0	13.3
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.78	0.00	0.00	0.00	0.19
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R				T+R
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	78	0	995	0	0	0	714
Grp Sat Flow (s), veh/h/ln	0	1577	0	1775	0	0	0	1854
Q Serve Time (g_s), s	0.0	6.7	0.0	54.6	0.0	0.0	0.0	26.8
Cycle Q Clear Time (g_c), s	0.0	6.7	0.0	54.6	0.0	0.0	0.0	26.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.96	0.00	0.28	0.00	0.59	0.00	0.03
Lane Grp Cap (c), veh/h	0	315	0	1303	0	0	0	1361
V/C Ratio (X)	0.00	0.25	0.00	0.76	0.00	0.00	0.00	0.52
Avail Cap (c_a), veh/h	0	315	0	1303	0	0	0	1361
Upstream Filter (I)	0.00	1.00	0.00	0.42	0.00	0.00	0.00	0.83
Uniform Delay (d1), s/veh	0.0	54.2	0.0	12.9	0.0	0.0	0.0	9.3
Incr Delay (d2), s/veh	0.0	1.9	0.0	1.8	0.0	0.0	0.0	1.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	56.1	0.0	14.8	0.0	0.0	0.0	10.5
1st-Term Q (Q1), veh/ln	0.0	2.9	0.0	26.5	0.0	0.0	0.0	13.5
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.7	0.0	0.0	0.0	0.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	3.1	0.0	27.2	0.0	0.0	0.0	13.9
%ile Storage Ratio (RQ%)	0.00	0.27	0.00	0.88	0.00	0.00	0.00	0.20
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	27.0
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	1435	231	257	1306	5	176	0	190	3	4	4
Future Volume (veh/h)	6	1435	231	257	1306	5	176	0	190	3	4	4
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1845	1900	1845	1900
Adj Flow Rate, veh/h	6	1495	241	268	1360	5	183	0	198	3	4	4
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	0	1	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	293	1998	317	289	2783	10	290	326	277	87	114	100
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.65	0.65	0.65	0.09	0.77	0.77	0.18	0.00	0.18	0.18	0.18	0.18
Ln Grp Delay, s/veh	11.6	21.2	21.9	48.4	7.2	7.2	75.0	0.0	79.4	57.2	0.0	0.0
Ln Grp LOS	B	C	C	D	A	A	E		E	E		
Approach Vol, veh/h		1742			1633			381			11	
Approach Delay, s/veh		21.5			14.0			77.3			57.2	
Approach LOS		C			B			E			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Case No		5.0	1.2	6.0		8.0		4.0
Phs Duration (G+Y+Rc), s		34.0	19.5	113.5		34.0		133.0
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5		4.5
Max Green (Gmax), s		29.5	18.5	105.5		29.5		128.5
Max Allow Headway (MAH), s		4.0	3.8	5.3		4.0		5.3
Max Q Clear (g_c+I1), s		22.6	14.7	59.2		2.9		25.2
Green Ext Time (g_e), s		0.8	0.3	38.7		1.3		71.4
Prob of Phs Call (p_c)		1.00	1.00	1.00		1.00		1.00
Prob of Max Out (p_x)		0.00	1.00	0.00		0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3	7		1		
Mvmt Sat Flow, veh/h		1388	1774	397		338		

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1845		3061		648		3617

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		485		563		13

Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	1	0	0
Lane Assignment			(Pr/Pm)			L+T+R		

Lanes in Grp	0	1	1	1	0	1	0	0
Grp Vol (v), veh/h	0	183	268	6	0	11	0	0
Grp Sat Flow (s), veh/h/ln	0	1388	1774	397	0	1550	0	0
Q Serve Time (g_s), s	0.0	19.7	12.7	0.9	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	20.6	12.7	4.6	0.0	0.9	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1388	277	397	0	1203	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	1757	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	29.5	111.0	109.0	0.0	29.5	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	28.6	51.8	105.3	0.0	29.5	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	19.7	51.8	0.9	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	5.3	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	1.00	0.00	0.27	0.00	0.00
Lane Grp Cap (c), veh/h	0	290	289	293	0	301	0	0
V/C Ratio (X)	0.00	0.63	0.93	0.02	0.00	0.04	0.00	0.00
Avail Cap (c_a), veh/h	0	290	326	293	0	301	0	0
Upstream Filter (I)	0.00	1.00	0.09	0.39	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	65.0	43.8	11.6	0.0	57.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	10.0	4.6	0.0	0.0	0.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	75.0	48.4	11.6	0.0	57.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	8.0	12.2	0.1	0.0	0.4	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.8	0.4	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	8.8	12.6	0.1	0.0	0.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.61	1.00	0.01	0.00	0.04	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T				T
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	854	0	0	0	665
Grp Sat Flow (s), veh/h/ln	0	1845	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	54.1	0.0	0.0	0.0	23.2
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	54.1	0.0	0.0	0.0	23.2
Lane Grp Cap (c), veh/h	0	326	0	1155	0	0	0	1362
V/C Ratio (X)	0.00	0.00	0.00	0.74	0.00	0.00	0.00	0.49
Avail Cap (c_a), veh/h	0	326	0	1155	0	0	0	1362
Upstream Filter (I)	0.00	0.00	0.00	0.39	0.00	0.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	0.0	0.0	19.5	0.0	0.0	0.0	7.1
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	21.2	0.0	0.0	0.0	7.2
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	26.3	0.0	0.0	0.0	11.3

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	26.9	0.0	0.0	0.0	11.3
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.38	0.00	0.00	0.00	0.29
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R				T+R
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	198	0	882	0	0	0	700
Grp Sat Flow (s), veh/h/ln	0	1568	0	1777	0	0	0	1860
Q Serve Time (g_s), s	0.0	19.9	0.0	57.2	0.0	0.0	0.0	23.2
Cycle Q Clear Time (g_c), s	0.0	19.9	0.0	57.2	0.0	0.0	0.0	23.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.27	0.00	0.36	0.00	0.01
Lane Grp Cap (c), veh/h	0	277	0	1160	0	0	0	1432
V/C Ratio (X)	0.00	0.71	0.00	0.76	0.00	0.00	0.00	0.49
Avail Cap (c_a), veh/h	0	277	0	1160	0	0	0	1432
Upstream Filter (I)	0.00	1.00	0.00	0.39	0.00	0.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	64.8	0.0	20.0	0.0	0.0	0.0	7.1
Incr Delay (d2), s/veh	0.0	14.6	0.0	1.9	0.0	0.0	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	79.4	0.0	21.9	0.0	0.0	0.0	7.2
1st-Term Q (Q1), veh/ln	0.0	8.6	0.0	27.9	0.0	0.0	0.0	11.9
2nd-Term Q (Q2), veh/ln	0.0	1.1	0.0	0.6	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	9.7	0.0	28.5	0.0	0.0	0.0	11.9
%ile Storage Ratio (RQ%)	0.00	0.79	0.00	0.41	0.00	0.00	0.00	0.31
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		24.0						
HCM 2010 LOS		C						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	57	1641	0	23	1613	153	0	0	28	106	0	38
Future Volume (veh/h)	57	1641	0	23	1613	153	0	0	28	106	0	38
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	0	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	58	1674	0	23	1646	156	0	0	29	108	0	39
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	1	1	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	0	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			No			Yes		
Cap, veh/h	92	1275	0	47	1096	103	0	0	470	511	0	470
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.36	0.00	0.03	0.34	0.34	0.00	0.00	0.30	0.30	0.00	0.30
Ln Grp Delay, s/veh	32.0	163.5	0.0	36.4	248.0	261.9	0.0	0.0	15.2	17.5	0.0	15.4
Ln Grp LOS	C	F		D	F	F			B	B		B
Approach Vol, veh/h		1732			1825			29			147	
Approach Delay, s/veh		159.1			252.3			15.2			17.0	
Approach LOS		F			F			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		8.0	2.0	4.0		6.0	2.0	4.0
Phs Duration (G+Y+Rc), s		24.0	8.0	28.0		24.0	9.5	26.5
Change Period (Y+Rc), s		6.0	6.4	6.4		6.0	6.4	6.4
Max Green (Gmax), s		18.0	5.0	18.6		18.0	5.0	18.6
Max Allow Headway (MAH), s		4.5	3.8	5.3		4.5	3.8	5.3
Max Q Clear (g_c+I1), s		2.8	2.8	23.6		6.5	3.9	22.1
Green Ext Time (g_e), s		0.6	0.0	0.0		0.5	0.0	0.0
Prob of Phs Call (p_c)		1.00	0.32	1.00		1.00	0.62	1.00
Prob of Max Out (p_x)		0.00	1.00	0.00		0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		0	1774			1362	1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		0		3632		0		3272

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		0		1568		307

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0
Lane Assignment			(Prot)				(Prot)	

Lanes in Grp	0	0	1	0	0	1	1	0
Grp Vol (v), veh/h	0	0	23	0	0	108	58	0
Grp Sat Flow (s), veh/h/ln	0	0	1774	0	0	1362	1774	0
Q Serve Time (g_s), s	0.0	0.0	0.8	0.0	0.0	3.7	1.9	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.8	0.0	0.0	4.5	1.9	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	1362	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	18.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	17.2	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	3.7	0.0	0.0
Time to First Blk (g_f), s	0.0	18.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	47	0	0	511	92	0
V/C Ratio (X)	0.00	0.00	0.49	0.00	0.00	0.21	0.63	0.00
Avail Cap (c_a), veh/h	0	0	148	0	0	511	148	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	1.00	0.57	0.00
Uniform Delay (d1), s/veh	0.0	0.0	28.8	0.0	0.0	16.6	27.9	0.0
Incr Delay (d2), s/veh	0.0	0.0	7.6	0.0	0.0	0.9	4.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	36.4	0.0	0.0	17.5	32.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.4	0.0	0.0	1.4	0.9	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.5	0.0	0.0	1.5	1.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.06	0.00	0.00	0.26	0.15	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	1
Grp Vol (v), veh/h	0	0	0	1674	0	0	0	882
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	21.6	0.0	0.0	0.0	20.1
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	21.6	0.0	0.0	0.0	20.1
Lane Grp Cap (c), veh/h	0	0	0	1275	0	0	0	593
V/C Ratio (X)	0.00	0.00	0.00	1.31	0.00	0.00	0.00	1.49
Avail Cap (c_a), veh/h	0	0	0	1275	0	0	0	593
Upstream Filter (I)	0.00	0.00	0.00	0.57	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	19.2	0.0	0.0	0.0	19.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	144.3	0.0	0.0	0.0	228.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	163.5	0.0	0.0	0.0	248.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	10.4	0.0	0.0	0.0	9.7

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	25.5	0.0	0.0	0.0	37.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	36.0	0.0	0.0	0.0	47.3
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.94	0.00	0.00	0.00	3.90
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	99.9	0.0	0.0	0.0	72.2
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.4
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R				T+R		T+R
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	29	0	0	0	39	0	920
Grp Sat Flow (s), veh/h/ln	0	1568	0	0	0	1568	0	1809
Q Serve Time (g_s), s	0.0	0.8	0.0	0.0	0.0	1.1	0.0	20.1
Cycle Q Clear Time (g_c), s	0.0	0.8	0.0	0.0	0.0	1.1	0.0	20.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.17
Lane Grp Cap (c), veh/h	0	470	0	0	0	470	0	606
V/C Ratio (X)	0.00	0.06	0.00	0.00	0.00	0.08	0.00	1.52
Avail Cap (c_a), veh/h	0	470	0	0	0	470	0	606
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	15.0	0.0	0.0	0.0	15.1	0.0	19.9
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.0	0.0	0.3	0.0	241.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	15.2	0.0	0.0	0.0	15.4	0.0	261.9
1st-Term Q (Q1), veh/ln	0.0	0.3	0.0	0.0	0.0	0.5	0.0	9.9
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.4	0.0	0.0	0.0	0.5	0.0	50.7
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.00	0.00	0.04	0.00	4.18
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	78.6
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
Intersection Summary								
HCM 2010 Ctrl Delay		198.0						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	488	1019	219	356	879	114	327	1004	306	245	961	482
Future Volume (veh/h)	488	1019	219	356	879	114	327	1004	306	245	961	482
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	519	1084	233	379	935	121	348	1068	326	261	1022	513
Adj No. of Lanes	2	3	0	2	3	0	2	3	0	2	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	522	1138	245	436	1124	145	353	1122	342	323	955	446
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.15	0.27	0.27	0.13	0.25	0.25	0.10	0.29	0.29	0.09	0.28	0.28
Ln Grp Delay, s/veh	86.9	61.6	73.1	65.2	50.8	58.5	96.2	59.3	70.9	60.6	91.3	132.1
Ln Grp LOS	F	E	E	E	D	E	F	E	E	E	F	F
Approach Vol, veh/h		1836			1435			1742			1796	
Approach Delay, s/veh		71.5			56.5			69.7			98.5	
Approach LOS		E			E			E			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	4.0
Phs Duration (G+Y+Rc), s	17.0	40.0	21.1	37.9	18.0	39.0	24.0	35.0
Change Period (Y+Rc), s	6.0	6.0	6.4	6.4	6.0	6.0	6.4	6.4
Max Green (Gmax), s	14.0	31.0	15.6	30.6	12.0	33.0	17.6	28.6
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.3	3.8	5.3	3.8	5.3
Max Q Clear (g_c+I1), s	10.7	33.7	14.5	31.5	13.8	35.0	19.5	24.6
Green Ext Time (g_e), s	0.3	0.0	0.2	0.0	0.0	0.0	0.0	3.6
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3408		3442		3408		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3828		4193		3357		4561

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1168		901		1568		588

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	261	0	379	0	348	0	519	0
Grp Sat Flow (s), veh/h/ln	1704	0	1721	0	1704	0	1721	0
Q Serve Time (g_s), s	8.7	0.0	12.5	0.0	11.8	0.0	17.5	0.0
Cycle Q Clear Time (g_c), s	8.7	0.0	12.5	0.0	11.8	0.0	17.5	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	323	0	436	0	353	0	522	0
V/C Ratio (X)	0.81	0.00	0.87	0.00	0.99	0.00	0.99	0.00
Avail Cap (c_a), veh/h	411	0	463	0	353	0	522	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	51.5	0.0	49.7	0.0	51.9	0.0	49.1	0.0
Incr Delay (d2), s/veh	9.1	0.0	15.5	0.0	44.3	0.0	37.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	60.6	0.0	65.2	0.0	96.2	0.0	86.9	0.0
1st-Term Q (Q1), veh/ln	4.1	0.0	5.9	0.0	5.6	0.0	8.3	0.0
2nd-Term Q (Q2), veh/ln	0.4	0.0	0.9	0.0	2.2	0.0	2.7	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	4.5	0.0	6.9	0.0	7.7	0.0	11.0	0.0
%ile Storage Ratio (RQ%)	0.36	0.00	1.03	0.00	0.62	0.00	0.93	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	2	0	2
Grp Vol (v), veh/h	0	937	0	876	0	1022	0	694
Grp Sat Flow (s), veh/h/ln	0	1679	0	1695	0	1679	0	1695
Q Serve Time (g_s), s	0.0	31.7	0.0	29.5	0.0	33.0	0.0	22.5
Cycle Q Clear Time (g_c), s	0.0	31.7	0.0	29.5	0.0	33.0	0.0	22.5
Lane Grp Cap (c), veh/h	0	984	0	920	0	955	0	836
V/C Ratio (X)	0.00	0.95	0.00	0.95	0.00	1.07	0.00	0.83
Avail Cap (c_a), veh/h	0	984	0	920	0	955	0	836
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	40.2	0.0	41.5	0.0	41.5	0.0	41.4
Incr Delay (d2), s/veh	0.0	19.1	0.0	20.1	0.0	49.8	0.0	9.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	59.3	0.0	61.6	0.0	91.3	0.0	50.8
1st-Term Q (Q1), veh/ln	0.0	14.7	0.0	13.8	0.0	15.3	0.0	10.5

2nd-Term Q (Q2), veh/ln	0.0	2.6	0.0	2.6	0.0	6.6	0.0	1.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	17.3	0.0	16.3	0.0	21.9	0.0	11.6
%ile Storage Ratio (RQ%)	0.00	0.97	0.00	0.65	0.00	0.84	0.00	1.84
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	16.7	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	457	0	441	0	513	0	362
Grp Sat Flow (s), veh/h/ln	0	1639	0	1704	0	1568	0	1759
Q Serve Time (g_s), s	0.0	31.7	0.0	29.5	0.0	33.0	0.0	22.6
Cycle Q Clear Time (g_c), s	0.0	31.7	0.0	29.5	0.0	33.0	0.0	22.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.71	0.00	0.53	0.00	1.00	0.00	0.33
Lane Grp Cap (c), veh/h	0	480	0	463	0	446	0	434
V/C Ratio (X)	0.00	0.95	0.00	0.95	0.00	1.15	0.00	0.83
Avail Cap (c_a), veh/h	0	480	0	463	0	446	0	434
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	40.2	0.0	41.5	0.0	41.5	0.0	41.5
Incr Delay (d2), s/veh	0.0	30.7	0.0	31.6	0.0	90.6	0.0	17.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	70.9	0.0	73.1	0.0	132.1	0.0	58.5
1st-Term Q (Q1), veh/ln	0.0	14.4	0.0	13.8	0.0	14.2	0.0	11.0
2nd-Term Q (Q2), veh/ln	0.0	4.1	0.0	4.1	0.0	11.2	0.0	2.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	18.4	0.0	17.9	0.0	25.5	0.0	13.0
%ile Storage Ratio (RQ%)	0.00	1.03	0.00	0.72	0.00	0.97	0.00	2.06
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	16.7	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		75.0						
HCM 2010 LOS		E						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	161	1341	44	0	1240	133	125	47	3	92	35	60
Future Volume (veh/h)	161	1341	44	0	1240	133	125	47	3	92	35	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	0	1863	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	166	1382	45	0	1278	137	129	48	3	95	36	62
Adj No. of Lanes	1	2	0	0	2	0	1	1	1	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	0	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			No			Yes			Yes		
Cap, veh/h	96	2396	78	0	1920	205	49	337	286	49	337	286
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.68	0.68	0.00	0.59	0.59	0.03	0.18	0.18	0.03	0.18	0.18
Ln Grp Delay, s/veh	454.6	16.6	16.6	0.0	27.4	27.5	867.7	61.9	59.6	568.4	61.3	63.6
Ln Grp LOS	F	B	B		C	C	F	E	E	F	E	E
Approach Vol, veh/h		1593			1415			180			193	
Approach Delay, s/veh		62.2			27.5			639.4			311.6	
Approach LOS		E			C			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6	7	8
Case No	2.0	3.0		4.0	2.0	3.0	2.0	8.0
Phs Duration (G+Y+Rc), s	10.7	39.0		128.3	10.7	39.0	16.0	112.3
Change Period (Y+Rc), s	* 5.7	6.5		6.4	* 5.7	6.5	6.4	6.4
Max Green (Gmax), s	* 5	32.5		121.6	* 5	32.5	9.6	105.6
Max Allow Headway (MAH), s	3.8	4.7		5.3	3.8	4.7	3.8	5.3
Max Q Clear (g_c+I1), s	7.0	5.9		38.7	7.0	8.0	11.6	49.6
Green Ext Time (g_e), s	0.0	0.6		52.4	0.0	0.6	0.0	40.5
Prob of Phs Call (p_c)	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	0.00	0.00		0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1				5		7	3
Mvmt Sat Flow, veh/h	1757				1757		1774	0

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1845		3498		1845		3320

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		114		1568		345

Left Lane Group Data								
Assigned Mvmt	1	0	0	0	5	0	7	3
Lane Assignment	(Prot)				(Prot)		(Prot)	

Lanes in Grp	1	0	0	0	1	0	1	0
Grp Vol (v), veh/h	95	0	0	0	129	0	166	0
Grp Sat Flow (s), veh/h/ln	1757	0	0	0	1757	0	1774	0
Q Serve Time (g_s), s	5.0	0.0	0.0	0.0	5.0	0.0	9.6	0.0
Cycle Q Clear Time (g_c), s	5.0	0.0	0.0	0.0	5.0	0.0	9.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	105.9
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	49	0	0	0	49	0	96	0
V/C Ratio (X)	1.93	0.00	0.00	0.00	2.61	0.00	1.73	0.00
Avail Cap (c_a), veh/h	49	0	0	0	49	0	96	0
Upstream Filter (I)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	86.5	0.0	0.0	0.0	86.5	0.0	84.2	0.0
Incr Delay (d2), s/veh	481.9	0.0	0.0	0.0	781.2	0.0	370.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	568.4	0.0	0.0	0.0	867.7	0.0	454.6	0.0
1st-Term Q (Q1), veh/ln	2.4	0.0	0.0	0.0	2.4	0.0	4.7	0.0
2nd-Term Q (Q2), veh/ln	6.6	0.0	0.0	0.0	10.7	0.0	9.8	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	9.0	0.0	0.0	0.0	13.1	0.0	14.5	0.0
%ile Storage Ratio (RQ%)	2.31	0.00	0.00	0.00	2.40	0.00	0.88	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	11.4	0.0	0.0	0.0	19.9	0.0	17.6	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.5	0.0	0.0	0.0	0.7	0.0	0.4	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	48	0	698	0	36	0	699
Grp Sat Flow (s), veh/h/ln	0	1845	0	1770	0	1845	0	1770
Q Serve Time (g_s), s	0.0	3.9	0.0	36.6	0.0	2.9	0.0	47.0
Cycle Q Clear Time (g_c), s	0.0	3.9	0.0	36.6	0.0	2.9	0.0	47.0
Lane Grp Cap (c), veh/h	0	337	0	1212	0	337	0	1053
V/C Ratio (X)	0.00	0.14	0.00	0.58	0.00	0.11	0.00	0.66
Avail Cap (c_a), veh/h	0	337	0	1212	0	337	0	1053
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	61.1	0.0	14.6	0.0	60.7	0.0	24.1
Incr Delay (d2), s/veh	0.0	0.9	0.0	2.0	0.0	0.6	0.0	3.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	61.9	0.0	16.6	0.0	61.3	0.0	27.4
1st-Term Q (Q1), veh/ln	0.0	2.0	0.0	17.8	0.0	1.5	0.0	22.9

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.7	0.0	0.1	0.0	1.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.1	0.0	18.5	0.0	1.5	0.0	23.9
%ile Storage Ratio (RQ%)	0.00	0.21	0.00	0.22	0.00	0.08	0.00	0.48
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	3	0	729	0	62	0	716
Grp Sat Flow (s), veh/h/ln	0	1568	0	1843	0	1568	0	1802
Q Serve Time (g_s), s	0.0	0.3	0.0	36.7	0.0	6.0	0.0	47.6
Cycle Q Clear Time (g_c), s	0.0	0.3	0.0	36.7	0.0	6.0	0.0	47.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.06	0.00	1.00	0.00	0.19
Lane Grp Cap (c), veh/h	0	286	0	1262	0	286	0	1072
V/C Ratio (X)	0.00	0.01	0.00	0.58	0.00	0.22	0.00	0.67
Avail Cap (c_a), veh/h	0	286	0	1262	0	286	0	1072
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	59.6	0.0	14.6	0.0	61.9	0.0	24.2
Incr Delay (d2), s/veh	0.0	0.1	0.0	1.9	0.0	1.7	0.0	3.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	59.6	0.0	16.6	0.0	63.6	0.0	27.5
1st-Term Q (Q1), veh/ln	0.0	0.1	0.0	18.6	0.0	5.6	0.0	23.7
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.7	0.0	0.1	0.0	1.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.1	0.0	19.3	0.0	5.7	0.0	24.7
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.23	0.00	0.30	0.00	0.49
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	92.6
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	428	828	159	249	698	228	426	1638	217	364	1020	239
Future Volume (veh/h)	428	828	159	249	698	228	426	1638	217	364	1020	239
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	437	845	162	254	712	233	435	1671	221	371	1041	244
Adj No. of Lanes	2	3	0	2	3	1	2	3	0	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	327	932	178	159	856	266	482	2034	268	422	1771	415
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.10	0.22	0.22	0.05	0.17	0.17	0.14	0.45	0.45	0.12	0.43	0.43
Ln Grp Delay, s/veh	244.3	79.4	91.7	372.4	75.2	97.0	86.3	44.3	48.9	83.2	37.0	38.7
Ln Grp LOS	F	E	F	F	E	F	F	D	D	F	D	D
Approach Vol, veh/h		1444			1199			2327			1656	
Approach Delay, s/veh		132.2			142.4			53.4			47.8	
Approach LOS		F			F			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	27.1	80.9	14.0	42.0	30.0	78.0	22.0	34.0
Change Period (Y+Rc), s	6.8	6.8	6.4	6.4	6.8	6.8	6.4	6.4
Max Green (Gmax), s	26.2	71.2	7.6	32.6	26.2	71.2	15.6	24.6
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.1	3.8	5.3	3.8	5.1
Max Q Clear (g_c+I1), s	19.6	55.4	9.6	33.7	22.6	33.9	17.6	25.5
Green Ext Time (g_e), s	0.8	14.7	0.0	0.0	0.6	32.1	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	0.18	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3408		3442		3408		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		4504		4291		4078		5085

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		593		818		955		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	371	0	254	0	435	0	437	0
Grp Sat Flow (s), veh/h/ln	1704	0	1721	0	1704	0	1721	0
Q Serve Time (g_s), s	17.6	0.0	7.6	0.0	20.6	0.0	15.6	0.0
Cycle Q Clear Time (g_c), s	17.6	0.0	7.6	0.0	20.6	0.0	15.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	422	0	159	0	482	0	327	0
V/C Ratio (X)	0.88	0.00	1.59	0.00	0.90	0.00	1.33	0.00
Avail Cap (c_a), veh/h	544	0	159	0	544	0	327	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	70.6	0.0	78.2	0.0	69.3	0.0	74.2	0.0
Incr Delay (d2), s/veh	12.6	0.0	294.2	0.0	17.0	0.0	170.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	83.2	0.0	372.4	0.0	86.3	0.0	244.3	0.0
1st-Term Q (Q1), veh/ln	8.3	0.0	3.6	0.0	9.7	0.0	7.4	0.0
2nd-Term Q (Q2), veh/ln	0.7	0.0	6.5	0.0	1.1	0.0	7.7	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	9.0	0.0	10.1	0.0	10.9	0.0	15.1	0.0
%ile Storage Ratio (RQ%)	0.40	0.00	0.52	0.00	0.70	0.00	0.77	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	23.6	0.0	0.0	0.0	27.4	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.4	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	2	0	3
Grp Vol (v), veh/h	0	1244	0	667	0	857	0	712
Grp Sat Flow (s), veh/h/ln	0	1679	0	1695	0	1679	0	1695
Q Serve Time (g_s), s	0.0	52.9	0.0	31.4	0.0	31.8	0.0	22.2
Cycle Q Clear Time (g_c), s	0.0	52.9	0.0	31.4	0.0	31.8	0.0	22.2
Lane Grp Cap (c), veh/h	0	1517	0	736	0	1458	0	856
V/C Ratio (X)	0.00	0.82	0.00	0.91	0.00	0.59	0.00	0.83
Avail Cap (c_a), veh/h	0	1517	0	736	0	1458	0	856
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	39.2	0.0	62.6	0.0	35.3	0.0	66.0
Incr Delay (d2), s/veh	0.0	5.1	0.0	16.8	0.0	1.7	0.0	9.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	44.3	0.0	79.4	0.0	37.0	0.0	75.2
1st-Term Q (Q1), veh/ln	0.0	24.5	0.0	14.7	0.0	14.8	0.0	10.4

2nd-Term Q (Q2), veh/ln	0.0	1.1	0.0	1.7	0.0	0.4	0.0	0.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	25.6	0.0	16.4	0.0	15.1	0.0	11.2
%ile Storage Ratio (RQ%)	0.00	1.16	0.00	0.78	0.00	0.58	0.00	0.19
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	648	0	340	0	428	0	233
Grp Sat Flow (s), veh/h/ln	0	1740	0	1718	0	1676	0	1583
Q Serve Time (g_s), s	0.0	53.4	0.0	31.7	0.0	31.9	0.0	23.5
Cycle Q Clear Time (g_c), s	0.0	53.4	0.0	31.7	0.0	31.9	0.0	23.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.34	0.00	0.48	0.00	0.57	0.00	1.00
Lane Grp Cap (c), veh/h	0	786	0	373	0	728	0	266
V/C Ratio (X)	0.00	0.82	0.00	0.91	0.00	0.59	0.00	0.87
Avail Cap (c_a), veh/h	0	786	0	373	0	728	0	266
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	39.3	0.0	62.7	0.0	35.3	0.0	66.5
Incr Delay (d2), s/veh	0.0	9.6	0.0	29.0	0.0	3.5	0.0	30.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	48.9	0.0	91.7	0.0	38.7	0.0	97.0
1st-Term Q (Q1), veh/ln	0.0	25.6	0.0	15.0	0.0	14.8	0.0	10.3
2nd-Term Q (Q2), veh/ln	0.0	2.1	0.0	3.0	0.0	0.7	0.0	2.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	27.7	0.0	18.0	0.0	15.5	0.0	12.6
%ile Storage Ratio (RQ%)	0.00	1.26	0.00	0.85	0.00	0.60	0.00	0.45
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		85.3						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	1038	190	267	873	111	64	56	122	150	63	64
Future Volume (veh/h)	72	1038	190	267	873	111	64	56	122	150	63	64
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1900	1712	1712	1712	1776	1776	1900	1776	1776	1776
Adj Flow Rate, veh/h	76	1093	200	281	919	117	67	59	128	158	66	67
Adj No. of Lanes	2	3	0	2	3	1	1	2	0	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	11	11	11	11	11	11	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	90	1365	250	90	1606	500	86	718	643	214	1486	665
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.34	0.34	0.03	0.34	0.34	0.05	0.43	0.43	0.07	0.44	0.44
Ln Grp Delay, s/veh	117.4	45.9	49.6	1056.5	38.2	33.3	80.4	24.3	26.1	69.7	22.6	23.4
Ln Grp LOS	F	D	D	F	D	C	F	C	C	E	C	C
Approach Vol, veh/h		1369			1317			254			291	
Approach Delay, s/veh		51.1			255.0			40.0			48.3	
Approach LOS		D			F			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	13.2	65.3	8.0	54.5	11.1	67.4	8.0	54.5
Change Period (Y+Rc), s	4.0	5.3	4.0	* 6	4.0	5.3	4.0	* 6
Max Green (Gmax), s	42.0	24.7	4.0	* 51	42.0	24.7	4.0	* 51
Max Allow Headway (MAH), s	3.8	5.1	3.8	5.2	3.8	5.1	3.8	5.2
Max Q Clear (g_c+I1), s	8.7	9.5	6.0	37.2	7.5	5.7	5.4	24.7
Green Ext Time (g_e), s	0.5	1.5	0.0	11.3	0.2	1.7	0.0	18.9
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.93	1.00	0.95	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.84	0.00	0.00	1.00	0.64

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3281		3163		1691		3163	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1687		3973		3374		4673

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1509		726		1509		1455

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	1	0	2	0
Grp Vol (v), veh/h	158	0	281	0	67	0	76	0
Grp Sat Flow (s), veh/h/ln	1640	0	1581	0	1691	0	1581	0
Q Serve Time (g_s), s	6.7	0.0	4.0	0.0	5.5	0.0	3.4	0.0
Cycle Q Clear Time (g_c), s	6.7	0.0	4.0	0.0	5.5	0.0	3.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	214	0	90	0	86	0	90	0
V/C Ratio (X)	0.74	0.00	3.13	0.00	0.78	0.00	0.85	0.00
Avail Cap (c_a), veh/h	977	0	90	0	504	0	90	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.99	0.00	1.00	0.00
Uniform Delay (d1), s/veh	64.7	0.0	68.5	0.0	66.2	0.0	68.2	0.0
Incr Delay (d2), s/veh	4.9	0.0	988.0	0.0	14.2	0.0	49.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	69.7	0.0	1056.5	0.0	80.4	0.0	117.4	0.0
1st-Term Q (Q1), veh/ln	3.0	0.0	1.7	0.0	2.6	0.0	1.5	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	12.3	0.0	0.3	0.0	0.6	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	3.2	0.0	14.1	0.0	2.9	0.0	2.1	0.0
%ile Storage Ratio (RQ%)	0.43	0.00	1.96	0.00	0.48	0.00	0.16	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	47.8	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	2	0	3
Grp Vol (v), veh/h	0	59	0	857	0	66	0	919
Grp Sat Flow (s), veh/h/ln	0	1687	0	1558	0	1687	0	1558
Q Serve Time (g_s), s	0.0	2.9	0.0	35.1	0.0	1.6	0.0	22.7
Cycle Q Clear Time (g_c), s	0.0	2.9	0.0	35.1	0.0	1.6	0.0	22.7
Lane Grp Cap (c), veh/h	0	718	0	1071	0	1486	0	1606
V/C Ratio (X)	0.00	0.08	0.00	0.80	0.00	0.04	0.00	0.57
Avail Cap (c_a), veh/h	0	718	0	1127	0	1486	0	1690
Upstream Filter (I)	0.00	0.99	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	24.1	0.0	41.9	0.0	22.5	0.0	37.8
Incr Delay (d2), s/veh	0.0	0.2	0.0	4.0	0.0	0.1	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	24.3	0.0	45.9	0.0	22.6	0.0	38.2
1st-Term Q (Q1), veh/ln	0.0	1.4	0.0	15.1	0.0	0.7	0.0	9.8

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.4	0.0	15.7	0.0	0.7	0.0	9.8
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.17	0.00	0.01	0.00	0.17
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	128	0	436	0	67	0	117
Grp Sat Flow (s), veh/h/ln	0	1509	0	1584	0	1509	0	1455
Q Serve Time (g_s), s	0.0	7.5	0.0	35.2	0.0	3.7	0.0	8.1
Cycle Q Clear Time (g_c), s	0.0	7.5	0.0	35.2	0.0	3.7	0.0	8.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.46	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	643	0	544	0	665	0	500
V/C Ratio (X)	0.00	0.20	0.00	0.80	0.00	0.10	0.00	0.23
Avail Cap (c_a), veh/h	0	643	0	573	0	665	0	526
Upstream Filter (I)	0.00	0.99	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	25.4	0.0	41.9	0.0	23.1	0.0	33.0
Incr Delay (d2), s/veh	0.0	0.7	0.0	7.7	0.0	0.3	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	26.1	0.0	49.6	0.0	23.4	0.0	33.3
1st-Term Q (Q1), veh/ln	0.0	3.1	0.0	15.4	0.0	1.5	0.0	3.3
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	1.2	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	3.3	0.0	16.5	0.0	1.6	0.0	3.3
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.18	0.00	0.26	0.00	0.06
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	133.1
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	74	326	50	41	310	148	35	78	24	145	74	84
Future Volume (veh/h)	74	326	50	41	310	148	35	78	24	145	74	84
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1900	1900	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	79	347	53	44	330	157	37	83	26	154	79	89
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	150	439	62	132	630	596	568	544	171	623	320	361
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.42	0.42	0.42	0.42	0.42	0.42
Ln Grp Delay, s/veh	16.7	0.0	0.0	11.3	0.0	9.8	10.0	0.0	8.6	10.0	0.0	8.5
Ln Grp LOS	B			B		A	A		A	A		A
Approach Vol, veh/h		479			531			146			322	
Approach Delay, s/veh		16.7			10.9			8.9			9.2	
Approach LOS		B			B			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		8.0		6.0		7.0
Phs Duration (G+Y+Rc), s		23.4		21.6		23.4		21.6
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green (Gmax), s		18.0		18.0		18.0		18.0
Max Allow Headway (MAH), s		4.9		5.2		4.9		5.2
Max Q Clear (g_c+I1), s		6.0		15.8		7.8		9.1
Green Ext Time (g_e), s		1.9		1.3		1.7		4.1
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		1.00		0.00		0.67

Left-Turn Movement Data				
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		1156		149		1219		111

Through Movement Data				
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1298		1153		764		1655

Right-Turn Movement Data				
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		406		162		860		1568

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment				L+T+R				L+T

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	37	0	479	0	154	0	374
Grp Sat Flow (s), veh/h/ln	0	1156	0	1465	0	1219	0	1766
Q Serve Time (g_s), s	0.0	1.0	0.0	6.7	0.0	4.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	4.0	0.0	13.8	0.0	5.8	0.0	7.1
Perm LT Sat Flow (s_l), veh/h/ln	0	1156	0	923	0	1219	0	1000
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	1720
Perm LT Eff Green (g_p), s	0.0	18.9	0.0	17.1	0.0	18.9	0.0	17.1
Perm LT Serve Time (g_u), s	0.0	15.9	0.0	10.0	0.0	17.1	0.0	3.3
Perm LT Q Serve Time (g_ps), s	0.0	1.0	0.0	6.7	0.0	4.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	5.3	0.0	0.0	0.0	7.6
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	5.3	0.0	0.0	0.0	7.1
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	0.16	0.00	1.00	0.00	0.12
Lane Grp Cap (c), veh/h	0	568	0	650	0	623	0	761
V/C Ratio (X)	0.00	0.07	0.00	0.74	0.00	0.25	0.00	0.49
Avail Cap (c_a), veh/h	0	568	0	681	0	623	0	794
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	9.7	0.0	12.7	0.0	9.9	0.0	10.8
Incr Delay (d2), s/veh	0.0	0.2	0.0	4.0	0.0	0.1	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.0	0.0	16.7	0.0	10.0	0.0	11.3
1st-Term Q (Q1), veh/ln	0.0	0.3	0.0	5.5	0.0	1.3	0.0	3.5
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.3	0.0	6.2	0.0	1.3	0.0	3.6
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.27	0.00	0.01	0.00	0.14
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment								
Lanes in Grp	0	0	0	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R				T+R		R
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	109	0	0	0	168	0	157
Grp Sat Flow (s), veh/h/ln	0	1704	0	0	0	1624	0	1568
Q Serve Time (g_s), s	0.0	1.8	0.0	0.0	0.0	3.0	0.0	3.1
Cycle Q Clear Time (g_c), s	0.0	1.8	0.0	0.0	0.0	3.0	0.0	3.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.24	0.00	0.11	0.00	0.53	0.00	1.00
Lane Grp Cap (c), veh/h	0	715	0	0	0	681	0	596
V/C Ratio (X)	0.00	0.15	0.00	0.00	0.00	0.25	0.00	0.26
Avail Cap (c_a), veh/h	0	715	0	0	0	681	0	627
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	8.1	0.0	0.0	0.0	8.5	0.0	9.6
Incr Delay (d2), s/veh	0.0	0.5	0.0	0.0	0.0	0.1	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.6	0.0	0.0	0.0	8.5	0.0	9.8
1st-Term Q (Q1), veh/ln	0.0	0.8	0.0	0.0	0.0	1.4	0.0	1.3
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.9	0.0	0.0	0.0	1.4	0.0	1.3
%ile Storage Ratio (RQ%)	0.00	0.04	0.00	0.00	0.00	0.01	0.00	0.05
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		12.2						
HCM 2010 LOS		B						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	149	667	3	18	1337	570	2	13	23	332	1	96
Future Volume (veh/h)	149	667	3	18	1337	570	2	13	23	332	1	96
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1696	1696	1696	1696	1696	1696	1900	1696	1900	1696	1696	1696
Adj Flow Rate, veh/h	157	702	3	19	1407	0	2	14	24	349	1	0
Adj No. of Lanes	1	2	1	1	2	1	0	1	0	2	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	12	12	12	12	12	12	12	12	12	12	12	12
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	184	2276	1018	22	1954	874	0	18	30	132	206	175
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.11	0.71	0.71	0.01	0.61	0.00	0.00	0.03	0.03	0.04	0.12	0.00
Ln Grp Delay, s/veh	68.6	7.7	5.8	74.4	18.5	0.0	0.0	0.0	88.7	825.0	51.4	0.0
Ln Grp LOS	E	A	A	E	B				F	F	D	
Approach Vol, veh/h		862			1426			38			350	
Approach Delay, s/veh		18.8			19.3			88.7			822.8	
Approach LOS		B			B			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	4.0	2.0	3.0	0.0	3.0
Phs Duration (G+Y+Rc), s	22.2	87.7	12.0	11.1	8.9	101.0	0.0	23.1
Change Period (Y+Rc), s	7.1	7.1	6.4	6.9	7.1	7.1	6.9	* 6.9
Max Green (Gmax), s	67.9	18.9	5.6	13.1	30.9	55.9	13.1	* 5.6
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.5	3.8	5.3	0.0	5.5
Max Q Clear (g_c+I1), s	14.7	42.6	7.6	5.3	3.6	12.9	0.0	2.1
Green Ext Time (g_e), s	0.5	0.0	0.0	0.1	0.0	25.5	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	0.78	0.50	1.00	0.00	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.11	0.00	0.00	0.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1616		3134		1616		0	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3223		562		3223		1696

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1442		964		1442		1442

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)			

Lanes in Grp	1	0	2	0	1	0	0	0
Grp Vol (v), veh/h	157	0	349	0	19	0	0	0
Grp Sat Flow (s), veh/h/ln	1616	0	1567	0	1616	0	0	0
Q Serve Time (g_s), s	12.7	0.0	5.6	0.0	1.6	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	12.7	0.0	5.6	0.0	1.6	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	184	0	132	0	22	0	0	0
V/C Ratio (X)	0.85	0.00	2.64	0.00	0.86	0.00	0.00	0.00
Avail Cap (c_a), veh/h	825	0	132	0	375	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.09	0.00	0.00	0.00
Uniform Delay (d1), s/veh	57.9	0.0	63.7	0.0	65.5	0.0	0.0	0.0
Incr Delay (d2), s/veh	10.7	0.0	761.3	0.0	8.9	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	68.6	0.0	825.0	0.0	74.4	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	5.7	0.0	2.4	0.0	0.7	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.5	0.0	14.0	0.0	0.1	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	6.2	0.0	16.4	0.0	0.8	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.20	0.00	0.72	0.00	0.06	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	54.3	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	2	0	0	0	2	0	1
Grp Vol (v), veh/h	0	1407	0	0	0	702	0	1
Grp Sat Flow (s), veh/h/ln	0	1612	0	0	0	1612	0	1696
Q Serve Time (g_s), s	0.0	40.6	0.0	0.0	0.0	10.9	0.0	0.1
Cycle Q Clear Time (g_c), s	0.0	40.6	0.0	0.0	0.0	10.9	0.0	0.1
Lane Grp Cap (c), veh/h	0	1954	0	0	0	2276	0	206
V/C Ratio (X)	0.00	0.72	0.00	0.00	0.00	0.31	0.00	0.00
Avail Cap (c_a), veh/h	0	1954	0	0	0	2276	0	206
Upstream Filter (I)	0.00	0.09	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	18.3	0.0	0.0	0.0	7.3	0.0	51.3
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.0	0.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	18.5	0.0	0.0	0.0	7.7	0.0	51.4
1st-Term Q (Q1), veh/ln	0.0	18.0	0.0	0.0	0.0	4.8	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	18.0	0.0	0.0	0.0	4.9	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.25	0.00	0.00	0.00	0.04	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	38	0	3	0	0
Grp Sat Flow (s), veh/h/ln	0	1442	0	1526	0	1442	0	1442
Q Serve Time (g_s), s	0.0	0.0	0.0	3.3	0.0	0.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	3.3	0.0	0.1	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.63	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	874	0	48	0	1018	0	175
V/C Ratio (X)	0.00	0.00	0.00	0.79	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	874	0	150	0	1018	0	175
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	64.0	0.0	5.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	24.7	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	88.7	0.0	5.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	125.2
HCM 2010 LOS	F

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	106	933	1806	383	609	300
Future Volume (veh/h)	106	933	1806	383	609	300
Number	1	6	2	12	3	18
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00			1.00	1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1696	1696	1696	1696	1696	1696
Adj Flow Rate, veh/h	112	982	1901	0	641	0
Adj No. of Lanes	1	2	2	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	12	12	12	12	12	12
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	138	1926	1364	610	749	344
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.09	0.60	0.42	0.00	0.24	0.00
Ln Grp Delay, s/veh	38.5	9.4	201.5	0.0	35.6	0.0
Ln Grp LOS	D	A	F		D	
Approach Vol, veh/h		1094	1901		641	
Approach Delay, s/veh		12.4	201.5		35.6	
Approach LOS		B	F		D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8			6		
Case No	2.0	7.0	9.0			4.0		
Phs Duration (G+Y+Rc), s	13.9	41.0	25.1			54.9		
Change Period (Y+Rc), s	7.1	7.1	6.0			7.1		
Max Green (Gmax), s	7.9	27.9	24.0			42.9		
Max Allow Headway (MAH), s	3.8	5.3	3.8			5.3		
Max Q Clear (g_c+I1), s	7.4	35.9	17.7			16.1		
Green Ext Time (g_e), s	0.0	0.0	1.5			23.8		
Prob of Phs Call (p_c)	0.92	1.00	1.00			1.00		
Prob of Max Out (p_x)	1.00	0.00	0.38			0.00		

Left-Turn Movement Data			
Assigned Mvmt	1	5	3
Mvmt Sat Flow, veh/h	1616	0	3134

Through Movement Data			
Assigned Mvmt		2	8	6
Mvmt Sat Flow, veh/h		3308	0	3308

Right-Turn Movement Data			
Assigned Mvmt		12	18	16
Mvmt Sat Flow, veh/h		1442	1442	0

Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	0	0
Lane Assignment	(Prot)							

Lanes in Grp	1	0	2	0	0	0	0	0
Grp Vol (v), veh/h	112	0	641	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1616	0	1567	0	0	0	0	0
Q Serve Time (g_s), s	5.4	0.0	15.7	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	5.4	0.0	15.7	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1567	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	33.9	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	138	0	749	0	0	0	0	0
V/C Ratio (X)	0.81	0.00	0.86	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	160	0	940	0	0	0	0	0
Upstream Filter (I)	0.09	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	35.9	0.0	29.1	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	2.6	0.0	6.5	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	38.5	0.0	35.6	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	2.4	0.0	6.8	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.7	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	2.5	0.0	7.4	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.15	0.00	0.46	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1901	0	0	0	982	0	0
Grp Sat Flow (s), veh/h/ln	0	1612	0	0	0	1612	0	0
Q Serve Time (g_s), s	0.0	33.9	0.0	0.0	0.0	14.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	33.9	0.0	0.0	0.0	14.1	0.0	0.0
Lane Grp Cap (c), veh/h	0	1364	0	0	0	1926	0	0
V/C Ratio (X)	0.00	1.39	0.00	0.00	0.00	0.51	0.00	0.00
Avail Cap (c_a), veh/h	0	1364	0	0	0	1926	0	0
Upstream Filter (I)	0.00	0.25	0.00	0.00	0.00	0.09	0.00	0.00
Uniform Delay (d1), s/veh	0.0	23.1	0.0	0.0	0.0	9.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	178.4	0.0	0.0	0.0	0.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	201.5	0.0	0.0	0.0	9.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	15.0	0.0	0.0	0.0	6.3	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	33.8	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	48.8	0.0	0.0	0.0	6.3	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.39	0.00	0.00	0.00	0.09	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	134.3	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lane Assignment		R	R					
Lanes in Grp	0	1	1	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1442	1442	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	610	344	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	610	433	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		115.3						
HCM 2010 LOS		F						

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	405	268	270	1381	1876	679
Future Volume (veh/h)	405	268	270	1381	1876	679
Number	7	14	5	2	6	16
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00	1.00			1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1827	1827	1827	1827
Adj Flow Rate, veh/h	445	0	297	1518	2062	0
Adj No. of Lanes	2	1	2	3	3	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	4	4	4	4
Opposing Right Turn Influence	Yes		Yes			
Cap, veh/h	496	228	364	3836	3089	962
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.14	0.00	0.11	0.77	0.62	0.00
Ln Grp Delay, s/veh	76.8	0.0	66.9	5.8	18.1	0.0
Ln Grp LOS	E		E	A	B	
Approach Vol, veh/h	445			1815	2062	
Approach Delay, s/veh	76.8			15.8	18.1	
Approach LOS	E			B	B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Case No		4.0		9.0	2.0	7.0		
Phs Duration (G+Y+Rc), s		116.0		27.0	21.4	94.6		
Change Period (Y+Rc), s		6.0		6.4	6.0	6.0		
Max Green (Gmax), s		108.0		22.6	84.0	18.0		
Max Allow Headway (MAH), s		5.2		3.8	3.8	5.2		
Max Q Clear (g_c+I1), s		16.4		20.2	14.3	40.4		
Green Ext Time (g_e), s		76.9		0.4	1.1	0.0		
Prob of Phs Call (p_c)		1.00		1.00	1.00	1.00		
Prob of Max Out (p_x)		0.00		1.00	0.00	0.00		
Left-Turn Movement Data								
Assigned Mvmt				7	5	1		
Mvmt Sat Flow, veh/h				3442	3375	0		
Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		5152		0		5152		
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		0		1583		1553		
Left Lane Group Data								
Assigned Mvmt	0	0	0	7	5	1	0	0
Lane Assignment					(Prot)			

Lanes in Grp	0	0	0	2	2	0	0	0
Grp Vol (v), veh/h	0	0	0	445	297	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1721	1688	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	18.2	12.3	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	18.2	12.3	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1721	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	88.6	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	496	364	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.90	0.82	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	544	1983	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	60.1	62.4	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	16.6	4.5	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	76.8	66.9	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	8.7	5.7	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.1	0.2	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	9.8	6.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.76	0.36	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	3	0	0	0	3	0	0
Grp Vol (v), veh/h	0	1518	0	0	0	2062	0	0
Grp Sat Flow (s), veh/h/ln	0	1663	0	0	0	1663	0	0
Q Serve Time (g_s), s	0.0	14.4	0.0	0.0	0.0	38.4	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	14.4	0.0	0.0	0.0	38.4	0.0	0.0
Lane Grp Cap (c), veh/h	0	3836	0	0	0	3089	0	0
V/C Ratio (X)	0.00	0.40	0.00	0.00	0.00	0.67	0.00	0.00
Avail Cap (c_a), veh/h	0	3836	0	0	0	3089	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.38	0.00	0.00
Uniform Delay (d1), s/veh	0.0	5.5	0.0	0.0	0.0	17.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.0	0.0	0.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	5.8	0.0	0.0	0.0	18.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	6.6	0.0	0.0	0.0	17.6	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	6.7	0.0	0.0	0.0	17.7	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.21	0.00	0.00	0.00	0.31	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment				R		R		
Lanes in Grp	0	0	0	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1583	0	1553	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	228	0	962	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	250	0	962	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		23.2						
HCM 2010 LOS		C						

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	581	1255	1621	89	447	2433
Future Volume (veh/h)	581	1255	1621	89	447	2433
Number	3	18	2	12	1	6
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1845	1845	1845	1845
Adj Flow Rate, veh/h	612	1321	1706	0	471	2561
Adj No. of Lanes	2	2	3	1	2	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	4	3	3	3	3
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	881	713	2536	790	586	3839
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.26	0.26	0.50	0.00	0.17	0.76
Ln Grp Delay, s/veh	25.4	414.7	14.1	0.0	32.6	4.9
Ln Grp LOS	C	F	B		C	A
Approach Vol, veh/h	1933		1706			3032
Approach Delay, s/veh	291.4		14.1			9.2
Approach LOS	F		B			A

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8			6		
Case No	2.0	7.0	9.0			4.0		
Phs Duration (G+Y+Rc), s	17.9	41.1	24.4			59.0		
Change Period (Y+Rc), s	6.0	6.0	6.4			6.0		
Max Green (Gmax), s	15.0	18.0	18.0			39.0		
Max Allow Headway (MAH), s	3.8	5.2	4.0			5.2		
Max Q Clear (g_c+I1), s	11.2	19.5	20.0			19.0		
Green Ext Time (g_e), s	0.7	0.0	0.0			19.7		
Prob of Phs Call (p_c)	1.00	1.00	1.00			1.00		
Prob of Max Out (p_x)	0.99	0.00	1.00			0.00		

Left-Turn Movement Data			
Assigned Mvmt	1	5	3
Mvmt Sat Flow, veh/h	3408	0	3375

Through Movement Data			
Assigned Mvmt		2	8		6
Mvmt Sat Flow, veh/h		5202	0		5202

Right-Turn Movement Data				
Assigned Mvmt		12	18	16
Mvmt Sat Flow, veh/h		1568	2733	0

Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	0	0
Lane Assignment	(Prot)							

Lanes in Grp	2	0	2	0	0	0	0	0
Grp Vol (v), veh/h	471	0	612	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1704	0	1688	0	0	0	0	0
Q Serve Time (g_s), s	9.2	0.0	11.3	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	9.2	0.0	11.3	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1688	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	34.7	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	586	0	881	0	0	0	0	0
V/C Ratio (X)	0.80	0.00	0.70	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	741	0	881	0	0	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	27.5	0.0	23.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	5.1	0.0	2.4	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	32.6	0.0	25.4	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	4.3	0.0	5.3	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.4	0.0	0.3	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	4.7	0.0	5.6	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.38	0.00	0.30	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	3	0	0	0	3	0	0
Grp Vol (v), veh/h	0	1706	0	0	0	2561	0	0
Grp Sat Flow (s), veh/h/ln	0	1679	0	0	0	1679	0	0
Q Serve Time (g_s), s	0.0	17.5	0.0	0.0	0.0	17.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	17.5	0.0	0.0	0.0	17.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	2536	0	0	0	3839	0	0
V/C Ratio (X)	0.00	0.67	0.00	0.00	0.00	0.67	0.00	0.00
Avail Cap (c_a), veh/h	0	2536	0	0	0	3839	0	0
Upstream Filter (I)	0.00	0.86	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	12.9	0.0	0.0	0.0	4.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.2	0.0	0.0	0.0	0.9	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	14.1	0.0	0.0	0.0	4.9	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	8.1	0.0	0.0	0.0	7.6	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	8.3	0.0	0.0	0.0	7.9	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.13	0.00	0.00	0.00	0.19	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lane Assignment		R	R					
Lanes in Grp	0	1	2	0	0	0	0	0
Grp Vol (v), veh/h	0	0	1321	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1568	1367	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	18.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	18.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	790	713	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	1.85	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	790	713	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	25.5	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	389.2	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	414.7	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	6.7	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	38.5	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	45.3	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	4.87	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	152.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		92.2						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	671	737	52	40	975	246	330	293	186	140	59	834
Future Volume (veh/h)	671	737	52	40	975	246	330	293	186	140	59	834
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1712	1712	1712	1712	1712	1712	1900	1900	1712	1712
Adj Flow Rate, veh/h	678	744	53	40	985	0	333	296	188	141	60	842
Adj No. of Lanes	1	3	1	1	3	1	1	2	0	0	1	2
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	11	11	11	11	11	11	11	11	11	11	11	11
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	433	2299	716	51	1203	375	227	693	429	0	293	439
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.27	0.49	0.49	0.03	0.26	0.00	0.14	0.36	0.36	0.00	0.17	0.17
Ln Grp Delay, s/veh	321.6	24.8	21.6	100.1	62.2	0.0	300.9	39.3	39.6	0.0	57.3	488.7
Ln Grp LOS	F	C	C	F	E		F	D	D		E	F
Approach Vol, veh/h		1475			1025			817			902	
Approach Delay, s/veh		161.1			63.6			146.0			460.0	
Approach LOS		F			E			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	0.0	4.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	50.0	48.4	0.0	65.1	12.5	85.9	30.0	35.1
Change Period (Y+Rc), s	7.5	7.1	7.6	* 7.7	7.5	7.1	* 7.7	* 7.7
Max Green (Gmax), s	42.5	37.9	27.4	* 22	42.5	37.9	* 22	* 27
Max Allow Headway (MAH), s	3.8	5.2	0.0	4.6	3.8	5.2	3.8	4.6
Max Q Clear (g_c+I1), s	44.5	33.7	0.0	21.2	5.9	17.4	24.3	29.4
Green Ext Time (g_e), s	0.0	3.4	0.0	0.8	0.1	12.7	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	0.00	1.00	0.83	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1630		0		1630		1630	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		4673		1932		4673		1712

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1455		1195		1455		2561

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)				(Prot)		(Prot)	

Lanes in Grp	1	0	0	0	1	0	1	0
Grp Vol (v), veh/h	678	0	0	0	40	0	333	0
Grp Sat Flow (s), veh/h/ln	1630	0	0	0	1630	0	1630	0
Q Serve Time (g_s), s	42.5	0.0	0.0	0.0	3.9	0.0	22.3	0.0
Cycle Q Clear Time (g_c), s	42.5	0.0	0.0	0.0	3.9	0.0	22.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	433	0	0	0	51	0	227	0
V/C Ratio (X)	1.57	0.00	0.00	0.00	0.79	0.00	1.47	0.00
Avail Cap (c_a), veh/h	433	0	0	0	433	0	227	0
Upstream Filter (I)	0.74	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	58.8	0.0	0.0	0.0	77.0	0.0	68.8	0.0
Incr Delay (d2), s/veh	262.8	0.0	0.0	0.0	23.1	0.0	232.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	321.6	0.0	0.0	0.0	100.1	0.0	300.9	0.0
1st-Term Q (Q1), veh/ln	19.1	0.0	0.0	0.0	1.8	0.0	10.0	0.0
2nd-Term Q (Q2), veh/ln	31.6	0.0	0.0	0.0	0.3	0.0	14.6	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	50.7	0.0	0.0	0.0	2.1	0.0	24.7	0.0
%ile Storage Ratio (RQ%)	1.88	0.00	0.00	0.00	0.13	0.00	1.35	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	61.2	0.0	0.0	0.0	0.0	0.0	26.4	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.4	0.0	0.0	0.0	0.0	0.0	0.4	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	1	0	3	0	1
Grp Vol (v), veh/h	0	985	0	248	0	744	0	60
Grp Sat Flow (s), veh/h/ln	0	1558	0	1626	0	1558	0	1712
Q Serve Time (g_s), s	0.0	31.7	0.0	18.5	0.0	15.4	0.0	4.8
Cycle Q Clear Time (g_c), s	0.0	31.7	0.0	18.5	0.0	15.4	0.0	4.8
Lane Grp Cap (c), veh/h	0	1203	0	583	0	2299	0	293
V/C Ratio (X)	0.00	0.82	0.00	0.42	0.00	0.32	0.00	0.20
Avail Cap (c_a), veh/h	0	1203	0	583	0	2299	0	293
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.74	0.00	1.00
Uniform Delay (d1), s/veh	0.0	55.9	0.0	38.8	0.0	24.6	0.0	56.9
Incr Delay (d2), s/veh	0.0	6.3	0.0	0.5	0.0	0.3	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	62.2	0.0	39.3	0.0	24.8	0.0	57.3
1st-Term Q (Q1), veh/ln	0.0	13.7	0.0	8.3	0.0	6.6	0.0	2.3

2nd-Term Q (Q2), veh/ln	0.0	0.7	0.0	0.1	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	14.4	0.0	8.3	0.0	6.7	0.0	2.3
%ile Storage Ratio (RQ%)	0.00	0.16	0.00	0.46	0.00	0.05	0.00	0.07
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	2
Grp Vol (v), veh/h	0	0	0	236	0	53	0	842
Grp Sat Flow (s), veh/h/ln	0	1455	0	1501	0	1455	0	1280
Q Serve Time (g_s), s	0.0	0.0	0.0	19.2	0.0	3.1	0.0	27.4
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	19.2	0.0	3.1	0.0	27.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.80	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	375	0	538	0	716	0	439
V/C Ratio (X)	0.00	0.00	0.00	0.44	0.00	0.07	0.00	1.92
Avail Cap (c_a), veh/h	0	375	0	538	0	716	0	439
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.74	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	39.0	0.0	21.4	0.0	66.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.6	0.0	0.1	0.0	422.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	39.6	0.0	21.6	0.0	488.7
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	7.9	0.0	1.2	0.0	9.7
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	25.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	8.0	0.0	1.3	0.0	35.4
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.44	0.00	0.07	0.00	1.06
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.9
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	198.4
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	421	812	53	204	697	701	142	1099	235	231	616	180
Future Volume (veh/h)	421	812	53	204	697	701	142	1099	235	231	616	180
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1776	1776	1776	1776	1776	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	425	820	54	206	704	708	143	1110	237	233	622	182
Adj No. of Lanes	2	3	1	2	3	2	2	2	0	2	2	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	7	7	7	7	7	7	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	80	1482	462	80	1482	812	214	615	131	313	625	182
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.02	0.31	0.31	0.02	0.31	0.31	0.07	0.22	0.22	0.10	0.24	0.24
Ln Grp Delay, s/veh	2007.4	25.3	21.0	783.5	24.2	39.3	41.0	402.0	409.0	41.3	74.2	75.4
Ln Grp LOS	F	C	C	F	C	D	D	F	F	D	E	E
Approach Vol, veh/h		1299			1618			1490			1037	
Approach Delay, s/veh		673.6			127.5			370.5			67.3	
Approach LOS		F			F			F			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	4.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	9.2	32.4	14.6	25.8	9.2	32.4	13.0	27.5
Change Period (Y+Rc), s	7.2	* 7.3	6.8	* 7.6	7.2	* 7.3	* 7.6	* 7.6
Max Green (Gmax), s	2.0	* 24	10.2	* 18	2.0	* 24	* 7.4	* 19
Max Allow Headway (MAH), s	3.8	4.9	3.8	5.3	3.8	4.9	3.8	5.3
Max Q Clear (g_c+I1), s	4.0	22.7	7.7	20.2	4.0	13.6	5.5	21.8
Green Ext Time (g_e), s	0.0	0.9	0.2	0.0	0.0	8.1	0.1	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.99	1.00	0.96	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	3281	3281	3281	3281

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	4848	2770	4848	2577

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	2656	588	1509	753

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	425	0	233	0	206	0	143	0
Grp Sat Flow (s), veh/h/ln	1640	0	1640	0	1640	0	1640	0
Q Serve Time (g_s), s	2.0	0.0	5.7	0.0	2.0	0.0	3.5	0.0
Cycle Q Clear Time (g_c), s	2.0	0.0	5.7	0.0	2.0	0.0	3.5	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	80	0	313	0	80	0	214	0
V/C Ratio (X)	5.31	0.00	0.74	0.00	2.57	0.00	0.67	0.00
Avail Cap (c_a), veh/h	80	0	408	0	80	0	296	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	40.0	0.0	36.1	0.0	40.0	0.0	37.5	0.0
Incr Delay (d2), s/veh	1967.4	0.0	5.2	0.0	743.5	0.0	3.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	2007.4	0.0	41.3	0.0	783.5	0.0	41.0	0.0
1st-Term Q (Q1), veh/ln	0.9	0.0	2.6	0.0	0.9	0.0	1.6	0.0
2nd-Term Q (Q2), veh/ln	21.9	0.0	0.2	0.0	8.3	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	22.8	0.0	2.8	0.0	9.2	0.0	1.7	0.0
%ile Storage Ratio (RQ%)	1.31	0.00	0.06	0.00	0.47	0.00	0.05	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	86.2	0.0	0.0	0.0	31.5	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	1.3	0.0	0.0	0.0	0.6	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	1	0	3	0	1
Grp Vol (v), veh/h	0	704	0	674	0	820	0	407
Grp Sat Flow (s), veh/h/ln	0	1616	0	1687	0	1616	0	1687
Q Serve Time (g_s), s	0.0	9.7	0.0	18.2	0.0	11.6	0.0	19.7
Cycle Q Clear Time (g_c), s	0.0	9.7	0.0	18.2	0.0	11.6	0.0	19.7
Lane Grp Cap (c), veh/h	0	1482	0	374	0	1482	0	409
V/C Ratio (X)	0.00	0.47	0.00	1.80	0.00	0.55	0.00	1.00
Avail Cap (c_a), veh/h	0	1482	0	374	0	1482	0	409
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	23.1	0.0	31.9	0.0	23.8	0.0	31.0
Incr Delay (d2), s/veh	0.0	1.1	0.0	370.1	0.0	1.5	0.0	43.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	24.2	0.0	402.0	0.0	25.3	0.0	74.2
1st-Term Q (Q1), veh/ln	0.0	4.3	0.0	8.4	0.0	5.2	0.0	9.2

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	38.5	0.0	0.2	0.0	4.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	4.5	0.0	46.9	0.0	5.4	0.0	14.1
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	1.25	0.00	0.06	0.00	0.28
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	74.8	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		T+R
Lanes in Grp	0	2	0	1	0	1	0	1
Grp Vol (v), veh/h	0	708	0	673	0	54	0	397
Grp Sat Flow (s), veh/h/ln	0	1328	0	1672	0	1509	0	1643
Q Serve Time (g_s), s	0.0	20.7	0.0	18.2	0.0	2.1	0.0	19.8
Cycle Q Clear Time (g_c), s	0.0	20.7	0.0	18.2	0.0	2.1	0.0	19.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.35	0.00	1.00	0.00	0.46
Lane Grp Cap (c), veh/h	0	812	0	371	0	462	0	398
V/C Ratio (X)	0.00	0.87	0.00	1.81	0.00	0.12	0.00	1.00
Avail Cap (c_a), veh/h	0	812	0	371	0	462	0	398
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	26.9	0.0	31.9	0.0	20.5	0.0	31.0
Incr Delay (d2), s/veh	0.0	12.4	0.0	377.1	0.0	0.5	0.0	44.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	39.3	0.0	409.0	0.0	21.0	0.0	75.4
1st-Term Q (Q1), veh/ln	0.0	7.6	0.0	8.3	0.0	0.9	0.0	8.9
2nd-Term Q (Q2), veh/ln	0.0	1.4	0.0	38.9	0.0	0.1	0.0	4.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	9.0	0.0	47.2	0.0	1.0	0.0	13.8
%ile Storage Ratio (RQ%)	0.00	0.35	0.00	1.26	0.00	0.06	0.00	0.27
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	75.6	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		312.8						
HCM 2010 LOS		F						

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	464	1620	3	69	2203	802	0	0	999	2	0	1170
Future Volume (veh/h)	464	1620	3	69	2203	802	0	0	999	2	0	1170
Number	7	4	14	3	8	18	5	2	12			
Initial Q, veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1845	1845	1900	1900	1845	1845	0	0	1845			
Adj Flow Rate, veh/h	473	1653	3	70	2248	0	0	0	1019			
Adj No. of Lanes	2	3	0	0	3	1	0	0	2			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98			
Percent Heavy Veh, %	3	3	3	3	3	3	0	0	3			
Opposing Right Turn Influence	Yes			Yes			No					
Cap, veh/h	485	4991	9	104	3326	1224	0	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Prop Arrive On Green	0.14	0.96	0.96	0.78	0.78	0.00	0.00	0.00	0.00			
Ln Grp Delay, s/veh	105.6	0.5	0.7	11.4	9.7	0.0	0.0	0.0	0.0			
Ln Grp LOS	F	A	A	B	A							

Approach Vol, veh/h		2129			2318			0				Timer:
Approach Delay, s/veh		23.9			10.2			0.0				Assigned Phs
Approach LOS		C			B							Case No
Phs Duration (G+Y+Rc), s					166.0			30.0	136.0			
Change Period (Y+Rc), s					6.4			6.4	6.4			
Max Green (Gmax), s					76.6			23.6	46.6			
Max Allow Headway (MAH), s					5.4			3.8	5.4			
Max Q Clear (g_c+I1), s					5.0			24.9	40.5			
Green Ext Time (g_e), s					66.4			0.0	6.0			
Prob of Phs Call (p_c)					1.00			1.00	1.00			
Prob of Max Out (p_x)					0.00			1.00	0.00			

Left-Turn Movement Data												
Assigned Mvmt								7	3			
Mvmt Sat Flow, veh/h								3408	103			

Through Movement Data												
Assigned Mvmt					4				8			
Mvmt Sat Flow, veh/h					5191				4260			

Right-Turn Movement Data												
Assigned Mvmt					14				18			
Mvmt Sat Flow, veh/h					9				1568			

Left Lane Group Data												
Assigned Mvmt		0	0	0	0	0	0	7	3			
Lane Assignment								(Prot)	L+T			
Lanes in Grp		0	0	0	0	0	0	2	1			
Grp Vol (v), veh/h		0	0	0	0	0	0	473	747			
Grp Sat Flow (s), veh/h/ln		0	0	0	0	0	0	1704	1308			

Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	22.9	22.2
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	22.9	37.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	306
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	129.6
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	129.6
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.2
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.8
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.8
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.09
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	485	1045
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.71
Avail Cap (c_a), veh/h	0	0	0	0	0	0	485	1045
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	70.9	7.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	34.6	4.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	105.6	11.4
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	10.8	14.7
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	2.3	1.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	13.2	15.9
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	2.25	1.18
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	2
Grp Vol (v), veh/h	0	0	0	1069	0	0	0	1571
Grp Sat Flow (s), veh/h/ln	0	0	0	1679	0	0	0	1528
Q Serve Time (g_s), s	0.0	0.0	0.0	3.0	0.0	0.0	0.0	38.5
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	3.0	0.0	0.0	0.0	38.5
Lane Grp Cap (c), veh/h	0	0	0	3228	0	0	0	2385
V/C Ratio (X)	0.00	0.00	0.00	0.33	0.00	0.00	0.00	0.66
Avail Cap (c_a), veh/h	0	0	0	3228	0	0	0	2385
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	8.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.3	0.0	0.0	0.0	1.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.5	0.0	0.0	0.0	9.7
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.2	0.0	0.0	0.0	15.9
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00

%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	1.3	0.0	0.0	0.0	16.4
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.20	0.00	0.00	0.00	1.21
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	0	0	18
Lane Assignment				T+R				R
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	587	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1843	0	0	0	1568
Q Serve Time (g_s), s	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.01	0.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	0	0	1772	0	0	0	1224
V/C Ratio (X)	0.00	0.00	0.00	0.33	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	1772	0	0	0	1224
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	16.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1392	770	1021	2537	0	0	0	664	0	0	628
Future Volume (veh/h)	0	1392	770	1021	2537	0	0	0	664	0	0	628
Number	7	4	14	3	8	18				1	6	16
Initial Q, veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1845	1845	1845	1845	0				0	0	1845
Adj Flow Rate, veh/h	0	1420	0	1042	2589	0				0	0	641
Adj No. of Lanes	0	3	1	2	3	0				0	0	2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98				0.98	0.98	0.98
Percent Heavy Veh, %	0	3	3	3	3	0				0	0	3
Opposing Right Turn Influence	No			Yes						No		
Cap, veh/h	0	2328	725	1162	4540	0				0	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Prop Arrive On Green	0.00	0.46	0.00	0.34	0.90	0.00				0.00	0.00	0.00
Ln Grp Delay, s/veh	0.0	14.3	0.0	28.9	1.2	0.0				0.0	0.0	0.0
Ln Grp LOS		B		C	A							
Approach Vol, veh/h		1420			3631						0	
Approach Delay, s/veh		14.3			9.1						0.0	
Approach LOS		B			A							

Timer:	1	2	3	4	5	6	7	8
Assigned Phs			3	4				8
Case No			2.0	7.0				4.0
Phs Duration (G+Y+Rc), s			28.6	36.4				65.0
Change Period (Y+Rc), s			6.4	6.4				6.4
Max Green (Gmax), s			23.6	18.0				48.0
Max Allow Headway (MAH), s			3.8	5.2				5.2
Max Q Clear (g_c+I1), s			20.9	15.7				8.8
Green Ext Time (g_e), s			1.3	2.3				37.8
Prob of Phs Call (p_c)			1.00	1.00				1.00
Prob of Max Out (p_x)			1.00	0.00				0.00

Left-Turn Movement Data		
Assigned Mvmt	3	7
Mvmt Sat Flow, veh/h	3408	0

Through Movement Data		
Assigned Mvmt	4	8
Mvmt Sat Flow, veh/h	5202	5202

Right-Turn Movement Data		
Assigned Mvmt	14	18
Mvmt Sat Flow, veh/h	1568	0

Left Lane Group Data								
Assigned Mvmt	0	0	3	7	0	0	0	0
Lane Assignment			(Prot)					

Lanes in Grp	0	0	2	0	0	0	0	0
Grp Vol (v), veh/h	0	0	1042	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1704	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	18.9	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	18.9	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	1162	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.90	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	1237	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	20.3	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	8.6	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	28.9	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	8.8	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	10.2	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.82	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	3	0	0	0	3
Grp Vol (v), veh/h	0	0	0	1420	0	0	0	2589
Grp Sat Flow (s), veh/h/ln	0	0	0	1679	0	0	0	1679
Q Serve Time (g_s), s	0.0	0.0	0.0	13.7	0.0	0.0	0.0	6.8
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	13.7	0.0	0.0	0.0	6.8
Lane Grp Cap (c), veh/h	0	0	0	2328	0	0	0	4540
V/C Ratio (X)	0.00	0.00	0.00	0.61	0.00	0.00	0.00	0.57
Avail Cap (c_a), veh/h	0	0	0	2328	0	0	0	4540
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	13.1	0.0	0.0	0.0	0.6
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	14.3	0.0	0.0	0.0	1.2
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	6.3	0.0	0.0	0.0	2.9

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	6.6	0.0	0.0	0.0	3.1
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.29	0.00	0.00	0.00	0.20
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	0	0	18
Lane Assignment				R				
Lanes in Grp	0	0	0	1	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1568	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	725	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	725	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		10.6						
HCM 2010 LOS		B						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	458	2599	0	0	2471	658	0	0	846	0	0	842
Future Volume (veh/h)	458	2599	0	0	2471	658	0	0	846	0	0	842
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	0	0	1863	0	0	1863
Adj Flow Rate, veh/h	477	2707	0	0	2574	685	0	0	881	0	0	877
Adj No. of Lanes	2	3	0	0	3	2	0	0	3	0	0	3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	0	0	2	2	0	0	2	0	0	2
Opposing Right Turn Influence	Yes			No			No			No		
Cap, veh/h	564	4795	0	0	3671	2012	0	0	0	0	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.16	0.94	0.00	0.00	0.72	0.72	0.00	0.00	0.00	0.00	0.00	0.00
Ln Grp Delay, s/veh	48.5	0.6	0.0	0.0	9.9	6.2	0.0	0.0	0.0	0.0	0.0	0.0
Ln Grp LOS	D	A			A	A						
Approach Vol, veh/h		3184			3259			0			0	
Approach Delay, s/veh		7.8			9.1			0.0			0.0	
Approach LOS		A			A							

Timer:	1	2	3	4	5	6	7	8
Assigned Phs				4			7	8
Case No				4.0			2.0	7.0
Phs Duration (G+Y+Rc), s				112.0			24.7	87.3
Change Period (Y+Rc), s				6.4			6.4	6.4
Max Green (Gmax), s				81.6			26.6	48.6
Max Allow Headway (MAH), s				5.1			3.8	5.1
Max Q Clear (g_c+I1), s				9.3			17.1	33.9
Green Ext Time (g_e), s				71.9			1.3	14.7
Prob of Phs Call (p_c)				1.00			1.00	1.00
Prob of Max Out (p_x)				0.00			0.06	0.00

Left-Turn Movement Data												
Assigned Mvmt								7	3			
Mvmt Sat Flow, veh/h								3442	0			
Through Movement Data												
Assigned Mvmt					4				8			
Mvmt Sat Flow, veh/h					5253				5253			
Right-Turn Movement Data												
Assigned Mvmt					14				18			
Mvmt Sat Flow, veh/h					0				2787			
Left Lane Group Data												
Assigned Mvmt		0	0	0	0	0	0	7	3			
Lane Assignment								(Prot)				

Lanes in Grp	0	0	0	0	0	0	2	0
Grp Vol (v), veh/h	0	0	0	0	0	0	477	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	1721	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	15.1	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	15.1	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.9
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	564	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.85	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	817	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	45.5	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	48.5	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	7.2	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	7.4	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	3	0	0	0	3
Grp Vol (v), veh/h	0	0	0	2707	0	0	0	2574
Grp Sat Flow (s), veh/h/ln	0	0	0	1695	0	0	0	1695
Q Serve Time (g_s), s	0.0	0.0	0.0	7.3	0.0	0.0	0.0	31.9
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	7.3	0.0	0.0	0.0	31.9
Lane Grp Cap (c), veh/h	0	0	0	4795	0	0	0	3671
V/C Ratio (X)	0.00	0.00	0.00	0.56	0.00	0.00	0.00	0.70
Avail Cap (c_a), veh/h	0	0	0	4795	0	0	0	3671
Upstream Filter (I)	0.00	0.00	0.00	0.52	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.4	0.0	0.0	0.0	8.8
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.3	0.0	0.0	0.0	1.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.6	0.0	0.0	0.0	9.9
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.0	0.0	0.0	0.0	14.8

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	3.1	0.0	0.0	0.0	15.2
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.24
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	0	0	18
Lane Assignment								R
Lanes in Grp	0	0	0	0	0	0	0	2
Grp Vol (v), veh/h	0	0	0	0	0	0	0	685
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	1393
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.2
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	2012
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	2012
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.7
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.2
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.5
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.7
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.51
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		8.5						
HCM 2010 LOS		A						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2098	385	646	2578	11	0	0	828	0	0	506
Future Volume (veh/h)	0	2098	385	646	2578	11	0	0	828	0	0	506
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	1900	0	0	1863	0	0	1863
Adj Flow Rate, veh/h	0	2256	414	695	2772	12	0	0	890	0	0	544
Adj No. of Lanes	0	3	2	2	3	0	0	0	3	0	0	3
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	2	2	2	2	2	0	0	2	0	0	2
Opposing Right Turn Influence	No			Yes			No			No		
Cap, veh/h	0	3587	1966	761	5034	22	0	0	0	0	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.00	0.71	0.71	0.22	0.96	0.96	0.00	0.00	0.00	0.00	0.00	0.00
Ln Grp Delay, s/veh	0.0	14.4	9.1	69.1	0.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0
Ln Grp LOS		B	A	E	A	A						
Approach Vol, veh/h		2670			3479			0			0	
Approach Delay, s/veh		13.6			14.2			0.0			0.0	
Approach LOS		B			B							

Timer:	1	2	3	4	5	6	7	8
Assigned Phs			3	4				8
Case No			2.0	7.0				4.0
Phs Duration (G+Y+Rc), s			44.9	129.1				174.0
Change Period (Y+Rc), s			6.4	6.4				6.4
Max Green (Gmax), s			47.6	93.6				147.6
Max Allow Headway (MAH), s			3.8	5.2				5.2
Max Q Clear (g_c+I1), s			36.3	42.9				9.2
Green Ext Time (g_e), s			2.2	50.4				135.6
Prob of Phs Call (p_c)			1.00	1.00				1.00
Prob of Max Out (p_x)			0.07	0.00				0.00

Left-Turn Movement Data								
Assigned Mvmt			3	7				
Mvmt Sat Flow, veh/h			3442	0				

Through Movement Data								
Assigned Mvmt				4				8
Mvmt Sat Flow, veh/h				5253				5226

Right-Turn Movement Data								
Assigned Mvmt				14				18
Mvmt Sat Flow, veh/h				2787				23

Left Lane Group Data								
Assigned Mvmt	0	0	3	7	0	0	0	0
Lane Assignment			(Prot)					

Lanes in Grp	0	0	2	0	0	0	0	0
Grp Vol (v), veh/h	0	0	695	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1721	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	34.3	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	34.3	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	122.7	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	761	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.91	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	942	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	66.2	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	69.1	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	16.3	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	16.6	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	1.32	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	3	0	0	0	2
Grp Vol (v), veh/h	0	0	0	2256	0	0	0	1797
Grp Sat Flow (s), veh/h/ln	0	0	0	1695	0	0	0	1695
Q Serve Time (g_s), s	0.0	0.0	0.0	40.9	0.0	0.0	0.0	7.2
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	40.9	0.0	0.0	0.0	7.2
Lane Grp Cap (c), veh/h	0	0	0	3587	0	0	0	3265
V/C Ratio (X)	0.00	0.00	0.00	0.63	0.00	0.00	0.00	0.55
Avail Cap (c_a), veh/h	0	0	0	3587	0	0	0	3265
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.22
Uniform Delay (d1), s/veh	0.0	0.0	0.0	13.6	0.0	0.0	0.0	0.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	14.4	0.0	0.0	0.0	0.4
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	19.0	0.0	0.0	0.0	3.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	19.3	0.0	0.0	0.0	3.1
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.32	0.00	0.00	0.00	0.06
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	0	0	18
Lane Assignment				R				T+R
Lanes in Grp	0	0	0	2	0	0	0	1
Grp Vol (v), veh/h	0	0	0	414	0	0	0	987
Grp Sat Flow (s), veh/h/ln	0	0	0	1393	0	0	0	1859
Q Serve Time (g_s), s	0.0	0.0	0.0	8.9	0.0	0.0	0.0	7.2
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	8.9	0.0	0.0	0.0	7.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.01
Lane Grp Cap (c), veh/h	0	0	0	1966	0	0	0	1790
V/C Ratio (X)	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.55
Avail Cap (c_a), veh/h	0	0	0	1966	0	0	0	1790
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.22
Uniform Delay (d1), s/veh	0.0	0.0	0.0	8.9	0.0	0.0	0.0	0.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	9.1	0.0	0.0	0.0	0.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.4	0.0	0.0	0.0	3.3
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	3.5	0.0	0.0	0.0	3.4
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.37	0.00	0.00	0.00	0.06
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		13.9						
HCM 2010 LOS		B						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	391	142	251	370	239	173	1116	351	349	808	47
Future Volume (veh/h)	44	391	142	251	370	239	173	1116	351	349	808	47
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	45	403	146	259	381	246	178	1151	362	360	833	48
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	58	318	114	187	410	261	198	1138	352	344	1734	100
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.13	0.13	0.11	0.20	0.20	0.12	0.45	0.45	0.20	0.53	0.53
Ln Grp Delay, s/veh	93.9	215.7	225.0	272.0	91.3	96.5	104.4	76.2	83.2	123.3	24.4	24.3
Ln Grp LOS	F	F	F	F	F	F	F	F	F	F	C	C
Approach Vol, veh/h		594			886			1691			1241	
Approach Delay, s/veh		210.7			145.9			82.3			53.1	
Approach LOS		F			F			F			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	4.0
Phs Duration (G+Y+Rc), s	36.0	74.0	21.0	24.0	22.6	87.4	9.6	35.4
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green (Gmax), s	31.5	69.5	16.5	19.5	18.5	82.5	13.5	22.5
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.4	3.8	5.3	3.8	5.4
Max Q Clear (g_c+I1), s	33.5	71.5	18.5	21.5	18.1	26.9	5.9	30.7
Green Ext Time (g_e), s	0.0	0.0	0.0	0.0	0.0	32.8	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	0.86	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	1.00	1.00	0.00	0.01	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1691		1757		1691		1757	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2538		2531		3243		2056

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		786		906		187		1310

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	360	0	259	0	178	0	45	0
Grp Sat Flow (s), veh/h/ln	1691	0	1757	0	1691	0	1757	0
Q Serve Time (g_s), s	31.5	0.0	16.5	0.0	16.1	0.0	3.9	0.0
Cycle Q Clear Time (g_c), s	31.5	0.0	16.5	0.0	16.1	0.0	3.9	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	344	0	187	0	198	0	58	0
V/C Ratio (X)	1.05	0.00	1.38	0.00	0.90	0.00	0.78	0.00
Avail Cap (c_a), veh/h	344	0	187	0	202	0	153	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	61.7	0.0	69.3	0.0	67.6	0.0	74.4	0.0
Incr Delay (d2), s/veh	61.5	0.0	202.8	0.0	36.9	0.0	19.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	123.3	0.0	272.0	0.0	104.4	0.0	93.9	0.0
1st-Term Q (Q1), veh/ln	14.7	0.0	8.0	0.0	7.5	0.0	1.9	0.0
2nd-Term Q (Q2), veh/ln	5.9	0.0	10.5	0.0	2.0	0.0	0.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	20.6	0.0	18.5	0.0	9.5	0.0	2.2	0.0
%ile Storage Ratio (RQ%)	1.67	0.00	2.02	0.00	1.53	0.00	0.46	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	4.1	0.0	18.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	759	0	278	0	433	0	324
Grp Sat Flow (s), veh/h/ln	0	1687	0	1752	0	1687	0	1752
Q Serve Time (g_s), s	0.0	69.5	0.0	19.5	0.0	24.9	0.0	28.1
Cycle Q Clear Time (g_c), s	0.0	69.5	0.0	19.5	0.0	24.9	0.0	28.1
Lane Grp Cap (c), veh/h	0	756	0	220	0	902	0	349
V/C Ratio (X)	0.00	1.00	0.00	1.26	0.00	0.48	0.00	0.93
Avail Cap (c_a), veh/h	0	756	0	220	0	902	0	349
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	42.8	0.0	67.8	0.0	22.6	0.0	61.0
Incr Delay (d2), s/veh	0.0	33.4	0.0	147.9	0.0	1.8	0.0	30.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	76.2	0.0	215.7	0.0	24.4	0.0	91.3
1st-Term Q (Q1), veh/ln	0.0	32.4	0.0	9.4	0.0	11.6	0.0	13.7

2nd-Term Q (Q2), veh/ln	0.0	7.0	0.0	9.1	0.0	0.5	0.0	2.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	39.4	0.0	18.5	0.0	12.0	0.0	16.6
%ile Storage Ratio (RQ%)	0.00	3.10	0.00	0.43	0.00	0.92	0.00	0.38
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.6	0.0	14.3	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	754	0	271	0	448	0	303
Grp Sat Flow (s), veh/h/ln	0	1637	0	1685	0	1743	0	1614
Q Serve Time (g_s), s	0.0	69.5	0.0	19.5	0.0	24.9	0.0	28.7
Cycle Q Clear Time (g_c), s	0.0	69.5	0.0	19.5	0.0	24.9	0.0	28.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.48	0.00	0.54	0.00	0.11	0.00	0.81
Lane Grp Cap (c), veh/h	0	734	0	212	0	932	0	322
V/C Ratio (X)	0.00	1.03	0.00	1.28	0.00	0.48	0.00	0.94
Avail Cap (c_a), veh/h	0	734	0	212	0	932	0	322
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	42.8	0.0	67.8	0.0	22.6	0.0	61.2
Incr Delay (d2), s/veh	0.0	40.5	0.0	157.3	0.0	1.8	0.0	35.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	83.2	0.0	225.0	0.0	24.3	0.0	96.5
1st-Term Q (Q1), veh/ln	0.0	31.4	0.0	9.1	0.0	11.9	0.0	12.8
2nd-Term Q (Q2), veh/ln	0.0	8.3	0.0	9.3	0.0	0.5	0.0	3.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	39.7	0.0	18.3	0.0	12.4	0.0	16.0
%ile Storage Ratio (RQ%)	0.00	3.12	0.00	0.42	0.00	0.95	0.00	0.36
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	5.1	0.0	14.9	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		104.1						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	34	68	80	34	105	74	574	164	194	503	34
Future Volume (veh/h)	27	34	68	80	34	105	74	574	164	194	503	34
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1900	1712	1712	1712	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	29	36	72	85	36	112	79	611	174	206	535	36
Adj No. of Lanes	1	1	0	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	11	11	11	11	11	11	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	46	52	103	101	230	196	74	1365	388	74	1689	113
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.10	0.10	0.06	0.13	0.13	0.04	0.53	0.53	0.04	0.53	0.53
Ln Grp Delay, s/veh	57.2	0.0	45.6	86.7	35.5	40.0	172.1	15.1	15.2	891.2	13.3	13.3
Ln Grp LOS	E		D	F	D	D	F	B	B	F	B	B
Approach Vol, veh/h		137			233			864			777	
Approach Delay, s/veh		48.1			56.3			29.5			246.1	
Approach LOS		D			E			C			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	10.0	54.4	12.0	15.6	10.0	54.4	8.9	18.7
Change Period (Y+Rc), s	6.0	6.0	* 6.3	* 6.3	6.0	6.0	* 6.3	* 6.3
Max Green (Gmax), s	4.0	34.0	* 5.7	* 24	4.0	34.0	* 5.7	* 24
Max Allow Headway (MAH), s	3.8	5.3	3.8	4.8	3.8	5.3	3.8	4.8
Max Q Clear (g_c+I1), s	6.0	15.5	6.7	8.3	6.0	10.7	3.6	8.6
Green Ext Time (g_e), s	0.0	8.6	0.0	1.0	0.0	9.6	0.0	1.0
Prob of Phs Call (p_c)	0.99	1.00	0.89	1.00	0.87	1.00	0.52	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.01	1.00	0.00	1.00	0.01

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1691		1630		1691		1630	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2595		511		3209		1712

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		738		1021		216		1455

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	206	0	85	0	79	0	29	0
Grp Sat Flow (s), veh/h/ln	1691	0	1630	0	1691	0	1630	0
Q Serve Time (g_s), s	4.0	0.0	4.7	0.0	4.0	0.0	1.6	0.0
Cycle Q Clear Time (g_c), s	4.0	0.0	4.7	0.0	4.0	0.0	1.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	74	0	101	0	74	0	46	0
V/C Ratio (X)	2.80	0.00	0.84	0.00	1.07	0.00	0.63	0.00
Avail Cap (c_a), veh/h	74	0	101	0	74	0	101	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	44.0	0.0	42.7	0.0	44.0	0.0	44.2	0.0
Incr Delay (d2), s/veh	847.2	0.0	44.0	0.0	126.8	0.0	13.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0
Control Delay (d), s/veh	891.2	0.0	86.7	0.0	172.1	0.0	57.2	0.0
1st-Term Q (Q1), veh/ln	1.9	0.0	2.1	0.0	1.9	0.0	0.7	0.0
2nd-Term Q (Q2), veh/ln	17.3	0.0	1.2	0.0	2.6	0.0	0.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	19.2	0.0	3.4	0.0	4.4	0.0	0.9	0.0
%ile Storage Ratio (RQ%)	2.23	0.00	0.65	0.00	0.37	0.00	0.16	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	33.1	0.0	0.0	0.0	1.4	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.7	0.0	0.0	0.0	0.3	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	397	0	0	0	281	0	36
Grp Sat Flow (s), veh/h/ln	0	1687	0	0	0	1687	0	1712
Q Serve Time (g_s), s	0.0	13.4	0.0	0.0	0.0	8.7	0.0	1.7
Cycle Q Clear Time (g_c), s	0.0	13.4	0.0	0.0	0.0	8.7	0.0	1.7
Lane Grp Cap (c), veh/h	0	888	0	0	0	888	0	230
V/C Ratio (X)	0.00	0.45	0.00	0.00	0.00	0.32	0.00	0.16
Avail Cap (c_a), veh/h	0	888	0	0	0	888	0	441
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	13.5	0.0	0.0	0.0	12.4	0.0	35.2
Incr Delay (d2), s/veh	0.0	1.6	0.0	0.0	0.0	0.9	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	15.1	0.0	0.0	0.0	13.3	0.0	35.5
1st-Term Q (Q1), veh/ln	0.0	6.2	0.0	0.0	0.0	4.1	0.0	0.8

2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	6.6	0.0	0.0	0.0	4.3	0.0	0.8
%ile Storage Ratio (RQ%)	0.00	0.21	0.00	0.00	0.00	0.13	0.00	0.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	388	0	108	0	290	0	112
Grp Sat Flow (s), veh/h/ln	0	1646	0	1532	0	1738	0	1455
Q Serve Time (g_s), s	0.0	13.5	0.0	6.3	0.0	8.7	0.0	6.6
Cycle Q Clear Time (g_c), s	0.0	13.5	0.0	6.3	0.0	8.7	0.0	6.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.45	0.00	0.67	0.00	0.12	0.00	1.00
Lane Grp Cap (c), veh/h	0	866	0	155	0	914	0	196
V/C Ratio (X)	0.00	0.45	0.00	0.70	0.00	0.32	0.00	0.57
Avail Cap (c_a), veh/h	0	866	0	395	0	914	0	375
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	13.5	0.0	40.0	0.0	12.4	0.0	37.3
Incr Delay (d2), s/veh	0.0	1.7	0.0	5.6	0.0	0.9	0.0	2.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	15.2	0.0	45.6	0.0	13.3	0.0	40.0
1st-Term Q (Q1), veh/ln	0.0	6.0	0.0	2.7	0.0	4.2	0.0	2.7
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.2	0.0	0.2	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	6.4	0.0	2.9	0.0	4.4	0.0	2.8
%ile Storage Ratio (RQ%)	0.00	0.21	0.00	0.07	0.00	0.13	0.00	0.49
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		117.5						
HCM 2010 LOS		F						

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	101	253	43	148	222	134	89	1002	185	343	1018	71
Future Volume (veh/h)	101	253	43	148	222	134	89	1002	185	343	1018	71
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	103	258	44	151	227	137	91	1022	189	350	1039	72
Adj No. of Lanes	1	1	0	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	96	309	53	96	372	316	110	1337	247	185	1646	114
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.20	0.20	0.05	0.20	0.20	0.07	0.47	0.47	0.11	0.51	0.51
Ln Grp Delay, s/veh	181.4	0.0	61.0	368.9	54.7	52.0	97.8	38.9	39.0	477.9	27.8	27.7
Ln Grp LOS	F		E	F	D	D	F	D	D	F	C	C
Approach Vol, veh/h		405			515			1302			1461	
Approach Delay, s/veh		91.6			146.1			43.1			135.6	
Approach LOS		F			F			D			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	22.0	74.6	14.0	35.4	15.5	81.1	14.0	35.4
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green (Gmax), s	16.0	46.0	8.0	52.0	11.0	51.0	8.0	52.0
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.0	3.8	5.3	3.8	5.0
Max Q Clear (g_c+I1), s	18.0	45.5	10.0	25.5	9.8	36.1	10.0	18.4
Green Ext Time (g_e), s	0.0	0.4	0.0	3.9	0.0	12.0	0.0	4.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.98	1.00	0.98	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.01	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1691		1757		1691		1757	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2845		1536		3202		1845

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		525		262		222		1568

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	350	0	151	0	91	0	103	0
Grp Sat Flow (s), veh/h/ln	1691	0	1757	0	1691	0	1757	0
Q Serve Time (g_s), s	16.0	0.0	8.0	0.0	7.8	0.0	8.0	0.0
Cycle Q Clear Time (g_c), s	16.0	0.0	8.0	0.0	7.8	0.0	8.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	185	0	96	0	110	0	96	0
V/C Ratio (X)	1.89	0.00	1.57	0.00	0.82	0.00	1.07	0.00
Avail Cap (c_a), veh/h	185	0	96	0	127	0	96	0
Upstream Filter (I)	0.65	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	65.0	0.0	69.0	0.0	67.4	0.0	69.0	0.0
Incr Delay (d2), s/veh	412.9	0.0	299.9	0.0	30.4	0.0	111.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0
Control Delay (d), s/veh	477.9	0.0	368.9	0.0	97.8	0.0	181.4	0.0
1st-Term Q (Q1), veh/ln	7.5	0.0	3.9	0.0	3.6	0.0	3.9	0.0
2nd-Term Q (Q2), veh/ln	21.3	0.0	8.0	0.0	0.9	0.0	3.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	28.7	0.0	11.9	0.0	4.6	0.0	6.9	0.0
%ile Storage Ratio (RQ%)	3.03	0.00	2.26	0.00	0.56	0.00	1.07	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	41.2	0.0	13.7	0.0	0.0	0.0	1.7	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.5	0.0	0.4	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	605	0	0	0	547	0	227
Grp Sat Flow (s), veh/h/ln	0	1687	0	0	0	1687	0	1845
Q Serve Time (g_s), s	0.0	43.3	0.0	0.0	0.0	34.1	0.0	16.4
Cycle Q Clear Time (g_c), s	0.0	43.3	0.0	0.0	0.0	34.1	0.0	16.4
Lane Grp Cap (c), veh/h	0	793	0	0	0	867	0	372
V/C Ratio (X)	0.00	0.76	0.00	0.00	0.00	0.63	0.00	0.61
Avail Cap (c_a), veh/h	0	793	0	0	0	867	0	657
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.65	0.00	1.00
Uniform Delay (d1), s/veh	0.0	32.0	0.0	0.0	0.0	25.5	0.0	53.1
Incr Delay (d2), s/veh	0.0	6.9	0.0	0.0	0.0	2.3	0.0	1.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	38.9	0.0	0.0	0.0	27.8	0.0	54.7
1st-Term Q (Q1), veh/ln	0.0	20.2	0.0	0.0	0.0	15.8	0.0	8.3

2nd-Term Q (Q2), veh/ln	0.0	1.5	0.0	0.0	0.0	0.6	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	21.7	0.0	0.0	0.0	16.4	0.0	8.5
%ile Storage Ratio (RQ%)	0.00	1.09	0.00	0.00	0.00	0.34	0.00	0.24
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	606	0	302	0	564	0	137
Grp Sat Flow (s), veh/h/ln	0	1683	0	1798	0	1737	0	1568
Q Serve Time (g_s), s	0.0	43.5	0.0	23.5	0.0	34.1	0.0	11.2
Cycle Q Clear Time (g_c), s	0.0	43.5	0.0	23.5	0.0	34.1	0.0	11.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.31	0.00	0.15	0.00	0.13	0.00	1.00
Lane Grp Cap (c), veh/h	0	791	0	362	0	893	0	316
V/C Ratio (X)	0.00	0.77	0.00	0.83	0.00	0.63	0.00	0.43
Avail Cap (c_a), veh/h	0	791	0	641	0	893	0	558
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.65	0.00	1.00
Uniform Delay (d1), s/veh	0.0	32.1	0.0	56.0	0.0	25.5	0.0	51.0
Incr Delay (d2), s/veh	0.0	7.0	0.0	5.0	0.0	2.2	0.0	0.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	39.0	0.0	61.0	0.0	27.7	0.0	52.0
1st-Term Q (Q1), veh/ln	0.0	20.2	0.0	11.7	0.0	16.3	0.0	4.9
2nd-Term Q (Q2), veh/ln	0.0	1.5	0.0	0.5	0.0	0.6	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	21.7	0.0	12.2	0.0	16.8	0.0	4.9
%ile Storage Ratio (RQ%)	0.00	1.09	0.00	0.34	0.00	0.35	0.00	0.14
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		99.5						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	129	227	41	127	298	124	104	958	72	243	1174	101
Future Volume (veh/h)	129	227	41	127	298	124	104	958	72	243	1174	101
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	137	241	44	135	317	132	111	1019	77	259	1249	107
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	209	584	496	278	584	496	132	1483	112	217	1625	139
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.08	0.47	0.47	0.13	0.52	0.52
Ln Grp Delay, s/veh	66.5	41.3	36.6	55.0	43.7	39.1	70.6	32.3	32.3	178.8	33.6	33.6
Ln Grp LOS	E	D	D	E	D	D	E	C	C	F	C	C
Approach Vol, veh/h		422			584			1207			1615	
Approach Delay, s/veh		49.0			45.3			35.8			56.9	
Approach LOS		D			D			D			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Case No	2.0	4.0		5.0	2.0	4.0		5.0
Phs Duration (G+Y+Rc), s	24.0	75.4		52.6	16.4	83.0		52.6
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green (Gmax), s	19.5	67.5		51.5	19.5	67.5		51.5
Max Allow Headway (MAH), s	3.8	5.3		4.9	3.8	5.3		4.9
Max Q Clear (g_c+I1), s	21.5	40.3		45.3	11.8	50.5		34.7
Green Ext Time (g_e), s	0.0	20.4		2.8	0.1	13.9		5.1
Prob of Phs Call (p_c)	1.00	1.00		1.00	0.99	1.00		1.00
Prob of Max Out (p_x)	1.00	0.00		0.84	0.02	0.00		0.20

Left-Turn Movement Data								
Assigned Mvmt	1			7	5			3
Mvmt Sat Flow, veh/h	1691			928	1691			1079

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3180		1845		3146		1845

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		240		1568		269		1568

Left Lane Group Data								
Assigned Mvmt	1	0	0	7	5	0	0	3
Lane Assignment	(Prot)				(Prot)			

Lanes in Grp	1	0	0	1	1	0	0	1
Grp Vol (v), veh/h	259	0	0	137	111	0	0	135
Grp Sat Flow (s), veh/h/ln	1691	0	0	928	1691	0	0	1079
Q Serve Time (g_s), s	19.5	0.0	0.0	21.7	9.8	0.0	0.0	17.1
Cycle Q Clear Time (g_c), s	19.5	0.0	0.0	43.3	9.8	0.0	0.0	32.7
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	928	0	0	0	1079
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	48.1	0.0	0.0	0.0	48.1
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	26.5	0.0	0.0	0.0	32.5
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	21.7	0.0	0.0	0.0	17.1
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	217	0	0	209	132	0	0	278
V/C Ratio (X)	1.19	0.00	0.00	0.65	0.84	0.00	0.00	0.49
Avail Cap (c_a), veh/h	217	0	0	230	217	0	0	302
Upstream Filter (I)	0.64	0.00	0.00	1.00	0.09	0.00	0.00	1.00
Uniform Delay (d1), s/veh	66.3	0.0	0.0	60.7	69.1	0.0	0.0	53.7
Incr Delay (d2), s/veh	112.6	0.0	0.0	5.7	1.5	0.0	0.0	1.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	178.8	0.0	0.0	66.5	70.6	0.0	0.0	55.0
1st-Term Q (Q1), veh/ln	9.1	0.0	0.0	5.6	4.6	0.0	0.0	5.1
2nd-Term Q (Q2), veh/ln	6.8	0.0	0.0	0.3	0.1	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	15.9	0.0	0.0	5.9	4.6	0.0	0.0	5.2
%ile Storage Ratio (RQ%)	1.55	0.00	0.00	0.89	0.63	0.00	0.00	0.72
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	10.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	540	0	241	0	668	0	317
Grp Sat Flow (s), veh/h/ln	0	1687	0	1845	0	1687	0	1845
Q Serve Time (g_s), s	0.0	38.2	0.0	15.6	0.0	48.2	0.0	21.6
Cycle Q Clear Time (g_c), s	0.0	38.2	0.0	15.6	0.0	48.2	0.0	21.6
Lane Grp Cap (c), veh/h	0	787	0	584	0	871	0	584
V/C Ratio (X)	0.00	0.69	0.00	0.41	0.00	0.77	0.00	0.54
Avail Cap (c_a), veh/h	0	787	0	625	0	871	0	625
Upstream Filter (I)	0.00	0.09	0.00	1.00	0.00	0.64	0.00	1.00
Uniform Delay (d1), s/veh	0.0	31.8	0.0	40.8	0.0	29.4	0.0	42.9
Incr Delay (d2), s/veh	0.0	0.5	0.0	0.5	0.0	4.2	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	32.3	0.0	41.3	0.0	33.6	0.0	43.7
1st-Term Q (Q1), veh/ln	0.0	17.9	0.0	8.0	0.0	22.5	0.0	11.0

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.0	1.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	18.0	0.0	8.0	0.0	23.5	0.0	11.1
%ile Storage Ratio (RQ%)	0.00	0.38	0.00	0.24	0.00	1.03	0.00	0.26
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	556	0	44	0	688	0	132
Grp Sat Flow (s), veh/h/ln	0	1733	0	1568	0	1728	0	1568
Q Serve Time (g_s), s	0.0	38.3	0.0	3.0	0.0	48.5	0.0	9.6
Cycle Q Clear Time (g_c), s	0.0	38.3	0.0	3.0	0.0	48.5	0.0	9.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.14	0.00	1.00	0.00	0.16	0.00	1.00
Lane Grp Cap (c), veh/h	0	808	0	496	0	893	0	496
V/C Ratio (X)	0.00	0.69	0.00	0.09	0.00	0.77	0.00	0.27
Avail Cap (c_a), veh/h	0	808	0	531	0	893	0	531
Upstream Filter (I)	0.00	0.09	0.00	1.00	0.00	0.64	0.00	1.00
Uniform Delay (d1), s/veh	0.0	31.8	0.0	36.5	0.0	29.5	0.0	38.8
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.1	0.0	4.2	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	32.3	0.0	36.6	0.0	33.6	0.0	39.1
1st-Term Q (Q1), veh/ln	0.0	18.4	0.0	1.3	0.0	23.1	0.0	4.1
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	1.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	18.5	0.0	1.3	0.0	24.1	0.0	4.2
%ile Storage Ratio (RQ%)	0.00	0.39	0.00	0.23	0.00	1.06	0.00	0.59
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		47.6						
HCM 2010 LOS		D						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	45	38	112	37	530	41	1208	76	464	1408	86
Future Volume (veh/h)	64	45	38	112	37	530	41	1208	76	464	1408	86
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	68	48	40	119	39	564	44	1285	81	494	1498	91
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	46	126	105	140	26	375	163	1469	92	300	2169	131
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.14	0.14	0.14	0.08	0.25	0.25	0.46	0.46	0.46	0.18	0.67	0.67
Ln Grp Delay, s/veh	386.7	0.0	63.3	89.6	0.0	298.6	37.5	47.5	47.5	363.1	17.4	17.5
Ln Grp LOS	F		E	F		F	D	D	D	F	B	B
Approach Vol, veh/h		156			722			1410			2083	
Approach Delay, s/veh		204.3			264.2			47.2			99.4	
Approach LOS		F			F			D			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4		6		8
Case No	2.0	6.0	2.0	6.0		4.0		4.0
Phs Duration (G+Y+Rc), s	34.0	78.0	18.6	27.4		112.0		46.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0		6.0		6.0
Max Green (Gmax), s	28.0	72.0	19.0	15.0		106.0		40.0
Max Allow Headway (MAH), s	3.8	5.4	3.8	5.6		5.4		5.6
Max Q Clear (g_c+I1), s	30.0	59.2	12.6	23.4		47.3		42.0
Green Ext Time (g_e), s	0.0	12.0	0.1	0.0		45.9		0.0
Prob of Phs Call (p_c)	1.00	1.00	0.99	1.00		1.00		1.00
Prob of Max Out (p_x)	1.00	0.00	0.08	1.00		0.00		1.00

Left-Turn Movement Data				
Assigned Mvmt	1	5	3	7
Mvmt Sat Flow, veh/h	1691	305	1757	805

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	3224	931	3233	102

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	203	776	196	1481

Left Lane Group Data								
Assigned Mvmt	1	5	3	7	0	0	0	0
Lane Assignment	(Prot)		(Prot)					

Lanes in Grp	1	1	1	1	0	0	0	0
Grp Vol (v), veh/h	494	44	119	68	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1691	305	1757	805	0	0	0	0
Q Serve Time (g_s), s	28.0	16.4	10.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	28.0	27.7	10.6	21.4	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	305	0	805	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	72.0	0.0	21.4	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	60.7	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	16.4	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	300	163	140	46	0	0	0	0
V/C Ratio (X)	1.65	0.27	0.85	1.49	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	300	163	211	46	0	0	0	0
Upstream Filter (I)	0.43	0.61	1.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	65.0	35.0	71.7	79.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	298.1	2.5	17.8	307.7	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	363.1	37.5	89.6	386.7	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	13.1	1.4	5.1	2.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	24.8	0.1	0.7	3.9	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	37.9	1.5	5.8	5.9	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	4.00	0.18	0.66	1.88	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	48.6	0.0	0.0	5.6	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.4	0.0	0.0	0.4	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	671	0	0	0	779	0	0
Grp Sat Flow (s), veh/h/ln	0	1687	0	0	0	1687	0	0
Q Serve Time (g_s), s	0.0	56.8	0.0	0.0	0.0	44.6	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	56.8	0.0	0.0	0.0	44.6	0.0	0.0
Lane Grp Cap (c), veh/h	0	769	0	0	0	1132	0	0
V/C Ratio (X)	0.00	0.87	0.00	0.00	0.00	0.69	0.00	0.00
Avail Cap (c_a), veh/h	0	769	0	0	0	1132	0	0
Upstream Filter (I)	0.00	0.61	0.00	0.00	0.00	0.43	0.00	0.00
Uniform Delay (d1), s/veh	0.0	38.9	0.0	0.0	0.0	15.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	8.6	0.0	0.0	0.0	1.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	47.5	0.0	0.0	0.0	17.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	26.5	0.0	0.0	0.0	20.6	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	1.8	0.0	0.0	0.0	0.5	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	28.3	0.0	0.0	0.0	21.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.24	0.00	0.00	0.00	1.08	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	695	0	88	0	810	0	603
Grp Sat Flow (s), veh/h/ln	0	1740	0	1708	0	1741	0	1583
Q Serve Time (g_s), s	0.0	57.2	0.0	7.4	0.0	45.3	0.0	40.0
Cycle Q Clear Time (g_c), s	0.0	57.2	0.0	7.4	0.0	45.3	0.0	40.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.12	0.00	0.45	0.00	0.11	0.00	0.94
Lane Grp Cap (c), veh/h	0	793	0	231	0	1168	0	401
V/C Ratio (X)	0.00	0.88	0.00	0.38	0.00	0.69	0.00	1.50
Avail Cap (c_a), veh/h	0	793	0	231	0	1168	0	401
Upstream Filter (I)	0.00	0.61	0.00	1.00	0.00	0.43	0.00	1.00
Uniform Delay (d1), s/veh	0.0	39.0	0.0	62.3	0.0	16.0	0.0	59.0
Incr Delay (d2), s/veh	0.0	8.5	0.0	1.0	0.0	1.5	0.0	239.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	47.5	0.0	63.3	0.0	17.5	0.0	298.6
1st-Term Q (Q1), veh/ln	0.0	27.4	0.0	3.5	0.0	21.6	0.0	17.5
2nd-Term Q (Q2), veh/ln	0.0	1.9	0.0	0.1	0.0	0.5	0.0	26.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	29.3	0.0	3.6	0.0	22.1	0.0	44.2
%ile Storage Ratio (RQ%)	0.00	1.28	0.00	0.47	0.00	1.13	0.00	4.71
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.5
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	113.5
HCM 2010 LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	470	636	305	682	763	13	256	1004	7	7	853	196
Future Volume (veh/h)	470	636	305	682	763	13	256	1004	7	7	853	196
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1759	1759	1759	1900	1776	1776	1776	1900	1776	1776
Adj Flow Rate, veh/h	490	662	318	710	795	14	267	1046	0	7	889	0
Adj No. of Lanes	2	2	1	2	2	0	1	2	1	0	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	8	8	8	8	8	8	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	556	455	204	768	677	12	134	1704	762	27	1269	584
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.17	0.14	0.14	0.24	0.20	0.20	0.08	0.51	0.00	0.39	0.39	0.00
Ln Grp Delay, s/veh	68.5	282.0	340.9	71.4	165.9	165.0	527.0	27.4	0.0	44.4	46.2	0.0
Ln Grp LOS	E	F	F	E	F	F	F	C		D	D	
Approach Vol, veh/h		1470			1519			1313			896	
Approach Delay, s/veh		223.6			121.5			129.0			45.2	
Approach LOS		F			F			F			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Case No		3.0	2.0	3.0	2.0	7.0	2.0	4.0
Phs Duration (G+Y+Rc), s		83.1	41.9	27.0	18.0	65.1	32.0	36.9
Change Period (Y+Rc), s		6.3	6.0	6.3	6.0	6.3	6.0	6.3
Max Green (Gmax), s		72.7	40.0	20.7	12.0	54.7	40.0	20.7
Max Allow Headway (MAH), s		5.3	3.8	5.1	3.8	5.3	3.8	5.1
Max Q Clear (g_c+I1), s		35.8	34.4	22.7	14.0	36.9	24.4	32.6
Green Ext Time (g_e), s		19.6	1.5	0.0	0.0	12.4	1.6	0.0
Prob of Phs Call (p_c)		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)		0.00	0.55	1.00	1.00	0.00	0.00	1.00

Left-Turn Movement Data							
Assigned Mvmt			3		5	1	7
Mvmt Sat Flow, veh/h			3250		1691	9	3250

Through Movement Data							
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3374		3343		3281		3361

Right-Turn Movement Data							
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1509		1495		1509		59

Left Lane Group Data								
Assigned Mvmt	0	0	3	0	5	1	7	0
Lane Assignment			(Prot)		(Prot)	L+T	(Prot)	

Lanes in Grp	0	0	2	0	1	1	2	0
Grp Vol (v), veh/h	0	0	710	0	267	478	490	0
Grp Sat Flow (s), veh/h/ln	0	0	1625	0	1691	1755	1625	0
Q Serve Time (g_s), s	0.0	0.0	32.4	0.0	12.0	0.0	22.4	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	32.4	0.0	12.0	34.3	22.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	548	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	58.8	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	43.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	38.7	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	34.3	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	1.00	0.01	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	768	0	134	702	556	0
V/C Ratio (X)	0.00	0.00	0.92	0.00	2.00	0.68	0.88	0.00
Avail Cap (c_a), veh/h	0	0	855	0	134	702	855	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.27	1.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	56.7	0.0	70.0	39.1	61.5	0.0
Incr Delay (d2), s/veh	0.0	0.0	14.6	0.0	457.0	5.3	7.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	71.4	0.0	527.0	44.4	68.5	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	14.6	0.0	5.6	16.9	10.1	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	1.6	0.0	16.9	1.0	0.5	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	16.2	0.0	22.5	17.9	10.6	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	1.07	0.00	2.53	0.60	1.01	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	33.4	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	1	0	1
Grp Vol (v), veh/h	0	1046	0	662	0	418	0	395
Grp Sat Flow (s), veh/h/ln	0	1687	0	1671	0	1535	0	1671
Q Serve Time (g_s), s	0.0	33.8	0.0	20.7	0.0	34.9	0.0	30.6
Cycle Q Clear Time (g_c), s	0.0	33.8	0.0	20.7	0.0	34.9	0.0	30.6
Lane Grp Cap (c), veh/h	0	1704	0	455	0	594	0	337
V/C Ratio (X)	0.00	0.61	0.00	1.45	0.00	0.70	0.00	1.17
Avail Cap (c_a), veh/h	0	1704	0	455	0	594	0	337
Upstream Filter (I)	0.00	0.27	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	27.0	0.0	65.6	0.0	39.3	0.0	60.7
Incr Delay (d2), s/veh	0.0	0.4	0.0	216.4	0.0	6.9	0.0	105.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	27.4	0.0	282.0	0.0	46.2	0.0	165.9
1st-Term Q (Q1), veh/ln	0.0	15.7	0.0	9.5	0.0	14.7	0.0	14.1

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	13.7	0.0	1.1	0.0	9.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	15.8	0.0	23.2	0.0	15.9	0.0	24.0
%ile Storage Ratio (RQ%)	0.00	0.81	0.00	0.80	0.00	0.53	0.00	0.73
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	51.7	0.0	0.0	0.0	14.7
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	318	0	0	0	414
Grp Sat Flow (s), veh/h/ln	0	1509	0	1495	0	1509	0	1749
Q Serve Time (g_s), s	0.0	0.0	0.0	20.7	0.0	0.0	0.0	30.6
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	20.7	0.0	0.0	0.0	30.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.03
Lane Grp Cap (c), veh/h	0	762	0	204	0	584	0	352
V/C Ratio (X)	0.00	0.00	0.00	1.56	0.00	0.00	0.00	1.17
Avail Cap (c_a), veh/h	0	762	0	204	0	584	0	352
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	65.6	0.0	0.0	0.0	60.7
Incr Delay (d2), s/veh	0.0	0.0	0.0	275.3	0.0	0.0	0.0	104.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	340.9	0.0	0.0	0.0	165.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	8.6	0.0	0.0	0.0	14.8
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	15.6	0.0	0.0	0.0	10.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	24.1	0.0	0.0	0.0	25.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.83	0.00	0.00	0.00	0.76
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	28.6	0.0	0.0	0.0	15.4
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.3
Intersection Summary								
HCM 2010 Ctrl Delay		139.1						
HCM 2010 LOS		F						

APPENDIX IV-B4:
Year 2020 Zoning Intersection Total with Combined LOS PM Analysis with Mitigation

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	629	1477	796	198	953	77	487	281	192	156	188	211
Future Volume (veh/h)	629	1477	796	198	953	77	487	281	192	156	188	211
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1743	1743	1900	1743	1743	1743
Adj Flow Rate, veh/h	669	1571	847	211	1014	82	518	299	204	166	200	224
Adj No. of Lanes	2	2	1	1	2	1	2	2	0	2	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	9	9	9	9	9	9
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	733	1615	723	193	1247	558	211	472	314	65	669	299
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.21	0.45	0.45	0.11	0.35	0.35	0.07	0.25	0.25	0.02	0.20	0.20
Ln Grp Delay, s/veh	72.3	58.0	133.9	160.4	51.5	35.0	739.6	58.9	60.4	820.6	53.3	73.5
Ln Grp LOS	E	E	F	F	D	C	F	E	E	F	D	E
Approach Vol, veh/h		3087			1307			1021			590	
Approach Delay, s/veh		81.9			68.0			404.6			276.9	
Approach LOS		F			E			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	10.0	45.0	23.0	76.0	17.0	38.0	38.9	60.1
Change Period (Y+Rc), s	6.9	6.9	6.4	6.4	6.9	6.9	6.4	6.4
Max Green (Gmax), s	3.1	38.1	16.6	69.6	10.1	31.1	37.6	48.6
Max Allow Headway (MAH), s	3.8	5.1	3.7	4.8	3.8	5.1	3.8	4.8
Max Q Clear (g_c+I1), s	5.1	24.2	18.6	71.6	12.1	23.9	31.0	41.7
Green Ext Time (g_e), s	0.0	4.6	0.0	0.0	0.0	3.1	1.5	6.6
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	0.33	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3221		1792		3221		3476	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1908		3574		3312		3574

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1268		1599		1482		1599

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	1	0	2	0	2	0
Grp Vol (v), veh/h	166	0	211	0	518	0	669	0
Grp Sat Flow (s), veh/h/ln	1610	0	1792	0	1610	0	1738	0
Q Serve Time (g_s), s	3.1	0.0	16.6	0.0	10.1	0.0	29.0	0.0
Cycle Q Clear Time (g_c), s	3.1	0.0	16.6	0.0	10.1	0.0	29.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	65	0	193	0	211	0	733	0
V/C Ratio (X)	2.56	0.00	1.09	0.00	2.45	0.00	0.91	0.00
Avail Cap (c_a), veh/h	65	0	193	0	211	0	849	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	75.4	0.0	68.7	0.0	71.9	0.0	59.4	0.0
Incr Delay (d2), s/veh	745.2	0.0	91.7	0.0	667.7	0.0	12.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	820.6	0.0	160.4	0.0	739.6	0.0	72.3	0.0
1st-Term Q (Q1), veh/ln	1.4	0.0	8.2	0.0	4.5	0.0	13.9	0.0
2nd-Term Q (Q2), veh/ln	6.7	0.0	4.9	0.0	19.6	0.0	1.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	8.1	0.0	13.1	0.0	24.1	0.0	15.2	0.0
%ile Storage Ratio (RQ%)	0.68	0.00	1.03	0.00	2.02	0.00	0.62	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	25.3	0.0	4.5	0.0	76.7	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.6	0.0	0.3	0.0	0.6	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	2	0	2
Grp Vol (v), veh/h	0	258	0	1571	0	200	0	1014
Grp Sat Flow (s), veh/h/ln	0	1656	0	1787	0	1656	0	1787
Q Serve Time (g_s), s	0.0	21.4	0.0	66.2	0.0	7.9	0.0	39.7
Cycle Q Clear Time (g_c), s	0.0	21.4	0.0	66.2	0.0	7.9	0.0	39.7
Lane Grp Cap (c), veh/h	0	410	0	1615	0	669	0	1247
V/C Ratio (X)	0.00	0.63	0.00	0.97	0.00	0.30	0.00	0.81
Avail Cap (c_a), veh/h	0	410	0	1615	0	669	0	1247
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	51.7	0.0	41.3	0.0	52.2	0.0	45.6
Incr Delay (d2), s/veh	0.0	7.2	0.0	16.8	0.0	1.1	0.0	5.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	58.9	0.0	58.0	0.0	53.3	0.0	51.5
1st-Term Q (Q1), veh/ln	0.0	9.8	0.0	32.5	0.0	3.6	0.0	19.6

2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	3.8	0.0	0.1	0.0	1.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	10.7	0.0	36.3	0.0	3.7	0.0	20.6
%ile Storage Ratio (RQ%)	0.00	0.39	0.00	0.81	0.00	0.14	0.00	0.96
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	245	0	847	0	224	0	82
Grp Sat Flow (s), veh/h/ln	0	1519	0	1599	0	1482	0	1599
Q Serve Time (g_s), s	0.0	22.2	0.0	69.6	0.0	21.9	0.0	5.4
Cycle Q Clear Time (g_c), s	0.0	22.2	0.0	69.6	0.0	21.9	0.0	5.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.83	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	376	0	723	0	299	0	558
V/C Ratio (X)	0.00	0.65	0.00	1.17	0.00	0.75	0.00	0.15
Avail Cap (c_a), veh/h	0	376	0	723	0	299	0	558
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	52.0	0.0	42.2	0.0	57.8	0.0	34.4
Incr Delay (d2), s/veh	0.0	8.5	0.0	91.7	0.0	15.7	0.0	0.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	60.4	0.0	133.9	0.0	73.5	0.0	35.0
1st-Term Q (Q1), veh/ln	0.0	9.3	0.0	30.6	0.0	9.0	0.0	2.4
2nd-Term Q (Q2), veh/ln	0.0	0.9	0.0	18.4	0.0	1.3	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	10.2	0.0	49.0	0.0	10.3	0.0	2.5
%ile Storage Ratio (RQ%)	0.00	0.37	0.00	5.15	0.00	1.15	0.00	0.12
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	31.1	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		152.9						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	158	1515	200	130	977	125	219	114	177	137	61	76
Future Volume (veh/h)	158	1515	200	130	977	125	219	114	177	137	61	76
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	168	1612	213	138	1039	133	233	121	188	146	65	81
Adj No. of Lanes	2	3	1	2	2	0	2	1	1	2	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	192	2722	847	181	1680	215	289	342	291	198	292	248
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.54	0.54	0.05	0.53	0.53	0.08	0.19	0.19	0.06	0.16	0.16
Ln Grp Delay, s/veh	105.1	25.3	19.9	82.2	27.1	27.1	74.4	57.5	68.7	76.7	58.3	61.0
Ln Grp LOS	F	C	B	F	C	C	E	E	E	E	E	E
Approach Vol, veh/h		1993			1310			542			292	
Approach Delay, s/veh		31.5			32.9			68.7			68.2	
Approach LOS		C			C			E			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	15.5	35.2	14.5	88.8	19.7	31.0	15.0	88.3
Change Period (Y+Rc), s	6.6	6.6	6.4	6.4	6.6	6.6	6.4	6.4
Max Green (Gmax), s	32.4	24.4	8.6	62.6	32.4	24.4	8.6	62.6
Max Allow Headway (MAH), s	3.8	4.5	3.7	4.9	3.8	4.5	3.7	4.9
Max Q Clear (g_c+I1), s	8.5	19.1	8.1	35.2	12.3	9.1	9.5	37.4
Green Ext Time (g_e), s	0.4	1.0	0.0	22.5	0.7	1.7	0.0	21.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3408		3442		3408		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1845		5085		1845		3157

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		1583		1568		404

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	146	0	138	0	233	0	168	0
Grp Sat Flow (s), veh/h/ln	1704	0	1721	0	1704	0	1721	0
Q Serve Time (g_s), s	6.5	0.0	6.1	0.0	10.3	0.0	7.5	0.0
Cycle Q Clear Time (g_c), s	6.5	0.0	6.1	0.0	10.3	0.0	7.5	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	198	0	181	0	289	0	192	0
V/C Ratio (X)	0.74	0.00	0.76	0.00	0.80	0.00	0.87	0.00
Avail Cap (c_a), veh/h	717	0	192	0	717	0	192	0
Upstream Filter (I)	1.00	0.00	0.63	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	71.4	0.0	72.0	0.0	69.2	0.0	72.2	0.0
Incr Delay (d2), s/veh	5.3	0.0	10.2	0.0	5.2	0.0	33.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	76.7	0.0	82.2	0.0	74.4	0.0	105.1	0.0
1st-Term Q (Q1), veh/ln	3.1	0.0	2.9	0.0	4.9	0.0	3.5	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.3	0.0	0.2	0.0	0.9	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	3.2	0.0	3.2	0.0	5.1	0.0	4.4	0.0
%ile Storage Ratio (RQ%)	0.61	0.00	0.30	0.00	0.97	0.00	0.35	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	3	0	1	0	1
Grp Vol (v), veh/h	0	121	0	1612	0	65	0	582
Grp Sat Flow (s), veh/h/ln	0	1845	0	1695	0	1845	0	1770
Q Serve Time (g_s), s	0.0	8.8	0.0	33.2	0.0	4.7	0.0	35.3
Cycle Q Clear Time (g_c), s	0.0	8.8	0.0	33.2	0.0	4.7	0.0	35.3
Lane Grp Cap (c), veh/h	0	342	0	2722	0	292	0	941
V/C Ratio (X)	0.00	0.35	0.00	0.59	0.00	0.22	0.00	0.62
Avail Cap (c_a), veh/h	0	342	0	2722	0	292	0	941
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.63
Uniform Delay (d1), s/veh	0.0	54.7	0.0	24.4	0.0	56.5	0.0	25.1
Incr Delay (d2), s/veh	0.0	2.9	0.0	1.0	0.0	1.8	0.0	1.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	57.5	0.0	25.3	0.0	58.3	0.0	27.1
1st-Term Q (Q1), veh/ln	0.0	4.5	0.0	15.5	0.0	2.4	0.0	17.1

2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.2	0.0	0.1	0.0	0.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	4.8	0.0	15.8	0.0	2.6	0.0	17.6
%ile Storage Ratio (RQ%)	0.00	0.16	0.00	0.16	0.00	0.09	0.00	0.33
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	188	0	213	0	81	0	590
Grp Sat Flow (s), veh/h/ln	0	1568	0	1583	0	1568	0	1791
Q Serve Time (g_s), s	0.0	17.1	0.0	11.1	0.0	7.1	0.0	35.4
Cycle Q Clear Time (g_c), s	0.0	17.1	0.0	11.1	0.0	7.1	0.0	35.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.23
Lane Grp Cap (c), veh/h	0	291	0	847	0	248	0	953
V/C Ratio (X)	0.00	0.65	0.00	0.25	0.00	0.33	0.00	0.62
Avail Cap (c_a), veh/h	0	291	0	847	0	248	0	953
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.63
Uniform Delay (d1), s/veh	0.0	58.1	0.0	19.2	0.0	57.5	0.0	25.2
Incr Delay (d2), s/veh	0.0	10.6	0.0	0.7	0.0	3.5	0.0	1.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	68.7	0.0	19.9	0.0	61.0	0.0	27.1
1st-Term Q (Q1), veh/ln	0.0	7.4	0.0	4.8	0.0	3.1	0.0	17.5
2nd-Term Q (Q2), veh/ln	0.0	0.9	0.0	0.2	0.0	0.2	0.0	0.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	8.2	0.0	5.0	0.0	3.3	0.0	18.0
%ile Storage Ratio (RQ%)	0.00	0.28	0.00	0.05	0.00	0.12	0.00	0.34
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		39.4						
HCM 2010 LOS		D						

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	211	1600	1078	272	215	85
Future Volume (veh/h)	211	1600	1078	272	215	85
Number	7	4	8	18	1	16
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00			1.00	1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1676	1676	1676	1710	1660	1660
Adj Flow Rate, veh/h	218	1649	1111	280	222	88
Adj No. of Lanes	2	2	2	0	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	3	3
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	254	2300	1520	380	317	283
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.72	0.60	0.60	0.20	0.20
Ln Grp Delay, s/veh	90.9	14.6	27.6	28.1	74.2	59.8
Ln Grp LOS	F	B	C	C	E	E
Approach Vol, veh/h		1867	1391		310	
Approach Delay, s/veh		23.5	27.8		70.1	
Approach LOS		C	C		E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	6			4			7	8
Case No	9.0			4.0			2.0	8.0
Phs Duration (G+Y+Rc), s	40.0			127.0			20.1	106.9
Change Period (Y+Rc), s	6.5			6.4			6.4	6.4
Max Green (Gmax), s	33.5			120.6			14.6	99.6
Max Allow Headway (MAH), s	3.9			5.0			3.7	5.0
Max Q Clear (g_c+I1), s	23.8			51.8			13.6	54.9
Green Ext Time (g_e), s	0.7			49.5			0.1	35.7
Prob of Phs Call (p_c)	1.00			1.00			1.00	1.00
Prob of Max Out (p_x)	0.00			0.00			1.00	0.00
Left-Turn Movement Data								
Assigned Mvmt	1						7	3
Mvmt Sat Flow, veh/h	1581						3097	0
Through Movement Data								
Assigned Mvmt	6			4				8
Mvmt Sat Flow, veh/h	0			3269				2610
Right-Turn Movement Data								
Assigned Mvmt	16			14				18
Mvmt Sat Flow, veh/h	1411			0				632
Left Lane Group Data								
Assigned Mvmt	1	0	0	0	0	0	7	3
Lane Assignment							(Prot)	

Lanes in Grp	1	0	0	0	0	0	2	0
Grp Vol (v), veh/h	222	0	0	0	0	0	218	0
Grp Sat Flow (s), veh/h/ln	1581	0	0	0	0	0	1549	0
Q Serve Time (g_s), s	21.8	0.0	0.0	0.0	0.0	0.0	11.6	0.0
Cycle Q Clear Time (g_c), s	21.8	0.0	0.0	0.0	0.0	0.0	11.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1581	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.5
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	317	0	0	0	0	0	254	0
V/C Ratio (X)	0.70	0.00	0.00	0.00	0.00	0.00	0.86	0.00
Avail Cap (c_a), veh/h	317	0	0	0	0	0	271	0
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.63	0.00
Uniform Delay (d1), s/veh	62.1	0.0	0.0	0.0	0.0	0.0	75.7	0.0
Incr Delay (d2), s/veh	12.1	0.0	0.0	0.0	0.0	0.0	15.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	74.2	0.0	0.0	0.0	0.0	0.0	90.9	0.0
1st-Term Q (Q1), veh/ln	9.6	0.0	0.0	0.0	0.0	0.0	5.0	0.0
2nd-Term Q (Q2), veh/ln	1.1	0.0	0.0	0.0	0.0	0.0	0.5	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	10.6	0.0	0.0	0.0	0.0	0.0	5.5	0.0
%ile Storage Ratio (RQ%)	0.53	0.00	0.00	0.00	0.00	0.00	0.64	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	6	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	1
Grp Vol (v), veh/h	0	0	0	1649	0	0	0	697
Grp Sat Flow (s), veh/h/ln	0	0	0	1593	0	0	0	1593
Q Serve Time (g_s), s	0.0	0.0	0.0	49.8	0.0	0.0	0.0	51.8
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	49.8	0.0	0.0	0.0	51.8
Lane Grp Cap (c), veh/h	0	0	0	2300	0	0	0	959
V/C Ratio (X)	0.00	0.00	0.00	0.72	0.00	0.00	0.00	0.73
Avail Cap (c_a), veh/h	0	0	0	2300	0	0	0	959
Upstream Filter (I)	0.00	0.00	0.00	0.63	0.00	0.00	0.00	0.84
Uniform Delay (d1), s/veh	0.0	0.0	0.0	13.4	0.0	0.0	0.0	23.5
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.2	0.0	0.0	0.0	4.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	14.6	0.0	0.0	0.0	27.6
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	21.8	0.0	0.0	0.0	22.7

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.4	0.0	0.0	0.0	1.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	22.1	0.0	0.0	0.0	23.7
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.41	0.00	0.00	0.00	0.36
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	16	0	0	14	0	0	0	18
Lane Assignment	R							T+R
Lanes in Grp	1	0	0	0	0	0	0	1
Grp Vol (v), veh/h	88	0	0	0	0	0	0	694
Grp Sat Flow (s), veh/h/ln	1411	0	0	0	0	0	0	1565
Q Serve Time (g_s), s	8.9	0.0	0.0	0.0	0.0	0.0	0.0	52.9
Cycle Q Clear Time (g_c), s	8.9	0.0	0.0	0.0	0.0	0.0	0.0	52.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
Lane Grp Cap (c), veh/h	283	0	0	0	0	0	0	942
V/C Ratio (X)	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.74
Avail Cap (c_a), veh/h	283	0	0	0	0	0	0	942
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84
Uniform Delay (d1), s/veh	56.9	0.0	0.0	0.0	0.0	0.0	0.0	23.8
Incr Delay (d2), s/veh	2.8	0.0	0.0	0.0	0.0	0.0	0.0	4.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	59.8	0.0	0.0	0.0	0.0	0.0	0.0	28.1
1st-Term Q (Q1), veh/ln	7.3	0.0	0.0	0.0	0.0	0.0	0.0	22.7
2nd-Term Q (Q2), veh/ln	0.2	0.0	0.0	0.0	0.0	0.0	0.0	1.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	7.5	0.0	0.0	0.0	0.0	0.0	0.0	23.9
%ile Storage Ratio (RQ%)	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.36
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		29.2						
HCM 2010 LOS		C						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	1611	44	73	1238	88	66	17	68	60	6	58
Future Volume (veh/h)	64	1611	44	73	1238	88	66	17	68	60	6	58
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	65	1644	48	74	1263	90	67	17	69	61	6	59
Adj No. of Lanes	2	2	0	2	2	0	2	2	1	2	1	1
Peak Hour Factor	0.98	0.98	0.92	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	105	2524	73	113	2417	172	114	117	52	140	76	65
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.72	0.72	0.03	0.72	0.72	0.03	0.03	0.03	0.04	0.04	0.04
Ln Grp Delay, s/veh	76.9	13.0	13.0	78.7	10.9	10.9	93.4	74.4	306.1	81.1	72.6	162.5
Ln Grp LOS	E	B	B	E	B	B	F	E	F	F	E	F
Approach Vol, veh/h		1757			1427			153			126	
Approach Delay, s/veh		15.4			14.4			187.2			118.8	
Approach LOS		B			B			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	6	2	3	4			7	8
Case No	9.0	9.0	2.0	4.0			2.0	4.0
Phs Duration (G+Y+Rc), s	13.0	12.0	11.4	116.6			11.1	116.9
Change Period (Y+Rc), s	6.7	6.9	6.4	* 6.6			6.4	* 6.6
Max Green (Gmax), s	6.3	5.1	6.6	* 1.1E2			6.6	* 1.1E2
Max Allow Headway (MAH), s	4.0	4.1	3.8	5.1			3.7	5.1
Max Q Clear (g_c+I1), s	7.7	7.1	5.3	40.1			4.9	27.9
Green Ext Time (g_e), s	0.0	0.0	0.0	49.3			0.0	55.2
Prob of Phs Call (p_c)	1.00	1.00	0.96	1.00			0.94	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.00			1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1	5	3				7	
Mvmt Sat Flow, veh/h	3408	3408	3442				3442	

Through Movement Data								
Assigned Mvmt	6	2		4				8
Mvmt Sat Flow, veh/h	1845	3505		3512				3352

Right-Turn Movement Data								
Assigned Mvmt	16	12		14				18
Mvmt Sat Flow, veh/h	1568	1568		102				238

Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	7	0
Lane Assignment			(Prot)				(Prot)	

Lanes in Grp	2	2	2	0	0	0	2	0
Grp Vol (v), veh/h	61	67	74	0	0	0	65	0
Grp Sat Flow (s), veh/h/ln	1704	1704	1721	0	0	0	1721	0
Q Serve Time (g_s), s	2.7	3.0	3.3	0.0	0.0	0.0	2.9	0.0
Cycle Q Clear Time (g_c), s	2.7	3.0	3.3	0.0	0.0	0.0	2.9	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1704	1704	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	140	114	113	0	0	0	105	0
V/C Ratio (X)	0.43	0.59	0.65	0.00	0.00	0.00	0.62	0.00
Avail Cap (c_a), veh/h	140	114	148	0	0	0	148	0
Upstream Filter (I)	1.00	1.00	0.90	0.00	0.00	0.00	0.63	0.00
Uniform Delay (d1), s/veh	71.6	72.9	73.1	0.0	0.0	0.0	73.3	0.0
Incr Delay (d2), s/veh	9.5	20.5	5.6	0.0	0.0	0.0	3.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	81.1	93.4	78.7	0.0	0.0	0.0	76.9	0.0
1st-Term Q (Q1), veh/ln	1.3	1.4	1.6	0.0	0.0	0.0	1.4	0.0
2nd-Term Q (Q2), veh/ln	0.2	0.3	0.1	0.0	0.0	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	1.4	1.7	1.6	0.0	0.0	0.0	1.4	0.0
%ile Storage Ratio (RQ%)	0.07	0.10	0.12	0.00	0.00	0.00	0.20	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	6	2	0	4	0	0	0	8
Lane Assignment	T	T		T				T
Lanes in Grp	1	2	0	1	0	0	0	1
Grp Vol (v), veh/h	6	17	0	826	0	0	0	666
Grp Sat Flow (s), veh/h/ln	1845	1752	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.5	0.7	0.0	37.7	0.0	0.0	0.0	25.7
Cycle Q Clear Time (g_c), s	0.5	0.7	0.0	37.7	0.0	0.0	0.0	25.7
Lane Grp Cap (c), veh/h	76	117	0	1272	0	0	0	1276
V/C Ratio (X)	0.08	0.15	0.00	0.65	0.00	0.00	0.00	0.52
Avail Cap (c_a), veh/h	76	117	0	1272	0	0	0	1276
Upstream Filter (I)	1.00	1.00	0.00	0.63	0.00	0.00	0.00	0.90
Uniform Delay (d1), s/veh	70.6	71.8	0.0	11.4	0.0	0.0	0.0	9.5
Incr Delay (d2), s/veh	2.0	2.6	0.0	1.6	0.0	0.0	0.0	1.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	72.6	74.4	0.0	13.0	0.0	0.0	0.0	10.9
1st-Term Q (Q1), veh/ln	0.2	0.3	0.0	18.1	0.0	0.0	0.0	12.4

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.3	0.4	0.0	18.7	0.0	0.0	0.0	12.9
%ile Storage Ratio (RQ%)	0.01	0.02	0.00	0.27	0.00	0.00	0.00	0.84
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	16	12	0	14	0	0	0	18
Lane Assignment	R	R		T+R				T+R
Lanes in Grp	1	1	0	1	0	0	0	1
Grp Vol (v), veh/h	59	69	0	866	0	0	0	687
Grp Sat Flow (s), veh/h/ln	1568	1568	0	1845	0	0	0	1821
Q Serve Time (g_s), s	5.7	5.1	0.0	38.1	0.0	0.0	0.0	25.9
Cycle Q Clear Time (g_c), s	5.7	5.1	0.0	38.1	0.0	0.0	0.0	25.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	1.00	0.00	0.06	0.00	0.00	0.00	0.13
Lane Grp Cap (c), veh/h	65	52	0	1326	0	0	0	1313
V/C Ratio (X)	0.91	1.32	0.00	0.65	0.00	0.00	0.00	0.52
Avail Cap (c_a), veh/h	65	52	0	1326	0	0	0	1313
Upstream Filter (I)	1.00	1.00	0.00	0.63	0.00	0.00	0.00	0.90
Uniform Delay (d1), s/veh	73.1	73.9	0.0	11.4	0.0	0.0	0.0	9.6
Incr Delay (d2), s/veh	89.4	232.2	0.0	1.6	0.0	0.0	0.0	1.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	162.5	306.1	0.0	13.0	0.0	0.0	0.0	10.9
1st-Term Q (Q1), veh/ln	2.5	2.2	0.0	19.2	0.0	0.0	0.0	12.8
2nd-Term Q (Q2), veh/ln	1.6	3.4	0.0	0.6	0.0	0.0	0.0	0.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	4.1	5.6	0.0	19.8	0.0	0.0	0.0	13.3
%ile Storage Ratio (RQ%)	2.62	1.30	0.00	0.29	0.00	0.00	0.00	0.87
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	26.3
HCM 2010 LOS	C

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1500	224	258	1128	257	262
Future Volume (veh/h)	1500	224	258	1128	257	262
Number	4	14	3	8	5	12
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)		1.00	1.00		1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1845	1845
Adj Flow Rate, veh/h	1562	233	269	1175	268	273
Adj No. of Lanes	3	0	2	2	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	3	3
Opposing Right Turn Influence			Yes		Yes	
Cap, veh/h	2754	410	316	2641	602	277
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.62	0.62	0.09	0.75	0.18	0.18
Ln Grp Delay, s/veh	19.7	20.5	84.3	8.5	63.8	119.1
Ln Grp LOS	B	C	F	A	E	F
Approach Vol, veh/h	1795			1444	541	
Approach Delay, s/veh	20.0			22.6	91.7	
Approach LOS	B			C	F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Case No		9.0	2.0	8.0				4.0
Phs Duration (G+Y+Rc), s		36.0	21.7	109.3				131.0
Change Period (Y+Rc), s		6.5	6.4	6.4				6.4
Max Green (Gmax), s		29.5	20.6	97.6				124.6
Max Allow Headway (MAH), s		3.9	3.8	5.3				5.3
Max Q Clear (g_c+I1), s		31.0	14.9	36.6				23.1
Green Ext Time (g_e), s		0.0	0.5	45.8				64.7
Prob of Phs Call (p_c)		1.00	1.00	1.00				1.00
Prob of Max Out (p_x)		0.00	0.24	0.00				0.00
Left-Turn Movement Data								
Assigned Mvmt		5	3	7				
Mvmt Sat Flow, veh/h		3408	3442	0				
Through Movement Data								
Assigned Mvmt		2		4				8
Mvmt Sat Flow, veh/h		0		4638				3632
Right-Turn Movement Data								
Assigned Mvmt		12		14				18
Mvmt Sat Flow, veh/h		1568		665				0
Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	0	0	0
Lane Assignment			(Prot)					

Lanes in Grp	0	2	2	0	0	0	0	0
Grp Vol (v), veh/h	0	268	269	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1704	1721	0	0	0	0	0
Q Serve Time (g_s), s	0.0	11.7	12.9	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	11.7	12.9	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1704	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	102.9	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	602	316	0	0	0	0	0
V/C Ratio (X)	0.00	0.45	0.85	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	602	425	0	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.79	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	61.4	74.7	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.4	9.6	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	63.8	84.3	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	5.5	6.1	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.4	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	5.7	6.5	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.25	0.72	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	2
Grp Vol (v), veh/h	0	0	0	1184	0	0	0	1175
Grp Sat Flow (s), veh/h/ln	0	0	0	1695	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	34.4	0.0	0.0	0.0	21.1
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	34.4	0.0	0.0	0.0	21.1
Lane Grp Cap (c), veh/h	0	0	0	2089	0	0	0	2641
V/C Ratio (X)	0.00	0.00	0.00	0.57	0.00	0.00	0.00	0.44
Avail Cap (c_a), veh/h	0	0	0	2089	0	0	0	2641
Upstream Filter (I)	0.00	0.00	0.00	0.70	0.00	0.00	0.00	0.79
Uniform Delay (d1), s/veh	0.0	0.0	0.0	18.9	0.0	0.0	0.0	8.1
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	19.7	0.0	0.0	0.0	8.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	16.1	0.0	0.0	0.0	10.1

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	16.3	0.0	0.0	0.0	10.3
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	1.07	0.00	0.00	0.00	0.27
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	0	0	18
Lane Assignment		R		T+R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	273	0	611	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1568	0	1745	0	0	0	0
Q Serve Time (g_s), s	0.0	29.0	0.0	34.6	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	29.0	0.0	34.6	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.38	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	277	0	1075	0	0	0	0
V/C Ratio (X)	0.00	0.99	0.00	0.57	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	277	0	1075	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.70	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	68.5	0.0	18.9	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	50.6	0.0	1.5	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	119.1	0.0	20.5	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	12.6	0.0	16.6	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	3.9	0.0	0.5	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	16.4	0.0	17.1	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.70	0.00	1.12	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		31.2						
HCM 2010 LOS		C						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	1579	265	87	1306	19	105	3	71	11	3	21
Future Volume (veh/h)	41	1579	265	87	1306	19	105	3	71	11	3	21
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1900	1900	1845	1900
Adj Flow Rate, veh/h	43	1662	279	92	1375	20	111	3	75	12	3	22
Adj No. of Lanes	2	2	0	2	2	0	1	1	0	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	91	2237	365	107	2638	38	309	12	303	106	37	166
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.73	0.73	0.03	0.74	0.74	0.20	0.20	0.20	0.20	0.20	0.20
Ln Grp Delay, s/veh	80.1	15.0	16.3	119.8	10.2	10.2	60.0	0.0	56.1	53.5	0.0	0.0
Ln Grp LOS	F	B	B	F	B	B	E		E	D		
Approach Vol, veh/h		1984			1487			189			37	
Approach Delay, s/veh		17.1			17.0			58.4			53.5	
Approach LOS		B			B			E			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		6.0	2.0	4.0		8.0	2.0	4.0
Phs Duration (G+Y+Rc), s		39.0	11.4	125.0		39.0	10.7	125.7
Change Period (Y+Rc), s		* 6.8	6.4	6.4		* 6.8	6.4	6.4
Max Green (Gmax), s		* 32	5.0	104.6		* 32	5.0	104.6
Max Allow Headway (MAH), s		4.7	3.8	5.3		4.7	3.8	5.3
Max Q Clear (g_c+I1), s		14.6	6.3	56.6		8.8	4.0	28.4
Green Ext Time (g_e), s		0.9	0.0	42.4		1.0	0.0	63.1
Prob of Phs Call (p_c)		1.00	0.98	1.00		1.00	0.85	1.00
Prob of Max Out (p_x)		0.00	1.00	0.00		0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		1367	3442			382	3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		61		3047		183		3571

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1516		498		829		52

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0
Lane Assignment			(Prot)			L+T+R	(Prot)	

Lanes in Grp	0	1	2	0	0	1	2	0
Grp Vol (v), veh/h	0	111	92	0	0	37	43	0
Grp Sat Flow (s), veh/h/ln	0	1367	1721	0	0	1394	1721	0
Q Serve Time (g_s), s	0.0	5.8	4.3	0.0	0.0	0.1	2.0	0.0
Cycle Q Clear Time (g_c), s	0.0	12.6	4.3	0.0	0.0	6.8	2.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1367	0	0	0	1342	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	1147	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	32.2	0.0	0.0	0.0	32.2	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	25.4	0.0	0.0	0.0	25.5	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	5.8	0.0	0.0	0.0	0.1	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	4.2	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	2.9	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	0.00	0.32	1.00	0.00
Lane Grp Cap (c), veh/h	0	309	107	0	0	308	91	0
V/C Ratio (X)	0.00	0.36	0.86	0.00	0.00	0.12	0.47	0.00
Avail Cap (c_a), veh/h	0	309	107	0	0	308	107	0
Upstream Filter (I)	0.00	1.00	0.87	0.00	0.00	1.00	0.77	0.00
Uniform Delay (d1), s/veh	0.0	56.8	77.7	0.0	0.0	52.7	77.3	0.0
Incr Delay (d2), s/veh	0.0	3.2	42.2	0.0	0.0	0.8	2.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	60.0	119.8	0.0	0.0	53.5	80.1	0.0
1st-Term Q (Q1), veh/ln	0.0	4.3	2.0	0.0	0.0	1.3	0.9	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.6	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	4.6	2.7	0.0	0.0	1.4	1.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.54	0.28	0.00	0.00	0.12	0.13	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	946	0	0	0	681
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	49.1	0.0	0.0	0.0	26.3
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	49.1	0.0	0.0	0.0	26.3
Lane Grp Cap (c), veh/h	0	0	0	1299	0	0	0	1307
V/C Ratio (X)	0.00	0.00	0.00	0.73	0.00	0.00	0.00	0.52
Avail Cap (c_a), veh/h	0	0	0	1299	0	0	0	1307
Upstream Filter (I)	0.00	0.00	0.00	0.77	0.00	0.00	0.00	0.87
Uniform Delay (d1), s/veh	0.0	0.0	0.0	12.2	0.0	0.0	0.0	8.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.8	0.0	0.0	0.0	1.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	15.0	0.0	0.0	0.0	10.2
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	23.9	0.0	0.0	0.0	12.7

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	24.9	0.0	0.0	0.0	13.1
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.82	0.00	0.00	0.00	0.19
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R				T+R
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	78	0	995	0	0	0	714
Grp Sat Flow (s), veh/h/ln	0	1577	0	1775	0	0	0	1854
Q Serve Time (g_s), s	0.0	6.7	0.0	54.6	0.0	0.0	0.0	26.4
Cycle Q Clear Time (g_c), s	0.0	6.7	0.0	54.6	0.0	0.0	0.0	26.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.96	0.00	0.28	0.00	0.59	0.00	0.03
Lane Grp Cap (c), veh/h	0	315	0	1303	0	0	0	1369
V/C Ratio (X)	0.00	0.25	0.00	0.76	0.00	0.00	0.00	0.52
Avail Cap (c_a), veh/h	0	315	0	1303	0	0	0	1369
Upstream Filter (I)	0.00	1.00	0.00	0.77	0.00	0.00	0.00	0.87
Uniform Delay (d1), s/veh	0.0	54.2	0.0	12.9	0.0	0.0	0.0	8.9
Incr Delay (d2), s/veh	0.0	1.9	0.0	3.3	0.0	0.0	0.0	1.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	56.1	0.0	16.3	0.0	0.0	0.0	10.2
1st-Term Q (Q1), veh/ln	0.0	2.9	0.0	26.5	0.0	0.0	0.0	13.3
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	1.2	0.0	0.0	0.0	0.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	3.1	0.0	27.7	0.0	0.0	0.0	13.8
%ile Storage Ratio (RQ%)	0.00	0.28	0.00	0.92	0.00	0.00	0.00	0.20
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	19.5
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	57	1641	0	23	1613	153	0	0	28	106	0	38
Future Volume (veh/h)	57	1641	0	23	1613	153	0	0	28	106	0	38
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	0	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	58	1674	0	23	1646	156	0	0	29	108	0	39
Adj No. of Lanes	1	2	0	1	3	1	0	1	0	1	1	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	0	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			No			Yes		
Cap, veh/h	92	1275	0	47	1704	530	0	0	470	511	0	470
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.36	0.00	0.03	0.34	0.34	0.00	0.00	0.30	0.30	0.00	0.30
Ln Grp Delay, s/veh	32.0	163.5	0.0	36.4	34.7	16.1	0.0	0.0	15.2	17.5	0.0	15.4
Ln Grp LOS	C	F		D	C	B			B	B		B
Approach Vol, veh/h		1732			1825			29			147	
Approach Delay, s/veh		159.1			33.2			15.2			17.0	
Approach LOS		F			C			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		8.0	2.0	4.0		6.0	2.0	3.0
Phs Duration (G+Y+Rc), s		24.0	8.0	28.0		24.0	9.5	26.5
Change Period (Y+Rc), s		6.0	6.4	6.4		6.0	6.4	6.4
Max Green (Gmax), s		18.0	5.0	18.6		18.0	5.0	18.6
Max Allow Headway (MAH), s		4.5	3.8	5.2		4.5	3.8	5.2
Max Q Clear (g_c+I1), s		2.8	2.8	23.6		6.5	3.9	21.1
Green Ext Time (g_e), s		0.6	0.0	0.0		0.5	0.0	0.0
Prob of Phs Call (p_c)		1.00	0.32	1.00		1.00	0.62	1.00
Prob of Max Out (p_x)		0.00	1.00	0.00		0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		0	1774			1362	1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		0		3632		0		5085

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		0		1568		1583

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0
Lane Assignment			(Prot)				(Prot)	

Lanes in Grp	0	0	1	0	0	1	1	0
Grp Vol (v), veh/h	0	0	23	0	0	108	58	0
Grp Sat Flow (s), veh/h/ln	0	0	1774	0	0	1362	1774	0
Q Serve Time (g_s), s	0.0	0.0	0.8	0.0	0.0	3.7	1.9	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.8	0.0	0.0	4.5	1.9	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	1362	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	18.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	17.2	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	3.7	0.0	0.0
Time to First Blk (g_f), s	0.0	18.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	47	0	0	511	92	0
V/C Ratio (X)	0.00	0.00	0.49	0.00	0.00	0.21	0.63	0.00
Avail Cap (c_a), veh/h	0	0	148	0	0	511	148	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	1.00	0.57	0.00
Uniform Delay (d1), s/veh	0.0	0.0	28.8	0.0	0.0	16.6	27.9	0.0
Incr Delay (d2), s/veh	0.0	0.0	7.6	0.0	0.0	0.9	4.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	36.4	0.0	0.0	17.5	32.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.4	0.0	0.0	1.4	0.9	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.5	0.0	0.0	1.5	1.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.06	0.00	0.00	0.26	0.15	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	3
Grp Vol (v), veh/h	0	0	0	1674	0	0	0	1646
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1695
Q Serve Time (g_s), s	0.0	0.0	0.0	21.6	0.0	0.0	0.0	19.1
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	21.6	0.0	0.0	0.0	19.1
Lane Grp Cap (c), veh/h	0	0	0	1275	0	0	0	1704
V/C Ratio (X)	0.00	0.00	0.00	1.31	0.00	0.00	0.00	0.97
Avail Cap (c_a), veh/h	0	0	0	1275	0	0	0	1704
Upstream Filter (I)	0.00	0.00	0.00	0.57	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	19.2	0.0	0.0	0.0	19.6
Incr Delay (d2), s/veh	0.0	0.0	0.0	144.3	0.0	0.0	0.0	15.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	163.5	0.0	0.0	0.0	34.7
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	10.4	0.0	0.0	0.0	8.8

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	25.5	0.0	0.0	0.0	2.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	36.0	0.0	0.0	0.0	11.2
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.94	0.00	0.00	0.00	0.93
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	99.9	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R				T+R		R
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	29	0	0	0	39	0	156
Grp Sat Flow (s), veh/h/ln	0	1568	0	0	0	1568	0	1583
Q Serve Time (g_s), s	0.0	0.8	0.0	0.0	0.0	1.1	0.0	4.4
Cycle Q Clear Time (g_c), s	0.0	0.8	0.0	0.0	0.0	1.1	0.0	4.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	470	0	0	0	470	0	530
V/C Ratio (X)	0.00	0.06	0.00	0.00	0.00	0.08	0.00	0.29
Avail Cap (c_a), veh/h	0	470	0	0	0	470	0	530
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	15.0	0.0	0.0	0.0	15.1	0.0	14.7
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.0	0.0	0.3	0.0	1.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	15.2	0.0	0.0	0.0	15.4	0.0	16.1
1st-Term Q (Q1), veh/ln	0.0	0.3	0.0	0.0	0.0	0.5	0.0	1.9
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.4	0.0	0.0	0.0	0.5	0.0	2.1
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.00	0.00	0.04	0.00	0.17
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		90.8						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	488	1019	219	356	879	114	327	1004	306	245	961	482
Future Volume (veh/h)	488	1019	219	356	879	114	327	1004	306	245	961	482
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	519	1084	233	379	935	121	348	1068	326	261	1022	513
Adj No. of Lanes	2	3	0	2	3	0	2	3	0	2	3	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	522	1138	245	436	1124	145	353	1122	342	323	1433	446
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.15	0.27	0.27	0.13	0.25	0.25	0.10	0.29	0.29	0.09	0.28	0.28
Ln Grp Delay, s/veh	86.9	61.6	73.1	65.2	50.8	58.5	96.2	59.3	70.9	60.6	40.3	132.1
Ln Grp LOS	F	E	E	E	D	E	F	E	E	E	D	F
Approach Vol, veh/h		1836			1435			1742			1796	
Approach Delay, s/veh		71.5			56.5			69.7			69.5	
Approach LOS		E			E			E			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	17.0	40.0	21.1	37.9	18.0	39.0	24.0	35.0
Change Period (Y+Rc), s	6.0	6.0	6.4	6.4	6.0	6.0	6.4	6.4
Max Green (Gmax), s	14.0	31.0	15.6	30.6	12.0	33.0	17.6	28.6
Max Allow Headway (MAH), s	3.8	5.1	3.8	5.3	3.8	5.1	3.8	5.3
Max Q Clear (g_c+I1), s	10.7	33.7	14.5	31.5	13.8	35.0	19.5	24.6
Green Ext Time (g_e), s	0.3	0.0	0.2	0.0	0.0	0.0	0.0	3.6
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3408		3442		3408		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3828		4193		5036		4561

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1168		901		1568		588

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	261	0	379	0	348	0	519	0
Grp Sat Flow (s), veh/h/ln	1704	0	1721	0	1704	0	1721	0
Q Serve Time (g_s), s	8.7	0.0	12.5	0.0	11.8	0.0	17.5	0.0
Cycle Q Clear Time (g_c), s	8.7	0.0	12.5	0.0	11.8	0.0	17.5	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	323	0	436	0	353	0	522	0
V/C Ratio (X)	0.81	0.00	0.87	0.00	0.99	0.00	0.99	0.00
Avail Cap (c_a), veh/h	411	0	463	0	353	0	522	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	51.5	0.0	49.7	0.0	51.9	0.0	49.1	0.0
Incr Delay (d2), s/veh	9.1	0.0	15.5	0.0	44.3	0.0	37.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	60.6	0.0	65.2	0.0	96.2	0.0	86.9	0.0
1st-Term Q (Q1), veh/ln	4.1	0.0	5.9	0.0	5.6	0.0	8.3	0.0
2nd-Term Q (Q2), veh/ln	0.4	0.0	0.9	0.0	2.2	0.0	2.7	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	4.5	0.0	6.9	0.0	7.7	0.0	11.0	0.0
%ile Storage Ratio (RQ%)	0.36	0.00	1.03	0.00	0.62	0.00	0.93	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	3	0	2
Grp Vol (v), veh/h	0	937	0	876	0	1022	0	694
Grp Sat Flow (s), veh/h/ln	0	1679	0	1695	0	1679	0	1695
Q Serve Time (g_s), s	0.0	31.7	0.0	29.5	0.0	21.1	0.0	22.5
Cycle Q Clear Time (g_c), s	0.0	31.7	0.0	29.5	0.0	21.1	0.0	22.5
Lane Grp Cap (c), veh/h	0	984	0	920	0	1433	0	836
V/C Ratio (X)	0.00	0.95	0.00	0.95	0.00	0.71	0.00	0.83
Avail Cap (c_a), veh/h	0	984	0	920	0	1433	0	836
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	40.2	0.0	41.5	0.0	37.3	0.0	41.4
Incr Delay (d2), s/veh	0.0	19.1	0.0	20.1	0.0	3.1	0.0	9.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	59.3	0.0	61.6	0.0	40.3	0.0	50.8
1st-Term Q (Q1), veh/ln	0.0	14.7	0.0	13.8	0.0	9.7	0.0	10.5

2nd-Term Q (Q2), veh/ln	0.0	2.6	0.0	2.6	0.0	0.4	0.0	1.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	17.3	0.0	16.3	0.0	10.2	0.0	11.6
%ile Storage Ratio (RQ%)	0.00	0.97	0.00	0.67	0.00	0.39	0.00	1.84
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	457	0	441	0	513	0	362
Grp Sat Flow (s), veh/h/ln	0	1639	0	1704	0	1568	0	1759
Q Serve Time (g_s), s	0.0	31.7	0.0	29.5	0.0	33.0	0.0	22.6
Cycle Q Clear Time (g_c), s	0.0	31.7	0.0	29.5	0.0	33.0	0.0	22.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.71	0.00	0.53	0.00	1.00	0.00	0.33
Lane Grp Cap (c), veh/h	0	480	0	463	0	446	0	434
V/C Ratio (X)	0.00	0.95	0.00	0.95	0.00	1.15	0.00	0.83
Avail Cap (c_a), veh/h	0	480	0	463	0	446	0	434
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	40.2	0.0	41.5	0.0	41.5	0.0	41.5
Incr Delay (d2), s/veh	0.0	30.7	0.0	31.6	0.0	90.6	0.0	17.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	70.9	0.0	73.1	0.0	132.1	0.0	58.5
1st-Term Q (Q1), veh/ln	0.0	14.4	0.0	13.8	0.0	14.2	0.0	11.0
2nd-Term Q (Q2), veh/ln	0.0	4.1	0.0	4.1	0.0	11.2	0.0	2.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	18.4	0.0	17.9	0.0	25.5	0.0	13.0
%ile Storage Ratio (RQ%)	0.00	1.03	0.00	0.73	0.00	0.98	0.00	2.06
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	16.7	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		67.4						
HCM 2010 LOS		E						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	161	1341	44	0	1240	133	125	47	3	92	35	60
Future Volume (veh/h)	161	1341	44	0	1240	133	125	47	3	92	35	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	0	1863	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	166	1382	45	0	1278	137	129	48	3	95	36	62
Adj No. of Lanes	2	2	0	0	2	0	2	1	1	2	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	0	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			No			Yes			Yes		
Cap, veh/h	186	2396	78	0	1920	205	96	337	286	96	337	286
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.68	0.68	0.00	0.59	0.59	0.03	0.18	0.18	0.03	0.18	0.18
Ln Grp Delay, s/veh	121.7	16.6	16.6	0.0	27.4	27.5	297.0	61.9	59.6	176.4	61.3	63.6
Ln Grp LOS	F	B	B		C	C	F	E	E	F	E	E
Approach Vol, veh/h		1593			1415			180			193	
Approach Delay, s/veh		27.5			27.5			230.4			118.7	
Approach LOS		C			C			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6	7	8
Case No	2.0	3.0		4.0	2.0	3.0	2.0	8.0
Phs Duration (G+Y+Rc), s	10.7	39.0		128.3	10.7	39.0	16.0	112.3
Change Period (Y+Rc), s	* 5.7	6.5		6.4	* 5.7	6.5	6.4	6.4
Max Green (Gmax), s	* 5	32.5		121.6	* 5	32.5	9.6	105.6
Max Allow Headway (MAH), s	3.8	4.7		5.3	3.8	4.7	3.8	5.3
Max Q Clear (g_c+I1), s	7.0	5.9		38.7	7.0	8.0	10.5	49.6
Green Ext Time (g_e), s	0.0	0.6		52.4	0.0	0.6	0.0	40.5
Prob of Phs Call (p_c)	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	0.00	0.00		0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1				5		7	3
Mvmt Sat Flow, veh/h	3408				3408		3442	0

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1845		3498		1845		3320

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		114		1568		345

Left Lane Group Data								
Assigned Mvmt	1	0	0	0	5	0	7	3
Lane Assignment	(Prot)				(Prot)		(Prot)	

Lanes in Grp	2	0	0	0	2	0	2	0
Grp Vol (v), veh/h	95	0	0	0	129	0	166	0
Grp Sat Flow (s), veh/h/ln	1704	0	0	0	1704	0	1721	0
Q Serve Time (g_s), s	5.0	0.0	0.0	0.0	5.0	0.0	8.5	0.0
Cycle Q Clear Time (g_c), s	5.0	0.0	0.0	0.0	5.0	0.0	8.5	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	105.9
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	96	0	0	0	96	0	186	0
V/C Ratio (X)	0.99	0.00	0.00	0.00	1.35	0.00	0.89	0.00
Avail Cap (c_a), veh/h	96	0	0	0	96	0	186	0
Upstream Filter (I)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	86.5	0.0	0.0	0.0	86.5	0.0	83.7	0.0
Incr Delay (d2), s/veh	89.9	0.0	0.0	0.0	210.5	0.0	38.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	176.4	0.0	0.0	0.0	297.0	0.0	121.7	0.0
1st-Term Q (Q1), veh/ln	2.3	0.0	0.0	0.0	2.4	0.0	4.1	0.0
2nd-Term Q (Q2), veh/ln	1.2	0.0	0.0	0.0	2.8	0.0	1.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	3.5	0.0	0.0	0.0	5.2	0.0	5.0	0.0
%ile Storage Ratio (RQ%)	0.90	0.00	0.00	0.00	0.94	0.00	0.30	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	8.3	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	48	0	698	0	36	0	699
Grp Sat Flow (s), veh/h/ln	0	1845	0	1770	0	1845	0	1770
Q Serve Time (g_s), s	0.0	3.9	0.0	36.6	0.0	2.9	0.0	47.0
Cycle Q Clear Time (g_c), s	0.0	3.9	0.0	36.6	0.0	2.9	0.0	47.0
Lane Grp Cap (c), veh/h	0	337	0	1212	0	337	0	1053
V/C Ratio (X)	0.00	0.14	0.00	0.58	0.00	0.11	0.00	0.66
Avail Cap (c_a), veh/h	0	337	0	1212	0	337	0	1053
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	61.1	0.0	14.6	0.0	60.7	0.0	24.1
Incr Delay (d2), s/veh	0.0	0.9	0.0	2.0	0.0	0.6	0.0	3.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	61.9	0.0	16.6	0.0	61.3	0.0	27.4
1st-Term Q (Q1), veh/ln	0.0	2.0	0.0	17.8	0.0	1.5	0.0	22.9

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.7	0.0	0.1	0.0	1.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.1	0.0	18.5	0.0	1.5	0.0	23.9
%ile Storage Ratio (RQ%)	0.00	0.22	0.00	0.22	0.00	0.08	0.00	0.48
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	3	0	729	0	62	0	716
Grp Sat Flow (s), veh/h/ln	0	1568	0	1843	0	1568	0	1802
Q Serve Time (g_s), s	0.0	0.3	0.0	36.7	0.0	6.0	0.0	47.6
Cycle Q Clear Time (g_c), s	0.0	0.3	0.0	36.7	0.0	6.0	0.0	47.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.06	0.00	1.00	0.00	0.19
Lane Grp Cap (c), veh/h	0	286	0	1262	0	286	0	1072
V/C Ratio (X)	0.00	0.01	0.00	0.58	0.00	0.22	0.00	0.67
Avail Cap (c_a), veh/h	0	286	0	1262	0	286	0	1072
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	59.6	0.0	14.6	0.0	61.9	0.0	24.2
Incr Delay (d2), s/veh	0.0	0.1	0.0	1.9	0.0	1.7	0.0	3.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	59.6	0.0	16.6	0.0	63.6	0.0	27.5
1st-Term Q (Q1), veh/ln	0.0	0.1	0.0	18.6	0.0	5.6	0.0	23.7
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.7	0.0	0.1	0.0	1.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.1	0.0	19.3	0.0	5.7	0.0	24.7
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.23	0.00	0.31	0.00	0.50
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	43.5
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	428	828	159	249	698	228	426	1638	217	364	1020	239
Future Volume (veh/h)	428	828	159	249	698	228	426	1638	217	364	1020	239
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	437	845	162	254	712	233	435	1671	221	371	1041	244
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	327	1104	344	159	856	266	482	2275	708	422	2186	681
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.10	0.22	0.22	0.05	0.17	0.17	0.14	0.45	0.45	0.12	0.43	0.43
Ln Grp Delay, s/veh	244.3	65.4	60.6	372.4	75.2	97.0	86.3	39.0	29.8	83.2	33.8	32.6
Ln Grp LOS	F	E	E	F	E	F	F	D	C	F	C	C
Approach Vol, veh/h		1444			1199			2327			1656	
Approach Delay, s/veh		119.0			142.4			47.0			44.7	
Approach LOS		F			F			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	27.1	80.9	14.0	42.0	30.0	78.0	22.0	34.0
Change Period (Y+Rc), s	6.8	6.8	6.4	6.4	6.8	6.8	6.4	6.4
Max Green (Gmax), s	26.2	71.2	7.6	32.6	26.2	71.2	15.6	24.6
Max Allow Headway (MAH), s	3.8	5.1	3.8	5.0	3.8	5.1	3.8	5.0
Max Q Clear (g_c+I1), s	19.6	46.7	9.6	27.6	22.6	26.2	17.6	25.5
Green Ext Time (g_e), s	0.8	21.6	0.0	4.1	0.6	36.3	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	0.18	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3408		3442		3408		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5036		5085		5036		5085

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		1583		1568		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	371	0	254	0	435	0	437	0
Grp Sat Flow (s), veh/h/ln	1704	0	1721	0	1704	0	1721	0
Q Serve Time (g_s), s	17.6	0.0	7.6	0.0	20.6	0.0	15.6	0.0
Cycle Q Clear Time (g_c), s	17.6	0.0	7.6	0.0	20.6	0.0	15.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	422	0	159	0	482	0	327	0
V/C Ratio (X)	0.88	0.00	1.59	0.00	0.90	0.00	1.33	0.00
Avail Cap (c_a), veh/h	544	0	159	0	544	0	327	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	70.6	0.0	78.2	0.0	69.3	0.0	74.2	0.0
Incr Delay (d2), s/veh	12.6	0.0	294.2	0.0	17.0	0.0	170.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	83.2	0.0	372.4	0.0	86.3	0.0	244.3	0.0
1st-Term Q (Q1), veh/ln	8.3	0.0	3.6	0.0	9.7	0.0	7.4	0.0
2nd-Term Q (Q2), veh/ln	0.7	0.0	6.5	0.0	1.1	0.0	7.7	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	9.0	0.0	10.1	0.0	10.9	0.0	15.1	0.0
%ile Storage Ratio (RQ%)	0.40	0.00	0.52	0.00	0.70	0.00	0.77	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	23.6	0.0	0.0	0.0	27.4	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.4	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	3	0	3	0	3
Grp Vol (v), veh/h	0	1671	0	845	0	1041	0	712
Grp Sat Flow (s), veh/h/ln	0	1679	0	1695	0	1679	0	1695
Q Serve Time (g_s), s	0.0	44.7	0.0	25.6	0.0	24.2	0.0	22.2
Cycle Q Clear Time (g_c), s	0.0	44.7	0.0	25.6	0.0	24.2	0.0	22.2
Lane Grp Cap (c), veh/h	0	2275	0	1104	0	2186	0	856
V/C Ratio (X)	0.00	0.73	0.00	0.77	0.00	0.48	0.00	0.83
Avail Cap (c_a), veh/h	0	2275	0	1104	0	2186	0	856
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	36.9	0.0	60.3	0.0	33.1	0.0	66.0
Incr Delay (d2), s/veh	0.0	2.2	0.0	5.1	0.0	0.7	0.0	9.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	39.0	0.0	65.4	0.0	33.8	0.0	75.2
1st-Term Q (Q1), veh/ln	0.0	20.7	0.0	12.0	0.0	11.2	0.0	10.4

2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.5	0.0	0.2	0.0	0.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	21.2	0.0	12.5	0.0	11.3	0.0	11.2
%ile Storage Ratio (RQ%)	0.00	0.97	0.00	0.61	0.00	0.44	0.00	0.19
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	221	0	162	0	244	0	233
Grp Sat Flow (s), veh/h/ln	0	1568	0	1583	0	1568	0	1583
Q Serve Time (g_s), s	0.0	14.8	0.0	14.6	0.0	17.1	0.0	23.5
Cycle Q Clear Time (g_c), s	0.0	14.8	0.0	14.6	0.0	17.1	0.0	23.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	708	0	344	0	681	0	266
V/C Ratio (X)	0.00	0.31	0.00	0.47	0.00	0.36	0.00	0.87
Avail Cap (c_a), veh/h	0	708	0	344	0	681	0	266
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	28.7	0.0	56.0	0.0	31.1	0.0	66.5
Incr Delay (d2), s/veh	0.0	1.1	0.0	4.6	0.0	1.5	0.0	30.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	29.8	0.0	60.6	0.0	32.6	0.0	97.0
1st-Term Q (Q1), veh/ln	0.0	6.4	0.0	6.4	0.0	7.4	0.0	10.3
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.4	0.0	0.3	0.0	2.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	6.6	0.0	6.8	0.0	7.7	0.0	12.6
%ile Storage Ratio (RQ%)	0.00	0.30	0.00	0.33	0.00	0.30	0.00	0.45
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		79.4						
HCM 2010 LOS		E						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	149	667	3	18	1337	570	2	13	23	332	1	96
Future Volume (veh/h)	149	667	3	18	1337	570	2	13	23	332	1	96
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1696	1696	1696	1696	1696	1696	1900	1696	1900	1696	1696	1696
Adj Flow Rate, veh/h	157	702	3	19	1407	0	2	14	24	349	1	0
Adj No. of Lanes	1	2	1	1	2	1	0	2	0	2	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	12	12	12	12	12	12	12	12	12	12	12	12
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	184	2283	1021	22	1960	877	0	47	42	132	209	178
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.11	0.71	0.71	0.01	0.61	0.00	0.00	0.03	0.03	0.04	0.12	0.00
Ln Grp Delay, s/veh	68.6	7.6	5.7	85.7	18.7	0.0	0.0	66.6	75.1	825.0	51.1	0.0
Ln Grp LOS	E	A	A	F	B			E	E	F	D	
Approach Vol, veh/h		862			1426			38			350	
Approach Delay, s/veh		18.7			19.6			72.0			822.8	
Approach LOS		B			B			E			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	4	3	5	6	7	8
Case No	2.0	3.0	4.0	2.0	2.0	3.0	0.0	3.0
Phs Duration (G+Y+Rc), s	22.2	88.0	10.8	12.0	8.9	101.3	0.0	22.8
Change Period (Y+Rc), s	7.1	7.1	6.9	6.4	7.1	7.1	6.9	6.4
Max Green (Gmax), s	67.9	18.9	13.1	5.6	30.9	55.9	13.1	5.6
Max Allow Headway (MAH), s	3.8	5.3	5.5	3.9	3.8	5.3	0.0	3.9
Max Q Clear (g_c+I1), s	14.7	42.4	4.2	7.6	3.6	12.8	0.0	2.1
Green Ext Time (g_e), s	0.5	0.0	0.1	0.0	0.0	25.5	0.0	0.5
Prob of Phs Call (p_c)	1.00	1.00	0.78	1.00	0.50	1.00	0.00	1.00
Prob of Max Out (p_x)	0.00	0.00	0.04	1.00	0.00	0.00	0.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1			3	5		7	
Mvmt Sat Flow, veh/h	1616			3134	1616		0	

Through Movement Data								
Assigned Mvmt		2	4			6		8
Mvmt Sat Flow, veh/h		3223	1612			3223		1696

Right-Turn Movement Data								
Assigned Mvmt		12	14			16		18
Mvmt Sat Flow, veh/h		1442	1442			1442		1442

Left Lane Group Data								
Assigned Mvmt	1	0	0	3	5	0	7	0
Lane Assignment	(Prot)			(Prot)	(Prot)			

Lanes in Grp	1	0	0	2	1	0	0	0
Grp Vol (v), veh/h	157	0	0	349	19	0	0	0
Grp Sat Flow (s), veh/h/ln	1616	0	0	1567	1616	0	0	0
Q Serve Time (g_s), s	12.7	0.0	0.0	5.6	1.6	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	12.7	0.0	0.0	5.6	1.6	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	184	0	0	132	22	0	0	0
V/C Ratio (X)	0.85	0.00	0.00	2.64	0.86	0.00	0.00	0.00
Avail Cap (c_a), veh/h	825	0	0	132	375	0	0	0
Upstream Filter (I)	1.00	0.00	0.00	1.00	0.24	0.00	0.00	0.00
Uniform Delay (d1), s/veh	57.9	0.0	0.0	63.7	65.5	0.0	0.0	0.0
Incr Delay (d2), s/veh	10.7	0.0	0.0	761.3	20.2	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	68.6	0.0	0.0	825.0	85.7	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	5.7	0.0	0.0	2.4	0.7	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.5	0.0	0.0	14.0	0.1	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	6.2	0.0	0.0	16.4	0.8	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.20	0.00	0.00	0.72	0.07	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	54.3	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	4	0	0	6	0	8
Lane Assignment		T	T			T		T
Lanes in Grp	0	2	1	0	0	2	0	1
Grp Vol (v), veh/h	0	1407	14	0	0	702	0	1
Grp Sat Flow (s), veh/h/ln	0	1612	1612	0	0	1612	0	1696
Q Serve Time (g_s), s	0.0	40.4	1.1	0.0	0.0	10.8	0.0	0.1
Cycle Q Clear Time (g_c), s	0.0	40.4	1.1	0.0	0.0	10.8	0.0	0.1
Lane Grp Cap (c), veh/h	0	1960	47	0	0	2283	0	209
V/C Ratio (X)	0.00	0.72	0.30	0.00	0.00	0.31	0.00	0.00
Avail Cap (c_a), veh/h	0	1960	159	0	0	2283	0	209
Upstream Filter (I)	0.00	0.24	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	18.1	63.2	0.0	0.0	7.2	0.0	51.1
Incr Delay (d2), s/veh	0.0	0.6	3.4	0.0	0.0	0.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	18.7	66.6	0.0	0.0	7.6	0.0	51.1
1st-Term Q (Q1), veh/ln	0.0	17.8	0.5	0.0	0.0	4.8	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	17.9	0.6	0.0	0.0	4.9	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.25	0.04	0.00	0.00	0.04	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	14	0	0	16	0	18
Lane Assignment		R	T+R			R		R
Lanes in Grp	0	1	1	0	0	1	0	1
Grp Vol (v), veh/h	0	0	24	0	0	3	0	0
Grp Sat Flow (s), veh/h/ln	0	1442	1442	0	0	1442	0	1442
Q Serve Time (g_s), s	0.0	0.0	2.2	0.0	0.0	0.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	2.2	0.0	0.0	0.1	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	877	42	0	0	1021	0	178
V/C Ratio (X)	0.00	0.00	0.57	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	877	142	0	0	1021	0	178
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	63.7	0.0	0.0	5.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	11.4	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	75.1	0.0	0.0	5.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	125.1
HCM 2010 LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	106	933	1806	383	609	300
Future Volume (veh/h)	106	933	1806	383	609	300
Number	1	6	2	12	3	18
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00			1.00	1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1696	1696	1696	1696	1696	1696
Adj Flow Rate, veh/h	112	982	1901	0	641	0
Adj No. of Lanes	1	2	3	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	12	12	12	12	12	12
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	138	1926	1960	610	749	344
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.09	0.60	0.42	0.00	0.24	0.00
Ln Grp Delay, s/veh	53.1	10.0	32.2	0.0	35.6	0.0
Ln Grp LOS	D	A	C		D	
Approach Vol, veh/h		1094	1901		641	
Approach Delay, s/veh		14.4	32.2		35.6	
Approach LOS		B	C		D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8			6		
Case No	2.0	7.0	9.0			4.0		
Phs Duration (G+Y+Rc), s	13.9	41.0	25.1			54.9		
Change Period (Y+Rc), s	7.1	7.1	6.0			7.1		
Max Green (Gmax), s	7.9	27.9	24.0			42.9		
Max Allow Headway (MAH), s	3.8	5.3	3.8			5.3		
Max Q Clear (g_c+I1), s	7.4	34.1	17.7			16.1		
Green Ext Time (g_e), s	0.0	0.0	1.5			23.3		
Prob of Phs Call (p_c)	0.92	1.00	1.00			1.00		
Prob of Max Out (p_x)	1.00	0.00	0.38			0.00		

Left-Turn Movement Data			
Assigned Mvmt	1	5	3
Mvmt Sat Flow, veh/h	1616	0	3134

Through Movement Data			
Assigned Mvmt		2	8			6
Mvmt Sat Flow, veh/h		4784	0			3308

Right-Turn Movement Data			
Assigned Mvmt		12	18			16
Mvmt Sat Flow, veh/h		1442	1442			0

Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	0	0
Lane Assignment	(Prot)							

Lanes in Grp	1	0	2	0	0	0	0	0
Grp Vol (v), veh/h	112	0	641	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1616	0	1567	0	0	0	0	0
Q Serve Time (g_s), s	5.4	0.0	15.7	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	5.4	0.0	15.7	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1567	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	33.9	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	138	0	749	0	0	0	0	0
V/C Ratio (X)	0.81	0.00	0.86	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	160	0	940	0	0	0	0	0
Upstream Filter (I)	0.70	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	35.9	0.0	29.1	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	17.2	0.0	6.5	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	53.1	0.0	35.6	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	2.4	0.0	6.8	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.7	0.0	0.7	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	3.1	0.0	7.4	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.18	0.00	0.46	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	3	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1901	0	0	0	982	0	0
Grp Sat Flow (s), veh/h/ln	0	1544	0	0	0	1612	0	0
Q Serve Time (g_s), s	0.0	32.1	0.0	0.0	0.0	14.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	32.1	0.0	0.0	0.0	14.1	0.0	0.0
Lane Grp Cap (c), veh/h	0	1960	0	0	0	1926	0	0
V/C Ratio (X)	0.00	0.97	0.00	0.00	0.00	0.51	0.00	0.00
Avail Cap (c_a), veh/h	0	1960	0	0	0	1926	0	0
Upstream Filter (I)	0.00	0.55	0.00	0.00	0.00	0.70	0.00	0.00
Uniform Delay (d1), s/veh	0.0	22.6	0.0	0.0	0.0	9.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	9.6	0.0	0.0	0.0	0.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	32.2	0.0	0.0	0.0	10.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	13.6	0.0	0.0	0.0	6.3	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	1.7	0.0	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	15.3	0.0	0.0	0.0	6.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.12	0.00	0.00	0.00	0.09	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lane Assignment		R	R					
Lanes in Grp	0	1	1	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1442	1442	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	610	344	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	610	433	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		27.4						
HCM 2010 LOS		C						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	671	737	52	40	975	246	330	293	186	140	59	834
Future Volume (veh/h)	671	737	52	40	975	246	330	293	186	140	59	834
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1712	1712	1712	1712	1712	1712	1900	1712	1712	1712
Adj Flow Rate, veh/h	678	744	53	40	985	0	333	296	188	141	60	842
Adj No. of Lanes	2	3	1	2	3	1	2	2	0	1	1	2
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	11	11	11	11	11	11	11	11	11	11	11	11
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	735	2319	722	82	1355	422	376	370	229	162	293	439
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.23	0.50	0.50	0.03	0.29	0.00	0.12	0.19	0.19	0.10	0.17	0.17
Ln Grp Delay, s/veh	71.4	24.4	21.2	81.3	54.5	0.0	86.5	75.1	79.1	84.7	57.3	488.7
Ln Grp LOS	E	C	C	F	D		F	E	E	F	E	F
Approach Vol, veh/h		1475			1025			817			1043	
Approach Delay, s/veh		45.9			55.6			80.9			409.3	
Approach LOS		D			E			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	4.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	44.7	53.5	23.5	38.3	11.7	86.5	26.7	35.1
Change Period (Y+Rc), s	7.5	7.1	7.6	* 7.7	7.5	7.1	* 7.7	* 7.7
Max Green (Gmax), s	42.5	37.9	27.4	* 22	42.5	37.9	* 22	* 27
Max Allow Headway (MAH), s	3.8	5.2	3.8	4.6	3.8	5.2	3.8	4.6
Max Q Clear (g_c+I1), s	35.5	32.3	15.6	26.2	4.0	17.3	18.6	29.4
Green Ext Time (g_e), s	1.6	4.5	0.3	0.0	0.1	12.8	0.4	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.83	1.00	1.00	1.00
Prob of Max Out (p_x)	0.32	0.00	0.00	1.00	0.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3163		1630		3163		3163	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		4673		1932		4673		1712

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1455		1195		1455		2561

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	1	0	2	0	2	0
Grp Vol (v), veh/h	678	0	141	0	40	0	333	0
Grp Sat Flow (s), veh/h/ln	1581	0	1630	0	1581	0	1581	0
Q Serve Time (g_s), s	33.5	0.0	13.6	0.0	2.0	0.0	16.6	0.0
Cycle Q Clear Time (g_c), s	33.5	0.0	13.6	0.0	2.0	0.0	16.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	735	0	162	0	82	0	376	0
V/C Ratio (X)	0.92	0.00	0.87	0.00	0.49	0.00	0.89	0.00
Avail Cap (c_a), veh/h	840	0	279	0	840	0	441	0
Upstream Filter (I)	0.74	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	60.0	0.0	71.1	0.0	76.9	0.0	69.4	0.0
Incr Delay (d2), s/veh	11.4	0.0	13.7	0.0	4.4	0.0	17.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	71.4	0.0	84.7	0.0	81.3	0.0	86.5	0.0
1st-Term Q (Q1), veh/ln	14.7	0.0	6.1	0.0	0.9	0.0	7.3	0.0
2nd-Term Q (Q2), veh/ln	1.2	0.0	0.6	0.0	0.1	0.0	0.9	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	15.9	0.0	6.8	0.0	0.9	0.0	8.2	0.0
%ile Storage Ratio (RQ%)	0.59	0.00	1.67	0.00	0.06	0.00	0.45	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	1	0	3	0	1
Grp Vol (v), veh/h	0	985	0	248	0	744	0	60
Grp Sat Flow (s), veh/h/ln	0	1558	0	1626	0	1558	0	1712
Q Serve Time (g_s), s	0.0	30.3	0.0	23.3	0.0	15.3	0.0	4.8
Cycle Q Clear Time (g_c), s	0.0	30.3	0.0	23.3	0.0	15.3	0.0	4.8
Lane Grp Cap (c), veh/h	0	1355	0	311	0	2319	0	293
V/C Ratio (X)	0.00	0.73	0.00	0.80	0.00	0.32	0.00	0.20
Avail Cap (c_a), veh/h	0	1355	0	311	0	2319	0	293
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.74	0.00	1.00
Uniform Delay (d1), s/veh	0.0	51.1	0.0	61.7	0.0	24.1	0.0	56.9
Incr Delay (d2), s/veh	0.0	3.4	0.0	13.4	0.0	0.3	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	54.5	0.0	75.1	0.0	24.4	0.0	57.3
1st-Term Q (Q1), veh/ln	0.0	13.0	0.0	10.5	0.0	6.5	0.0	2.3

2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	1.2	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	13.5	0.0	11.6	0.0	6.6	0.0	2.3
%ile Storage Ratio (RQ%)	0.00	0.15	0.00	0.64	0.00	0.05	0.00	0.07
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	2
Grp Vol (v), veh/h	0	0	0	236	0	53	0	842
Grp Sat Flow (s), veh/h/ln	0	1455	0	1501	0	1455	0	1280
Q Serve Time (g_s), s	0.0	0.0	0.0	24.2	0.0	3.0	0.0	27.4
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	24.2	0.0	3.0	0.0	27.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.80	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	422	0	287	0	722	0	439
V/C Ratio (X)	0.00	0.00	0.00	0.82	0.00	0.07	0.00	1.92
Avail Cap (c_a), veh/h	0	422	0	287	0	722	0	439
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.74	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	62.1	0.0	21.1	0.0	66.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	17.1	0.0	0.1	0.0	422.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	79.1	0.0	21.2	0.0	488.7
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	10.0	0.0	1.2	0.0	9.7
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.4	0.0	0.0	0.0	25.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	11.4	0.0	1.3	0.0	35.4
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.63	0.00	0.07	0.00	1.08
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.9
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	141.7
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	421	812	53	204	697	701	142	1099	235	231	616	180
Future Volume (veh/h)	421	812	53	204	697	701	142	1099	235	231	616	180
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1776	1776	1776	1776	1776	1776	1776	1776	1776	1776	1900
Adj Flow Rate, veh/h	425	820	54	206	704	708	143	1110	237	233	622	182
Adj No. of Lanes	2	3	1	2	3	2	2	3	1	2	2	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	7	7	7	7	7	7	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	80	1482	462	80	1482	812	214	1076	335	313	625	182
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.02	0.31	0.31	0.02	0.31	0.31	0.07	0.22	0.22	0.10	0.24	0.24
Ln Grp Delay, s/veh	2007.4	25.3	21.0	783.5	24.2	39.3	41.0	67.8	36.1	41.3	74.2	75.4
Ln Grp LOS	F	C	C	F	C	D	D	F	D	D	E	E
Approach Vol, veh/h		1299			1618			1490			1037	
Approach Delay, s/veh		673.6			127.5			60.2			67.3	
Approach LOS		F			F			E			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	9.2	32.4	14.6	25.8	9.2	32.4	13.0	27.5
Change Period (Y+Rc), s	7.2	* 7.3	6.8	* 7.6	7.2	* 7.3	* 7.6	* 7.6
Max Green (Gmax), s	2.0	* 24	10.2	* 18	2.0	* 24	* 7.4	* 19
Max Allow Headway (MAH), s	3.8	4.9	3.8	5.2	3.8	4.9	3.8	5.2
Max Q Clear (g_c+I1), s	4.0	22.7	7.7	20.2	4.0	13.6	5.5	21.8
Green Ext Time (g_e), s	0.0	0.9	0.2	0.0	0.0	8.1	0.1	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.99	1.00	0.96	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	3281	3281	3281	3281

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	4848	4848	4848	2577

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	2656	1509	1509	753

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	425	0	233	0	206	0	143	0
Grp Sat Flow (s), veh/h/ln	1640	0	1640	0	1640	0	1640	0
Q Serve Time (g_s), s	2.0	0.0	5.7	0.0	2.0	0.0	3.5	0.0
Cycle Q Clear Time (g_c), s	2.0	0.0	5.7	0.0	2.0	0.0	3.5	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	80	0	313	0	80	0	214	0
V/C Ratio (X)	5.31	0.00	0.74	0.00	2.57	0.00	0.67	0.00
Avail Cap (c_a), veh/h	80	0	408	0	80	0	296	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	40.0	0.0	36.1	0.0	40.0	0.0	37.5	0.0
Incr Delay (d2), s/veh	1967.4	0.0	5.2	0.0	743.5	0.0	3.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	2007.4	0.0	41.3	0.0	783.5	0.0	41.0	0.0
1st-Term Q (Q1), veh/ln	0.9	0.0	2.6	0.0	0.9	0.0	1.6	0.0
2nd-Term Q (Q2), veh/ln	21.9	0.0	0.2	0.0	8.3	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	22.8	0.0	2.8	0.0	9.2	0.0	1.7	0.0
%ile Storage Ratio (RQ%)	1.31	0.00	0.06	0.00	0.47	0.00	0.05	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	86.2	0.0	0.0	0.0	31.5	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	1.3	0.0	0.0	0.0	0.6	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	3	0	3	0	1
Grp Vol (v), veh/h	0	704	0	1110	0	820	0	407
Grp Sat Flow (s), veh/h/ln	0	1616	0	1616	0	1616	0	1687
Q Serve Time (g_s), s	0.0	9.7	0.0	18.2	0.0	11.6	0.0	19.7
Cycle Q Clear Time (g_c), s	0.0	9.7	0.0	18.2	0.0	11.6	0.0	19.7
Lane Grp Cap (c), veh/h	0	1482	0	1076	0	1482	0	409
V/C Ratio (X)	0.00	0.47	0.00	1.03	0.00	0.55	0.00	1.00
Avail Cap (c_a), veh/h	0	1482	0	1076	0	1482	0	409
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	23.1	0.0	31.9	0.0	23.8	0.0	31.0
Incr Delay (d2), s/veh	0.0	1.1	0.0	35.9	0.0	1.5	0.0	43.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	24.2	0.0	67.8	0.0	25.3	0.0	74.2
1st-Term Q (Q1), veh/ln	0.0	4.3	0.0	8.1	0.0	5.2	0.0	9.2

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	3.6	0.0	0.2	0.0	4.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	4.5	0.0	11.6	0.0	5.4	0.0	14.1
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.31	0.00	0.06	0.00	0.28
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	8.5	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	2	0	1	0	1	0	1
Grp Vol (v), veh/h	0	708	0	237	0	54	0	397
Grp Sat Flow (s), veh/h/ln	0	1328	0	1509	0	1509	0	1643
Q Serve Time (g_s), s	0.0	20.7	0.0	11.9	0.0	2.1	0.0	19.8
Cycle Q Clear Time (g_c), s	0.0	20.7	0.0	11.9	0.0	2.1	0.0	19.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.46
Lane Grp Cap (c), veh/h	0	812	0	335	0	462	0	398
V/C Ratio (X)	0.00	0.87	0.00	0.71	0.00	0.12	0.00	1.00
Avail Cap (c_a), veh/h	0	812	0	335	0	462	0	398
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	26.9	0.0	29.4	0.0	20.5	0.0	31.0
Incr Delay (d2), s/veh	0.0	12.4	0.0	6.7	0.0	0.5	0.0	44.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	39.3	0.0	36.1	0.0	21.0	0.0	75.4
1st-Term Q (Q1), veh/ln	0.0	7.6	0.0	4.9	0.0	0.9	0.0	8.9
2nd-Term Q (Q2), veh/ln	0.0	1.4	0.0	0.6	0.0	0.1	0.0	4.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	9.0	0.0	5.5	0.0	1.0	0.0	13.8
%ile Storage Ratio (RQ%)	0.00	0.35	0.00	0.15	0.00	0.06	0.00	0.27
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	227.9
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	391	142	251	370	239	173	1116	351	349	808	47
Future Volume (veh/h)	44	391	142	251	370	239	173	1116	351	349	808	47
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1776	1776	1776	1776	1776	1900
Adj Flow Rate, veh/h	45	403	146	259	381	246	178	1151	362	360	833	48
Adj No. of Lanes	2	3	1	2	2	1	2	2	1	2	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	94	555	173	305	603	270	225	1623	726	667	1997	115
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.11	0.11	0.09	0.17	0.17	0.07	0.48	0.48	0.20	0.62	0.62
Ln Grp Delay, s/veh	78.0	70.3	92.4	84.6	61.7	95.7	77.3	34.3	29.9	58.4	16.6	16.6
Ln Grp LOS	E	E	F	F	E	F	E	C	C	E	B	B
Approach Vol, veh/h		594			886			1691			1241	
Approach Delay, s/veh		76.3			77.9			37.9			28.7	
Approach LOS		E			E			D			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	36.0	79.1	18.4	21.6	15.1	99.9	8.8	31.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green (Gmax), s	31.5	69.5	16.5	19.5	18.5	82.5	13.5	22.5
Max Allow Headway (MAH), s	3.8	5.1	3.8	4.8	3.8	5.1	3.8	4.8
Max Q Clear (g_c+I1), s	17.2	43.7	13.6	16.2	10.3	22.6	4.0	25.9
Green Ext Time (g_e), s	1.1	18.3	0.3	0.9	0.3	30.4	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	0.86	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	1.00	0.02	0.00	0.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3281		3408		3281		3408	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3374		5036		3243		3505

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1509		1568		187		1568

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	360	0	259	0	178	0	45	0
Grp Sat Flow (s), veh/h/ln	1640	0	1704	0	1640	0	1704	0
Q Serve Time (g_s), s	15.2	0.0	11.6	0.0	8.3	0.0	2.0	0.0
Cycle Q Clear Time (g_c), s	15.2	0.0	11.6	0.0	8.3	0.0	2.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	667	0	305	0	225	0	94	0
V/C Ratio (X)	0.54	0.00	0.85	0.00	0.79	0.00	0.48	0.00
Avail Cap (c_a), veh/h	667	0	363	0	392	0	297	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	55.3	0.0	69.5	0.0	71.1	0.0	74.3	0.0
Incr Delay (d2), s/veh	3.1	0.0	15.1	0.0	6.2	0.0	3.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	58.4	0.0	84.6	0.0	77.3	0.0	78.0	0.0
1st-Term Q (Q1), veh/ln	6.9	0.0	5.5	0.0	3.8	0.0	1.0	0.0
2nd-Term Q (Q2), veh/ln	0.3	0.0	0.6	0.0	0.2	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	7.2	0.0	6.1	0.0	4.0	0.0	1.0	0.0
%ile Storage Ratio (RQ%)	0.58	0.00	0.67	0.00	0.63	0.00	0.20	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	3	0	1	0	2
Grp Vol (v), veh/h	0	1151	0	403	0	433	0	381
Grp Sat Flow (s), veh/h/ln	0	1687	0	1679	0	1687	0	1752
Q Serve Time (g_s), s	0.0	41.7	0.0	12.0	0.0	20.6	0.0	15.7
Cycle Q Clear Time (g_c), s	0.0	41.7	0.0	12.0	0.0	20.6	0.0	15.7
Lane Grp Cap (c), veh/h	0	1623	0	555	0	1039	0	603
V/C Ratio (X)	0.00	0.71	0.00	0.73	0.00	0.42	0.00	0.63
Avail Cap (c_a), veh/h	0	1623	0	634	0	1039	0	603
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	31.7	0.0	66.7	0.0	15.4	0.0	59.6
Incr Delay (d2), s/veh	0.0	2.7	0.0	3.6	0.0	1.2	0.0	2.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	34.3	0.0	70.3	0.0	16.6	0.0	61.7
1st-Term Q (Q1), veh/ln	0.0	19.3	0.0	5.6	0.0	9.5	0.0	7.6

2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.2	0.0	0.4	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	19.9	0.0	5.7	0.0	9.9	0.0	7.7
%ile Storage Ratio (RQ%)	0.00	1.76	0.00	0.14	0.00	0.82	0.00	0.18
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	362	0	146	0	448	0	246
Grp Sat Flow (s), veh/h/ln	0	1509	0	1568	0	1743	0	1568
Q Serve Time (g_s), s	0.0	25.4	0.0	14.2	0.0	20.6	0.0	23.9
Cycle Q Clear Time (g_c), s	0.0	25.4	0.0	14.2	0.0	20.6	0.0	23.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.11	0.00	1.00
Lane Grp Cap (c), veh/h	0	726	0	173	0	1073	0	270
V/C Ratio (X)	0.00	0.50	0.00	0.84	0.00	0.42	0.00	0.91
Avail Cap (c_a), veh/h	0	726	0	197	0	1073	0	270
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	27.5	0.0	67.7	0.0	15.4	0.0	63.0
Incr Delay (d2), s/veh	0.0	2.4	0.0	24.8	0.0	1.2	0.0	32.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	29.9	0.0	92.4	0.0	16.6	0.0	95.7
1st-Term Q (Q1), veh/ln	0.0	10.6	0.0	6.2	0.0	9.8	0.0	10.3
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	1.2	0.0	0.4	0.0	2.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	11.1	0.0	7.4	0.0	10.2	0.0	12.8
%ile Storage Ratio (RQ%)	0.00	0.98	0.00	0.17	0.00	0.85	0.00	0.29
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		48.5						
HCM 2010 LOS		D						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	34	68	80	34	105	74	574	164	194	503	34
Future Volume (veh/h)	27	34	68	80	34	105	74	574	164	194	503	34
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1900	1712	1712	1712	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	29	36	72	85	36	112	79	611	174	206	535	36
Adj No. of Lanes	1	1	0	2	1	1	1	2	0	2	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	11	11	11	11	11	11	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	46	52	103	152	207	176	74	1401	398	143	1733	116
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.10	0.10	0.05	0.12	0.12	0.04	0.54	0.54	0.04	0.54	0.54
Ln Grp Delay, s/veh	57.2	0.0	45.6	46.0	36.7	42.3	172.1	14.2	14.3	278.8	12.6	12.5
Ln Grp LOS	E		D	D	D	D	F	B	B	F	B	B
Approach Vol, veh/h		137			233			864			777	
Approach Delay, s/veh		48.1			42.8			28.7			83.1	
Approach LOS		D			D			C			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	10.0	55.7	10.7	15.6	10.0	55.7	8.9	17.4
Change Period (Y+Rc), s	6.0	6.0	* 6.3	* 6.3	6.0	6.0	* 6.3	* 6.3
Max Green (Gmax), s	4.0	34.0	* 5.7	* 24	4.0	34.0	* 5.7	* 24
Max Allow Headway (MAH), s	3.8	5.3	3.8	4.8	3.8	5.3	3.8	4.8
Max Q Clear (g_c+I1), s	6.0	15.1	4.4	8.3	6.0	10.5	3.6	8.7
Green Ext Time (g_e), s	0.0	8.6	0.0	1.0	0.0	9.6	0.0	1.0
Prob of Phs Call (p_c)	0.99	1.00	0.89	1.00	0.87	1.00	0.52	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.01	1.00	0.00	1.00	0.01

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3281		3163		1691		1630	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2595		511		3209		1712

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		738		1021		216		1455

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	1	0	1	0
Grp Vol (v), veh/h	206	0	85	0	79	0	29	0
Grp Sat Flow (s), veh/h/ln	1640	0	1581	0	1691	0	1630	0
Q Serve Time (g_s), s	4.0	0.0	2.4	0.0	4.0	0.0	1.6	0.0
Cycle Q Clear Time (g_c), s	4.0	0.0	2.4	0.0	4.0	0.0	1.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	143	0	152	0	74	0	46	0
V/C Ratio (X)	1.44	0.00	0.56	0.00	1.07	0.00	0.63	0.00
Avail Cap (c_a), veh/h	143	0	196	0	74	0	101	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	44.0	0.0	42.8	0.0	44.0	0.0	44.2	0.0
Incr Delay (d2), s/veh	234.8	0.0	3.2	0.0	126.8	0.0	13.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0
Control Delay (d), s/veh	278.8	0.0	46.0	0.0	172.1	0.0	57.2	0.0
1st-Term Q (Q1), veh/ln	1.8	0.0	1.1	0.0	1.9	0.0	0.7	0.0
2nd-Term Q (Q2), veh/ln	4.7	0.0	0.1	0.0	2.6	0.0	0.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	6.5	0.0	1.1	0.0	4.4	0.0	0.9	0.0
%ile Storage Ratio (RQ%)	0.75	0.00	0.22	0.00	0.37	0.00	0.16	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	15.8	0.0	0.0	0.0	1.4	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.4	0.0	0.0	0.0	0.3	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	397	0	0	0	281	0	36
Grp Sat Flow (s), veh/h/ln	0	1687	0	0	0	1687	0	1712
Q Serve Time (g_s), s	0.0	13.0	0.0	0.0	0.0	8.4	0.0	1.7
Cycle Q Clear Time (g_c), s	0.0	13.0	0.0	0.0	0.0	8.4	0.0	1.7
Lane Grp Cap (c), veh/h	0	911	0	0	0	911	0	207
V/C Ratio (X)	0.00	0.44	0.00	0.00	0.00	0.31	0.00	0.17
Avail Cap (c_a), veh/h	0	911	0	0	0	911	0	441
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	12.7	0.0	0.0	0.0	11.7	0.0	36.3
Incr Delay (d2), s/veh	0.0	1.5	0.0	0.0	0.0	0.9	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	14.2	0.0	0.0	0.0	12.6	0.0	36.7
1st-Term Q (Q1), veh/ln	0.0	6.1	0.0	0.0	0.0	3.9	0.0	0.8

2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	6.4	0.0	0.0	0.0	4.1	0.0	0.8
%ile Storage Ratio (RQ%)	0.00	0.21	0.00	0.00	0.00	0.12	0.00	0.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	388	0	108	0	290	0	112
Grp Sat Flow (s), veh/h/ln	0	1646	0	1532	0	1738	0	1455
Q Serve Time (g_s), s	0.0	13.1	0.0	6.3	0.0	8.5	0.0	6.7
Cycle Q Clear Time (g_c), s	0.0	13.1	0.0	6.3	0.0	8.5	0.0	6.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.45	0.00	0.67	0.00	0.12	0.00	1.00
Lane Grp Cap (c), veh/h	0	889	0	155	0	938	0	176
V/C Ratio (X)	0.00	0.44	0.00	0.70	0.00	0.31	0.00	0.64
Avail Cap (c_a), veh/h	0	889	0	395	0	938	0	375
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	12.7	0.0	40.0	0.0	11.7	0.0	38.5
Incr Delay (d2), s/veh	0.0	1.6	0.0	5.6	0.0	0.9	0.0	3.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	14.3	0.0	45.6	0.0	12.5	0.0	42.3
1st-Term Q (Q1), veh/ln	0.0	5.9	0.0	2.7	0.0	4.0	0.0	2.7
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.2	0.0	0.2	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	6.3	0.0	2.9	0.0	4.3	0.0	2.9
%ile Storage Ratio (RQ%)	0.00	0.21	0.00	0.07	0.00	0.13	0.00	0.51
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		52.7						
HCM 2010 LOS		D						

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	101	253	43	148	222	134	89	1002	185	343	1018	71
Future Volume (veh/h)	101	253	43	148	222	134	89	1002	185	343	1018	71
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	103	258	44	151	227	137	91	1022	189	350	1039	72
Adj No. of Lanes	2	2	1	2	1	1	1	3	0	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	147	516	231	187	293	249	110	2156	398	185	1820	126
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.04	0.15	0.15	0.05	0.16	0.16	0.07	0.52	0.52	0.11	0.57	0.57
Ln Grp Delay, s/veh	77.0	58.1	55.0	90.8	63.3	58.5	97.8	22.9	23.9	479.7	22.0	21.9
Ln Grp LOS	E	E	E	F	E	E	F	C	C	F	C	C
Approach Vol, veh/h		405			515			1302			1461	
Approach Delay, s/veh		62.6			70.1			28.5			131.6	
Approach LOS		E			E			C			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	3.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	22.0	82.5	14.0	27.5	15.5	89.0	12.3	29.2
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green (Gmax), s	16.0	46.0	8.0	52.0	11.0	51.0	8.0	52.0
Max Allow Headway (MAH), s	3.8	5.3	3.8	4.9	3.8	5.3	3.8	4.9
Max Q Clear (g_c+I1), s	18.0	25.0	8.4	11.9	9.8	32.3	6.4	19.2
Green Ext Time (g_e), s	0.0	15.9	0.0	4.0	0.0	14.5	0.0	3.9
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.98	1.00	0.98	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1691		3408		1691		3408	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		4114		3505		3202		1845

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		759		1568		222		1568

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	2	0	1	0	2	0
Grp Vol (v), veh/h	350	0	151	0	91	0	103	0
Grp Sat Flow (s), veh/h/ln	1691	0	1704	0	1691	0	1704	0
Q Serve Time (g_s), s	16.0	0.0	6.4	0.0	7.8	0.0	4.4	0.0
Cycle Q Clear Time (g_c), s	16.0	0.0	6.4	0.0	7.8	0.0	4.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	185	0	187	0	110	0	147	0
V/C Ratio (X)	1.89	0.00	0.81	0.00	0.82	0.00	0.70	0.00
Avail Cap (c_a), veh/h	185	0	187	0	127	0	187	0
Upstream Filter (I)	0.75	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	65.0	0.0	68.2	0.0	67.4	0.0	68.9	0.0
Incr Delay (d2), s/veh	414.7	0.0	22.6	0.0	30.4	0.0	8.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	479.7	0.0	90.8	0.0	97.8	0.0	77.0	0.0
1st-Term Q (Q1), veh/ln	7.5	0.0	3.0	0.0	3.6	0.0	2.1	0.0
2nd-Term Q (Q2), veh/ln	21.3	0.0	0.6	0.0	0.9	0.0	0.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	28.8	0.0	3.6	0.0	4.6	0.0	2.2	0.0
%ile Storage Ratio (RQ%)	3.04	0.00	0.68	0.00	0.56	0.00	0.35	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	41.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	1	0	1
Grp Vol (v), veh/h	0	802	0	258	0	547	0	227
Grp Sat Flow (s), veh/h/ln	0	1616	0	1752	0	1687	0	1845
Q Serve Time (g_s), s	0.0	22.9	0.0	9.9	0.0	30.3	0.0	17.2
Cycle Q Clear Time (g_c), s	0.0	22.9	0.0	9.9	0.0	30.3	0.0	17.2
Lane Grp Cap (c), veh/h	0	1694	0	516	0	959	0	293
V/C Ratio (X)	0.00	0.47	0.00	0.50	0.00	0.57	0.00	0.78
Avail Cap (c_a), veh/h	0	1694	0	1248	0	959	0	657
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.75	0.00	1.00
Uniform Delay (d1), s/veh	0.0	22.0	0.0	57.3	0.0	20.1	0.0	58.9
Incr Delay (d2), s/veh	0.0	1.0	0.0	0.8	0.0	1.8	0.0	4.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	22.9	0.0	58.1	0.0	22.0	0.0	63.3
1st-Term Q (Q1), veh/ln	0.0	10.3	0.0	4.8	0.0	14.0	0.0	8.8

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.1	0.0	0.5	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	10.5	0.0	4.9	0.0	14.5	0.0	9.2
%ile Storage Ratio (RQ%)	0.00	0.56	0.00	0.14	0.00	0.31	0.00	0.26
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	409	0	44	0	564	0	137
Grp Sat Flow (s), veh/h/ln	0	1642	0	1568	0	1737	0	1568
Q Serve Time (g_s), s	0.0	23.0	0.0	3.6	0.0	30.3	0.0	11.8
Cycle Q Clear Time (g_c), s	0.0	23.0	0.0	3.6	0.0	30.3	0.0	11.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.46	0.00	1.00	0.00	0.13	0.00	1.00
Lane Grp Cap (c), veh/h	0	860	0	231	0	987	0	249
V/C Ratio (X)	0.00	0.47	0.00	0.19	0.00	0.57	0.00	0.55
Avail Cap (c_a), veh/h	0	860	0	558	0	987	0	558
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.75	0.00	1.00
Uniform Delay (d1), s/veh	0.0	22.0	0.0	54.6	0.0	20.1	0.0	56.6
Incr Delay (d2), s/veh	0.0	1.9	0.0	0.4	0.0	1.8	0.0	1.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	23.9	0.0	55.0	0.0	21.9	0.0	58.5
1st-Term Q (Q1), veh/ln	0.0	10.4	0.0	1.6	0.0	14.4	0.0	5.1
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.0	0.5	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	10.9	0.0	1.6	0.0	14.9	0.0	5.2
%ile Storage Ratio (RQ%)	0.00	0.58	0.00	0.27	0.00	0.31	0.00	0.15
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		78.9						
HCM 2010 LOS		E						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	129	227	41	127	298	124	104	958	72	243	1174	101
Future Volume (veh/h)	129	227	41	127	298	124	104	958	72	243	1174	101
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	137	241	44	135	317	132	111	1019	77	259	1249	107
Adj No. of Lanes	2	1	1	2	1	1	2	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	309	499	424	431	499	424	156	1630	123	217	1866	160
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.05	0.51	0.51	0.13	0.59	0.59
Ln Grp Delay, s/veh	64.8	47.3	41.7	57.6	50.3	44.6	74.9	28.6	28.6	181.2	23.4	23.4
Ln Grp LOS	E	D	D	E	D	D	E	C	C	F	C	C
Approach Vol, veh/h		422			584			1207			1615	
Approach Delay, s/veh		52.4			50.7			32.8			48.7	
Approach LOS		D			D			C			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Case No	2.0	4.0		5.0	2.0	4.0		5.0
Phs Duration (G+Y+Rc), s	24.0	82.4		45.6	11.7	94.7		45.6
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green (Gmax), s	19.5	67.5		51.5	19.5	67.5		51.5
Max Allow Headway (MAH), s	3.8	5.3		5.0	3.8	5.3		5.0
Max Q Clear (g_c+I1), s	21.5	37.0		36.0	7.1	42.9		27.5
Green Ext Time (g_e), s	0.0	22.2		5.1	0.2	18.9		6.0
Prob of Phs Call (p_c)	1.00	1.00		1.00	0.99	1.00		1.00
Prob of Max Out (p_x)	1.00	0.00		0.24	0.00	0.00		0.07

Left-Turn Movement Data								
Assigned Mvmt	1			7	5			3
Mvmt Sat Flow, veh/h	1691			1801	3281			2094

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3180		1845		3146		1845

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		240		1568		269		1568

Left Lane Group Data								
Assigned Mvmt	1	0	0	7	5	0	0	3
Lane Assignment	(Prot)				(Prot)			

Lanes in Grp	1	0	0	2	2	0	0	2
Grp Vol (v), veh/h	259	0	0	137	111	0	0	135
Grp Sat Flow (s), veh/h/ln	1691	0	0	901	1640	0	0	1047
Q Serve Time (g_s), s	19.5	0.0	0.0	11.0	5.1	0.0	0.0	8.8
Cycle Q Clear Time (g_c), s	19.5	0.0	0.0	34.0	5.1	0.0	0.0	25.5
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	901	0	0	0	1047
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	41.1	0.0	0.0	0.0	41.1
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	18.1	0.0	0.0	0.0	24.4
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	11.0	0.0	0.0	0.0	8.8
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	217	0	0	309	156	0	0	431
V/C Ratio (X)	1.19	0.00	0.00	0.44	0.71	0.00	0.00	0.31
Avail Cap (c_a), veh/h	217	0	0	432	421	0	0	575
Upstream Filter (I)	0.72	0.00	0.00	1.00	0.59	0.00	0.00	1.00
Uniform Delay (d1), s/veh	66.3	0.0	0.0	63.8	71.4	0.0	0.0	57.2
Incr Delay (d2), s/veh	115.0	0.0	0.0	1.0	3.5	0.0	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	181.2	0.0	0.0	64.8	74.9	0.0	0.0	57.6
1st-Term Q (Q1), veh/ln	9.1	0.0	0.0	2.7	2.3	0.0	0.0	2.5
2nd-Term Q (Q2), veh/ln	6.9	0.0	0.0	0.0	0.1	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	16.0	0.0	0.0	2.8	2.4	0.0	0.0	2.6
%ile Storage Ratio (RQ%)	1.57	0.00	0.00	0.42	0.32	0.00	0.00	0.36
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	10.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	540	0	241	0	668	0	317
Grp Sat Flow (s), veh/h/ln	0	1687	0	1845	0	1687	0	1845
Q Serve Time (g_s), s	0.0	34.9	0.0	16.7	0.0	40.6	0.0	23.0
Cycle Q Clear Time (g_c), s	0.0	34.9	0.0	16.7	0.0	40.6	0.0	23.0
Lane Grp Cap (c), veh/h	0	864	0	499	0	1001	0	499
V/C Ratio (X)	0.00	0.63	0.00	0.48	0.00	0.67	0.00	0.64
Avail Cap (c_a), veh/h	0	864	0	625	0	1001	0	625
Upstream Filter (I)	0.00	0.59	0.00	1.00	0.00	0.72	0.00	1.00
Uniform Delay (d1), s/veh	0.0	26.6	0.0	46.5	0.0	20.8	0.0	48.8
Incr Delay (d2), s/veh	0.0	2.0	0.0	0.7	0.0	2.5	0.0	1.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	28.6	0.0	47.3	0.0	23.4	0.0	50.3
1st-Term Q (Q1), veh/ln	0.0	16.2	0.0	8.5	0.0	18.8	0.0	11.7

2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.1	0.0	0.7	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	16.7	0.0	8.6	0.0	19.5	0.0	11.9
%ile Storage Ratio (RQ%)	0.00	0.35	0.00	0.26	0.00	0.93	0.00	0.28
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	556	0	44	0	688	0	132
Grp Sat Flow (s), veh/h/ln	0	1733	0	1568	0	1728	0	1568
Q Serve Time (g_s), s	0.0	35.0	0.0	3.2	0.0	40.9	0.0	10.2
Cycle Q Clear Time (g_c), s	0.0	35.0	0.0	3.2	0.0	40.9	0.0	10.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.14	0.00	1.00	0.00	0.16	0.00	1.00
Lane Grp Cap (c), veh/h	0	888	0	424	0	1025	0	424
V/C Ratio (X)	0.00	0.63	0.00	0.10	0.00	0.67	0.00	0.31
Avail Cap (c_a), veh/h	0	888	0	531	0	1025	0	531
Upstream Filter (I)	0.00	0.59	0.00	1.00	0.00	0.72	0.00	1.00
Uniform Delay (d1), s/veh	0.0	26.6	0.0	41.6	0.0	20.9	0.0	44.2
Incr Delay (d2), s/veh	0.0	2.0	0.0	0.1	0.0	2.5	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	28.6	0.0	41.7	0.0	23.4	0.0	44.6
1st-Term Q (Q1), veh/ln	0.0	16.7	0.0	1.4	0.0	19.5	0.0	4.4
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.0	0.0	0.7	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	17.2	0.0	1.4	0.0	20.2	0.0	4.5
%ile Storage Ratio (RQ%)	0.00	0.36	0.00	0.25	0.00	0.96	0.00	0.64
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		44.4						
HCM 2010 LOS		D						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	45	38	112	37	530	41	1208	76	464	1408	86
Future Volume (veh/h)	64	45	38	112	37	530	41	1208	76	464	1408	86
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	68	48	40	119	39	564	44	1285	81	494	1498	91
Adj No. of Lanes	2	3	1	2	1	1	1	2	0	2	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	352	840	262	165	467	397	163	1511	95	539	2169	131
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.17	0.17	0.17	0.05	0.25	0.25	0.47	0.47	0.47	0.16	0.67	0.67
Ln Grp Delay, s/veh	57.6	55.4	56.5	80.0	45.1	262.6	37.7	44.7	44.7	74.6	17.4	17.5
Ln Grp LOS	E	E	E	E	D	F	D	D	D	E	B	B
Approach Vol, veh/h		156			722			1410			2083	
Approach Delay, s/veh		56.7			220.8			44.5			31.0	
Approach LOS		E			F			D			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4		6		8
Case No	2.0	6.0	2.0	5.0		4.0		3.0
Phs Duration (G+Y+Rc), s	31.9	80.1	13.6	32.4		112.0		46.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0		6.0		6.0
Max Green (Gmax), s	28.0	72.0	19.0	15.0		106.0		40.0
Max Allow Headway (MAH), s	3.8	5.4	3.8	4.3		5.4		4.3
Max Q Clear (g_c+I1), s	25.4	57.8	7.4	8.0		47.3		42.0
Green Ext Time (g_e), s	0.5	13.2	0.2	2.1		45.9		0.0
Prob of Phs Call (p_c)	1.00	1.00	0.99	1.00		1.00		1.00
Prob of Max Out (p_x)	1.00	0.00	0.00	0.53		0.00		1.00

Left-Turn Movement Data				
Assigned Mvmt	1	5	3	7
Mvmt Sat Flow, veh/h	3281	305	3408	1562

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	3224	5036	3233	1845

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	203	1568	196	1568

Left Lane Group Data								
Assigned Mvmt	1	5	3	7	0	0	0	0
Lane Assignment	(Prot)		(Prot)					

Lanes in Grp	2	1	2	2	0	0	0	0
Grp Vol (v), veh/h	494	44	119	68	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1640	305	1704	781	0	0	0	0
Q Serve Time (g_s), s	23.4	16.4	5.4	6.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	23.4	29.7	5.4	6.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	305	0	781	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	74.1	0.0	26.4	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	60.7	0.0	26.4	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	16.4	0.0	6.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	539	163	165	352	0	0	0	0
V/C Ratio (X)	0.92	0.27	0.72	0.19	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	581	163	410	352	0	0	0	0
Upstream Filter (I)	0.43	0.67	1.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	65.0	35.0	74.1	57.3	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	9.6	2.7	5.9	0.3	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	74.6	37.7	80.0	57.6	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	10.6	1.4	2.6	1.3	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.7	0.1	0.1	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	11.4	1.5	2.7	1.3	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	1.20	0.18	0.31	0.42	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	3	0	1	0	1
Grp Vol (v), veh/h	0	671	0	48	0	779	0	39
Grp Sat Flow (s), veh/h/ln	0	1687	0	1679	0	1687	0	1845
Q Serve Time (g_s), s	0.0	55.5	0.0	1.3	0.0	44.6	0.0	2.5
Cycle Q Clear Time (g_c), s	0.0	55.5	0.0	1.3	0.0	44.6	0.0	2.5
Lane Grp Cap (c), veh/h	0	791	0	840	0	1132	0	467
V/C Ratio (X)	0.00	0.85	0.00	0.06	0.00	0.69	0.00	0.08
Avail Cap (c_a), veh/h	0	791	0	840	0	1132	0	467
Upstream Filter (I)	0.00	0.67	0.00	1.00	0.00	0.43	0.00	1.00
Uniform Delay (d1), s/veh	0.0	37.0	0.0	55.4	0.0	15.9	0.0	45.0
Incr Delay (d2), s/veh	0.0	7.7	0.0	0.0	0.0	1.5	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	44.7	0.0	55.4	0.0	17.4	0.0	45.1
1st-Term Q (Q1), veh/ln	0.0	25.7	0.0	0.6	0.0	20.6	0.0	1.3

2nd-Term Q (Q2), veh/ln	0.0	1.7	0.0	0.0	0.0	0.5	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	27.4	0.0	0.6	0.0	21.0	0.0	1.3
%ile Storage Ratio (RQ%)	0.00	1.31	0.00	0.08	0.00	1.14	0.00	0.14
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	695	0	40	0	810	0	564
Grp Sat Flow (s), veh/h/ln	0	1740	0	1568	0	1741	0	1568
Q Serve Time (g_s), s	0.0	55.8	0.0	3.4	0.0	45.3	0.0	40.0
Cycle Q Clear Time (g_c), s	0.0	55.8	0.0	3.4	0.0	45.3	0.0	40.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.12	0.00	1.00	0.00	0.11	0.00	1.00
Lane Grp Cap (c), veh/h	0	815	0	262	0	1168	0	397
V/C Ratio (X)	0.00	0.85	0.00	0.15	0.00	0.69	0.00	1.42
Avail Cap (c_a), veh/h	0	815	0	262	0	1168	0	397
Upstream Filter (I)	0.00	0.67	0.00	1.00	0.00	0.43	0.00	1.00
Uniform Delay (d1), s/veh	0.0	37.1	0.0	56.3	0.0	16.0	0.0	59.0
Incr Delay (d2), s/veh	0.0	7.6	0.0	0.3	0.0	1.5	0.0	203.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	44.7	0.0	56.5	0.0	17.5	0.0	262.6
1st-Term Q (Q1), veh/ln	0.0	26.8	0.0	1.5	0.0	21.6	0.0	17.3
2nd-Term Q (Q2), veh/ln	0.0	1.7	0.0	0.0	0.0	0.5	0.0	22.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	28.6	0.0	1.5	0.0	22.1	0.0	39.8
%ile Storage Ratio (RQ%)	0.00	1.36	0.00	0.20	0.00	1.20	0.00	4.35
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	41.8
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	67.6
HCM 2010 LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	470	636	305	682	763	13	256	1004	7	7	853	196
Future Volume (veh/h)	470	636	305	682	763	13	256	1004	7	7	853	196
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1759	1759	1759	1759	1776	1776	1776	1900	1776	1776
Adj Flow Rate, veh/h	490	662	318	710	795	14	267	1046	0	7	889	0
Adj No. of Lanes	2	3	1	2	3	1	2	2	1	0	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	8	8	8	8	8	8	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	556	654	204	768	968	301	259	1704	762	27	1269	584
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.17	0.14	0.14	0.24	0.20	0.20	0.08	0.51	0.00	0.39	0.39	0.00
Ln Grp Delay, s/veh	68.5	103.9	340.9	71.4	63.8	49.0	115.1	27.7	0.0	44.4	46.2	0.0
Ln Grp LOS	E	F	F	E	E	D	F	C		D	D	
Approach Vol, veh/h		1470			1519			1313			896	
Approach Delay, s/veh		143.4			67.2			45.5			45.2	
Approach LOS		F			E			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Case No		3.0	2.0	3.0	2.0	7.0	2.0	3.0
Phs Duration (G+Y+Rc), s		83.1	41.9	27.0	18.0	65.1	32.0	36.9
Change Period (Y+Rc), s		6.3	6.0	6.3	6.0	6.3	6.0	6.3
Max Green (Gmax), s		72.7	40.0	20.7	12.0	54.7	40.0	20.7
Max Allow Headway (MAH), s		5.3	3.8	5.0	3.8	5.3	3.8	5.0
Max Q Clear (g_c+I1), s		35.8	34.4	22.7	14.0	36.9	24.4	26.1
Green Ext Time (g_e), s		19.6	1.5	0.0	0.0	12.4	1.6	0.0
Prob of Phs Call (p_c)		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)		0.00	0.55	1.00	1.00	0.00	0.00	1.00

Left-Turn Movement Data								
Assigned Mvmt			3		5	1	7	
Mvmt Sat Flow, veh/h			3250		3281	9	3250	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3374		4803		3281		4803

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1509		1495		1509		1495

Left Lane Group Data								
Assigned Mvmt	0	0	3	0	5	1	7	0
Lane Assignment			(Prot)		(Prot)	L+T	(Prot)	

Lanes in Grp	0	0	2	0	2	1	2	0
Grp Vol (v), veh/h	0	0	710	0	267	478	490	0
Grp Sat Flow (s), veh/h/ln	0	0	1625	0	1640	1755	1625	0
Q Serve Time (g_s), s	0.0	0.0	32.4	0.0	12.0	0.0	22.4	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	32.4	0.0	12.0	34.3	22.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	548	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	58.8	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	43.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	38.7	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	34.3	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	1.00	0.01	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	768	0	259	702	556	0
V/C Ratio (X)	0.00	0.00	0.92	0.00	1.03	0.68	0.88	0.00
Avail Cap (c_a), veh/h	0	0	855	0	259	702	855	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.44	1.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	56.7	0.0	70.0	39.1	61.5	0.0
Incr Delay (d2), s/veh	0.0	0.0	14.6	0.0	45.1	5.3	7.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	71.4	0.0	115.1	44.4	68.5	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	14.6	0.0	5.4	16.9	10.1	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	1.6	0.0	1.6	1.0	0.5	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	16.2	0.0	7.1	17.9	10.6	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	1.07	0.00	0.79	0.62	1.01	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	3	0	1	0	3
Grp Vol (v), veh/h	0	1046	0	662	0	418	0	795
Grp Sat Flow (s), veh/h/ln	0	1687	0	1601	0	1535	0	1601
Q Serve Time (g_s), s	0.0	33.8	0.0	20.7	0.0	34.9	0.0	24.1
Cycle Q Clear Time (g_c), s	0.0	33.8	0.0	20.7	0.0	34.9	0.0	24.1
Lane Grp Cap (c), veh/h	0	1704	0	654	0	594	0	968
V/C Ratio (X)	0.00	0.61	0.00	1.01	0.00	0.70	0.00	0.82
Avail Cap (c_a), veh/h	0	1704	0	654	0	594	0	968
Upstream Filter (I)	0.00	0.44	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	27.0	0.0	65.6	0.0	39.3	0.0	58.1
Incr Delay (d2), s/veh	0.0	0.7	0.0	38.2	0.0	6.9	0.0	5.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	27.7	0.0	103.9	0.0	46.2	0.0	63.8
1st-Term Q (Q1), veh/ln	0.0	15.7	0.0	9.1	0.0	14.7	0.0	10.7

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	2.3	0.0	1.1	0.0	0.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	15.9	0.0	11.5	0.0	15.9	0.0	11.2
%ile Storage Ratio (RQ%)	0.00	0.86	0.00	0.40	0.00	0.55	0.00	0.34
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	318	0	0	0	14
Grp Sat Flow (s), veh/h/ln	0	1509	0	1495	0	1509	0	1495
Q Serve Time (g_s), s	0.0	0.0	0.0	20.7	0.0	0.0	0.0	1.1
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	20.7	0.0	0.0	0.0	1.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	762	0	204	0	584	0	301
V/C Ratio (X)	0.00	0.00	0.00	1.56	0.00	0.00	0.00	0.05
Avail Cap (c_a), veh/h	0	762	0	204	0	584	0	301
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	65.6	0.0	0.0	0.0	48.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	275.3	0.0	0.0	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	340.9	0.0	0.0	0.0	49.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	8.6	0.0	0.0	0.0	0.5
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	15.6	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	24.1	0.0	0.0	0.0	0.5
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.84	0.00	0.00	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	28.6	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		79.5						
HCM 2010 LOS		E						

APPENDIX IV-C:
Year 2040 Zoning Intersection Total with Combined ADM and Graham LOS

APPENDIX IV-C1:
Year 2040 Zoning Intersection Total with Combined LOS AM Analysis without Mitigation

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	276	709	406	191	2238	42	807	377	195	115	377	686
Future Volume (veh/h)	276	709	406	191	2238	42	807	377	195	115	377	686
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1743	1743	1900	1743	1743	1743
Adj Flow Rate, veh/h	285	731	419	197	2307	43	832	389	201	119	389	707
Adj No. of Lanes	2	2	1	1	3	0	1	2	0	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	9	9	9	9	9	9
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	133	1240	555	69	1800	33	125	635	324	55	447	380
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.04	0.35	0.35	0.04	0.35	0.35	0.08	0.30	0.30	0.03	0.26	0.26
Ln Grp Delay, s/veh	582.9	27.3	36.4	925.7	163.2	170.1	2596.1	33.8	34.5	628.7	53.6	432.5
Ln Grp LOS	F	C	D	F	F	F	F	C	C	F	D	F
Approach Vol, veh/h		1435			2547			1422			1215	
Approach Delay, s/veh		140.3			224.5			1533.1			330.4	
Approach LOS		F			F			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	3.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	10.0	35.0	10.0	39.0	14.0	31.0	10.0	39.0
Change Period (Y+Rc), s	6.9	6.9	6.4	6.4	6.9	6.9	6.4	6.4
Max Green (Gmax), s	3.1	28.1	3.6	32.6	7.1	24.1	3.6	32.6
Max Allow Headway (MAH), s	3.8	4.8	3.7	4.9	3.8	4.8	3.8	4.9
Max Q Clear (g_c+I1), s	5.1	17.0	5.6	23.8	9.1	26.1	5.6	34.6
Green Ext Time (g_e), s	0.0	6.7	0.0	8.4	0.0	0.0	0.0	0.0
Prob of Phs Call (p_c)	0.96	1.00	0.99	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1660		1792		1660		3476	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2125		3574		1743		5191

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1083		1599		1482		97

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	2	0
Grp Vol (v), veh/h	119	0	197	0	832	0	285	0
Grp Sat Flow (s), veh/h/ln	1660	0	1792	0	1660	0	1738	0
Q Serve Time (g_s), s	3.1	0.0	3.6	0.0	7.1	0.0	3.6	0.0
Cycle Q Clear Time (g_c), s	3.1	0.0	3.6	0.0	7.1	0.0	3.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	55	0	69	0	125	0	133	0
V/C Ratio (X)	2.17	0.00	2.87	0.00	6.64	0.00	2.14	0.00
Avail Cap (c_a), veh/h	55	0	69	0	125	0	133	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	45.5	0.0	45.2	0.0	43.5	0.0	45.2	0.0
Incr Delay (d2), s/veh	583.2	0.0	880.5	0.0	2552.6	0.0	537.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	628.7	0.0	925.7	0.0	2596.1	0.0	582.9	0.0
1st-Term Q (Q1), veh/ln	1.4	0.0	1.8	0.0	3.2	0.0	1.7	0.0
2nd-Term Q (Q2), veh/ln	8.9	0.0	16.8	0.0	88.9	0.0	9.9	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	10.3	0.0	18.6	0.0	92.2	0.0	11.7	0.0
%ile Storage Ratio (RQ%)	0.81	0.00	1.95	0.00	8.23	0.00	0.47	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	16.1	0.0	32.1	0.0	176.7	0.0	38.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.5	0.0	0.7	0.0	1.7	0.0	0.5	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	1	0	2
Grp Vol (v), veh/h	0	302	0	731	0	389	0	1520
Grp Sat Flow (s), veh/h/ln	0	1656	0	1787	0	1743	0	1712
Q Serve Time (g_s), s	0.0	14.7	0.0	15.8	0.0	20.1	0.0	32.6
Cycle Q Clear Time (g_c), s	0.0	14.7	0.0	15.8	0.0	20.1	0.0	32.6
Lane Grp Cap (c), veh/h	0	495	0	1240	0	447	0	1187
V/C Ratio (X)	0.00	0.61	0.00	0.59	0.00	0.87	0.00	1.28
Avail Cap (c_a), veh/h	0	495	0	1240	0	447	0	1187
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	28.3	0.0	25.2	0.0	33.5	0.0	30.7
Incr Delay (d2), s/veh	0.0	5.5	0.0	2.1	0.0	20.1	0.0	132.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	33.8	0.0	27.3	0.0	53.6	0.0	163.2
1st-Term Q (Q1), veh/ln	0.0	6.7	0.0	7.7	0.0	9.6	0.0	15.3

2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	0.4	0.0	2.5	0.0	21.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.5	0.0	8.1	0.0	12.1	0.0	37.2
%ile Storage Ratio (RQ%)	0.00	0.27	0.00	0.18	0.00	0.47	0.00	1.71
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	83.1
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	288	0	419	0	707	0	830
Grp Sat Flow (s), veh/h/ln	0	1552	0	1599	0	1482	0	1864
Q Serve Time (g_s), s	0.0	15.0	0.0	21.8	0.0	24.1	0.0	32.6
Cycle Q Clear Time (g_c), s	0.0	15.0	0.0	21.8	0.0	24.1	0.0	32.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.70	0.00	1.00	0.00	1.00	0.00	0.05
Lane Grp Cap (c), veh/h	0	464	0	555	0	380	0	647
V/C Ratio (X)	0.00	0.62	0.00	0.76	0.00	1.86	0.00	1.28
Avail Cap (c_a), veh/h	0	464	0	555	0	380	0	647
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	28.4	0.0	27.2	0.0	35.0	0.0	30.7
Incr Delay (d2), s/veh	0.0	6.1	0.0	9.3	0.0	397.5	0.0	139.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	34.5	0.0	36.4	0.0	432.5	0.0	170.1
1st-Term Q (Q1), veh/ln	0.0	6.4	0.0	9.6	0.0	9.8	0.0	16.7
2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	1.4	0.0	41.9	0.0	25.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.2	0.0	11.0	0.0	51.7	0.0	41.7
%ile Storage Ratio (RQ%)	0.00	0.26	0.00	0.53	0.00	1.99	0.00	1.92
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	81.8	0.0	45.9
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.3
Intersection Summary								
HCM 2010 Ctrl Delay		506.8						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	854	181	262	1762	304	369	154	190	269	222	250
Future Volume (veh/h)	130	854	181	262	1762	304	369	154	190	269	222	250
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	134	880	187	270	1816	313	380	159	196	277	229	258
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	119	1083	230	221	1306	219	259	120	148	236	272	231
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.07	0.37	0.37	0.12	0.43	0.43	0.15	0.16	0.16	0.13	0.15	0.15
Ln Grp Delay, s/veh	177.9	45.8	45.9	157.4	199.2	230.1	284.5	0.0	220.2	167.5	78.0	147.8
Ln Grp LOS	F	D	D	F	F	F	F		F	F	E	F
Approach Vol, veh/h		1201			2399			735			764	
Approach Delay, s/veh		60.6			208.6			253.4			134.0	
Approach LOS		E			F			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	23.4	26.6	22.0	53.0	25.0	25.0	14.8	60.2
Change Period (Y+Rc), s	6.6	6.6	6.4	6.4	6.6	6.6	6.4	6.4
Max Green (Gmax), s	16.8	20.0	15.6	46.6	18.4	18.4	8.4	53.8
Max Allow Headway (MAH), s	3.8	5.0	3.7	5.1	3.8	5.0	3.7	5.1
Max Q Clear (g_c+I1), s	18.8	22.0	17.6	36.1	20.4	20.4	10.4	55.8
Green Ext Time (g_e), s	0.0	0.0	0.0	10.1	0.0	0.0	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		1		3		5		7
Mvmt Sat Flow, veh/h		1757		1774		1757		1774

Through Movement Data								
Assigned Mvmt			2		4		6		8
Mvmt Sat Flow, veh/h			753		2906		1845		3034

Right-Turn Movement Data								
Assigned Mvmt			12		14		16		18
Mvmt Sat Flow, veh/h			928		617		1568		508

Left Lane Group Data								
Assigned Mvmt		1	0	3	0	5	0	7	0
Lane Assignment		(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	277	0	270	0	380	0	134	0
Grp Sat Flow (s), veh/h/ln	1757	0	1774	0	1757	0	1774	0
Q Serve Time (g_s), s	16.8	0.0	15.6	0.0	18.4	0.0	8.4	0.0
Cycle Q Clear Time (g_c), s	16.8	0.0	15.6	0.0	18.4	0.0	8.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	236	0	221	0	259	0	119	0
V/C Ratio (X)	1.17	0.00	1.22	0.00	1.47	0.00	1.12	0.00
Avail Cap (c_a), veh/h	236	0	221	0	259	0	119	0
Upstream Filter (I)	1.00	0.00	0.09	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	54.1	0.0	54.7	0.0	53.3	0.0	58.3	0.0
Incr Delay (d2), s/veh	113.4	0.0	102.7	0.0	231.2	0.0	119.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	167.5	0.0	157.4	0.0	284.5	0.0	177.9	0.0
1st-Term Q (Q1), veh/ln	8.1	0.0	7.6	0.0	8.9	0.0	4.1	0.0
2nd-Term Q (Q2), veh/ln	7.4	0.0	6.3	0.0	16.6	0.0	4.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	15.6	0.0	13.9	0.0	25.5	0.0	8.1	0.0
%ile Storage Ratio (RQ%)	2.95	0.00	1.31	0.00	4.84	0.00	0.64	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	10.2	0.0	12.1	0.0	30.3	0.0	3.7	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.3	0.0	0.4	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T		T		T
Lanes in Grp	0	0	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	536	0	229	0	1037
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	1845	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	34.0	0.0	15.1	0.0	53.8
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	34.0	0.0	15.1	0.0	53.8
Lane Grp Cap (c), veh/h	0	0	0	660	0	272	0	762
V/C Ratio (X)	0.00	0.00	0.00	0.81	0.00	0.84	0.00	1.36
Avail Cap (c_a), veh/h	0	0	0	660	0	272	0	762
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	0.0	0.0	35.3	0.0	51.9	0.0	35.6
Incr Delay (d2), s/veh	0.0	0.0	0.0	10.5	0.0	26.1	0.0	163.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	45.8	0.0	78.0	0.0	199.2
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	16.7	0.0	7.7	0.0	26.2

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.9	0.0	2.0	0.0	34.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	18.6	0.0	9.7	0.0	60.8
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.24	0.00	0.34	0.00	1.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	68.9
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	355	0	531	0	258	0	1092
Grp Sat Flow (s), veh/h/ln	0	1681	0	1754	0	1568	0	1773
Q Serve Time (g_s), s	0.0	20.0	0.0	34.1	0.0	18.4	0.0	53.8
Cycle Q Clear Time (g_c), s	0.0	20.0	0.0	34.1	0.0	18.4	0.0	53.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.55	0.00	0.35	0.00	1.00	0.00	0.29
Lane Grp Cap (c), veh/h	0	269	0	654	0	231	0	763
V/C Ratio (X)	0.00	1.32	0.00	0.81	0.00	1.12	0.00	1.43
Avail Cap (c_a), veh/h	0	269	0	654	0	231	0	763
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	52.5	0.0	35.3	0.0	53.3	0.0	35.6
Incr Delay (d2), s/veh	0.0	167.7	0.0	10.6	0.0	94.5	0.0	194.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	220.2	0.0	45.9	0.0	147.8	0.0	230.1
1st-Term Q (Q1), veh/ln	0.0	9.3	0.0	16.5	0.0	8.0	0.0	26.3
2nd-Term Q (Q2), veh/ln	0.0	12.5	0.0	1.9	0.0	6.1	0.0	41.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	21.8	0.0	18.5	0.0	14.0	0.0	67.5
%ile Storage Ratio (RQ%)	0.00	0.72	0.00	0.24	0.00	0.49	0.00	1.14
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	21.5	0.0	0.0	0.0	6.8	0.0	82.2
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.4
Intersection Summary								
HCM 2010 Ctrl Delay		169.0						
HCM 2010 LOS		F						

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	110	1174	2014	495	412	163
Future Volume (veh/h)	110	1174	2014	495	412	163
Number	7	4	8	18	1	16
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00			1.00	1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1676	1676	1676	1710	1660	1660
Adj Flow Rate, veh/h	117	1249	2143	527	438	173
Adj No. of Lanes	1	2	2	0	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	3	3
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	40	1919	1269	300	370	330
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.60	0.50	0.50	0.23	0.23
Ln Grp Delay, s/veh	912.5	10.8	311.1	361.4	136.8	32.2
Ln Grp LOS	F	B	F	F	F	C
Approach Vol, veh/h		1366	2670		611	
Approach Delay, s/veh		88.1	336.9		107.2	
Approach LOS		F	F		F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	6			4			7	8
Case No	9.0			4.0			2.0	8.0
Phs Duration (G+Y+Rc), s	25.0			54.0			8.4	45.6
Change Period (Y+Rc), s	6.5			6.4			6.4	6.4
Max Green (Gmax), s	18.5			46.6			2.0	39.2
Max Allow Headway (MAH), s	3.9			5.1			3.7	5.1
Max Q Clear (g_c+I1), s	20.5			22.3			4.0	41.2
Green Ext Time (g_e), s	0.0			23.9			0.0	0.0
Prob of Phs Call (p_c)	1.00			1.00			0.92	1.00
Prob of Max Out (p_x)	0.00			0.00			1.00	0.00
Left-Turn Movement Data								
Assigned Mvmt	1						7	3
Mvmt Sat Flow, veh/h	1581						1597	0
Through Movement Data								
Assigned Mvmt	6			4				8
Mvmt Sat Flow, veh/h	0			3269				2642
Right-Turn Movement Data								
Assigned Mvmt	16			14				18
Mvmt Sat Flow, veh/h	1411			0				604
Left Lane Group Data								
Assigned Mvmt	1	0	0	0	0	0	7	3
Lane Assignment							(Prot)	

Lanes in Grp	1	0	0	0	0	0	1	0
Grp Vol (v), veh/h	438	0	0	0	0	0	117	0
Grp Sat Flow (s), veh/h/ln	1581	0	0	0	0	0	1597	0
Q Serve Time (g_s), s	18.5	0.0	0.0	0.0	0.0	0.0	2.0	0.0
Cycle Q Clear Time (g_c), s	18.5	0.0	0.0	0.0	0.0	0.0	2.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1581	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.2
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	370	0	0	0	0	0	40	0
V/C Ratio (X)	1.18	0.00	0.00	0.00	0.00	0.00	2.89	0.00
Avail Cap (c_a), veh/h	370	0	0	0	0	0	40	0
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.32	0.00
Uniform Delay (d1), s/veh	30.3	0.0	0.0	0.0	0.0	0.0	38.5	0.0
Incr Delay (d2), s/veh	106.6	0.0	0.0	0.0	0.0	0.0	874.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	136.8	0.0	0.0	0.0	0.0	0.0	912.5	0.0
1st-Term Q (Q1), veh/ln	8.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0
2nd-Term Q (Q2), veh/ln	11.0	0.0	0.0	0.0	0.0	0.0	9.8	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	19.0	0.0	0.0	0.0	0.0	0.0	10.7	0.0
%ile Storage Ratio (RQ%)	0.94	0.00	0.00	0.00	0.00	0.00	1.23	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	16.9	0.0	0.0	0.0	0.0	0.0	19.1	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.0	0.0	0.0	0.0	0.7	0.0
Middle Lane Group Data								
Assigned Mvmt	6	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	1
Grp Vol (v), veh/h	0	0	0	1249	0	0	0	1301
Grp Sat Flow (s), veh/h/ln	0	0	0	1593	0	0	0	1593
Q Serve Time (g_s), s	0.0	0.0	0.0	20.3	0.0	0.0	0.0	39.2
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	20.3	0.0	0.0	0.0	39.2
Lane Grp Cap (c), veh/h	0	0	0	1919	0	0	0	790
V/C Ratio (X)	0.00	0.00	0.00	0.65	0.00	0.00	0.00	1.65
Avail Cap (c_a), veh/h	0	0	0	1919	0	0	0	790
Upstream Filter (I)	0.00	0.00	0.00	0.32	0.00	0.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	0.0	0.0	10.3	0.0	0.0	0.0	19.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.6	0.0	0.0	0.0	291.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	10.8	0.0	0.0	0.0	311.1
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	8.8	0.0	0.0	0.0	17.1

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	63.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	9.0	0.0	0.0	0.0	81.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.15	0.00	0.00	0.00	1.17
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	127.6
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
Right Lane Group Data								
Assigned Mvmt	16	0	0	14	0	0	0	18
Lane Assignment	R							T+R
Lanes in Grp	1	0	0	0	0	0	0	1
Grp Vol (v), veh/h	173	0	0	0	0	0	0	1369
Grp Sat Flow (s), veh/h/ln	1411	0	0	0	0	0	0	1570
Q Serve Time (g_s), s	8.5	0.0	0.0	0.0	0.0	0.0	0.0	39.2
Cycle Q Clear Time (g_c), s	8.5	0.0	0.0	0.0	0.0	0.0	0.0	39.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38
Lane Grp Cap (c), veh/h	330	0	0	0	0	0	0	779
V/C Ratio (X)	0.52	0.00	0.00	0.00	0.00	0.00	0.00	1.76
Avail Cap (c_a), veh/h	330	0	0	0	0	0	0	779
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09
Uniform Delay (d1), s/veh	26.4	0.0	0.0	0.0	0.0	0.0	0.0	19.9
Incr Delay (d2), s/veh	5.8	0.0	0.0	0.0	0.0	0.0	0.0	341.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	32.2	0.0	0.0	0.0	0.0	0.0	0.0	361.4
1st-Term Q (Q1), veh/ln	6.7	0.0	0.0	0.0	0.0	0.0	0.0	16.9
2nd-Term Q (Q2), veh/ln	0.5	0.0	0.0	0.0	0.0	0.0	0.0	73.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	7.2	0.0	0.0	0.0	0.0	0.0	0.0	90.8
%ile Storage Ratio (RQ%)	0.35	0.00	0.00	0.00	0.00	0.00	0.00	1.31
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	147.6
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
Intersection Summary								
HCM 2010 Ctrl Delay		233.5						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	1317	40	52	2069	32	154	9	16	67	26	94
Future Volume (veh/h)	52	1317	40	52	2069	32	154	9	16	67	26	94
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1845	1845	1900	1845	1845
Adj Flow Rate, veh/h	53	1344	41	53	2111	33	157	9	16	68	27	96
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	55	2192	67	55	2229	35	133	8	125	86	34	105
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.63	0.63	0.03	0.63	0.63	0.08	0.08	0.08	0.07	0.07	0.07
Ln Grp Delay, s/veh	103.6	8.6	8.6	88.2	18.2	18.5	162.8	0.0	29.5	69.8	0.0	95.7
Ln Grp LOS	F	A	A	F	B	B	F		C	E		F
Approach Vol, veh/h		1438			2197			182			191	
Approach Delay, s/veh		12.1			20.1			151.1			82.8	
Approach LOS		B			C			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	6	2	3	4			7	8
Case No	11.0	11.0	2.0	4.0			2.0	4.0
Phs Duration (G+Y+Rc), s	11.0	12.0	8.4	47.0			8.4	47.0
Change Period (Y+Rc), s	6.7	6.9	6.4	* 6.6			6.4	* 6.6
Max Green (Gmax), s	4.3	5.1	2.0	* 26			2.0	* 26
Max Allow Headway (MAH), s	4.7	5.2	3.8	5.2			3.7	5.2
Max Q Clear (g_c+I1), s	5.9	7.1	3.9	16.9			3.9	37.0
Green Ext Time (g_e), s	0.0	0.0	0.0	9.2			0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	0.61	1.00			0.61	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.00			1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1	5	3				7	
Mvmt Sat Flow, veh/h	1275	1666	1774				1774	

Through Movement Data								
Assigned Mvmt	6	2		4				8
Mvmt Sat Flow, veh/h	506	95		3507				3567

Right-Turn Movement Data								
Assigned Mvmt	16	12		14				18
Mvmt Sat Flow, veh/h	1568	1568		107				56

Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	7	0
Lane Assignment	L+T	L+T	(Prot)				(Prot)	

Lanes in Grp	1	1	1	0	0	0	1	0
Grp Vol (v), veh/h	95	166	53	0	0	0	53	0
Grp Sat Flow (s), veh/h/ln	1781	1761	1774	0	0	0	1774	0
Q Serve Time (g_s), s	3.4	5.1	1.9	0.0	0.0	0.0	1.9	0.0
Cycle Q Clear Time (g_c), s	3.4	5.1	1.9	0.0	0.0	0.0	1.9	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.72	0.95	1.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	120	140	55	0	0	0	55	0
V/C Ratio (X)	0.79	1.18	0.96	0.00	0.00	0.00	0.96	0.00
Avail Cap (c_a), veh/h	120	140	55	0	0	0	55	0
Upstream Filter (I)	1.00	1.00	0.34	0.00	0.00	0.00	0.52	0.00
Uniform Delay (d1), s/veh	29.4	29.5	31.0	0.0	0.0	0.0	31.0	0.0
Incr Delay (d2), s/veh	40.4	133.4	57.2	0.0	0.0	0.0	72.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	69.8	162.8	88.2	0.0	0.0	0.0	103.6	0.0
1st-Term Q (Q1), veh/ln	1.7	2.5	0.9	0.0	0.0	0.0	0.9	0.0
2nd-Term Q (Q2), veh/ln	1.3	5.2	0.9	0.0	0.0	0.0	1.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	3.0	7.7	1.8	0.0	0.0	0.0	2.0	0.0
%ile Storage Ratio (RQ%)	0.15	0.42	0.14	0.00	0.00	0.00	0.29	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	6.4	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	6	2	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	678	0	0	0	1045
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	14.9	0.0	0.0	0.0	34.6
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	14.9	0.0	0.0	0.0	34.6
Lane Grp Cap (c), veh/h	0	0	0	1106	0	0	0	1106
V/C Ratio (X)	0.00	0.00	0.00	0.61	0.00	0.00	0.00	0.94
Avail Cap (c_a), veh/h	0	0	0	1106	0	0	0	1106
Upstream Filter (I)	0.00	0.00	0.00	0.52	0.00	0.00	0.00	0.34
Uniform Delay (d1), s/veh	0.0	0.0	0.0	7.3	0.0	0.0	0.0	11.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.3	0.0	0.0	0.0	7.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	8.6	0.0	0.0	0.0	18.2
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	7.2	0.0	0.0	0.0	16.5

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.4	0.0	0.0	0.0	2.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	7.6	0.0	0.0	0.0	18.8
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.11	0.00	0.00	0.00	1.10
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	16	12	0	14	0	0	0	18
Lane Assignment	R	R		T+R				T+R
Lanes in Grp	1	1	0	1	0	0	0	1
Grp Vol (v), veh/h	96	16	0	707	0	0	0	1099
Grp Sat Flow (s), veh/h/ln	1568	1568	0	1844	0	0	0	1853
Q Serve Time (g_s), s	3.9	0.6	0.0	14.9	0.0	0.0	0.0	35.0
Cycle Q Clear Time (g_c), s	3.9	0.6	0.0	14.9	0.0	0.0	0.0	35.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	1.00	0.00	0.06	0.00	0.00	0.00	0.03
Lane Grp Cap (c), veh/h	105	125	0	1152	0	0	0	1158
V/C Ratio (X)	0.91	0.13	0.00	0.61	0.00	0.00	0.00	0.95
Avail Cap (c_a), veh/h	105	125	0	1152	0	0	0	1158
Upstream Filter (I)	1.00	1.00	0.00	0.52	0.00	0.00	0.00	0.34
Uniform Delay (d1), s/veh	29.7	27.4	0.0	7.3	0.0	0.0	0.0	11.1
Incr Delay (d2), s/veh	66.1	2.1	0.0	1.3	0.0	0.0	0.0	7.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	95.7	29.5	0.0	8.6	0.0	0.0	0.0	18.5
1st-Term Q (Q1), veh/ln	1.7	0.3	0.0	7.5	0.0	0.0	0.0	17.4
2nd-Term Q (Q2), veh/ln	1.9	0.1	0.0	0.4	0.0	0.0	0.0	2.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	3.6	0.3	0.0	7.9	0.0	0.0	0.0	19.8
%ile Storage Ratio (RQ%)	2.31	0.08	0.00	0.11	0.00	0.00	0.00	1.16
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	26.1
HCM 2010 LOS	C

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1199	178	502	1813	265	299
Future Volume (veh/h)	1199	178	502	1813	265	299
Number	4	14	3	8	5	12
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)		1.00	1.00		1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1845	1845
Adj Flow Rate, veh/h	1223	182	512	1850	270	305
Adj No. of Lanes	2	0	1	2	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	3	3
Opposing Right Turn Influence			Yes		Yes	
Cap, veh/h	1134	168	196	1978	484	432
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.37	0.37	0.11	0.56	0.28	0.28
Ln Grp Delay, s/veh	65.3	68.9	764.0	17.0	28.8	34.7
Ln Grp LOS	F	F	F	B	C	C
Approach Vol, veh/h	1405			2362	575	
Approach Delay, s/veh	67.1			178.9	31.9	
Approach LOS	E			F	C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Case No		9.0	2.0	8.0				4.0
Phs Duration (G+Y+Rc), s		28.0	15.0	35.0				50.0
Change Period (Y+Rc), s		6.5	6.4	6.4				6.4
Max Green (Gmax), s		21.5	8.6	28.6				43.6
Max Allow Headway (MAH), s		3.9	3.8	5.3				5.3
Max Q Clear (g_c+I1), s		15.6	10.6	30.6				39.7
Green Ext Time (g_e), s		1.1	0.0	0.0				3.8
Prob of Phs Call (p_c)		1.00	1.00	1.00				1.00
Prob of Max Out (p_x)		0.00	1.00	0.00				0.00
Left-Turn Movement Data								
Assigned Mvmt		5	3	7				
Mvmt Sat Flow, veh/h		1757	1774	0				
Through Movement Data								
Assigned Mvmt		2		4				8
Mvmt Sat Flow, veh/h		0		3187				3632
Right-Turn Movement Data								
Assigned Mvmt		12		14				18
Mvmt Sat Flow, veh/h		1568		458				0
Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	0	0	0
Lane Assignment			(Prot)					

Lanes in Grp	0	1	1	0	0	0	0	0
Grp Vol (v), veh/h	0	270	512	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1757	1774	0	0	0	0	0
Q Serve Time (g_s), s	0.0	10.3	8.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	10.3	8.6	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1757	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	28.6	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	484	196	0	0	0	0	0
V/C Ratio (X)	0.00	0.56	2.62	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	484	196	0	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.09	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	24.2	34.7	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	4.6	729.3	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	28.8	764.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	5.0	4.2	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.6	39.6	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	5.6	43.8	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.23	4.84	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	79.1	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	2
Grp Vol (v), veh/h	0	0	0	697	0	0	0	1850
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	28.6	0.0	0.0	0.0	37.7
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	28.6	0.0	0.0	0.0	37.7
Lane Grp Cap (c), veh/h	0	0	0	649	0	0	0	1978
V/C Ratio (X)	0.00	0.00	0.00	1.07	0.00	0.00	0.00	0.94
Avail Cap (c_a), veh/h	0	0	0	649	0	0	0	1978
Upstream Filter (I)	0.00	0.00	0.00	0.22	0.00	0.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	0.0	0.0	24.7	0.0	0.0	0.0	15.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	40.6	0.0	0.0	0.0	1.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	65.3	0.0	0.0	0.0	17.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	13.9	0.0	0.0	0.0	18.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	7.3	0.0	0.0	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	21.2	0.0	0.0	0.0	18.3
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	1.25	0.00	0.00	0.00	0.47
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	12.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	0	0	18
Lane Assignment		R		T+R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	305	0	708	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1568	0	1782	0	0	0	0
Q Serve Time (g_s), s	0.0	13.6	0.0	28.6	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	13.6	0.0	28.6	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.26	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	432	0	653	0	0	0	0
V/C Ratio (X)	0.00	0.71	0.00	1.08	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	432	0	653	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.22	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	25.4	0.0	24.7	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	9.3	0.0	44.2	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	34.7	0.0	68.9	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	5.9	0.0	14.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.1	0.0	8.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.0	0.0	22.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.29	0.00	1.29	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	13.6	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		123.3						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	1388	205	61	2115	10	320	2	105	9	6	52
Future Volume (veh/h)	33	1388	205	61	2115	10	320	2	105	9	6	52
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1900	1900	1845	1900
Adj Flow Rate, veh/h	34	1431	211	63	2180	10	330	2	108	9	6	54
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	0	1	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	41	1852	270	48	2172	10	508	9	463	87	71	371
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.02	0.60	0.60	0.03	0.60	0.60	0.30	0.30	0.30	0.30	0.30	0.30
Ln Grp Delay, s/veh	48.6	11.8	12.0	210.2	29.5	29.5	29.8	0.0	20.7	19.4	0.0	0.0
Ln Grp LOS	D	B	B	F	F	F	C		C	B		
Approach Vol, veh/h		1676			2253			440			69	
Approach Delay, s/veh		12.6			34.6			27.5			19.4	
Approach LOS		B			C			C			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		6.0	2.0	4.0		8.0	2.0	4.0
Phs Duration (G+Y+Rc), s		29.0	8.4	51.0		29.0	8.1	51.3
Change Period (Y+Rc), s		* 6.8	6.4	6.4		* 6.8	6.4	6.4
Max Green (Gmax), s		* 22	2.0	30.6		* 22	2.0	30.6
Max Allow Headway (MAH), s		4.5	3.8	5.3		4.5	3.8	5.3
Max Q Clear (g_c+I1), s		18.2	4.0	28.1		4.3	3.4	46.5
Green Ext Time (g_e), s		0.9	0.0	2.5		2.1	0.0	0.0
Prob of Phs Call (p_c)		1.00	0.73	1.00		1.00	0.50	1.00
Prob of Max Out (p_x)		0.00	1.00	0.00		0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		1324	1774			106	1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		29		3101		237		3613

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1544		452		1235		17

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0
Lane Assignment			(Prot)			L+T+R	(Prot)	

Lanes in Grp	0	1	1	0	0	1	1	0
Grp Vol (v), veh/h	0	330	63	0	0	69	34	0
Grp Sat Flow (s), veh/h/ln	0	1324	1774	0	0	1578	1774	0
Q Serve Time (g_s), s	0.0	13.9	2.0	0.0	0.0	0.0	1.4	0.0
Cycle Q Clear Time (g_c), s	0.0	16.2	2.0	0.0	0.0	2.3	1.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1324	0	0	0	1304	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	1757	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	22.2	0.0	0.0	0.0	22.2	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	19.9	0.0	0.0	0.0	18.3	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	13.9	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	10.5	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	0.00	0.13	1.00	0.00
Lane Grp Cap (c), veh/h	0	508	48	0	0	528	41	0
V/C Ratio (X)	0.00	0.65	1.31	0.00	0.00	0.13	0.83	0.00
Avail Cap (c_a), veh/h	0	508	48	0	0	528	48	0
Upstream Filter (I)	0.00	1.00	0.26	0.00	0.00	1.00	0.13	0.00
Uniform Delay (d1), s/veh	0.0	23.5	36.0	0.0	0.0	18.9	36.0	0.0
Incr Delay (d2), s/veh	0.0	6.3	174.2	0.0	0.0	0.5	12.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	29.8	210.2	0.0	0.0	19.4	48.6	0.0
1st-Term Q (Q1), veh/ln	0.0	6.1	1.0	0.0	0.0	1.0	0.7	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.9	2.3	0.0	0.0	0.1	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	7.0	3.3	0.0	0.0	1.1	0.8	0.0
%ile Storage Ratio (RQ%)	0.00	0.82	0.35	0.00	0.00	0.09	0.11	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	3.8	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	810	0	0	0	1067
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	25.1	0.0	0.0	0.0	44.5
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	25.1	0.0	0.0	0.0	44.5
Lane Grp Cap (c), veh/h	0	0	0	1057	0	0	0	1064
V/C Ratio (X)	0.00	0.00	0.00	0.77	0.00	0.00	0.00	1.00
Avail Cap (c_a), veh/h	0	0	0	1057	0	0	0	1064
Upstream Filter (I)	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.26
Uniform Delay (d1), s/veh	0.0	0.0	0.0	11.1	0.0	0.0	0.0	14.8
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.7	0.0	0.0	0.0	14.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	11.8	0.0	0.0	0.0	29.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	12.1	0.0	0.0	0.0	21.3

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	4.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	12.4	0.0	0.0	0.0	25.6
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.32	0.00	0.00	0.00	0.35
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R				T+R
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	110	0	832	0	0	0	1123
Grp Sat Flow (s), veh/h/ln	0	1572	0	1783	0	0	0	1860
Q Serve Time (g_s), s	0.0	3.9	0.0	26.1	0.0	0.0	0.0	44.5
Cycle Q Clear Time (g_c), s	0.0	3.9	0.0	26.1	0.0	0.0	0.0	44.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.98	0.00	0.25	0.00	0.78	0.00	0.01
Lane Grp Cap (c), veh/h	0	472	0	1065	0	0	0	1118
V/C Ratio (X)	0.00	0.23	0.00	0.78	0.00	0.00	0.00	1.00
Avail Cap (c_a), veh/h	0	472	0	1065	0	0	0	1118
Upstream Filter (I)	0.00	1.00	0.00	0.13	0.00	0.00	0.00	0.26
Uniform Delay (d1), s/veh	0.0	19.5	0.0	11.3	0.0	0.0	0.0	14.8
Incr Delay (d2), s/veh	0.0	1.2	0.0	0.8	0.0	0.0	0.0	14.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	20.7	0.0	12.0	0.0	0.0	0.0	29.5
1st-Term Q (Q1), veh/ln	0.0	1.7	0.0	12.7	0.0	0.0	0.0	22.4
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.2	0.0	0.0	0.0	4.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.8	0.0	12.9	0.0	0.0	0.0	26.9
%ile Storage Ratio (RQ%)	0.00	0.16	0.00	0.33	0.00	0.00	0.00	0.37
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	25.4
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	1460	133	220	1685	6	279	0	342	1	1	0
Future Volume (veh/h)	5	1460	133	220	1685	6	279	0	342	1	1	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1845	1900	1845	1900
Adj Flow Rate, veh/h	5	1587	145	239	1832	7	303	0	372	1	1	0
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	105	1473	133	138	1924	7	585	650	553	281	259	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.45	0.45	0.45	0.03	0.53	0.53	0.35	0.00	0.35	0.35	0.35	0.00
Ln Grp Delay, s/veh	35.9	55.4	63.2	359.7	20.3	20.2	24.1	0.0	27.9	16.4	0.0	0.0
Ln Grp LOS	D	F	F	F	C	C	C		C	B		
Approach Vol, veh/h		1737			2078			675			2	
Approach Delay, s/veh		59.3			59.3			26.2			16.4	
Approach LOS		E			E			C			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Case No		5.0	1.2	6.0		8.0		4.0
Phs Duration (G+Y+Rc), s		32.0	6.5	39.5		32.0		46.0
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5		4.5
Max Green (Gmax), s		27.5	2.0	29.5		27.5		41.5
Max Allow Headway (MAH), s		3.9	3.8	5.3		3.9		5.3
Max Q Clear (g_c+I1), s		17.7	4.0	37.0		2.1		39.5
Green Ext Time (g_e), s		1.8	0.0	0.0		2.3		2.0
Prob of Phs Call (p_c)		1.00	0.99	1.00		1.00		1.00
Prob of Max Out (p_x)		0.00	1.00	0.00		0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3	7		1		
Mvmt Sat Flow, veh/h		1397	1774	251		600		

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1845		3283		734		3616

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		297		0		14

Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	1	0	0
Lane Assignment			(Pr/Pm)			L+T		

Lanes in Grp	0	1	1	1	0	1	0	0
Grp Vol (v), veh/h	0	303	239	5	0	2	0	0
Grp Sat Flow (s), veh/h/ln	0	1397	1774	251	0	1334	0	0
Q Serve Time (g_s), s	0.0	13.9	2.0	1.5	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	14.0	2.0	32.5	0.0	0.1	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1397	278	251	0	1026	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	1757	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	27.5	37.0	35.0	0.0	27.5	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	27.4	0.0	4.0	0.0	27.5	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	13.9	0.0	1.5	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	1.00	0.00	0.50	0.00	0.00
Lane Grp Cap (c), veh/h	0	585	138	105	0	540	0	0
V/C Ratio (X)	0.00	0.52	1.73	0.05	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	585	138	105	0	540	0	0
Upstream Filter (I)	0.00	1.00	0.09	0.09	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	20.9	26.5	35.8	0.0	16.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	3.3	333.3	0.1	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	24.1	359.7	35.9	0.0	16.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	5.4	0.0	0.1	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.5	12.8	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	5.9	12.8	0.1	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.08	1.01	0.01	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	25.3	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T				T
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	849	0	0	0	896
Grp Sat Flow (s), veh/h/ln	0	1845	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	35.0	0.0	0.0	0.0	37.4
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	35.0	0.0	0.0	0.0	37.4
Lane Grp Cap (c), veh/h	0	650	0	794	0	0	0	942
V/C Ratio (X)	0.00	0.00	0.00	1.07	0.00	0.00	0.00	0.95
Avail Cap (c_a), veh/h	0	650	0	794	0	0	0	942
Upstream Filter (I)	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	0.0	0.0	21.5	0.0	0.0	0.0	17.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	33.9	0.0	0.0	0.0	3.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	55.4	0.0	0.0	0.0	20.3
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	17.0	0.0	0.0	0.0	17.9

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	7.5	0.0	0.0	0.0	0.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	24.5	0.0	0.0	0.0	18.7
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.34	0.00	0.00	0.00	0.49
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	13.7	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R				T+R
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	372	0	883	0	0	0	943
Grp Sat Flow (s), veh/h/ln	0	1568	0	1810	0	0	0	1860
Q Serve Time (g_s), s	0.0	15.7	0.0	35.0	0.0	0.0	0.0	37.5
Cycle Q Clear Time (g_c), s	0.0	15.7	0.0	35.0	0.0	0.0	0.0	37.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.16	0.00	0.00	0.00	0.01
Lane Grp Cap (c), veh/h	0	553	0	812	0	0	0	990
V/C Ratio (X)	0.00	0.67	0.00	1.09	0.00	0.00	0.00	0.95
Avail Cap (c_a), veh/h	0	553	0	812	0	0	0	990
Upstream Filter (I)	0.00	1.00	0.00	0.09	0.00	0.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	21.4	0.0	21.5	0.0	0.0	0.0	17.3
Incr Delay (d2), s/veh	0.0	6.4	0.0	41.7	0.0	0.0	0.0	2.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	27.9	0.0	63.2	0.0	0.0	0.0	20.2
1st-Term Q (Q1), veh/ln	0.0	6.8	0.0	17.4	0.0	0.0	0.0	18.9
2nd-Term Q (Q2), veh/ln	0.0	1.0	0.0	9.4	0.0	0.0	0.0	0.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.8	0.0	26.8	0.0	0.0	0.0	19.7
%ile Storage Ratio (RQ%)	0.00	0.63	0.00	0.37	0.00	0.00	0.00	0.51
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	17.8	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		54.3						
HCM 2010 LOS		D						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	1915	0	15	1777	119	15	0	67	206	0	74
Future Volume (veh/h)	33	1915	0	15	1777	119	15	0	67	206	0	74
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	35	2037	0	16	1890	127	16	0	71	219	0	79
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	65	1299	0	35	1179	78	120	37	380	531	0	470
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.04	0.37	0.00	0.02	0.35	0.35	0.30	0.00	0.30	0.30	0.00	0.30
Ln Grp Delay, s/veh	29.0	274.7	0.0	38.4	291.4	306.4	16.2	0.0	0.0	19.5	0.0	16.3
Ln Grp LOS	C	F		D	F	F	B			B		B
Approach Vol, veh/h		2072			2033			87			298	
Approach Delay, s/veh		270.6			297.1			16.2			18.6	
Approach LOS		F			F			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		8.0	2.0	4.0		6.0	2.0	4.0
Phs Duration (G+Y+Rc), s		24.0	7.6	28.4		24.0	8.6	27.4
Change Period (Y+Rc), s		6.0	6.4	6.4		6.0	6.4	6.4
Max Green (Gmax), s		18.0	5.0	18.6		18.0	5.0	18.6
Max Allow Headway (MAH), s		4.6	3.8	5.3		4.6	3.8	5.3
Max Q Clear (g_c+I1), s		4.4	2.5	24.0		9.4	3.2	23.0
Green Ext Time (g_e), s		1.4	0.0	0.0		1.1	0.0	0.0
Prob of Phs Call (p_c)		1.00	0.23	1.00		1.00	0.44	1.00
Prob of Max Out (p_x)		0.00	1.00	0.00		0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		163	1774			1311	1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		123		3632		0		3369

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1267		0		1568		224

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0
Lane Assignment		L+T+R	(Prot)				(Prot)	

Lanes in Grp	0	1	1	0	0	1	1	0
Grp Vol (v), veh/h	0	87	16	0	0	219	35	0
Grp Sat Flow (s), veh/h/ln	0	1553	1774	0	0	1311	1774	0
Q Serve Time (g_s), s	0.0	0.0	0.5	0.0	0.0	5.0	1.2	0.0
Cycle Q Clear Time (g_c), s	0.0	2.4	0.5	0.0	0.0	7.4	1.2	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1341	0	0	0	1311	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	1757	0	0
Perm LT Eff Green (g_p), s	0.0	18.0	0.0	0.0	0.0	18.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	15.8	0.0	0.0	0.0	15.6	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0
Time to First Blk (g_f), s	0.0	7.4	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.18	1.00	0.00	0.00	1.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	537	35	0	0	531	65	0
V/C Ratio (X)	0.00	0.16	0.46	0.00	0.00	0.41	0.54	0.00
Avail Cap (c_a), veh/h	0	537	148	0	0	531	148	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	0.00	1.00	0.09	0.00
Uniform Delay (d1), s/veh	0.0	15.5	29.1	0.0	0.0	17.1	28.4	0.0
Incr Delay (d2), s/veh	0.0	0.6	9.3	0.0	0.0	2.4	0.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	16.2	38.4	0.0	0.0	19.5	29.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.1	0.3	0.0	0.0	3.0	0.6	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.1	0.0	0.0	0.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	1.2	0.4	0.0	0.0	3.3	0.6	0.0
%ile Storage Ratio (RQ%)	0.00	0.08	0.05	0.00	0.00	0.57	0.08	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	1
Grp Vol (v), veh/h	0	0	0	2037	0	0	0	983
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	22.0	0.0	0.0	0.0	21.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	22.0	0.0	0.0	0.0	21.0
Lane Grp Cap (c), veh/h	0	0	0	1299	0	0	0	619
V/C Ratio (X)	0.00	0.00	0.00	1.57	0.00	0.00	0.00	1.59
Avail Cap (c_a), veh/h	0	0	0	1299	0	0	0	619
Upstream Filter (I)	0.00	0.00	0.00	0.09	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	19.0	0.0	0.0	0.0	19.5
Incr Delay (d2), s/veh	0.0	0.0	0.0	255.8	0.0	0.0	0.0	271.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	274.7	0.0	0.0	0.0	291.4
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	10.6	0.0	0.0	0.0	10.1

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	46.2	0.0	0.0	0.0	46.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	56.8	0.0	0.0	0.0	56.9
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	1.48	0.00	0.00	0.00	4.69
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	184.4	0.0	0.0	0.0	90.9
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.4
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment						T+R		T+R
Lanes in Grp	0	0	0	0	0	1	0	1
Grp Vol (v), veh/h	0	0	0	0	0	79	0	1034
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	1568	0	1823
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	2.2	0.0	21.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	2.2	0.0	21.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.82	0.00	0.00	0.00	1.00	0.00	0.12
Lane Grp Cap (c), veh/h	0	0	0	0	0	470	0	638
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.17	0.00	1.62
Avail Cap (c_a), veh/h	0	0	0	0	0	470	0	638
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	15.5	0.0	19.5
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.8	0.0	286.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	16.3	0.0	306.4
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	1.0	0.0	10.5
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	50.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	1.1	0.0	61.3
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.08	0.00	5.05
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	99.1
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	260.9
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	500	1314	210	320	1004	145	260	815	273	347	1058	494
Future Volume (veh/h)	500	1314	210	320	1004	145	260	815	273	347	1058	494
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	521	1369	219	333	1046	151	271	849	284	361	1102	515
Adj No. of Lanes	2	3	0	2	3	0	2	3	0	2	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	505	1325	212	392	1199	173	325	966	321	414	955	446
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.15	0.30	0.30	0.11	0.27	0.27	0.10	0.26	0.26	0.12	0.28	0.28
Ln Grp Delay, s/veh	99.8	79.1	90.4	65.2	53.4	61.9	69.0	55.0	65.5	69.2	124.1	135.6
Ln Grp LOS	F	F	F	E	D	E	E	D	E	E	F	F
Approach Vol, veh/h		2109			1530			1404			1978	
Approach Delay, s/veh		87.1			58.2			60.4			117.1	
Approach LOS		F			E			E			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	4.0
Phs Duration (G+Y+Rc), s	20.6	37.0	20.1	42.4	17.4	40.1	24.0	38.4
Change Period (Y+Rc), s	6.0	6.0	6.4	6.4	6.0	6.0	6.4	6.4
Max Green (Gmax), s	15.0	31.0	15.6	33.6	12.0	34.0	17.6	31.6
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.3	3.8	5.3	3.8	5.3
Max Q Clear (g_c+I1), s	14.5	28.3	13.4	38.0	11.4	36.1	19.6	28.8
Green Ext Time (g_e), s	0.1	2.6	0.3	0.0	0.1	0.0	0.0	2.7
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3408		3442		3408		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3739		4421		3359		4491

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1244		707		1567		647

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	361	0	333	0	271	0	521	0
Grp Sat Flow (s), veh/h/ln	1704	0	1721	0	1704	0	1721	0
Q Serve Time (g_s), s	12.5	0.0	11.4	0.0	9.4	0.0	17.6	0.0
Cycle Q Clear Time (g_c), s	12.5	0.0	11.4	0.0	9.4	0.0	17.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	414	0	392	0	325	0	505	0
V/C Ratio (X)	0.87	0.00	0.85	0.00	0.83	0.00	1.03	0.00
Avail Cap (c_a), veh/h	426	0	447	0	341	0	505	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	51.8	0.0	52.2	0.0	53.3	0.0	51.2	0.0
Incr Delay (d2), s/veh	17.4	0.0	13.0	0.0	15.6	0.0	48.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	69.2	0.0	65.2	0.0	69.0	0.0	99.8	0.0
1st-Term Q (Q1), veh/ln	5.9	0.0	5.4	0.0	4.4	0.0	8.3	0.0
2nd-Term Q (Q2), veh/ln	1.0	0.0	0.7	0.0	0.7	0.0	3.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	6.9	0.0	6.1	0.0	5.1	0.0	11.7	0.0
%ile Storage Ratio (RQ%)	0.60	0.00	0.46	0.00	0.38	0.00	0.99	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	4.1	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	2	0	2
Grp Vol (v), veh/h	0	762	0	1050	0	1102	0	789
Grp Sat Flow (s), veh/h/ln	0	1679	0	1695	0	1679	0	1695
Q Serve Time (g_s), s	0.0	26.1	0.0	36.0	0.0	34.1	0.0	26.7
Cycle Q Clear Time (g_c), s	0.0	26.1	0.0	36.0	0.0	34.1	0.0	26.7
Lane Grp Cap (c), veh/h	0	867	0	1016	0	955	0	905
V/C Ratio (X)	0.00	0.88	0.00	1.03	0.00	1.15	0.00	0.87
Avail Cap (c_a), veh/h	0	867	0	1016	0	955	0	905
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	42.7	0.0	42.0	0.0	42.9	0.0	42.0
Incr Delay (d2), s/veh	0.0	12.3	0.0	37.1	0.0	81.2	0.0	11.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	55.0	0.0	79.1	0.0	124.1	0.0	53.4
1st-Term Q (Q1), veh/ln	0.0	12.1	0.0	16.8	0.0	15.8	0.0	12.5

2nd-Term Q (Q2), veh/ln	0.0	1.5	0.0	5.2	0.0	10.8	0.0	1.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	13.5	0.0	22.0	0.0	26.6	0.0	13.9
%ile Storage Ratio (RQ%)	0.00	0.76	0.00	0.88	0.00	1.01	0.00	2.21
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	8.4	0.0	36.7	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.3	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	371	0	538	0	515	0	408
Grp Sat Flow (s), veh/h/ln	0	1625	0	1738	0	1568	0	1748
Q Serve Time (g_s), s	0.0	26.3	0.0	36.0	0.0	34.1	0.0	26.8
Cycle Q Clear Time (g_c), s	0.0	26.3	0.0	36.0	0.0	34.1	0.0	26.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.77	0.00	0.41	0.00	1.00	0.00	0.37
Lane Grp Cap (c), veh/h	0	420	0	521	0	446	0	467
V/C Ratio (X)	0.00	0.88	0.00	1.03	0.00	1.16	0.00	0.87
Avail Cap (c_a), veh/h	0	420	0	521	0	446	0	467
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	42.8	0.0	42.0	0.0	42.9	0.0	42.1
Incr Delay (d2), s/veh	0.0	22.7	0.0	48.4	0.0	92.7	0.0	19.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	65.5	0.0	90.4	0.0	135.6	0.0	61.9
1st-Term Q (Q1), veh/ln	0.0	11.9	0.0	17.2	0.0	14.7	0.0	12.9
2nd-Term Q (Q2), veh/ln	0.0	2.7	0.0	7.0	0.0	11.5	0.0	2.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	14.5	0.0	24.2	0.0	26.2	0.0	15.5
%ile Storage Ratio (RQ%)	0.00	0.81	0.00	0.97	0.00	0.99	0.00	2.46
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	4.4	0.0	17.4	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.3	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		83.9						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	107	2039	18	1	1039	117	114	38	0	264	112	245
Future Volume (veh/h)	107	2039	18	1	1039	117	114	38	0	264	112	245
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	116	2216	20	1	1129	127	124	41	0	287	122	266
Adj No. of Lanes	1	2	0	0	2	0	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	73	2670	24	23	2079	233	36	223	190	36	223	190
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.04	0.74	0.74	0.66	0.66	0.66	0.02	0.12	0.00	0.02	0.12	0.12
Ln Grp Delay, s/veh	400.0	20.0	19.9	15.1	0.0	15.3	1244.9	65.4	0.0	3271.6	75.9	279.7
Ln Grp LOS	F	B	B	B		B	F	E		F	E	F
Approach Vol, veh/h		2352			1257			165			675	
Approach Delay, s/veh		38.7			15.2			951.8			1514.9	
Approach LOS		D			B			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6	7	8
Case No	2.0	3.0		4.0	2.0	3.0	2.0	8.0
Phs Duration (G+Y+Rc), s	9.0	26.0		126.0	9.0	26.0	13.0	113.0
Change Period (Y+Rc), s	* 5.7	6.5		6.4	* 5.7	6.5	6.4	6.4
Max Green (Gmax), s	* 3.3	19.5		119.6	* 3.3	19.5	6.6	100.6
Max Allow Headway (MAH), s	3.8	4.5		5.3	3.8	4.5	3.8	5.3
Max Q Clear (g_c+I1), s	5.3	5.2		68.8	5.3	21.5	8.6	32.7
Green Ext Time (g_e), s	0.0	1.6		46.6	0.0	0.0	0.0	60.7
Prob of Phs Call (p_c)	1.00	1.00		1.00	1.00	1.00	0.99	1.00
Prob of Max Out (p_x)	0.00	0.00		0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1				5		7	3
Mvmt Sat Flow, veh/h	1757				1757		1774	0

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1845		3594		1845		3140

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		32		1568		352

Left Lane Group Data								
Assigned Mvmt	1	0	0	0	5	0	7	3
Lane Assignment	(Prot)				(Prot)		(Prot)	L+T

Lanes in Grp	1	0	0	0	1	0	1	1
Grp Vol (v), veh/h	287	0	0	0	124	0	116	668
Grp Sat Flow (s), veh/h/ln	1757	0	0	0	1757	0	1774	1860
Q Serve Time (g_s), s	3.3	0.0	0.0	0.0	3.3	0.0	6.6	0.0
Cycle Q Clear Time (g_c), s	3.3	0.0	0.0	0.0	3.3	0.0	6.6	30.4
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	173
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	106.6
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.8
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	94.9
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.4
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	36	0	0	0	36	0	73	1254
V/C Ratio (X)	7.97	0.00	0.00	0.00	3.44	0.00	1.60	0.53
Avail Cap (c_a), veh/h	36	0	0	0	36	0	73	1254
Upstream Filter (I)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.49
Uniform Delay (d1), s/veh	78.8	0.0	0.0	0.0	78.8	0.0	77.2	14.3
Incr Delay (d2), s/veh	3192.7	0.0	0.0	0.0	1166.0	0.0	322.8	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	3271.6	0.0	0.0	0.0	1244.9	0.0	400.0	15.1
1st-Term Q (Q1), veh/ln	1.6	0.0	0.0	0.0	1.6	0.0	3.2	15.6
2nd-Term Q (Q2), veh/ln	31.9	0.0	0.0	0.0	11.7	0.0	6.5	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	33.5	0.0	0.0	0.0	13.3	0.0	9.8	15.9
%ile Storage Ratio (RQ%)	8.59	0.00	0.00	0.00	2.43	0.00	0.59	0.21
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	62.7	0.0	0.0	0.0	22.0	0.0	10.8	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	2.0	0.0	0.0	0.0	0.9	0.0	0.4	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	41	0	1089	0	122	0	0
Grp Sat Flow (s), veh/h/ln	0	1845	0	1770	0	1845	0	0
Q Serve Time (g_s), s	0.0	3.2	0.0	66.3	0.0	10.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	3.2	0.0	66.3	0.0	10.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	223	0	1315	0	223	0	0
V/C Ratio (X)	0.00	0.18	0.00	0.83	0.00	0.55	0.00	0.00
Avail Cap (c_a), veh/h	0	223	0	1315	0	223	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	63.6	0.0	13.8	0.0	66.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.8	0.0	6.1	0.0	9.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	65.4	0.0	20.0	0.0	75.9	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.6	0.0	32.1	0.0	5.1	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	2.2	0.0	0.6	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.8	0.0	34.3	0.0	5.7	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.19	0.00	0.40	0.00	0.29	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	1147	0	266	0	589
Grp Sat Flow (s), veh/h/ln	0	1568	0	1857	0	1568	0	1633
Q Serve Time (g_s), s	0.0	0.0	0.0	66.8	0.0	19.5	0.0	30.7
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	66.8	0.0	19.5	0.0	30.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.02	0.00	1.00	0.00	0.22
Lane Grp Cap (c), veh/h	0	190	0	1380	0	190	0	1081
V/C Ratio (X)	0.00	0.00	0.00	0.83	0.00	1.40	0.00	0.54
Avail Cap (c_a), veh/h	0	190	0	1380	0	190	0	1081
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.49
Uniform Delay (d1), s/veh	0.0	0.0	0.0	13.9	0.0	70.8	0.0	14.4
Incr Delay (d2), s/veh	0.0	0.0	0.0	6.0	0.0	208.9	0.0	1.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	19.9	0.0	279.7	0.0	15.3
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	33.8	0.0	8.5	0.0	13.7
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	2.3	0.0	11.0	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	36.0	0.0	19.5	0.0	14.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.42	0.00	1.01	0.00	0.19
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	19.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	289.9
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	488	1113	169	168	698	99	277	1228	146	438	2015	276
Future Volume (veh/h)	488	1113	169	168	698	99	277	1228	146	438	2015	276
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	503	1147	174	173	720	102	286	1266	151	452	2077	285
Adj No. of Lanes	2	3	0	2	3	1	2	3	0	2	3	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	348	876	133	218	807	251	331	2108	251	399	2164	292
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.10	0.20	0.20	0.06	0.16	0.16	0.10	0.46	0.46	0.12	0.48	0.48
Ln Grp Delay, s/veh	275.0	206.2	207.5	82.1	78.3	63.1	88.4	34.6	36.1	158.8	54.6	67.3
Ln Grp LOS	F	F	F	F	E	E	F	C	D	F	D	E
Approach Vol, veh/h		1824			995			1703			2814	
Approach Delay, s/veh		225.5			77.4			44.1			75.0	
Approach LOS		F			E			D			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	26.0	82.6	16.8	38.6	22.7	85.9	23.0	32.4
Change Period (Y+Rc), s	6.8	6.8	6.4	6.4	6.8	6.8	6.4	6.4
Max Green (Gmax), s	19.2	73.2	16.6	28.6	19.2	73.2	16.6	28.6
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.2	3.8	5.3	3.8	5.2
Max Q Clear (g_c+I1), s	21.2	35.9	10.1	34.2	15.6	77.5	18.6	24.8
Green Ext Time (g_e), s	0.0	35.0	0.3	0.0	0.3	0.0	0.0	1.3
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	0.09	1.00	1.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3408		3442		3408		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		4562		4458		4489		5085

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		544		676		606		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	452	0	173	0	286	0	503	0
Grp Sat Flow (s), veh/h/ln	1704	0	1721	0	1704	0	1721	0
Q Serve Time (g_s), s	19.2	0.0	8.1	0.0	13.6	0.0	16.6	0.0
Cycle Q Clear Time (g_c), s	19.2	0.0	8.1	0.0	13.6	0.0	16.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	399	0	218	0	331	0	348	0
V/C Ratio (X)	1.13	0.00	0.79	0.00	0.86	0.00	1.44	0.00
Avail Cap (c_a), veh/h	399	0	348	0	399	0	348	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	0.09	0.00
Uniform Delay (d1), s/veh	72.4	0.0	75.7	0.0	73.0	0.0	73.7	0.0
Incr Delay (d2), s/veh	86.4	0.0	6.4	0.0	15.4	0.0	201.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	158.8	0.0	82.1	0.0	88.4	0.0	275.0	0.0
1st-Term Q (Q1), veh/ln	9.0	0.0	3.9	0.0	6.4	0.0	7.9	0.0
2nd-Term Q (Q2), veh/ln	4.8	0.0	0.2	0.0	0.7	0.0	9.7	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	13.8	0.0	4.1	0.0	7.1	0.0	17.6	0.0
%ile Storage Ratio (RQ%)	0.62	0.00	0.21	0.00	0.45	0.00	0.90	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	13.2	0.0	0.0	0.0	0.0	0.0	38.7	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.0	0.0	0.0	0.0	0.4	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	2	0	3
Grp Vol (v), veh/h	0	932	0	872	0	1544	0	720
Grp Sat Flow (s), veh/h/ln	0	1679	0	1695	0	1679	0	1695
Q Serve Time (g_s), s	0.0	33.9	0.0	32.2	0.0	72.4	0.0	22.8
Cycle Q Clear Time (g_c), s	0.0	33.9	0.0	32.2	0.0	72.4	0.0	22.8
Lane Grp Cap (c), veh/h	0	1551	0	666	0	1619	0	807
V/C Ratio (X)	0.00	0.60	0.00	1.31	0.00	0.95	0.00	0.89
Avail Cap (c_a), veh/h	0	1551	0	666	0	1619	0	887
Upstream Filter (I)	0.00	1.00	0.00	0.09	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	32.8	0.0	65.9	0.0	40.7	0.0	67.6
Incr Delay (d2), s/veh	0.0	1.7	0.0	140.3	0.0	13.9	0.0	10.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	34.6	0.0	206.2	0.0	54.6	0.0	78.3
1st-Term Q (Q1), veh/ln	0.0	15.7	0.0	15.1	0.0	33.5	0.0	10.7

2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	13.0	0.0	3.1	0.0	0.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	16.0	0.0	28.1	0.0	36.6	0.0	11.5
%ile Storage Ratio (RQ%)	0.00	0.73	0.00	0.37	0.00	1.41	0.00	0.19
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	51.5	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	485	0	449	0	818	0	102
Grp Sat Flow (s), veh/h/ln	0	1749	0	1743	0	1738	0	1583
Q Serve Time (g_s), s	0.0	33.9	0.0	32.2	0.0	75.5	0.0	9.5
Cycle Q Clear Time (g_c), s	0.0	33.9	0.0	32.2	0.0	75.5	0.0	9.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.31	0.00	0.39	0.00	0.35	0.00	1.00
Lane Grp Cap (c), veh/h	0	808	0	343	0	838	0	251
V/C Ratio (X)	0.00	0.60	0.00	1.31	0.00	0.98	0.00	0.41
Avail Cap (c_a), veh/h	0	808	0	343	0	838	0	276
Upstream Filter (I)	0.00	1.00	0.00	0.09	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	32.8	0.0	65.9	0.0	41.5	0.0	62.0
Incr Delay (d2), s/veh	0.0	3.3	0.0	141.6	0.0	25.7	0.0	1.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	36.1	0.0	207.5	0.0	67.3	0.0	63.1
1st-Term Q (Q1), veh/ln	0.0	16.3	0.0	15.5	0.0	36.1	0.0	4.2
2nd-Term Q (Q2), veh/ln	0.0	0.7	0.0	13.5	0.0	6.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	17.0	0.0	29.0	0.0	42.1	0.0	4.2
%ile Storage Ratio (RQ%)	0.00	0.78	0.00	0.39	0.00	1.63	0.00	0.15
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	26.6	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		105.6						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	142	721	98	245	1303	113	182	100	339	275	195	185
Future Volume (veh/h)	142	721	98	245	1303	113	182	100	339	275	195	185
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1900	1712	1712	1712	1776	1776	1900	1776	1776	1776
Adj Flow Rate, veh/h	146	743	101	253	1343	116	188	103	349	284	201	191
Adj No. of Lanes	2	3	0	2	3	1	1	2	0	2	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	11	11	11	11	11	11	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	104	1007	136	104	1130	352	227	672	601	376	1278	572
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.24	0.24	0.03	0.24	0.24	0.13	0.40	0.40	0.11	0.38	0.38
Ln Grp Delay, s/veh	271.9	35.6	39.4	714.1	128.5	29.0	45.4	18.0	25.3	42.1	18.9	21.7
Ln Grp LOS	F	D	D	F	F	C	D	B	C	D	B	C
Approach Vol, veh/h		990			1712			640			676	
Approach Delay, s/veh		71.6			208.3			30.0			29.5	
Approach LOS		E			F			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	14.4	41.6	7.0	28.0	16.2	39.8	7.0	28.0
Change Period (Y+Rc), s	4.0	5.3	4.0	* 6	4.0	5.3	4.0	* 6
Max Green (Gmax), s	23.0	23.7	3.0	* 22	32.0	14.7	3.0	* 22
Max Allow Headway (MAH), s	3.8	5.1	3.8	5.2	3.8	5.1	3.8	5.2
Max Q Clear (g_c+I1), s	9.6	18.5	5.0	17.1	11.9	10.2	5.0	24.0
Green Ext Time (g_e), s	0.8	2.3	0.0	4.4	0.5	2.0	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.99	1.00	0.98	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	3281	3163	1691	3163

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	1687	4166	3374	4673

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	1509	562	1509	1455

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	1	0	2	0
Grp Vol (v), veh/h	284	0	253	0	188	0	146	0
Grp Sat Flow (s), veh/h/ln	1640	0	1581	0	1691	0	1581	0
Q Serve Time (g_s), s	7.6	0.0	3.0	0.0	9.9	0.0	3.0	0.0
Cycle Q Clear Time (g_c), s	7.6	0.0	3.0	0.0	9.9	0.0	3.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	376	0	104	0	227	0	104	0
V/C Ratio (X)	0.75	0.00	2.43	0.00	0.83	0.00	1.40	0.00
Avail Cap (c_a), veh/h	829	0	104	0	595	0	104	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.95	0.00	1.00	0.00
Uniform Delay (d1), s/veh	39.0	0.0	44.0	0.0	38.4	0.0	44.0	0.0
Incr Delay (d2), s/veh	3.1	0.0	670.1	0.0	7.1	0.0	227.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	42.1	0.0	714.1	0.0	45.4	0.0	271.9	0.0
1st-Term Q (Q1), veh/ln	3.5	0.0	1.3	0.0	4.6	0.0	1.3	0.0
2nd-Term Q (Q2), veh/ln	0.2	0.0	9.7	0.0	0.4	0.0	3.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	3.6	0.0	11.0	0.0	5.0	0.0	4.6	0.0
%ile Storage Ratio (RQ%)	0.49	0.00	1.54	0.00	0.83	0.00	0.36	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	37.2	0.0	0.0	0.0	10.4	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.6	0.0	0.0	0.0	0.4	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	2	0	3
Grp Vol (v), veh/h	0	103	0	554	0	201	0	1343
Grp Sat Flow (s), veh/h/ln	0	1687	0	1558	0	1687	0	1558
Q Serve Time (g_s), s	0.0	3.6	0.0	14.9	0.0	3.6	0.0	22.0
Cycle Q Clear Time (g_c), s	0.0	3.6	0.0	14.9	0.0	3.6	0.0	22.0
Lane Grp Cap (c), veh/h	0	672	0	753	0	1278	0	1130
V/C Ratio (X)	0.00	0.15	0.00	0.74	0.00	0.16	0.00	1.19
Avail Cap (c_a), veh/h	0	672	0	753	0	1278	0	1130
Upstream Filter (I)	0.00	0.95	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	17.5	0.0	31.8	0.0	18.7	0.0	34.5
Incr Delay (d2), s/veh	0.0	0.5	0.0	3.8	0.0	0.3	0.0	94.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	18.0	0.0	35.6	0.0	18.9	0.0	128.5
1st-Term Q (Q1), veh/ln	0.0	1.7	0.0	6.4	0.0	1.7	0.0	9.4

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.4	0.0	0.0	0.0	9.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.7	0.0	6.8	0.0	1.7	0.0	19.2
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.07	0.00	0.02	0.00	0.33
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.3
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	349	0	290	0	191	0	116
Grp Sat Flow (s), veh/h/ln	0	1509	0	1613	0	1509	0	1455
Q Serve Time (g_s), s	0.0	16.5	0.0	15.1	0.0	8.2	0.0	6.0
Cycle Q Clear Time (g_c), s	0.0	16.5	0.0	15.1	0.0	8.2	0.0	6.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.35	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	601	0	390	0	572	0	352
V/C Ratio (X)	0.00	0.58	0.00	0.74	0.00	0.33	0.00	0.33
Avail Cap (c_a), veh/h	0	601	0	390	0	572	0	352
Upstream Filter (I)	0.00	0.95	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	21.4	0.0	31.9	0.0	20.1	0.0	28.4
Incr Delay (d2), s/veh	0.0	3.8	0.0	7.5	0.0	1.6	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	25.3	0.0	39.4	0.0	21.7	0.0	29.0
1st-Term Q (Q1), veh/ln	0.0	6.8	0.0	6.7	0.0	3.4	0.0	2.4
2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.8	0.0	0.2	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.4	0.0	7.5	0.0	3.7	0.0	2.4
%ile Storage Ratio (RQ%)	0.00	0.08	0.00	0.08	0.00	0.61	0.00	0.04
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	116.1
HCM 2010 LOS	F

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	86	74	133	73	116	56	312	70	73	286	50
Future Volume (veh/h)	67	86	74	133	73	116	56	312	70	73	286	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1900	1900	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	69	89	76	137	75	120	58	322	72	75	295	52
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	165	173	113	341	159	425	563	744	166	526	778	137
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.53	0.53	0.53	0.53	0.53	0.53
Ln Grp Delay, s/veh	15.5	0.0	0.0	14.5	0.0	13.3	8.7	0.0	8.0	9.2	0.0	6.4
Ln Grp LOS	B			B		B	A		A	A		A
Approach Vol, veh/h		234			332			452			422	
Approach Delay, s/veh		15.5			14.1			8.1			6.9	
Approach LOS		B			B			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		8.0		6.0		7.0
Phs Duration (G+Y+Rc), s		28.3		16.7		28.3		16.7
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green (Gmax), s		18.0		18.0		18.0		18.0
Max Allow Headway (MAH), s		5.3		5.2		5.3		5.2
Max Q Clear (g_c+I1), s		9.0		10.2		10.7		7.9
Green Ext Time (g_e), s		3.6		2.0		3.1		2.4
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.54		0.00		0.32

Left-Turn Movement Data				
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		981		227		940		772

Through Movement Data				
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1406		638		1471		588

Right-Turn Movement Data				
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		314		416		259		1568

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment				L+T+R				L+T

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	58	0	234	0	75	0	212
Grp Sat Flow (s), veh/h/ln	0	981	0	1281	0	940	0	1360
Q Serve Time (g_s), s	0.0	1.7	0.0	2.2	0.0	2.4	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	7.0	0.0	8.2	0.0	8.7	0.0	5.9
Perm LT Sat Flow (s_l), veh/h/ln	0	981	0	1207	0	940	0	1240
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	1278
Perm LT Eff Green (g_p), s	0.0	23.8	0.0	12.2	0.0	23.8	0.0	12.2
Perm LT Serve Time (g_u), s	0.0	18.5	0.0	6.2	0.0	17.5	0.0	4.0
Perm LT Q Serve Time (g_ps), s	0.0	1.7	0.0	2.2	0.0	2.4	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	3.6	0.0	0.0	0.0	1.1
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	3.6	0.0	0.0	0.0	1.1
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	0.29	0.00	1.00	0.00	0.65
Lane Grp Cap (c), veh/h	0	563	0	451	0	526	0	500
V/C Ratio (X)	0.00	0.10	0.00	0.52	0.00	0.14	0.00	0.42
Avail Cap (c_a), veh/h	0	563	0	645	0	526	0	677
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	8.3	0.0	14.5	0.0	9.1	0.0	14.0
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.9	0.0	0.1	0.0	0.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.7	0.0	15.5	0.0	9.2	0.0	14.5
1st-Term Q (Q1), veh/ln	0.0	0.5	0.0	2.6	0.0	0.6	0.0	2.2
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.5	0.0	2.7	0.0	0.6	0.0	2.3
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.12	0.00	0.01	0.00	0.09
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment								
Lanes in Grp	0	0	0	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R				T+R		R
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	394	0	0	0	347	0	120
Grp Sat Flow (s), veh/h/ln	0	1720	0	0	0	1730	0	1568
Q Serve Time (g_s), s	0.0	6.3	0.0	0.0	0.0	5.3	0.0	2.7
Cycle Q Clear Time (g_c), s	0.0	6.3	0.0	0.0	0.0	5.3	0.0	2.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.18	0.00	0.32	0.00	0.15	0.00	1.00
Lane Grp Cap (c), veh/h	0	910	0	0	0	915	0	425
V/C Ratio (X)	0.00	0.43	0.00	0.00	0.00	0.38	0.00	0.28
Avail Cap (c_a), veh/h	0	910	0	0	0	915	0	627
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	6.5	0.0	0.0	0.0	6.2	0.0	12.9
Incr Delay (d2), s/veh	0.0	1.5	0.0	0.0	0.0	0.1	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.0	0.0	0.0	0.0	6.4	0.0	13.3
1st-Term Q (Q1), veh/ln	0.0	3.0	0.0	0.0	0.0	2.5	0.0	1.2
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	3.3	0.0	0.0	0.0	2.5	0.0	1.2
%ile Storage Ratio (RQ%)	0.00	0.15	0.00	0.00	0.00	0.03	0.00	0.05
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		10.3						
HCM 2010 LOS		B						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	943	1556	35	107	745	458	19	19	163	479	33	25
Future Volume (veh/h)	943	1556	35	107	745	458	19	19	163	479	33	25
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1696	1696	1696	1696	1696	1696	1900	1696	1900	1696	1696	1696
Adj Flow Rate, veh/h	982	1621	36	111	776	0	20	20	170	499	34	0
Adj No. of Lanes	1	2	1	1	2	1	0	1	0	2	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	12	12	12	12	12	12	12	12	12	12	12	12
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	825	1835	821	134	458	205	0	15	129	132	320	272
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.51	0.57	0.57	0.08	0.14	0.00	0.00	0.10	0.10	0.04	0.19	0.00
Ln Grp Delay, s/veh	130.3	31.4	12.7	61.2	370.3	0.0	0.0	0.0	242.8	1333.5	44.8	0.0
Ln Grp LOS	F	C	B	E	F				F	F	D	
Approach Vol, veh/h		2639			887			190			533	
Approach Delay, s/veh		67.9			331.6			242.8			1251.3	
Approach LOS		E			F			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	4.0	2.0	3.0	0.0	3.0
Phs Duration (G+Y+Rc), s	75.0	26.0	12.0	20.0	18.2	82.8	0.0	32.0
Change Period (Y+Rc), s	7.1	7.1	6.4	6.9	7.1	7.1	6.9	* 6.9
Max Green (Gmax), s	67.9	18.9	5.6	13.1	30.9	55.9	13.1	* 5.6
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.5	3.8	5.3	0.0	5.5
Max Q Clear (g_c+I1), s	69.9	20.9	7.6	15.1	11.0	59.9	0.0	4.2
Green Ext Time (g_e), s	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.2
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.98	1.00	0.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1616		3134		1616		0	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3223		154		3223		1696

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1442		1311		1442		1442

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)			

Lanes in Grp	1	0	2	0	1	0	0	0
Grp Vol (v), veh/h	982	0	499	0	111	0	0	0
Grp Sat Flow (s), veh/h/ln	1616	0	1567	0	1616	0	0	0
Q Serve Time (g_s), s	67.9	0.0	5.6	0.0	9.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	67.9	0.0	5.6	0.0	9.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	825	0	132	0	134	0	0	0
V/C Ratio (X)	1.19	0.00	3.78	0.00	0.83	0.00	0.00	0.00
Avail Cap (c_a), veh/h	825	0	132	0	375	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.09	0.00	0.00	0.00
Uniform Delay (d1), s/veh	32.6	0.0	63.7	0.0	60.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	97.7	0.0	1269.8	0.0	1.2	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	130.3	0.0	1333.5	0.0	61.2	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	30.0	0.0	2.4	0.0	4.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	22.4	0.0	23.3	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	52.4	0.0	25.7	0.0	4.1	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	1.67	0.00	1.12	0.00	0.33	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	39.3	0.0	91.8	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.9	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	2	0	0	0	2	0	1
Grp Vol (v), veh/h	0	776	0	0	0	1621	0	34
Grp Sat Flow (s), veh/h/ln	0	1612	0	0	0	1612	0	1696
Q Serve Time (g_s), s	0.0	18.9	0.0	0.0	0.0	57.9	0.0	2.2
Cycle Q Clear Time (g_c), s	0.0	18.9	0.0	0.0	0.0	57.9	0.0	2.2
Lane Grp Cap (c), veh/h	0	458	0	0	0	1835	0	320
V/C Ratio (X)	0.00	1.69	0.00	0.00	0.00	0.88	0.00	0.11
Avail Cap (c_a), veh/h	0	458	0	0	0	1835	0	320
Upstream Filter (I)	0.00	0.09	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	57.0	0.0	0.0	0.0	24.8	0.0	44.7
Incr Delay (d2), s/veh	0.0	313.2	0.0	0.0	0.0	6.6	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	370.3	0.0	0.0	0.0	31.4	0.0	44.8
1st-Term Q (Q1), veh/ln	0.0	8.4	0.0	0.0	0.0	25.7	0.0	1.0

2nd-Term Q (Q2), veh/ln	0.0	19.9	0.0	0.0	0.0	1.7	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	28.3	0.0	0.0	0.0	27.3	0.0	1.1
%ile Storage Ratio (RQ%)	0.00	0.39	0.00	0.00	0.00	0.24	0.00	0.05
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	79.5	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	190	0	36	0	0
Grp Sat Flow (s), veh/h/ln	0	1442	0	1465	0	1442	0	1442
Q Serve Time (g_s), s	0.0	0.0	0.0	13.1	0.0	1.5	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	13.1	0.0	1.5	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.89	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	205	0	144	0	821	0	272
V/C Ratio (X)	0.00	0.00	0.00	1.32	0.00	0.04	0.00	0.00
Avail Cap (c_a), veh/h	0	205	0	144	0	821	0	272
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	60.0	0.0	12.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	182.9	0.0	0.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	242.8	0.0	12.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	5.3	0.0	0.6	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	7.3	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	12.6	0.0	0.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.81	0.00	0.07	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	11.4	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	279.2
HCM 2010 LOS	F

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	314	1950	1520	154	837	110
Future Volume (veh/h)	314	1950	1520	154	837	110
Number	1	6	2	12	3	18
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00			1.00	1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1696	1696	1696	1696	1696	1696
Adj Flow Rate, veh/h	327	2031	1583	0	872	0
Adj No. of Lanes	1	2	2	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	12	12	12	12	12	12
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	160	1736	1132	506	933	429
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.10	0.54	0.35	0.00	0.30	0.00
Ln Grp Delay, s/veh	510.3	95.6	208.3	0.0	43.2	0.0
Ln Grp LOS	F	F	F		D	
Approach Vol, veh/h		2358	1583		872	
Approach Delay, s/veh		153.1	208.3		43.2	
Approach LOS		F	F		D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8			6		
Case No	2.0	7.0	9.0			4.0		
Phs Duration (G+Y+Rc), s	15.0	35.2	29.8			50.2		
Change Period (Y+Rc), s	7.1	7.1	6.0			7.1		
Max Green (Gmax), s	7.9	27.9	24.0			42.9		
Max Allow Headway (MAH), s	3.8	5.3	3.8			5.3		
Max Q Clear (g_c+I1), s	9.9	30.1	23.7			45.1		
Green Ext Time (g_e), s	0.0	0.0	0.2			0.0		
Prob of Phs Call (p_c)	1.00	1.00	1.00			1.00		
Prob of Max Out (p_x)	1.00	0.00	1.00			0.00		

Left-Turn Movement Data			
Assigned Mvmt	1	5	3
Mvmt Sat Flow, veh/h	1616	0	3134

Through Movement Data			
Assigned Mvmt		2	8			6
Mvmt Sat Flow, veh/h		3308	0			3308

Right-Turn Movement Data			
Assigned Mvmt		12	18			16
Mvmt Sat Flow, veh/h		1442	1442			0

Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	0	0
Lane Assignment	(Prot)							

Lanes in Grp	1	0	2	0	0	0	0	0
Grp Vol (v), veh/h	327	0	872	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1616	0	1567	0	0	0	0	0
Q Serve Time (g_s), s	7.9	0.0	21.7	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	7.9	0.0	21.7	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1567	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	28.1	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	160	0	933	0	0	0	0	0
V/C Ratio (X)	2.05	0.00	0.93	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	160	0	940	0	0	0	0	0
Upstream Filter (I)	0.09	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	36.0	0.0	27.3	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	474.3	0.0	15.9	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	510.3	0.0	43.2	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	3.5	0.0	9.3	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	21.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	24.5	0.0	11.4	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	1.43	0.00	0.70	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	41.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1583	0	0	0	2031	0	0
Grp Sat Flow (s), veh/h/ln	0	1612	0	0	0	1612	0	0
Q Serve Time (g_s), s	0.0	28.1	0.0	0.0	0.0	43.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	28.1	0.0	0.0	0.0	43.1	0.0	0.0
Lane Grp Cap (c), veh/h	0	1132	0	0	0	1736	0	0
V/C Ratio (X)	0.00	1.40	0.00	0.00	0.00	1.17	0.00	0.00
Avail Cap (c_a), veh/h	0	1132	0	0	0	1736	0	0
Upstream Filter (I)	0.00	0.52	0.00	0.00	0.00	0.09	0.00	0.00
Uniform Delay (d1), s/veh	0.0	26.0	0.0	0.0	0.0	18.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	182.4	0.0	0.0	0.0	77.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	208.3	0.0	0.0	0.0	95.6	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	12.4	0.0	0.0	0.0	19.0	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	28.7	0.0	0.0	0.0	18.6	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	41.1	0.0	0.0	0.0	37.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.33	0.00	0.00	0.00	0.52	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	112.8	0.0	0.0	0.0	73.8	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lane Assignment		R	R					
Lanes in Grp	0	1	1	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1442	1442	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	506	429	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	506	433	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		151.3						
HCM 2010 LOS		F						

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	445	91	923	2443	2064	635
Future Volume (veh/h)	445	91	923	2443	2064	635
Number	7	14	5	2	6	16
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00	1.00			1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1827	1827	1827	1827
Adj Flow Rate, veh/h	478	0	992	2627	2219	0
Adj No. of Lanes	2	1	2	3	3	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	4	4	4	4
Opposing Right Turn Influence	Yes		Yes			
Cap, veh/h	524	241	1099	3795	1962	611
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.15	0.00	0.33	0.76	0.39	0.00
Ln Grp Delay, s/veh	79.0	0.0	49.1	9.7	103.0	0.0
Ln Grp LOS	E		D	A	F	
Approach Vol, veh/h	478			3619	2219	
Approach Delay, s/veh	79.0			20.5	103.0	
Approach LOS	E			C	F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Case No		4.0		9.0	2.0	7.0		
Phs Duration (G+Y+Rc), s		114.8		28.2	52.6	62.3		
Change Period (Y+Rc), s		6.0		6.4	6.0	6.0		
Max Green (Gmax), s		108.0		22.6	84.0	18.0		
Max Allow Headway (MAH), s		5.2		3.8	3.8	5.2		
Max Q Clear (g_c+I1), s		40.0		21.6	42.1	58.3		
Green Ext Time (g_e), s		66.8		0.2	4.4	0.0		
Prob of Phs Call (p_c)		1.00		1.00	1.00	1.00		
Prob of Max Out (p_x)		0.00		1.00	0.00	0.00		
Left-Turn Movement Data								
Assigned Mvmt				7	5	1		
Mvmt Sat Flow, veh/h				3442	3375	0		
Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		5152		0		5152		
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		0		1583		1553		
Left Lane Group Data								
Assigned Mvmt	0	0	0	7	5	1	0	0
Lane Assignment					(Prot)			

Lanes in Grp	0	0	0	2	2	0	0	0
Grp Vol (v), veh/h	0	0	0	478	992	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1721	1688	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	19.6	40.1	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	19.6	40.1	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1721	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	56.3	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	524	1099	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.91	0.90	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	544	1983	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	59.7	46.1	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	19.4	3.1	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	79.0	49.1	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	9.3	18.7	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.4	0.5	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	10.7	19.2	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.83	1.15	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	3	0	0	0	3	0	0
Grp Vol (v), veh/h	0	2627	0	0	0	2219	0	0
Grp Sat Flow (s), veh/h/ln	0	1663	0	0	0	1663	0	0
Q Serve Time (g_s), s	0.0	38.0	0.0	0.0	0.0	56.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	38.0	0.0	0.0	0.0	56.3	0.0	0.0
Lane Grp Cap (c), veh/h	0	3795	0	0	0	1962	0	0
V/C Ratio (X)	0.00	0.69	0.00	0.00	0.00	1.13	0.00	0.00
Avail Cap (c_a), veh/h	0	3795	0	0	0	1962	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.09	0.00	0.00
Uniform Delay (d1), s/veh	0.0	8.6	0.0	0.0	0.0	43.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.1	0.0	0.0	0.0	59.6	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.7	0.0	0.0	0.0	103.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	17.3	0.0	0.0	0.0	25.8	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.0	10.8	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	17.6	0.0	0.0	0.0	36.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.54	0.00	0.00	0.00	0.58	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	64.2	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment				R		R		
Lanes in Grp	0	0	0	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1583	0	1553	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	241	0	611	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	250	0	611	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		53.9						
HCM 2010 LOS		D						

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	427	1546	2193	274	708	3152
Future Volume (veh/h)	427	1546	2193	274	708	3152
Number	3	18	2	12	1	6
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1845	1845	1845	1845
Adj Flow Rate, veh/h	445	1610	2284	0	738	3283
Adj No. of Lanes	2	2	3	1	2	3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	3	3	3	3
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	881	713	2306	718	741	3839
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.26	0.26	0.46	0.00	0.22	0.76
Ln Grp Delay, s/veh	22.2	596.2	31.1	0.0	59.0	8.3
Ln Grp LOS	C	F	C		E	A
Approach Vol, veh/h	2055		2284			4021
Approach Delay, s/veh	471.9		31.1			17.6
Approach LOS	F		C			B

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8			6		
Case No	2.0	7.0	9.0			4.0		
Phs Duration (G+Y+Rc), s	21.0	38.0	24.4			59.0		
Change Period (Y+Rc), s	6.0	6.0	6.4			6.0		
Max Green (Gmax), s	15.0	18.0	18.0			39.0		
Max Allow Headway (MAH), s	3.8	5.2	4.0			5.2		
Max Q Clear (g_c+I1), s	16.9	33.0	20.0			32.7		
Green Ext Time (g_e), s	0.0	0.0	0.0			6.3		
Prob of Phs Call (p_c)	1.00	1.00	1.00			1.00		
Prob of Max Out (p_x)	1.00	0.00	1.00			0.00		

Left-Turn Movement Data			
Assigned Mvmt	1	5	3
Mvmt Sat Flow, veh/h	3408	0	3375

Through Movement Data			
Assigned Mvmt		2	8			6
Mvmt Sat Flow, veh/h		5202	0			5202

Right-Turn Movement Data			
Assigned Mvmt		12	18			16
Mvmt Sat Flow, veh/h		1568	2733			0

Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	0	0
Lane Assignment	(Prot)							

Lanes in Grp	2	0	2	0	0	0	0	0
Grp Vol (v), veh/h	738	0	445	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1704	0	1688	0	0	0	0	0
Q Serve Time (g_s), s	14.9	0.0	7.7	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	14.9	0.0	7.7	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1688	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	31.6	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	741	0	881	0	0	0	0	0
V/C Ratio (X)	1.00	0.00	0.51	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	741	0	881	0	0	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	27.0	0.0	21.7	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	32.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	59.0	0.0	22.2	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	7.0	0.0	3.6	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	3.3	0.0	0.1	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	10.3	0.0	3.6	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.61	0.00	0.20	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	3	0	0	0	3	0	0
Grp Vol (v), veh/h	0	2284	0	0	0	3283	0	0
Grp Sat Flow (s), veh/h/ln	0	1679	0	0	0	1679	0	0
Q Serve Time (g_s), s	0.0	31.0	0.0	0.0	0.0	30.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	31.0	0.0	0.0	0.0	30.7	0.0	0.0
Lane Grp Cap (c), veh/h	0	2306	0	0	0	3839	0	0
V/C Ratio (X)	0.00	0.99	0.00	0.00	0.00	0.86	0.00	0.00
Avail Cap (c_a), veh/h	0	2306	0	0	0	3839	0	0
Upstream Filter (I)	0.00	0.61	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	18.5	0.0	0.0	0.0	5.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	12.6	0.0	0.0	0.0	2.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	31.1	0.0	0.0	0.0	8.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	14.2	0.0	0.0	0.0	13.7	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	2.7	0.0	0.0	0.0	0.9	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	16.9	0.0	0.0	0.0	14.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.27	0.00	0.00	0.00	0.35	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lane Assignment		R	R					
Lanes in Grp	0	1	2	0	0	0	0	0
Grp Vol (v), veh/h	0	0	1610	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1568	1367	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	18.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	18.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	718	713	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	2.26	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	718	713	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	25.5	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	570.7	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	596.2	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	6.7	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	56.5	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	63.2	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	2.51	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	224.3	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		133.0						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	729	1329	247	178	491	93	103	112	75	243	271	895
Future Volume (veh/h)	729	1329	247	178	491	93	103	112	75	243	271	895
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1712	1712	1712	1712	1712	1712	1900	1900	1712	1712
Adj Flow Rate, veh/h	759	1384	257	185	511	0	107	117	78	253	282	932
Adj No. of Lanes	1	3	1	1	3	1	1	2	0	0	1	2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	11	11	11	11	11	11	11	11	11	11	11	11
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	433	2039	635	208	1393	434	127	572	356	0	293	439
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.27	0.44	0.44	0.13	0.30	0.00	0.08	0.30	0.30	0.00	0.17	0.17
Ln Grp Delay, s/veh	398.4	36.3	31.0	81.0	45.0	0.0	86.8	42.3	42.5	0.0	108.0	580.3
Ln Grp LOS	F	D	C	F	D		F	D	D		F	F
Approach Vol, veh/h		2400			696			302			1214	
Approach Delay, s/veh		150.2			54.6			58.1			470.6	
Approach LOS		F			D			E			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	0.0	4.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	50.0	54.8	0.0	55.2	27.9	76.9	20.1	35.1
Change Period (Y+Rc), s	7.5	7.1	7.6	* 7.7	7.5	7.1	* 7.7	* 7.7
Max Green (Gmax), s	42.5	37.9	27.4	* 22	42.5	37.9	* 22	* 27
Max Allow Headway (MAH), s	3.8	5.1	0.0	4.5	3.8	5.1	3.8	4.5
Max Q Clear (g_c+I1), s	44.5	15.8	0.0	9.8	19.9	40.0	12.4	29.4
Green Ext Time (g_e), s	0.0	15.5	0.0	5.9	0.5	0.0	0.2	0.0
Prob of Phs Call (p_c)	1.00	1.00	0.00	1.00	1.00	1.00	0.99	1.00
Prob of Max Out (p_x)	1.00	0.00	0.00	0.44	0.00	0.00	0.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1630		0		1630		1630	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		4673		1927		4673		1712

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1455		1199		1455		2561

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)				(Prot)		(Prot)	

Lanes in Grp	1	0	0	0	1	0	1	0
Grp Vol (v), veh/h	759	0	0	0	185	0	107	0
Grp Sat Flow (s), veh/h/ln	1630	0	0	0	1630	0	1630	0
Q Serve Time (g_s), s	42.5	0.0	0.0	0.0	17.9	0.0	10.4	0.0
Cycle Q Clear Time (g_c), s	42.5	0.0	0.0	0.0	17.9	0.0	10.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	433	0	0	0	208	0	127	0
V/C Ratio (X)	1.75	0.00	0.00	0.00	0.89	0.00	0.85	0.00
Avail Cap (c_a), veh/h	433	0	0	0	433	0	227	0
Upstream Filter (I)	0.09	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	58.8	0.0	0.0	0.0	68.7	0.0	72.8	0.0
Incr Delay (d2), s/veh	339.6	0.0	0.0	0.0	12.3	0.0	14.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	398.4	0.0	0.0	0.0	81.0	0.0	86.8	0.0
1st-Term Q (Q1), veh/ln	19.1	0.0	0.0	0.0	8.1	0.0	4.7	0.0
2nd-Term Q (Q2), veh/ln	40.9	0.0	0.0	0.0	0.7	0.0	0.5	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	60.0	0.0	0.0	0.0	8.8	0.0	5.2	0.0
%ile Storage Ratio (RQ%)	2.22	0.00	0.00	0.00	0.57	0.00	0.28	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	81.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	1	0	3	0	1
Grp Vol (v), veh/h	0	511	0	97	0	1384	0	282
Grp Sat Flow (s), veh/h/ln	0	1558	0	1626	0	1558	0	1712
Q Serve Time (g_s), s	0.0	13.8	0.0	7.2	0.0	38.0	0.0	26.2
Cycle Q Clear Time (g_c), s	0.0	13.8	0.0	7.2	0.0	38.0	0.0	26.2
Lane Grp Cap (c), veh/h	0	1393	0	483	0	2039	0	293
V/C Ratio (X)	0.00	0.37	0.00	0.20	0.00	0.68	0.00	0.96
Avail Cap (c_a), veh/h	0	1393	0	483	0	2039	0	293
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	44.3	0.0	42.1	0.0	36.1	0.0	65.8
Incr Delay (d2), s/veh	0.0	0.7	0.0	0.2	0.0	0.2	0.0	42.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	45.0	0.0	42.3	0.0	36.3	0.0	108.0
1st-Term Q (Q1), veh/ln	0.0	6.0	0.0	3.2	0.0	16.3	0.0	12.4

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.0	0.0	3.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	6.1	0.0	3.2	0.0	16.3	0.0	15.8
%ile Storage Ratio (RQ%)	0.00	0.07	0.00	0.18	0.00	0.13	0.00	0.47
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	2
Grp Vol (v), veh/h	0	0	0	98	0	257	0	932
Grp Sat Flow (s), veh/h/ln	0	1455	0	1500	0	1455	0	1280
Q Serve Time (g_s), s	0.0	0.0	0.0	7.8	0.0	19.3	0.0	27.4
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	7.8	0.0	19.3	0.0	27.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.80	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	434	0	446	0	635	0	439
V/C Ratio (X)	0.00	0.00	0.00	0.22	0.00	0.40	0.00	2.13
Avail Cap (c_a), veh/h	0	434	0	446	0	635	0	439
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	42.3	0.0	30.9	0.0	66.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.2	0.0	514.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	42.5	0.0	31.0	0.0	580.3
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.3	0.0	7.8	0.0	9.7
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	3.3	0.0	7.8	0.0	41.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.18	0.00	0.43	0.00	1.22
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	123.4
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	214.1
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	207	1052	127	526	1130	152	146	565	166	678	1530	207
Future Volume (veh/h)	207	1052	127	526	1130	152	146	565	166	678	1530	207
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1776	1776	1776	1776	1776	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	218	1107	134	554	1189	160	154	595	175	714	1611	218
Adj No. of Lanes	2	3	1	2	3	2	2	2	0	2	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	7	7	7	7	7	7	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	264	1191	371	213	1116	612	196	989	290	374	1297	172
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.25	0.25	0.06	0.23	0.23	0.06	0.38	0.38	0.11	0.43	0.43
Ln Grp Delay, s/veh	80.4	69.5	49.9	804.9	104.3	48.6	87.8	38.7	38.8	486.5	156.2	172.3
Ln Grp LOS	F	E	D	F	F	D	F	D	D	F	F	F
Approach Vol, veh/h		1459			1903			924			2543	
Approach Delay, s/veh		69.3			303.6			46.9			254.9	
Approach LOS		E			F			D			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	4.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	19.3	42.1	24.0	65.6	17.0	44.4	16.6	73.0
Change Period (Y+Rc), s	7.2	* 7.3	6.8	* 7.6	7.2	* 7.3	* 7.6	* 7.6
Max Green (Gmax), s	15.8	* 31	17.2	* 59	9.8	* 37	* 9.4	* 65
Max Allow Headway (MAH), s	3.8	5.1	3.8	5.3	3.8	5.1	3.8	5.3
Max Q Clear (g_c+I1), s	11.9	36.8	19.2	30.0	11.8	35.7	9.0	67.4
Green Ext Time (g_e), s	0.3	0.0	0.0	23.6	0.0	0.9	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	0.93	0.00	1.00	0.81	1.00	0.00	1.00	1.00

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	3281	3281	3281	3281

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	4848	2574	4848	2994

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	2656	755	1509	398

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	218	0	714	0	554	0	154	0
Grp Sat Flow (s), veh/h/ln	1640	0	1640	0	1640	0	1640	0
Q Serve Time (g_s), s	9.9	0.0	17.2	0.0	9.8	0.0	7.0	0.0
Cycle Q Clear Time (g_c), s	9.9	0.0	17.2	0.0	9.8	0.0	7.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	264	0	374	0	213	0	196	0
V/C Ratio (X)	0.83	0.00	1.91	0.00	2.60	0.00	0.79	0.00
Avail Cap (c_a), veh/h	343	0	374	0	213	0	204	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	68.4	0.0	66.9	0.0	70.6	0.0	70.1	0.0
Incr Delay (d2), s/veh	12.1	0.0	419.6	0.0	734.3	0.0	17.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	80.4	0.0	486.5	0.0	804.9	0.0	87.8	0.0
1st-Term Q (Q1), veh/ln	4.5	0.0	7.8	0.0	4.4	0.0	3.2	0.0
2nd-Term Q (Q2), veh/ln	0.4	0.0	21.8	0.0	21.7	0.0	0.5	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	4.9	0.0	29.6	0.0	26.2	0.0	3.7	0.0
%ile Storage Ratio (RQ%)	0.28	0.00	0.59	0.00	1.33	0.00	0.10	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	85.1	0.0	85.3	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.5	0.0	0.7	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	1	0	3	0	1
Grp Vol (v), veh/h	0	1189	0	390	0	1107	0	895
Grp Sat Flow (s), veh/h/ln	0	1616	0	1687	0	1616	0	1687
Q Serve Time (g_s), s	0.0	34.8	0.0	27.9	0.0	33.7	0.0	65.4
Cycle Q Clear Time (g_c), s	0.0	34.8	0.0	27.9	0.0	33.7	0.0	65.4
Lane Grp Cap (c), veh/h	0	1116	0	648	0	1191	0	731
V/C Ratio (X)	0.00	1.07	0.00	0.60	0.00	0.93	0.00	1.23
Avail Cap (c_a), veh/h	0	1116	0	661	0	1191	0	731
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	58.1	0.0	37.2	0.0	55.7	0.0	42.8
Incr Delay (d2), s/veh	0.0	46.2	0.0	1.5	0.0	13.9	0.0	113.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	104.3	0.0	38.7	0.0	69.5	0.0	156.2
1st-Term Q (Q1), veh/ln	0.0	15.5	0.0	13.0	0.0	15.1	0.0	30.4

2nd-Term Q (Q2), veh/ln	0.0	4.8	0.0	0.3	0.0	1.5	0.0	23.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	20.3	0.0	13.2	0.0	16.6	0.0	53.5
%ile Storage Ratio (RQ%)	0.00	0.10	0.00	0.35	0.00	0.15	0.00	1.06
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	18.2	0.0	0.0	0.0	0.0	0.0	41.2
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		T+R
Lanes in Grp	0	2	0	1	0	1	0	1
Grp Vol (v), veh/h	0	160	0	380	0	134	0	934
Grp Sat Flow (s), veh/h/ln	0	1328	0	1642	0	1509	0	1705
Q Serve Time (g_s), s	0.0	7.4	0.0	28.0	0.0	11.1	0.0	65.4
Cycle Q Clear Time (g_c), s	0.0	7.4	0.0	28.0	0.0	11.1	0.0	65.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.46	0.00	1.00	0.00	0.23
Lane Grp Cap (c), veh/h	0	612	0	631	0	371	0	739
V/C Ratio (X)	0.00	0.26	0.00	0.60	0.00	0.36	0.00	1.26
Avail Cap (c_a), veh/h	0	612	0	644	0	371	0	739
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	47.6	0.0	37.3	0.0	47.1	0.0	42.8
Incr Delay (d2), s/veh	0.0	1.0	0.0	1.5	0.0	2.7	0.0	129.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	48.6	0.0	38.8	0.0	49.9	0.0	172.3
1st-Term Q (Q1), veh/ln	0.0	2.7	0.0	12.7	0.0	4.6	0.0	30.8
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.3	0.0	0.3	0.0	26.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.8	0.0	13.0	0.0	4.9	0.0	57.4
%ile Storage Ratio (RQ%)	0.00	0.11	0.00	0.35	0.00	0.31	0.00	1.14
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.8
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	200.7
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	616	1855	6	59	2596	743	0	0	1053	2	0	913
Future Volume (veh/h)	616	1855	6	59	2596	743	0	0	1053	2	0	913
Number	7	4	14	3	8	18	5	2	12			
Initial Q, veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1845	1845	1900	1900	1845	1845	0	0	1845			
Adj Flow Rate, veh/h	635	1912	6	61	2676	0	0	0	1086			
Adj No. of Lanes	2	3	0	0	3	1	0	0	2			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97			
Percent Heavy Veh, %	3	3	3	3	3	3	0	0	3			
Opposing Right Turn Influence	Yes			Yes			No					
Cap, veh/h	485	4983	16	77	3395	1224	0	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Prop Arrive On Green	0.14	0.96	0.96	0.78	0.78	0.00	0.00	0.00	0.00			
Ln Grp Delay, s/veh	225.2	0.5	0.8	22.9	11.5	0.0	0.0	0.0	0.0			
Ln Grp LOS	F	A	A	C	B							

Approach Vol, veh/h		2553			2737			0				Timer:
Approach Delay, s/veh		56.5			15.6			0.0				Assigned Phs
Approach LOS		E			B							Case No
Phs Duration (G+Y+Rc), s					166.0			30.0	136.0			
Change Period (Y+Rc), s					6.4			6.4	6.4			
Max Green (Gmax), s					76.6			23.6	46.6			
Max Allow Headway (MAH), s					5.4			3.8	5.4			
Max Q Clear (g_c+I1), s					5.7			25.6	85.0			
Green Ext Time (g_e), s					69.2			0.0	0.0			
Prob of Phs Call (p_c)					1.00			1.00	1.00			
Prob of Max Out (p_x)					0.00			1.00	0.00			

Left-Turn Movement Data												
Assigned Mvmt								7	3			
Mvmt Sat Flow, veh/h								3408	69			

Through Movement Data												
Assigned Mvmt					4				8			
Mvmt Sat Flow, veh/h					5183				4349			

Right-Turn Movement Data												
Assigned Mvmt					14				18			
Mvmt Sat Flow, veh/h					16				1568			

Left Lane Group Data												
Assigned Mvmt		0	0	0	0	0	0	7	3			
Lane Assignment								(Prot)	L+T			
Lanes in Grp		0	0	0	0	0	0	2	1			
Grp Vol (v), veh/h		0	0	0	0	0	0	635	978			
Grp Sat Flow (s), veh/h/ln		0	0	0	0	0	0	1704	1363			

Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	23.6	64.7
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	23.6	83.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	237
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	129.6
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	129.6
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	64.7
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.3
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.3
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.06
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	485	1087
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	1.31	0.90
Avail Cap (c_a), veh/h	0	0	0	0	0	0	485	1087
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	71.2	11.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	154.0	11.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	225.2	22.9
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	11.1	31.5
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	10.4	3.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	21.5	35.1
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.70	2.60
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	37.6	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	2
Grp Vol (v), veh/h	0	0	0	1238	0	0	0	1759
Grp Sat Flow (s), veh/h/ln	0	0	0	1679	0	0	0	1528
Q Serve Time (g_s), s	0.0	0.0	0.0	3.7	0.0	0.0	0.0	49.4
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	3.7	0.0	0.0	0.0	49.4
Lane Grp Cap (c), veh/h	0	0	0	3228	0	0	0	2385
V/C Ratio (X)	0.00	0.00	0.00	0.38	0.00	0.00	0.00	0.74
Avail Cap (c_a), veh/h	0	0	0	3228	0	0	0	2385
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	9.4
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.3	0.0	0.0	0.0	2.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.5	0.0	0.0	0.0	11.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.5	0.0	0.0	0.0	20.5
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00

%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	1.7	0.0	0.0	0.0	21.2
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.13	0.00	0.00	0.00	1.57
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	0	0	18
Lane Assignment				T+R				R
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	680	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1842	0	0	0	1568
Q Serve Time (g_s), s	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.01	0.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	0	0	1771	0	0	0	1224
V/C Ratio (X)	0.00	0.00	0.00	0.38	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	1771	0	0	0	1224
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		35.3						
HCM 2010 LOS		D						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1623	818	1530	2279	0	0	0	713	0	0	266
Future Volume (veh/h)	0	1623	818	1530	2279	0	0	0	713	0	0	266
Number	7	4	14	3	8	18				1	6	16
Initial Q, veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1845	1845	1845	1845	0				0	0	1845
Adj Flow Rate, veh/h	0	1673	0	1577	2349	0				0	0	0
Adj No. of Lanes	0	3	1	2	3	0				0	0	2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97				0.97	0.97	0.97
Percent Heavy Veh, %	0	3	3	3	3	0				0	0	3
Opposing Right Turn Influence	No			Yes						No		
Cap, veh/h	0	2216	690	1237	4540	0				0	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Prop Arrive On Green	0.00	0.44	0.00	0.36	0.90	0.00				0.00	0.00	0.00
Ln Grp Delay, s/veh	0.0	17.7	0.0	150.6	1.0	0.0				0.0	0.0	0.0
Ln Grp LOS		B		F	A							
Approach Vol, veh/h		1673			3926						0	
Approach Delay, s/veh		17.7			61.1						0.0	
Approach LOS		B			E							

Timer:	1	2	3	4	5	6	7	8
Assigned Phs			3	4				8
Case No			2.0	7.0				4.0
Phs Duration (G+Y+Rc), s			30.0	35.0				65.0
Change Period (Y+Rc), s			6.4	6.4				6.4
Max Green (Gmax), s			23.6	18.0				48.0
Max Allow Headway (MAH), s			3.8	5.2				5.2
Max Q Clear (g_c+I1), s			25.6	20.1				7.6
Green Ext Time (g_e), s			0.0	0.0				38.8
Prob of Phs Call (p_c)			1.00	1.00				1.00
Prob of Max Out (p_x)			1.00	0.00				0.00

Left-Turn Movement Data		
Assigned Mvmt	3	7
Mvmt Sat Flow, veh/h	3408	0

Through Movement Data		
Assigned Mvmt	4	8
Mvmt Sat Flow, veh/h	5202	5202

Right-Turn Movement Data		
Assigned Mvmt	14	18
Mvmt Sat Flow, veh/h	1568	0

Left Lane Group Data								
Assigned Mvmt	0	0	3	7	0	0	0	0
Lane Assignment			(Prot)					

Lanes in Grp	0	0	2	0	0	0	0	0
Grp Vol (v), veh/h	0	0	1577	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1704	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	23.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	23.6	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	28.6	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	1237	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	1.27	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	1237	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	20.7	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	129.9	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	150.6	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	11.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	22.3	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	33.3	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	1.15	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	84.9	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	3	0	0	0	3
Grp Vol (v), veh/h	0	0	0	1673	0	0	0	2349
Grp Sat Flow (s), veh/h/ln	0	0	0	1679	0	0	0	1679
Q Serve Time (g_s), s	0.0	0.0	0.0	18.1	0.0	0.0	0.0	5.6
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	18.1	0.0	0.0	0.0	5.6
Lane Grp Cap (c), veh/h	0	0	0	2216	0	0	0	4540
V/C Ratio (X)	0.00	0.00	0.00	0.76	0.00	0.00	0.00	0.52
Avail Cap (c_a), veh/h	0	0	0	2216	0	0	0	4540
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	15.3	0.0	0.0	0.0	0.6
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.4	0.0	0.0	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	17.7	0.0	0.0	0.0	1.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	8.4	0.0	0.0	0.0	2.4

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	8.9	0.0	0.0	0.0	2.6
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.38	0.00	0.00	0.00	0.16
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	0	0	18
Lane Assignment				R				
Lanes in Grp	0	0	0	1	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1568	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	690	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	690	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		48.1						
HCM 2010 LOS		D						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	965	3341	0	0	2847	659	0	0	406	0	0	302
Future Volume (veh/h)	965	3341	0	0	2847	659	0	0	406	0	0	302
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	0	0	1863	0	0	1863
Adj Flow Rate, veh/h	1060	3671	0	0	3129	724	0	0	446	0	0	332
Adj No. of Lanes	2	3	0	0	3	2	0	0	3	0	0	3
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	0	0	2	2	0	0	2	0	0	2
Opposing Right Turn Influence	Yes			No			No			No		
Cap, veh/h	832	4789	0	0	3264	1789	0	0	0	0	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.24	0.94	0.00	0.00	0.64	0.64	0.00	0.00	0.00	0.00	0.00	0.00
Ln Grp Delay, s/veh	165.7	0.8	0.0	0.0	27.1	10.2	0.0	0.0	0.0	0.0	0.0	0.0
Ln Grp LOS	F	A			C	B						
Approach Vol, veh/h		4731			3853			0			0	
Approach Delay, s/veh		37.7			23.9			0.0			0.0	
Approach LOS		D			C							

Timer:	1	2	3	4	5	6	7	8
Assigned Phs				4			7	8
Case No				4.0			2.0	7.0
Phs Duration (G+Y+Rc), s				110.0			33.0	77.0
Change Period (Y+Rc), s				6.4			6.4	6.4
Max Green (Gmax), s				81.6			26.6	48.6
Max Allow Headway (MAH), s				5.1			3.8	5.1
Max Q Clear (g_c+I1), s				18.6			28.6	65.0
Green Ext Time (g_e), s				62.6			0.0	0.0
Prob of Phs Call (p_c)				1.00			1.00	1.00
Prob of Max Out (p_x)				0.00			1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt							7	3
Mvmt Sat Flow, veh/h							3442	0

Through Movement Data								
Assigned Mvmt				4				8
Mvmt Sat Flow, veh/h				5253				5253

Right-Turn Movement Data								
Assigned Mvmt				14				18
Mvmt Sat Flow, veh/h				0				2787

Left Lane Group Data								
Assigned Mvmt	0	0	0	0	0	0	7	3
Lane Assignment							(Prot)	

Lanes in Grp	0	0	0	0	0	0	2	0
Grp Vol (v), veh/h	0	0	0	0	0	0	1060	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	1721	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	26.6	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	26.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	70.6
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	832	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	1.27	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	832	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	41.7	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	124.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	165.7	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	12.6	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	14.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	26.9	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	1.29	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	56.9	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	3	0	0	0	3
Grp Vol (v), veh/h	0	0	0	3671	0	0	0	3129
Grp Sat Flow (s), veh/h/ln	0	0	0	1695	0	0	0	1695
Q Serve Time (g_s), s	0.0	0.0	0.0	16.6	0.0	0.0	0.0	63.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	16.6	0.0	0.0	0.0	63.0
Lane Grp Cap (c), veh/h	0	0	0	4789	0	0	0	3264
V/C Ratio (X)	0.00	0.00	0.00	0.77	0.00	0.00	0.00	0.96
Avail Cap (c_a), veh/h	0	0	0	4789	0	0	0	3264
Upstream Filter (I)	0.00	0.00	0.00	0.09	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.7	0.0	0.0	0.0	18.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.0	0.0	8.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.8	0.0	0.0	0.0	27.1
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	6.8	0.0	0.0	0.0	29.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	6.8	0.0	0.0	0.0	31.6
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.51
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	0	0	18
Lane Assignment								R
Lanes in Grp	0	0	0	0	0	0	0	2
Grp Vol (v), veh/h	0	0	0	0	0	0	0	724
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	1393
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.8
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	1789
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	1789
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.5
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.2
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.4
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		31.5						
HCM 2010 LOS		C						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	3172	593	1249	1936	0	0	0	822	0	0	210
Future Volume (veh/h)	0	3172	593	1249	1936	0	0	0	822	0	0	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	0	0	0	1863	0	0	1863
Adj Flow Rate, veh/h	0	3270	611	1288	1996	0	0	0	847	0	0	216
Adj No. of Lanes	0	3	2	2	3	0	0	0	3	0	0	3
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	2	2	2	2	0	0	0	2	0	0	2
Opposing Right Turn Influence	No			Yes			No			No		
Cap, veh/h	0	3320	1819	942	4898	0	0	0	0	0	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.00	0.65	0.65	0.27	0.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ln Grp Delay, s/veh	0.0	41.8	13.9	229.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ln Grp LOS		D	B	F	A							
Approach Vol, veh/h		3881			3284			0			0	
Approach Delay, s/veh		37.4			90.1			0.0			0.0	
Approach LOS		D			F							

Timer:	1	2	3	4	5	6	7	8
Assigned Phs			3	4				8
Case No			2.0	7.0				4.0
Phs Duration (G+Y+Rc), s			54.0	120.0				174.0
Change Period (Y+Rc), s			6.4	6.4				6.4
Max Green (Gmax), s			47.6	93.6				147.6
Max Allow Headway (MAH), s			3.8	5.1				5.1
Max Q Clear (g_c+I1), s			49.6	110.8				6.1
Green Ext Time (g_e), s			0.0	0.0				139.8
Prob of Phs Call (p_c)			1.00	1.00				1.00
Prob of Max Out (p_x)			1.00	0.00				0.00

Left-Turn Movement Data								
Assigned Mvmt			3	7				
Mvmt Sat Flow, veh/h			3442	0				

Through Movement Data								
Assigned Mvmt				4				8
Mvmt Sat Flow, veh/h				5253				5253

Right-Turn Movement Data								
Assigned Mvmt				14				18
Mvmt Sat Flow, veh/h				2787				0

Left Lane Group Data								
Assigned Mvmt	0	0	3	7	0	0	0	0
Lane Assignment			(Prot)					

Lanes in Grp	0	0	2	0	0	0	0	0
Grp Vol (v), veh/h	0	0	1288	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1721	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	47.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	47.6	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	113.6	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	942	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	1.37	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	942	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	63.2	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	166.2	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	229.4	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	22.6	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	21.7	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	44.4	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	1.91	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	86.6	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	3	0	0	0	3
Grp Vol (v), veh/h	0	0	0	3270	0	0	0	1996
Grp Sat Flow (s), veh/h/ln	0	0	0	1695	0	0	0	1695
Q Serve Time (g_s), s	0.0	0.0	0.0	108.8	0.0	0.0	0.0	4.1
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	108.8	0.0	0.0	0.0	4.1
Lane Grp Cap (c), veh/h	0	0	0	3320	0	0	0	4898
V/C Ratio (X)	0.00	0.00	0.00	0.98	0.00	0.00	0.00	0.41
Avail Cap (c_a), veh/h	0	0	0	3320	0	0	0	4898
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	0.0	0.0	29.4	0.0	0.0	0.0	0.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	12.5	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	41.8	0.0	0.0	0.0	0.2
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	50.6	0.0	0.0	0.0	1.7

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	54.4	0.0	0.0	0.0	1.7
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.91	0.00	0.00	0.00	0.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	0	0	18
Lane Assignment				R				
Lanes in Grp	0	0	0	2	0	0	0	0
Grp Vol (v), veh/h	0	0	0	611	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1393	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	17.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	17.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	1819	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.34	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	1819	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	13.4	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	13.9	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	6.5	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	6.6	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		61.6						
HCM 2010 LOS		E						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	352	263	382	392	342	132	774	353	215	1460	13
Future Volume (veh/h)	27	352	263	382	392	342	132	774	353	215	1460	13
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	31	400	299	434	445	389	150	880	401	244	1659	15
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	38	440	326	72	442	385	90	1051	475	90	1594	14
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.02	0.23	0.23	0.04	0.25	0.25	0.05	0.47	0.47	0.05	0.47	0.47
Ln Grp Delay, s/veh	75.6	55.8	59.4	2320.0	76.9	80.1	387.8	30.1	31.3	847.2	65.7	65.5
Ln Grp LOS	E	E	E	F	F	F	F	C	C	F	F	F
Approach Vol, veh/h		730			1268			1431			1918	
Approach Delay, s/veh		58.3			845.7			68.1			165.0	
Approach LOS		E			F			E			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	4.0
Phs Duration (G+Y+Rc), s	9.0	44.0	8.0	24.0	9.0	44.0	6.3	25.6
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green (Gmax), s	4.5	39.5	3.5	19.5	4.5	39.5	3.5	19.5
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.4	3.8	5.3	3.8	5.4
Max Q Clear (g_c+I1), s	6.5	31.3	5.5	19.4	6.5	41.5	3.5	23.1
Green Ext Time (g_e), s	0.0	7.7	0.0	0.0	0.0	0.0	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.97	1.00	0.52	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1691		1757		1691		1757	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2260		1923		3426		1776

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1022		1423		31		1548

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	244	0	434	0	150	0	31	0
Grp Sat Flow (s), veh/h/ln	1691	0	1757	0	1691	0	1757	0
Q Serve Time (g_s), s	4.5	0.0	3.5	0.0	4.5	0.0	1.5	0.0
Cycle Q Clear Time (g_c), s	4.5	0.0	3.5	0.0	4.5	0.0	1.5	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	90	0	72	0	90	0	38	0
V/C Ratio (X)	2.73	0.00	6.00	0.00	1.68	0.00	0.83	0.00
Avail Cap (c_a), veh/h	90	0	72	0	90	0	72	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	40.3	0.0	40.8	0.0	40.3	0.0	41.4	0.0
Incr Delay (d2), s/veh	806.9	0.0	2279.2	0.0	347.5	0.0	34.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	847.2	0.0	2320.0	0.0	387.8	0.0	75.6	0.0
1st-Term Q (Q1), veh/ln	2.1	0.0	1.7	0.0	2.1	0.0	0.7	0.0
2nd-Term Q (Q2), veh/ln	20.1	0.0	45.8	0.0	8.6	0.0	0.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	22.2	0.0	47.5	0.0	10.7	0.0	1.1	0.0
%ile Storage Ratio (RQ%)	1.80	0.00	5.17	0.00	1.72	0.00	0.22	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	38.6	0.0	90.4	0.0	15.1	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.7	0.0	1.5	0.0	0.4	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	655	0	364	0	816	0	439
Grp Sat Flow (s), veh/h/ln	0	1687	0	1752	0	1687	0	1752
Q Serve Time (g_s), s	0.0	28.9	0.0	17.2	0.0	39.5	0.0	21.1
Cycle Q Clear Time (g_c), s	0.0	28.9	0.0	17.2	0.0	39.5	0.0	21.1
Lane Grp Cap (c), veh/h	0	785	0	401	0	785	0	436
V/C Ratio (X)	0.00	0.83	0.00	0.91	0.00	1.04	0.00	1.01
Avail Cap (c_a), veh/h	0	785	0	402	0	785	0	436
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	19.9	0.0	31.9	0.0	22.7	0.0	31.9
Incr Delay (d2), s/veh	0.0	10.2	0.0	23.9	0.0	43.0	0.0	44.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	30.1	0.0	55.8	0.0	65.7	0.0	76.9
1st-Term Q (Q1), veh/ln	0.0	13.3	0.0	8.3	0.0	18.3	0.0	10.2

2nd-Term Q (Q2), veh/ln	0.0	2.2	0.0	2.7	0.0	9.4	0.0	5.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	15.5	0.0	11.0	0.0	27.7	0.0	15.6
%ile Storage Ratio (RQ%)	0.00	1.22	0.00	0.25	0.00	2.12	0.00	0.31
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	7.9	0.0	0.8
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	626	0	335	0	858	0	395
Grp Sat Flow (s), veh/h/ln	0	1595	0	1594	0	1770	0	1572
Q Serve Time (g_s), s	0.0	29.3	0.0	17.4	0.0	39.5	0.0	21.1
Cycle Q Clear Time (g_c), s	0.0	29.3	0.0	17.4	0.0	39.5	0.0	21.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.64	0.00	0.89	0.00	0.02	0.00	0.98
Lane Grp Cap (c), veh/h	0	742	0	365	0	824	0	391
V/C Ratio (X)	0.00	0.84	0.00	0.92	0.00	1.04	0.00	1.01
Avail Cap (c_a), veh/h	0	742	0	366	0	824	0	391
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	20.0	0.0	32.0	0.0	22.7	0.0	31.9
Incr Delay (d2), s/veh	0.0	11.3	0.0	27.4	0.0	42.7	0.0	48.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	31.3	0.0	59.4	0.0	65.5	0.0	80.1
1st-Term Q (Q1), veh/ln	0.0	12.9	0.0	7.6	0.0	19.2	0.0	9.1
2nd-Term Q (Q2), veh/ln	0.0	2.3	0.0	2.8	0.0	9.8	0.0	5.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	15.2	0.0	10.4	0.0	29.0	0.0	14.3
%ile Storage Ratio (RQ%)	0.00	1.20	0.00	0.24	0.00	2.22	0.00	0.29
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	8.6	0.0	1.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3
Intersection Summary								
HCM 2010 Ctrl Delay		285.9						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	210	337	409	76	214	84	623	358	158	595	25
Future Volume (veh/h)	77	210	337	409	76	214	84	623	358	158	595	25
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1900	1712	1712	1712	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	81	221	355	431	80	225	88	656	377	166	626	26
Adj No. of Lanes	1	1	0	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	11	11	11	11	11	11	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	101	153	245	101	441	375	74	764	439	74	1220	51
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.26	0.26	0.06	0.26	0.26	0.04	0.37	0.37	0.04	0.37	0.37
Ln Grp Delay, s/veh	78.4	0.0	249.6	1536.3	26.8	32.6	211.4	41.1	42.1	650.9	25.6	25.5
Ln Grp LOS	E		F	F	C	C	F	D	D	F	C	C
Approach Vol, veh/h		657			736			1121			818	
Approach Delay, s/veh		228.5			912.6			54.9			152.4	
Approach LOS		F			F			D			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	10.0	40.0	12.0	30.0	10.0	40.0	12.0	30.0
Change Period (Y+Rc), s	6.0	6.0	* 6.3	* 6.3	6.0	6.0	* 6.3	* 6.3
Max Green (Gmax), s	4.0	34.0	* 5.7	* 24	4.0	34.0	* 5.7	* 24
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.1	3.8	5.3	3.8	5.1
Max Q Clear (g_c+I1), s	6.0	29.0	7.7	25.7	6.0	15.6	6.5	14.5
Green Ext Time (g_e), s	0.0	3.9	0.0	0.0	0.0	10.9	0.0	3.7
Prob of Phs Call (p_c)	0.99	1.00	1.00	1.00	0.89	1.00	0.87	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.57

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1691		1630		1691		1630	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2066		592		3301		1712

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1187		951		137		1455

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	166	0	431	0	88	0	81	0
Grp Sat Flow (s), veh/h/ln	1691	0	1630	0	1691	0	1630	0
Q Serve Time (g_s), s	4.0	0.0	5.7	0.0	4.0	0.0	4.5	0.0
Cycle Q Clear Time (g_c), s	4.0	0.0	5.7	0.0	4.0	0.0	4.5	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	74	0	101	0	74	0	101	0
V/C Ratio (X)	2.26	0.00	4.27	0.00	1.20	0.00	0.80	0.00
Avail Cap (c_a), veh/h	74	0	101	0	74	0	101	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	44.0	0.0	43.2	0.0	44.0	0.0	42.6	0.0
Incr Delay (d2), s/veh	606.9	0.0	1493.2	0.0	167.4	0.0	35.8	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	650.9	0.0	1536.3	0.0	211.4	0.0	78.4	0.0
1st-Term Q (Q1), veh/ln	1.9	0.0	2.6	0.0	1.9	0.0	2.0	0.0
2nd-Term Q (Q2), veh/ln	12.4	0.0	41.9	0.0	3.4	0.0	1.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	14.3	0.0	44.4	0.0	5.3	0.0	3.0	0.0
%ile Storage Ratio (RQ%)	1.66	0.00	8.64	0.00	0.44	0.00	0.55	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	23.1	0.0	82.5	0.0	3.6	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.6	0.0	1.1	0.0	0.3	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	536	0	0	0	320	0	80
Grp Sat Flow (s), veh/h/ln	0	1687	0	0	0	1687	0	1712
Q Serve Time (g_s), s	0.0	27.0	0.0	0.0	0.0	13.6	0.0	3.3
Cycle Q Clear Time (g_c), s	0.0	27.0	0.0	0.0	0.0	13.6	0.0	3.3
Lane Grp Cap (c), veh/h	0	623	0	0	0	623	0	441
V/C Ratio (X)	0.00	0.86	0.00	0.00	0.00	0.51	0.00	0.18
Avail Cap (c_a), veh/h	0	623	0	0	0	623	0	441
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	26.8	0.0	0.0	0.0	22.6	0.0	26.6
Incr Delay (d2), s/veh	0.0	14.3	0.0	0.0	0.0	3.0	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	41.1	0.0	0.0	0.0	25.6	0.0	26.8
1st-Term Q (Q1), veh/ln	0.0	12.5	0.0	0.0	0.0	6.3	0.0	1.6

2nd-Term Q (Q2), veh/ln	0.0	2.5	0.0	0.0	0.0	0.5	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	15.0	0.0	0.0	0.0	6.8	0.0	1.6
%ile Storage Ratio (RQ%)	0.00	0.48	0.00	0.00	0.00	0.20	0.00	0.05
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	497	0	576	0	332	0	225
Grp Sat Flow (s), veh/h/ln	0	1566	0	1544	0	1752	0	1455
Q Serve Time (g_s), s	0.0	27.0	0.0	23.7	0.0	13.6	0.0	12.5
Cycle Q Clear Time (g_c), s	0.0	27.0	0.0	23.7	0.0	13.6	0.0	12.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.76	0.00	0.62	0.00	0.08	0.00	1.00
Lane Grp Cap (c), veh/h	0	579	0	398	0	647	0	375
V/C Ratio (X)	0.00	0.86	0.00	1.45	0.00	0.51	0.00	0.60
Avail Cap (c_a), veh/h	0	579	0	398	0	647	0	375
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	26.8	0.0	34.2	0.0	22.6	0.0	30.0
Incr Delay (d2), s/veh	0.0	15.3	0.0	215.4	0.0	2.9	0.0	2.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	42.1	0.0	249.6	0.0	25.5	0.0	32.6
1st-Term Q (Q1), veh/ln	0.0	11.6	0.0	10.1	0.0	6.6	0.0	5.0
2nd-Term Q (Q2), veh/ln	0.0	2.5	0.0	23.8	0.0	0.5	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	14.1	0.0	33.9	0.0	7.1	0.0	5.3
%ile Storage Ratio (RQ%)	0.00	0.45	0.00	0.82	0.00	0.21	0.00	0.93
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	44.6	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	302.5
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	157	311	60	259	210	164	94	867	182	365	1284	65
Future Volume (veh/h)	157	311	60	259	210	164	94	867	182	365	1284	65
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	160	317	61	264	214	167	96	885	186	372	1310	66
Adj No. of Lanes	1	1	0	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	61	365	70	61	448	380	39	1167	245	39	1374	69
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.24	0.24	0.03	0.24	0.24	0.02	0.42	0.42	0.02	0.42	0.42
Ln Grp Delay, s/veh	811.2	0.0	45.9	1567.3	28.7	28.4	760.4	28.7	28.8	3863.0	34.0	34.1
Ln Grp LOS	F		D	F	C	C	F	C	C	F	C	C
Approach Vol, veh/h		538			645			1167			1748	
Approach Delay, s/veh		273.5			658.4			88.9			848.9	
Approach LOS		F			F			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	8.0	42.1	9.0	26.9	8.0	42.1	9.0	26.9
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green (Gmax), s	2.0	34.0	3.0	23.0	2.0	34.0	3.0	23.0
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.0	3.8	5.3	3.8	5.0
Max Q Clear (g_c+I1), s	4.0	25.3	5.0	19.4	4.0	35.4	5.0	10.5
Green Ext Time (g_e), s	0.0	7.7	0.0	1.5	0.0	0.0	0.0	3.5
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.90	1.00	0.98	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.26

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	1691	1757	1691	1757

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	2776	1504	3269	1845

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	583	289	164	1568

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	372	0	264	0	96	0	160	0
Grp Sat Flow (s), veh/h/ln	1691	0	1757	0	1691	0	1757	0
Q Serve Time (g_s), s	2.0	0.0	3.0	0.0	2.0	0.0	3.0	0.0
Cycle Q Clear Time (g_c), s	2.0	0.0	3.0	0.0	2.0	0.0	3.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	39	0	61	0	39	0	61	0
V/C Ratio (X)	9.46	0.00	4.31	0.00	2.44	0.00	2.61	0.00
Avail Cap (c_a), veh/h	39	0	61	0	39	0	61	0
Upstream Filter (I)	0.29	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	42.0	0.0	41.5	0.0	42.0	0.0	41.5	0.0
Incr Delay (d2), s/veh	3821.0	0.0	1525.8	0.0	718.4	0.0	769.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	3863.0	0.0	1567.3	0.0	760.4	0.0	811.2	0.0
1st-Term Q (Q1), veh/ln	0.9	0.0	1.4	0.0	0.9	0.0	1.4	0.0
2nd-Term Q (Q2), veh/ln	41.7	0.0	26.0	0.0	7.8	0.0	13.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	42.7	0.0	27.4	0.0	8.8	0.0	14.5	0.0
%ile Storage Ratio (RQ%)	4.51	0.00	5.20	0.00	1.08	0.00	2.26	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	83.2	0.0	50.7	0.0	14.2	0.0	24.7	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	2.4	0.0	1.1	0.0	0.6	0.0	0.7	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	538	0	0	0	675	0	214
Grp Sat Flow (s), veh/h/ln	0	1687	0	0	0	1687	0	1845
Q Serve Time (g_s), s	0.0	23.3	0.0	0.0	0.0	33.3	0.0	8.5
Cycle Q Clear Time (g_c), s	0.0	23.3	0.0	0.0	0.0	33.3	0.0	8.5
Lane Grp Cap (c), veh/h	0	709	0	0	0	709	0	448
V/C Ratio (X)	0.00	0.76	0.00	0.00	0.00	0.95	0.00	0.48
Avail Cap (c_a), veh/h	0	709	0	0	0	709	0	493
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.29	0.00	1.00
Uniform Delay (d1), s/veh	0.0	21.2	0.0	0.0	0.0	24.1	0.0	27.9
Incr Delay (d2), s/veh	0.0	7.5	0.0	0.0	0.0	9.9	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	28.7	0.0	0.0	0.0	34.0	0.0	28.7
1st-Term Q (Q1), veh/ln	0.0	10.8	0.0	0.0	0.0	15.4	0.0	4.3

2nd-Term Q (Q2), veh/ln	0.0	1.5	0.0	0.0	0.0	2.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	12.2	0.0	0.0	0.0	17.3	0.0	4.4
%ile Storage Ratio (RQ%)	0.00	0.62	0.00	0.00	0.00	0.36	0.00	0.12
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	533	0	378	0	701	0	167
Grp Sat Flow (s), veh/h/ln	0	1673	0	1794	0	1747	0	1568
Q Serve Time (g_s), s	0.0	23.3	0.0	17.4	0.0	33.4	0.0	7.8
Cycle Q Clear Time (g_c), s	0.0	23.3	0.0	17.4	0.0	33.4	0.0	7.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.35	0.00	0.16	0.00	0.09	0.00	1.00
Lane Grp Cap (c), veh/h	0	703	0	435	0	734	0	380
V/C Ratio (X)	0.00	0.76	0.00	0.87	0.00	0.96	0.00	0.44
Avail Cap (c_a), veh/h	0	703	0	480	0	734	0	419
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.29	0.00	1.00
Uniform Delay (d1), s/veh	0.0	21.2	0.0	31.3	0.0	24.1	0.0	27.6
Incr Delay (d2), s/veh	0.0	7.5	0.0	14.6	0.0	10.0	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	28.8	0.0	45.9	0.0	34.1	0.0	28.4
1st-Term Q (Q1), veh/ln	0.0	10.7	0.0	8.6	0.0	16.0	0.0	3.3
2nd-Term Q (Q2), veh/ln	0.0	1.5	0.0	1.8	0.0	2.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	12.1	0.0	10.4	0.0	18.0	0.0	3.4
%ile Storage Ratio (RQ%)	0.00	0.61	0.00	0.29	0.00	0.38	0.00	0.10
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		527.0						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	132	326	44	84	257	169	81	1126	61	282	1509	63
Future Volume (veh/h)	132	326	44	84	257	169	81	1126	61	282	1509	63
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	142	351	47	90	276	182	87	1211	66	303	1623	68
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	228	531	452	196	531	452	110	1468	80	193	1651	69
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.07	0.45	0.45	0.11	0.50	0.50
Ln Grp Delay, s/veh	43.3	31.8	24.1	40.9	28.3	27.0	44.8	24.1	24.0	299.5	28.2	29.3
Ln Grp LOS	D	C	C	D	C	C	D	C	C	F	C	C
Approach Vol, veh/h		540			548			1364			1994	
Approach Delay, s/veh		34.2			29.9			25.4			69.9	
Approach LOS		C			C			C			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Case No	2.0	4.0		5.0	2.0	4.0		5.0
Phs Duration (G+Y+Rc), s	15.0	46.0		31.0	10.5	50.5		31.0
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green (Gmax), s	10.5	41.5		26.5	10.5	41.5		26.5
Max Allow Headway (MAH), s	3.8	5.3		5.0	3.8	5.3		5.0
Max Q Clear (g_c+I1), s	12.5	32.0		27.6	6.7	46.8		25.6
Green Ext Time (g_e), s	0.0	9.0		0.0	0.1	0.0		0.5
Prob of Phs Call (p_c)	1.00	1.00		1.00	0.89	1.00		1.00
Prob of Max Out (p_x)	1.00	0.00		1.00	0.99	0.00		1.00

Left-Turn Movement Data								
Assigned Mvmt	1			7	5			3
Mvmt Sat Flow, veh/h	1691			921	1691			973

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3254		1845		3301		1845

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		177		1568		138		1568

Left Lane Group Data								
Assigned Mvmt	1	0	0	7	5	0	0	3
Lane Assignment	(Prot)				(Prot)			

Lanes in Grp	1	0	0	1	1	0	0	1
Grp Vol (v), veh/h	303	0	0	142	87	0	0	90
Grp Sat Flow (s), veh/h/ln	1691	0	0	921	1691	0	0	973
Q Serve Time (g_s), s	10.5	0.0	0.0	14.0	4.7	0.0	0.0	8.2
Cycle Q Clear Time (g_c), s	10.5	0.0	0.0	25.6	4.7	0.0	0.0	23.6
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	921	0	0	0	973
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	26.5	0.0	0.0	0.0	26.5
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	15.0	0.0	0.0	0.0	11.1
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	14.0	0.0	0.0	0.0	8.2
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	193	0	0	228	110	0	0	196
V/C Ratio (X)	1.57	0.00	0.00	0.62	0.79	0.00	0.00	0.46
Avail Cap (c_a), veh/h	193	0	0	228	193	0	0	196
Upstream Filter (I)	0.09	0.00	0.00	1.00	0.18	0.00	0.00	1.00
Uniform Delay (d1), s/veh	40.8	0.0	0.0	38.1	42.4	0.0	0.0	39.2
Incr Delay (d2), s/veh	258.7	0.0	0.0	5.2	2.4	0.0	0.0	1.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	299.5	0.0	0.0	43.3	44.8	0.0	0.0	40.9
1st-Term Q (Q1), veh/ln	4.9	0.0	0.0	3.5	2.2	0.0	0.0	2.2
2nd-Term Q (Q2), veh/ln	13.9	0.0	0.0	0.3	0.1	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	18.8	0.0	0.0	3.9	2.2	0.0	0.0	2.3
%ile Storage Ratio (RQ%)	1.83	0.00	0.00	0.58	0.30	0.00	0.00	0.32
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	27.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	627	0	351	0	826	0	276
Grp Sat Flow (s), veh/h/ln	0	1687	0	1845	0	1687	0	1845
Q Serve Time (g_s), s	0.0	29.9	0.0	15.4	0.0	44.2	0.0	11.5
Cycle Q Clear Time (g_c), s	0.0	29.9	0.0	15.4	0.0	44.2	0.0	11.5
Lane Grp Cap (c), veh/h	0	761	0	531	0	844	0	531
V/C Ratio (X)	0.00	0.82	0.00	0.66	0.00	0.98	0.00	0.52
Avail Cap (c_a), veh/h	0	761	0	531	0	844	0	531
Upstream Filter (I)	0.00	0.18	0.00	1.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	22.1	0.0	28.8	0.0	22.5	0.0	27.4
Incr Delay (d2), s/veh	0.0	2.0	0.0	3.0	0.0	5.7	0.0	0.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	24.1	0.0	31.8	0.0	28.2	0.0	28.3
1st-Term Q (Q1), veh/ln	0.0	13.8	0.0	7.8	0.0	20.4	0.0	5.8

2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.4	0.0	1.3	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	14.2	0.0	8.2	0.0	21.8	0.0	6.0
%ile Storage Ratio (RQ%)	0.00	0.30	0.00	0.24	0.00	0.95	0.00	0.14
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	650	0	47	0	865	0	182
Grp Sat Flow (s), veh/h/ln	0	1744	0	1568	0	1751	0	1568
Q Serve Time (g_s), s	0.0	30.0	0.0	2.0	0.0	44.8	0.0	8.6
Cycle Q Clear Time (g_c), s	0.0	30.0	0.0	2.0	0.0	44.8	0.0	8.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.10	0.00	1.00	0.00	0.08	0.00	1.00
Lane Grp Cap (c), veh/h	0	787	0	452	0	876	0	452
V/C Ratio (X)	0.00	0.83	0.00	0.10	0.00	0.99	0.00	0.40
Avail Cap (c_a), veh/h	0	787	0	452	0	876	0	452
Upstream Filter (I)	0.00	0.18	0.00	1.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	22.1	0.0	24.0	0.0	22.7	0.0	26.4
Incr Delay (d2), s/veh	0.0	1.9	0.0	0.1	0.0	6.6	0.0	0.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	24.0	0.0	24.1	0.0	29.3	0.0	27.0
1st-Term Q (Q1), veh/ln	0.0	14.3	0.0	0.9	0.0	21.4	0.0	3.7
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.0	1.6	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	14.7	0.0	0.9	0.0	23.0	0.0	3.8
%ile Storage Ratio (RQ%)	0.00	0.31	0.00	0.16	0.00	1.01	0.00	0.54
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		47.0						
HCM 2010 LOS		D						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	158	55	29	101	16	681	21	1492	40	625	1763	64
Future Volume (veh/h)	158	55	29	101	16	681	21	1492	40	625	1763	64
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	165	57	30	105	17	709	22	1554	42	651	1836	67
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	73	252	133	131	13	549	73	959	26	293	1728	63
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.22	0.22	0.22	0.07	0.36	0.36	0.29	0.29	0.29	0.17	0.52	0.52
Ln Grp Delay, s/veh	650.8	0.0	31.6	69.5	0.0	175.8	54.3	317.9	320.4	590.1	52.1	56.8
Ln Grp LOS	F		C	E		F	D	F	F	F	F	F
Approach Vol, veh/h		252			831			1618			2554	
Approach Delay, s/veh		437.0			162.3			315.6			191.0	
Approach LOS		F			F			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4		6		8
Case No	2.0	6.0	2.0	6.0		4.0		4.0
Phs Duration (G+Y+Rc), s	23.0	34.0	13.3	27.7		57.0		41.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0		6.0		6.0
Max Green (Gmax), s	17.0	28.0	8.0	15.0		51.0		35.0
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.7		5.3		5.7
Max Q Clear (g_c+I1), s	19.0	30.0	7.8	23.7		53.0		37.0
Green Ext Time (g_e), s	0.0	0.0	0.0	0.0		0.0		0.0
Prob of Phs Call (p_c)	1.00	1.00	0.94	1.00		1.00		1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00		0.00		1.00

Left-Turn Movement Data				
Assigned Mvmt	1	5	3	7
Mvmt Sat Flow, veh/h	1691	225	1757	718

Through Movement Data			
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	3356	1139	3321	37

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	91	600	121	1537

Left Lane Group Data								
Assigned Mvmt	1	5	3	7	0	0	0	0
Lane Assignment	(Prot)		(Prot)					

Lanes in Grp	1	1	1	1	0	0	0	0
Grp Vol (v), veh/h	651	22	105	165	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1691	225	1757	718	0	0	0	0
Q Serve Time (g_s), s	17.0	0.0	5.8	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	17.0	28.0	5.8	21.7	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	225	0	718	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	28.0	0.0	21.7	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	293	73	131	73	0	0	0	0
V/C Ratio (X)	2.22	0.30	0.80	2.25	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	293	73	143	73	0	0	0	0
Upstream Filter (I)	0.09	0.52	1.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	40.5	49.0	44.6	49.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	549.6	5.3	24.9	601.8	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	590.1	54.3	69.5	650.8	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	7.9	0.6	2.8	2.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	44.8	0.1	0.9	12.3	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	52.7	0.7	3.7	14.3	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	5.56	0.09	0.42	4.56	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	89.4	0.0	0.0	22.9	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.6	0.0	0.0	0.6	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	780	0	0	0	928	0	0
Grp Sat Flow (s), veh/h/ln	0	1687	0	0	0	1687	0	0
Q Serve Time (g_s), s	0.0	28.0	0.0	0.0	0.0	51.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	28.0	0.0	0.0	0.0	51.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	482	0	0	0	878	0	0
V/C Ratio (X)	0.00	1.62	0.00	0.00	0.00	1.06	0.00	0.00
Avail Cap (c_a), veh/h	0	482	0	0	0	878	0	0
Upstream Filter (I)	0.00	0.52	0.00	0.00	0.00	0.09	0.00	0.00
Uniform Delay (d1), s/veh	0.0	35.0	0.0	0.0	0.0	23.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	282.9	0.0	0.0	0.0	28.6	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	317.9	0.0	0.0	0.0	52.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	13.0	0.0	0.0	0.0	23.4	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	37.9	0.0	0.0	0.0	7.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	50.9	0.0	0.0	0.0	30.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	2.23	0.00	0.00	0.00	1.55	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	74.4	0.0	0.0	0.0	12.4	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.4	0.0	0.0	0.0	0.3	0.0	0.0

Right Lane Group Data

Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	816	0	87	0	975	0	726
Grp Sat Flow (s), veh/h/ln	0	1760	0	1739	0	1754	0	1573
Q Serve Time (g_s), s	0.0	28.0	0.0	4.0	0.0	51.0	0.0	35.0
Cycle Q Clear Time (g_c), s	0.0	28.0	0.0	4.0	0.0	51.0	0.0	35.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.05	0.00	0.34	0.00	0.07	0.00	0.98
Lane Grp Cap (c), veh/h	0	503	0	385	0	913	0	562
V/C Ratio (X)	0.00	1.62	0.00	0.23	0.00	1.07	0.00	1.29
Avail Cap (c_a), veh/h	0	503	0	385	0	913	0	562
Upstream Filter (I)	0.00	0.52	0.00	1.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	35.0	0.0	31.3	0.0	23.5	0.0	31.5
Incr Delay (d2), s/veh	0.0	285.4	0.0	0.3	0.0	33.3	0.0	144.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	320.4	0.0	31.6	0.0	56.8	0.0	175.8
1st-Term Q (Q1), veh/ln	0.0	13.5	0.0	1.9	0.0	24.3	0.0	15.1
2nd-Term Q (Q2), veh/ln	0.0	39.9	0.0	0.0	0.0	8.4	0.0	22.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	53.4	0.0	2.0	0.0	32.8	0.0	37.7
%ile Storage Ratio (RQ%)	0.00	2.34	0.00	0.26	0.00	1.68	0.00	4.02
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	78.4	0.0	0.0	0.0	15.6	0.0	41.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.4	0.0	0.0	0.0	0.3	0.0	0.3

Intersection Summary

HCM 2010 Ctrl Delay	236.6
HCM 2010 LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	343	651	391	640	846	5	258	1305	3	0	1388	705
Future Volume (veh/h)	343	651	391	640	846	5	258	1305	3	0	1388	705
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1759	1759	1759	1900	1776	1776	1776	0	1776	1776
Adj Flow Rate, veh/h	354	671	403	660	872	5	266	1345	0	0	1431	0
Adj No. of Lanes	2	2	1	2	2	0	1	2	1	0	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	8	8	8	8	8	8	7	7	7	0	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			No		
Cap, veh/h	439	489	219	765	841	5	165	1404	628	0	854	382
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.14	0.15	0.15	0.24	0.25	0.25	0.10	0.42	0.00	0.00	0.25	0.00
Ln Grp Delay, s/veh	43.6	219.0	434.9	40.2	88.9	87.8	317.6	28.4	0.0	0.0	343.8	0.0
Ln Grp LOS	D	F	F	D	F	F	F	C			F	
Approach Vol, veh/h		1428			1537			1611			1431	
Approach Delay, s/veh		236.4			67.7			76.2			343.8	
Approach LOS		F			E			E			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Case No		3.0	2.0	3.0	2.0	7.0	2.0	4.0
Phs Duration (G+Y+Rc), s		44.6	27.7	19.8	15.0	29.6	18.4	29.0
Change Period (Y+Rc), s		6.3	6.0	6.3	6.0	6.3	6.0	6.3
Max Green (Gmax), s		32.7	28.0	12.7	9.0	17.7	18.0	22.7
Max Allow Headway (MAH), s		5.3	3.8	5.0	3.8	5.3	3.8	5.0
Max Q Clear (g_c+I1), s		37.6	19.9	15.5	11.0	25.3	11.7	24.7
Green Ext Time (g_e), s		0.0	1.7	0.0	0.0	0.0	0.7	0.0
Prob of Phs Call (p_c)		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)		0.00	0.20	1.00	1.00	0.00	0.22	1.00

Left-Turn Movement Data								
Assigned Mvmt			3		5	1	7	
Mvmt Sat Flow, veh/h			3250		1691	0	3250	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3374		3343		3463		3408

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1509		1495		1509		20

Left Lane Group Data								
Assigned Mvmt	0	0	3	0	5	1	7	0
Lane Assignment			(Prot)		(Prot)		(Prot)	

Lanes in Grp	0	0	2	0	1	0	2	0
Grp Vol (v), veh/h	0	0	660	0	266	0	354	0
Grp Sat Flow (s), veh/h/ln	0	0	1625	0	1691	0	1625	0
Q Serve Time (g_s), s	0.0	0.0	17.9	0.0	9.0	0.0	9.7	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	17.9	0.0	9.0	0.0	9.7	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	23.3	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	765	0	165	0	439	0
V/C Ratio (X)	0.00	0.00	0.86	0.00	1.61	0.00	0.81	0.00
Avail Cap (c_a), veh/h	0	0	989	0	165	0	636	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.09	0.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	33.7	0.0	41.5	0.0	38.6	0.0
Incr Delay (d2), s/veh	0.0	0.0	6.4	0.0	276.1	0.0	4.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	40.2	0.0	317.6	0.0	43.6	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	8.1	0.0	4.2	0.0	4.4	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.7	0.0	12.7	0.0	0.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	8.7	0.0	16.9	0.0	4.7	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.58	0.00	1.90	0.00	0.44	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	25.1	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	2	0	1
Grp Vol (v), veh/h	0	1345	0	671	0	1431	0	428
Grp Sat Flow (s), veh/h/ln	0	1687	0	1671	0	1687	0	1671
Q Serve Time (g_s), s	0.0	35.6	0.0	13.5	0.0	23.3	0.0	22.7
Cycle Q Clear Time (g_c), s	0.0	35.6	0.0	13.5	0.0	23.3	0.0	22.7
Lane Grp Cap (c), veh/h	0	1404	0	489	0	854	0	412
V/C Ratio (X)	0.00	0.96	0.00	1.37	0.00	1.68	0.00	1.04
Avail Cap (c_a), veh/h	0	1404	0	489	0	854	0	412
Upstream Filter (I)	0.00	0.09	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	26.1	0.0	39.3	0.0	34.4	0.0	34.7
Incr Delay (d2), s/veh	0.0	2.3	0.0	179.7	0.0	309.5	0.0	54.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	28.4	0.0	219.0	0.0	343.8	0.0	88.9
1st-Term Q (Q1), veh/ln	0.0	16.4	0.0	6.2	0.0	10.8	0.0	10.4

2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	12.2	0.0	36.7	0.0	6.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	16.9	0.0	18.4	0.0	47.5	0.0	16.6
%ile Storage Ratio (RQ%)	0.00	0.86	0.00	0.63	0.00	1.59	0.00	0.50
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	45.4	0.0	144.3	0.0	3.8
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.4	0.0	0.3

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	403	0	0	0	449
Grp Sat Flow (s), veh/h/ln	0	1509	0	1495	0	1509	0	1756
Q Serve Time (g_s), s	0.0	0.0	0.0	13.5	0.0	0.0	0.0	22.7
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	13.5	0.0	0.0	0.0	22.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.01
Lane Grp Cap (c), veh/h	0	628	0	219	0	382	0	433
V/C Ratio (X)	0.00	0.00	0.00	1.84	0.00	0.00	0.00	1.04
Avail Cap (c_a), veh/h	0	628	0	219	0	382	0	433
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	39.3	0.0	0.0	0.0	34.7
Incr Delay (d2), s/veh	0.0	0.0	0.0	395.6	0.0	0.0	0.0	53.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	434.9	0.0	0.0	0.0	87.8
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	5.6	0.0	0.0	0.0	11.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	24.1	0.0	0.0	0.0	6.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	29.6	0.0	0.0	0.0	17.4
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	1.02	0.00	0.00	0.00	0.53
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	46.0	0.0	0.0	0.0	4.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	175.9
HCM 2010 LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

APPENDIX IV-C2:
Year 2040 Zoning Intersection Total with Combined LOS AM Analysis with Mitigation

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	276	709	544	196	2233	42	805	379	195	115	377	686
Future Volume (veh/h)	276	709	544	196	2233	42	805	379	195	115	377	686
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1743	1743	1743	1743	1743	1743
Adj Flow Rate, veh/h	285	731	561	202	2302	43	830	391	201	119	389	707
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	1	3	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	9	9	9	9	9	9
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	133	1781	555	133	1781	555	243	1423	443	55	1220	380
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.04	0.35	0.35	0.04	0.35	0.35	0.08	0.30	0.30	0.03	0.26	0.26
Ln Grp Delay, s/veh	582.9	24.1	71.9	312.6	166.6	20.9	1139.2	25.6	30.1	628.7	29.0	432.5
Ln Grp LOS	F	C	F	F	F	C	F	C	C	F	C	F
Approach Vol, veh/h		1577			2547			1422			1215	
Approach Delay, s/veh		142.1			175.8			676.2			322.5	
Approach LOS		F			F			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	10.0	35.0	10.0	39.0	14.0	31.0	10.0	39.0
Change Period (Y+Rc), s	6.9	6.9	6.4	6.4	6.9	6.9	6.4	6.4
Max Green (Gmax), s	3.1	28.1	3.6	32.6	7.1	24.1	3.6	32.6
Max Allow Headway (MAH), s	3.8	4.6	3.7	4.9	3.8	4.6	3.8	4.9
Max Q Clear (g_c+I1), s	5.1	12.3	5.6	34.6	9.1	26.1	5.6	34.6
Green Ext Time (g_e), s	0.0	8.4	0.0	0.0	0.0	0.0	0.0	0.0
Prob of Phs Call (p_c)	0.96	1.00	0.99	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1660		3476		3221		3476	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		4759		5136		4759		5136

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1482		1599		1482		1599

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	2	0	2	0	2	0
Grp Vol (v), veh/h	119	0	202	0	830	0	285	0
Grp Sat Flow (s), veh/h/ln	1660	0	1738	0	1610	0	1738	0
Q Serve Time (g_s), s	3.1	0.0	3.6	0.0	7.1	0.0	3.6	0.0
Cycle Q Clear Time (g_c), s	3.1	0.0	3.6	0.0	7.1	0.0	3.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	55	0	133	0	243	0	133	0
V/C Ratio (X)	2.17	0.00	1.52	0.00	3.41	0.00	2.14	0.00
Avail Cap (c_a), veh/h	55	0	133	0	243	0	133	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	45.5	0.0	45.2	0.0	43.5	0.0	45.2	0.0
Incr Delay (d2), s/veh	583.2	0.0	267.4	0.0	1095.8	0.0	537.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	628.7	0.0	312.6	0.0	1139.2	0.0	582.9	0.0
1st-Term Q (Q1), veh/ln	1.4	0.0	1.7	0.0	3.1	0.0	1.7	0.0
2nd-Term Q (Q2), veh/ln	8.9	0.0	4.9	0.0	37.0	0.0	9.9	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	10.3	0.0	6.7	0.0	40.2	0.0	11.7	0.0
%ile Storage Ratio (RQ%)	0.81	0.00	0.70	0.00	3.59	0.00	0.47	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	16.1	0.0	17.2	0.0	146.7	0.0	38.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.5	0.0	0.4	0.0	0.9	0.0	0.5	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	3	0	3	0	3
Grp Vol (v), veh/h	0	391	0	731	0	389	0	2302
Grp Sat Flow (s), veh/h/ln	0	1586	0	1712	0	1586	0	1712
Q Serve Time (g_s), s	0.0	5.9	0.0	10.2	0.0	6.2	0.0	32.6
Cycle Q Clear Time (g_c), s	0.0	5.9	0.0	10.2	0.0	6.2	0.0	32.6
Lane Grp Cap (c), veh/h	0	1423	0	1781	0	1220	0	1781
V/C Ratio (X)	0.00	0.27	0.00	0.41	0.00	0.32	0.00	1.29
Avail Cap (c_a), veh/h	0	1423	0	1781	0	1220	0	1781
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	25.2	0.0	23.4	0.0	28.3	0.0	30.7
Incr Delay (d2), s/veh	0.0	0.5	0.0	0.7	0.0	0.7	0.0	135.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	25.6	0.0	24.1	0.0	29.0	0.0	166.6
1st-Term Q (Q1), veh/ln	0.0	2.6	0.0	4.8	0.0	2.7	0.0	15.3

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.0	0.1	0.0	22.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.6	0.0	4.9	0.0	2.8	0.0	37.8
%ile Storage Ratio (RQ%)	0.00	0.10	0.00	0.11	0.00	0.11	0.00	1.84
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	130.2
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	201	0	561	0	707	0	43
Grp Sat Flow (s), veh/h/ln	0	1482	0	1599	0	1482	0	1599
Q Serve Time (g_s), s	0.0	10.3	0.0	32.6	0.0	24.1	0.0	1.7
Cycle Q Clear Time (g_c), s	0.0	10.3	0.0	32.6	0.0	24.1	0.0	1.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	443	0	555	0	380	0	555
V/C Ratio (X)	0.00	0.45	0.00	1.01	0.00	1.86	0.00	0.08
Avail Cap (c_a), veh/h	0	443	0	555	0	380	0	555
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	26.7	0.0	30.7	0.0	35.0	0.0	20.6
Incr Delay (d2), s/veh	0.0	3.3	0.0	41.1	0.0	397.5	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	30.1	0.0	71.9	0.0	432.5	0.0	20.9
1st-Term Q (Q1), veh/ln	0.0	4.2	0.0	14.4	0.0	9.8	0.0	0.7
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	6.3	0.0	41.9	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	4.6	0.0	20.7	0.0	51.7	0.0	0.8
%ile Storage Ratio (RQ%)	0.00	0.17	0.00	1.00	0.00	2.02	0.00	0.02
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	1.6	0.0	81.8	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.5	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		299.5						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	854	181	262	1762	304	369	154	190	269	222	250
Future Volume (veh/h)	130	854	181	262	1762	304	369	154	190	269	222	250
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	134	880	187	270	1816	313	380	159	196	277	229	258
Adj No. of Lanes	1	2	1	1	3	1	2	1	1	2	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	119	1385	620	221	2284	711	438	326	277	338	516	231
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.07	0.39	0.39	0.12	0.45	0.45	0.13	0.18	0.18	0.10	0.15	0.15
Ln Grp Delay, s/veh	177.9	33.0	27.5	164.8	30.4	24.2	67.0	51.5	62.6	63.6	51.4	147.8
Ln Grp LOS	F	C	C	F	C	C	E	D	E	E	D	F
Approach Vol, veh/h		1201			2399			735			764	
Approach Delay, s/veh		48.3			44.7			62.5			88.4	
Approach LOS		D			D			E			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	19.0	28.7	22.0	55.3	22.7	25.0	14.8	62.5
Change Period (Y+Rc), s	6.6	6.6	6.4	6.4	6.6	6.6	6.4	6.4
Max Green (Gmax), s	16.8	20.0	15.6	46.6	18.4	18.4	8.4	53.8
Max Allow Headway (MAH), s	3.8	4.6	3.7	4.8	3.8	4.6	3.7	4.8
Max Q Clear (g_c+I1), s	12.0	16.7	17.6	27.2	15.7	20.4	10.4	40.3
Green Ext Time (g_e), s	0.4	1.4	0.0	17.2	0.4	0.0	0.0	12.4
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00
Prob of Max Out (p_x)	0.48	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3408		1774		3408		1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1845		3539		3505		5085

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		1583		1568		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	1	0	2	0	1	0
Grp Vol (v), veh/h	277	0	270	0	380	0	134	0
Grp Sat Flow (s), veh/h/ln	1704	0	1774	0	1704	0	1774	0
Q Serve Time (g_s), s	10.0	0.0	15.6	0.0	13.7	0.0	8.4	0.0
Cycle Q Clear Time (g_c), s	10.0	0.0	15.6	0.0	13.7	0.0	8.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	338	0	221	0	438	0	119	0
V/C Ratio (X)	0.82	0.00	1.22	0.00	0.87	0.00	1.12	0.00
Avail Cap (c_a), veh/h	458	0	221	0	502	0	119	0
Upstream Filter (I)	1.00	0.00	0.28	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	55.2	0.0	54.7	0.0	53.4	0.0	58.3	0.0
Incr Delay (d2), s/veh	8.4	0.0	110.1	0.0	13.6	0.0	119.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	63.6	0.0	164.8	0.0	67.0	0.0	177.9	0.0
1st-Term Q (Q1), veh/ln	4.7	0.0	7.6	0.0	6.4	0.0	4.1	0.0
2nd-Term Q (Q2), veh/ln	0.4	0.0	6.8	0.0	0.8	0.0	4.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	5.1	0.0	14.4	0.0	7.3	0.0	8.1	0.0
%ile Storage Ratio (RQ%)	0.96	0.00	1.35	0.00	1.38	0.00	0.64	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	12.1	0.0	0.0	0.0	3.7	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	2	0	3
Grp Vol (v), veh/h	0	159	0	880	0	229	0	1816
Grp Sat Flow (s), veh/h/ln	0	1845	0	1770	0	1752	0	1695
Q Serve Time (g_s), s	0.0	9.7	0.0	25.2	0.0	7.5	0.0	38.3
Cycle Q Clear Time (g_c), s	0.0	9.7	0.0	25.2	0.0	7.5	0.0	38.3
Lane Grp Cap (c), veh/h	0	326	0	1385	0	516	0	2284
V/C Ratio (X)	0.00	0.49	0.00	0.64	0.00	0.44	0.00	0.80
Avail Cap (c_a), veh/h	0	326	0	1385	0	516	0	2284
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.28
Uniform Delay (d1), s/veh	0.0	46.4	0.0	30.8	0.0	48.6	0.0	29.5
Incr Delay (d2), s/veh	0.0	5.1	0.0	2.2	0.0	2.8	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	51.5	0.0	33.0	0.0	51.4	0.0	30.4
1st-Term Q (Q1), veh/ln	0.0	4.9	0.0	12.2	0.0	3.6	0.0	17.8

2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.4	0.0	0.2	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	5.4	0.0	12.7	0.0	3.8	0.0	18.0
%ile Storage Ratio (RQ%)	0.00	0.18	0.00	0.17	0.00	0.14	0.00	0.31
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	196	0	187	0	258	0	313
Grp Sat Flow (s), veh/h/ln	0	1568	0	1583	0	1568	0	1583
Q Serve Time (g_s), s	0.0	14.7	0.0	10.2	0.0	18.4	0.0	17.0
Cycle Q Clear Time (g_c), s	0.0	14.7	0.0	10.2	0.0	18.4	0.0	17.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	277	0	620	0	231	0	711
V/C Ratio (X)	0.00	0.71	0.00	0.30	0.00	1.12	0.00	0.44
Avail Cap (c_a), veh/h	0	277	0	620	0	231	0	711
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.28
Uniform Delay (d1), s/veh	0.0	48.4	0.0	26.2	0.0	53.3	0.0	23.6
Incr Delay (d2), s/veh	0.0	14.2	0.0	1.2	0.0	94.5	0.0	0.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	62.6	0.0	27.5	0.0	147.8	0.0	24.2
1st-Term Q (Q1), veh/ln	0.0	6.4	0.0	4.5	0.0	8.0	0.0	7.4
2nd-Term Q (Q2), veh/ln	0.0	1.1	0.0	0.2	0.0	6.1	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.5	0.0	4.7	0.0	14.0	0.0	7.5
%ile Storage Ratio (RQ%)	0.00	0.25	0.00	0.06	0.00	0.51	0.00	0.13
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	6.8	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		54.7						
HCM 2010 LOS		D						

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	110	1174	2014	495	412	243
Future Volume (veh/h)	110	1174	2014	495	412	243
Number	7	4	8	18	1	16
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00			1.00	1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1676	1676	1676	1676	1660	1660
Adj Flow Rate, veh/h	117	1249	2143	527	438	259
Adj No. of Lanes	1	2	3	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	3	3
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	40	1919	2271	707	718	330
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.60	0.50	0.50	0.23	0.23
Ln Grp Delay, s/veh	937.8	11.5	20.5	16.9	30.9	45.2
Ln Grp LOS	F	B	C	B	C	D
Approach Vol, veh/h		1366	2670		697	
Approach Delay, s/veh		90.9	19.8		36.2	
Approach LOS		F	B		D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	6			4			7	8
Case No	9.0			4.0			2.0	7.0
Phs Duration (G+Y+Rc), s	25.0			54.0			8.4	45.6
Change Period (Y+Rc), s	6.5			6.4			6.4	6.4
Max Green (Gmax), s	18.5			46.6			2.0	39.2
Max Allow Headway (MAH), s	3.9			4.9			3.7	4.9
Max Q Clear (g_c+I1), s	15.6			22.3			4.0	37.0
Green Ext Time (g_e), s	0.8			23.1			0.0	2.1
Prob of Phs Call (p_c)	1.00			1.00			0.92	1.00
Prob of Max Out (p_x)	0.00			0.00			1.00	0.00
Left-Turn Movement Data								
Assigned Mvmt	1						7	3
Mvmt Sat Flow, veh/h	3067						1597	0
Through Movement Data								
Assigned Mvmt	6			4				8
Mvmt Sat Flow, veh/h	0			3269				4728
Right-Turn Movement Data								
Assigned Mvmt	16			14				18
Mvmt Sat Flow, veh/h	1411			0				1425
Left Lane Group Data								
Assigned Mvmt	1	0	0	0	0	0	7	3
Lane Assignment							(Prot)	

Lanes in Grp	2	0	0	0	0	0	1	0
Grp Vol (v), veh/h	438	0	0	0	0	0	117	0
Grp Sat Flow (s), veh/h/ln	1534	0	0	0	0	0	1597	0
Q Serve Time (g_s), s	10.1	0.0	0.0	0.0	0.0	0.0	2.0	0.0
Cycle Q Clear Time (g_c), s	10.1	0.0	0.0	0.0	0.0	0.0	2.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1534	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.2
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	718	0	0	0	0	0	40	0
V/C Ratio (X)	0.61	0.00	0.00	0.00	0.00	0.00	2.89	0.00
Avail Cap (c_a), veh/h	718	0	0	0	0	0	40	0
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.73	0.00
Uniform Delay (d1), s/veh	27.0	0.0	0.0	0.0	0.0	0.0	38.5	0.0
Incr Delay (d2), s/veh	3.8	0.0	0.0	0.0	0.0	0.0	899.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	30.9	0.0	0.0	0.0	0.0	0.0	937.8	0.0
1st-Term Q (Q1), veh/ln	4.3	0.0	0.0	0.0	0.0	0.0	0.9	0.0
2nd-Term Q (Q2), veh/ln	0.4	0.0	0.0	0.0	0.0	0.0	10.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	4.6	0.0	0.0	0.0	0.0	0.0	11.0	0.0
%ile Storage Ratio (RQ%)	0.24	0.00	0.00	0.00	0.00	0.00	1.27	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	19.1	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0
Middle Lane Group Data								
Assigned Mvmt	6	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	3
Grp Vol (v), veh/h	0	0	0	1249	0	0	0	2143
Grp Sat Flow (s), veh/h/ln	0	0	0	1593	0	0	0	1526
Q Serve Time (g_s), s	0.0	0.0	0.0	20.3	0.0	0.0	0.0	35.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	20.3	0.0	0.0	0.0	35.0
Lane Grp Cap (c), veh/h	0	0	0	1919	0	0	0	2271
V/C Ratio (X)	0.00	0.00	0.00	0.65	0.00	0.00	0.00	0.94
Avail Cap (c_a), veh/h	0	0	0	1919	0	0	0	2271
Upstream Filter (I)	0.00	0.00	0.00	0.73	0.00	0.00	0.00	0.13
Uniform Delay (d1), s/veh	0.0	0.0	0.0	10.3	0.0	0.0	0.0	18.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.3	0.0	0.0	0.0	1.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	11.5	0.0	0.0	0.0	20.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	8.8	0.0	0.0	0.0	14.7

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	9.2	0.0	0.0	0.0	15.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.22
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	16	0	0	14	0	0	0	18
Lane Assignment	R							R
Lanes in Grp	1	0	0	0	0	0	0	1
Grp Vol (v), veh/h	259	0	0	0	0	0	0	527
Grp Sat Flow (s), veh/h/ln	1411	0	0	0	0	0	0	1425
Q Serve Time (g_s), s	13.6	0.0	0.0	0.0	0.0	0.0	0.0	23.4
Cycle Q Clear Time (g_c), s	13.6	0.0	0.0	0.0	0.0	0.0	0.0	23.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	330	0	0	0	0	0	0	707
V/C Ratio (X)	0.78	0.00	0.00	0.00	0.00	0.00	0.00	0.75
Avail Cap (c_a), veh/h	330	0	0	0	0	0	0	707
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13
Uniform Delay (d1), s/veh	28.4	0.0	0.0	0.0	0.0	0.0	0.0	15.9
Incr Delay (d2), s/veh	16.8	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	45.2	0.0	0.0	0.0	0.0	0.0	0.0	16.9
1st-Term Q (Q1), veh/ln	10.0	0.0	0.0	0.0	0.0	0.0	0.0	9.1
2nd-Term Q (Q2), veh/ln	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	11.5	0.0	0.0	0.0	0.0	0.0	0.0	9.3
%ile Storage Ratio (RQ%)	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.13
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		42.7						
HCM 2010 LOS		D						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	1317	40	52	2069	32	154	9	16	67	26	94
Future Volume (veh/h)	52	1317	40	52	2069	32	154	9	16	67	26	94
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	53	1344	41	53	2111	33	157	9	16	68	27	96
Adj No. of Lanes	1	2	1	1	3	1	2	1	1	1	1	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	55	2212	990	55	3178	990	272	147	125	118	24	85
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.63	0.63	0.03	0.63	0.63	0.08	0.08	0.08	0.07	0.07	0.07
Ln Grp Delay, s/veh	118.6	8.2	4.7	88.2	8.1	4.6	37.1	28.0	29.5	47.8	0.0	155.0
Ln Grp LOS	F	A	A	F	A	A	D	C	C	D		F
Approach Vol, veh/h		1438			2197			182			191	
Approach Delay, s/veh		12.1			10.0			36.0			116.9	
Approach LOS		B			A			D			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	6	2	3	4			7	8
Case No	10.0	9.0	2.0	3.0			2.0	3.0
Phs Duration (G+Y+Rc), s	11.0	12.0	8.4	47.0			8.4	47.0
Change Period (Y+Rc), s	6.7	6.9	6.4	* 6.6			6.4	* 6.6
Max Green (Gmax), s	4.3	5.1	2.0	* 26			2.0	* 26
Max Allow Headway (MAH), s	4.9	3.9	3.8	5.1			3.7	5.1
Max Q Clear (g_c+I1), s	6.3	4.8	3.9	16.7			3.9	19.0
Green Ext Time (g_e), s	0.0	0.0	0.0	9.4			0.0	7.2
Prob of Phs Call (p_c)	1.00	1.00	0.61	1.00			0.61	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.00			1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1	5	3				7	
Mvmt Sat Flow, veh/h	1757	3408	1774				1774	

Through Movement Data								
Assigned Mvmt	6	2		4				8
Mvmt Sat Flow, veh/h	356	1845		3539				5085

Right-Turn Movement Data								
Assigned Mvmt	16	12		14				18
Mvmt Sat Flow, veh/h	1265	1568		1583				1583

Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	7	0
Lane Assignment			(Prot)				(Prot)	

Lanes in Grp	1	2	1	0	0	0	1	0
Grp Vol (v), veh/h	68	157	53	0	0	0	53	0
Grp Sat Flow (s), veh/h/ln	1757	1704	1774	0	0	0	1774	0
Q Serve Time (g_s), s	2.4	2.8	1.9	0.0	0.0	0.0	1.9	0.0
Cycle Q Clear Time (g_c), s	2.4	2.8	1.9	0.0	0.0	0.0	1.9	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1757	1704	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	118	272	55	0	0	0	55	0
V/C Ratio (X)	0.58	0.58	0.96	0.00	0.00	0.00	0.96	0.00
Avail Cap (c_a), veh/h	118	272	55	0	0	0	55	0
Upstream Filter (I)	1.00	1.00	0.34	0.00	0.00	0.00	0.72	0.00
Uniform Delay (d1), s/veh	29.0	28.4	31.0	0.0	0.0	0.0	31.0	0.0
Incr Delay (d2), s/veh	18.9	8.7	57.2	0.0	0.0	0.0	87.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	47.8	37.1	88.2	0.0	0.0	0.0	118.6	0.0
1st-Term Q (Q1), veh/ln	1.2	1.3	0.9	0.0	0.0	0.0	0.9	0.0
2nd-Term Q (Q2), veh/ln	0.6	0.3	0.9	0.0	0.0	0.0	1.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	1.8	1.7	1.8	0.0	0.0	0.0	2.3	0.0
%ile Storage Ratio (RQ%)	0.10	0.09	0.14	0.00	0.00	0.00	0.32	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	6	2	0	4	0	0	0	8
Lane Assignment		T		T				T
Lanes in Grp	0	1	0	2	0	0	0	3
Grp Vol (v), veh/h	0	9	0	1344	0	0	0	2111
Grp Sat Flow (s), veh/h/ln	0	1845	0	1770	0	0	0	1695
Q Serve Time (g_s), s	0.0	0.3	0.0	14.7	0.0	0.0	0.0	17.0
Cycle Q Clear Time (g_c), s	0.0	0.3	0.0	14.7	0.0	0.0	0.0	17.0
Lane Grp Cap (c), veh/h	0	147	0	2212	0	0	0	3178
V/C Ratio (X)	0.00	0.06	0.00	0.61	0.00	0.00	0.00	0.66
Avail Cap (c_a), veh/h	0	147	0	2212	0	0	0	3178
Upstream Filter (I)	0.00	1.00	0.00	0.72	0.00	0.00	0.00	0.34
Uniform Delay (d1), s/veh	0.0	27.2	0.0	7.3	0.0	0.0	0.0	7.7
Incr Delay (d2), s/veh	0.0	0.8	0.0	0.9	0.0	0.0	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	28.0	0.0	8.2	0.0	0.0	0.0	8.1
1st-Term Q (Q1), veh/ln	0.0	0.1	0.0	7.1	0.0	0.0	0.0	7.8

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.2	0.0	7.4	0.0	0.0	0.0	7.9
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.11	0.00	0.00	0.00	0.50
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	16	12	0	14	0	0	0	18
Lane Assignment	T+R	R		R				R
Lanes in Grp	1	1	0	1	0	0	0	1
Grp Vol (v), veh/h	123	16	0	41	0	0	0	33
Grp Sat Flow (s), veh/h/ln	1621	1568	0	1583	0	0	0	1583
Q Serve Time (g_s), s	4.3	0.6	0.0	0.6	0.0	0.0	0.0	0.5
Cycle Q Clear Time (g_c), s	4.3	0.6	0.0	0.6	0.0	0.0	0.0	0.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.78	1.00	0.00	1.00	0.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	109	125	0	990	0	0	0	990
V/C Ratio (X)	1.13	0.13	0.00	0.04	0.00	0.00	0.00	0.03
Avail Cap (c_a), veh/h	109	125	0	990	0	0	0	990
Upstream Filter (I)	1.00	1.00	0.00	0.72	0.00	0.00	0.00	0.34
Uniform Delay (d1), s/veh	29.9	27.4	0.0	4.6	0.0	0.0	0.0	4.6
Incr Delay (d2), s/veh	125.2	2.1	0.0	0.1	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	155.0	29.5	0.0	4.7	0.0	0.0	0.0	4.6
1st-Term Q (Q1), veh/ln	1.9	0.3	0.0	0.3	0.0	0.0	0.0	0.2
2nd-Term Q (Q2), veh/ln	3.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	5.7	0.3	0.0	0.3	0.0	0.0	0.0	0.2
%ile Storage Ratio (RQ%)	0.30	0.08	0.00	0.00	0.00	0.00	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	17.0
HCM 2010 LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1199	178	502	1813	265	368
Future Volume (veh/h)	1199	178	502	1813	265	368
Number	4	14	3	8	5	12
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)		1.00	1.00		1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1845	1845
Adj Flow Rate, veh/h	1223	182	512	1850	270	376
Adj No. of Lanes	3	0	2	2	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	3	3
Opposing Right Turn Influence			Yes		Yes	
Cap, veh/h	1639	244	379	1978	484	432
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.37	0.37	0.11	0.56	0.28	0.28
Ln Grp Delay, s/veh	22.8	24.1	196.3	18.8	28.8	47.5
Ln Grp LOS	C	C	F	B	C	D
Approach Vol, veh/h	1405			2362	646	
Approach Delay, s/veh	23.3			57.3	39.7	
Approach LOS	C			E	D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Case No		9.0	2.0	8.0				4.0
Phs Duration (G+Y+Rc), s		28.0	15.0	35.0				50.0
Change Period (Y+Rc), s		6.5	6.4	6.4				6.4
Max Green (Gmax), s		21.5	8.6	28.6				43.6
Max Allow Headway (MAH), s		4.0	3.8	5.3				5.3
Max Q Clear (g_c+I1), s		19.8	10.6	20.6				39.7
Green Ext Time (g_e), s		0.5	0.0	7.7				3.8
Prob of Phs Call (p_c)		1.00	1.00	1.00				1.00
Prob of Max Out (p_x)		0.00	1.00	0.00				0.00

Left-Turn Movement Data			
Assigned Mvmt	5	3	7
Mvmt Sat Flow, veh/h	1757	3442	0

Through Movement Data			
Assigned Mvmt	2	4	8
Mvmt Sat Flow, veh/h	0	4638	3632

Right-Turn Movement Data			
Assigned Mvmt	12	14	18
Mvmt Sat Flow, veh/h	1568	665	0

Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	0	0	0
Lane Assignment			(Prot)					

Lanes in Grp	0	1	2	0	0	0	0	0
Grp Vol (v), veh/h	0	270	512	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1757	1721	0	0	0	0	0
Q Serve Time (g_s), s	0.0	10.3	8.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	10.3	8.6	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1757	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	28.6	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	484	379	0	0	0	0	0
V/C Ratio (X)	0.00	0.56	1.35	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	484	379	0	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.25	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	24.2	34.7	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	4.6	161.6	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	28.8	196.3	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	5.0	4.1	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.6	8.5	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	5.6	12.6	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.24	1.39	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	33.1	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	2
Grp Vol (v), veh/h	0	0	0	927	0	0	0	1850
Grp Sat Flow (s), veh/h/ln	0	0	0	1695	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	18.6	0.0	0.0	0.0	37.7
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	18.6	0.0	0.0	0.0	37.7
Lane Grp Cap (c), veh/h	0	0	0	1243	0	0	0	1978
V/C Ratio (X)	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.94
Avail Cap (c_a), veh/h	0	0	0	1243	0	0	0	1978
Upstream Filter (I)	0.00	0.00	0.00	0.31	0.00	0.00	0.00	0.25
Uniform Delay (d1), s/veh	0.0	0.0	0.0	21.5	0.0	0.0	0.0	15.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.3	0.0	0.0	0.0	3.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	22.8	0.0	0.0	0.0	18.8
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	8.6	0.0	0.0	0.0	18.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	8.9	0.0	0.0	0.0	18.8
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.55	0.00	0.00	0.00	0.48
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	0	0	18
Lane Assignment		R		T+R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	376	0	478	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1568	0	1745	0	0	0	0
Q Serve Time (g_s), s	0.0	17.8	0.0	18.6	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	17.8	0.0	18.6	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.38	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	432	0	640	0	0	0	0
V/C Ratio (X)	0.00	0.87	0.00	0.75	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	432	0	640	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.31	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	26.9	0.0	21.5	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	20.6	0.0	2.5	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	47.5	0.0	24.1	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	7.7	0.0	8.9	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	2.5	0.0	0.4	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	10.2	0.0	9.3	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.44	0.00	0.58	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		43.9						
HCM 2010 LOS		D						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	1388	205	61	2115	10	320	2	105	9	6	52
Future Volume (veh/h)	33	1388	205	61	2115	10	320	2	105	9	6	52
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1900	1900	1845	1900
Adj Flow Rate, veh/h	34	1431	211	63	2180	10	330	2	108	9	6	54
Adj No. of Lanes	1	2	0	1	3	0	1	1	0	0	1	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	41	1852	270	48	3141	14	508	9	463	87	71	371
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.02	0.60	0.60	0.03	0.60	0.60	0.30	0.30	0.30	0.30	0.30	0.30
Ln Grp Delay, s/veh	80.4	14.4	14.8	210.1	10.6	11.0	29.8	0.0	20.7	19.4	0.0	0.0
Ln Grp LOS	F	B	B	F	B	B	C		C	B		
Approach Vol, veh/h		1676			2253			440			69	
Approach Delay, s/veh		15.9			16.3			27.5			19.4	
Approach LOS		B			B			C			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		6.0	2.0	4.0		8.0	2.0	4.0
Phs Duration (G+Y+Rc), s		29.0	8.4	51.0		29.0	8.1	51.3
Change Period (Y+Rc), s		* 6.8	6.4	6.4		* 6.8	6.4	6.4
Max Green (Gmax), s		* 22	2.0	30.6		* 22	2.0	30.6
Max Allow Headway (MAH), s		4.5	3.8	5.3		4.5	3.8	5.3
Max Q Clear (g_c+I1), s		18.2	4.0	28.1		4.3	3.4	23.1
Green Ext Time (g_e), s		0.9	0.0	2.5		2.1	0.0	7.3
Prob of Phs Call (p_c)		1.00	0.73	1.00		1.00	0.50	1.00
Prob of Max Out (p_x)		0.00	1.00	0.00		0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		1324	1774			106	1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		29		3101		237		5225

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1544		452		1235		24

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0
Lane Assignment			(Prot)			L+T+R	(Prot)	

Lanes in Grp	0	1	1	0	0	1	1	0
Grp Vol (v), veh/h	0	330	63	0	0	69	34	0
Grp Sat Flow (s), veh/h/ln	0	1324	1774	0	0	1578	1774	0
Q Serve Time (g_s), s	0.0	13.9	2.0	0.0	0.0	0.0	1.4	0.0
Cycle Q Clear Time (g_c), s	0.0	16.2	2.0	0.0	0.0	2.3	1.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1324	0	0	0	1304	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	1757	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	22.2	0.0	0.0	0.0	22.2	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	19.9	0.0	0.0	0.0	18.3	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	13.9	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	10.5	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	0.00	0.13	1.00	0.00
Lane Grp Cap (c), veh/h	0	508	48	0	0	528	41	0
V/C Ratio (X)	0.00	0.65	1.31	0.00	0.00	0.13	0.83	0.00
Avail Cap (c_a), veh/h	0	508	48	0	0	528	48	0
Upstream Filter (I)	0.00	1.00	0.26	0.00	0.00	1.00	0.61	0.00
Uniform Delay (d1), s/veh	0.0	23.5	36.0	0.0	0.0	18.9	36.0	0.0
Incr Delay (d2), s/veh	0.0	6.3	174.1	0.0	0.0	0.5	44.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	29.8	210.1	0.0	0.0	19.4	80.4	0.0
1st-Term Q (Q1), veh/ln	0.0	6.1	1.0	0.0	0.0	1.0	0.7	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.9	2.3	0.0	0.0	0.1	0.5	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	7.0	3.3	0.0	0.0	1.1	1.2	0.0
%ile Storage Ratio (RQ%)	0.00	0.82	0.35	0.00	0.00	0.10	0.16	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	3.8	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	2
Grp Vol (v), veh/h	0	0	0	810	0	0	0	1414
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1695
Q Serve Time (g_s), s	0.0	0.0	0.0	25.1	0.0	0.0	0.0	21.1
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	25.1	0.0	0.0	0.0	21.1
Lane Grp Cap (c), veh/h	0	0	0	1057	0	0	0	2038
V/C Ratio (X)	0.00	0.00	0.00	0.77	0.00	0.00	0.00	0.69
Avail Cap (c_a), veh/h	0	0	0	1057	0	0	0	2038
Upstream Filter (I)	0.00	0.00	0.00	0.61	0.00	0.00	0.00	0.26
Uniform Delay (d1), s/veh	0.0	0.0	0.0	11.1	0.0	0.0	0.0	10.1
Incr Delay (d2), s/veh	0.0	0.0	0.0	3.3	0.0	0.0	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	14.4	0.0	0.0	0.0	10.6
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	12.1	0.0	0.0	0.0	9.8

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	13.1	0.0	0.0	0.0	10.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.34	0.00	0.00	0.00	0.14
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R				T+R
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	110	0	832	0	0	0	776
Grp Sat Flow (s), veh/h/ln	0	1572	0	1783	0	0	0	1859
Q Serve Time (g_s), s	0.0	3.9	0.0	26.1	0.0	0.0	0.0	21.1
Cycle Q Clear Time (g_c), s	0.0	3.9	0.0	26.1	0.0	0.0	0.0	21.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.98	0.00	0.25	0.00	0.78	0.00	0.01
Lane Grp Cap (c), veh/h	0	472	0	1065	0	0	0	1117
V/C Ratio (X)	0.00	0.23	0.00	0.78	0.00	0.00	0.00	0.69
Avail Cap (c_a), veh/h	0	472	0	1065	0	0	0	1117
Upstream Filter (I)	0.00	1.00	0.00	0.61	0.00	0.00	0.00	0.26
Uniform Delay (d1), s/veh	0.0	19.5	0.0	11.3	0.0	0.0	0.0	10.1
Incr Delay (d2), s/veh	0.0	1.2	0.0	3.6	0.0	0.0	0.0	0.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	20.7	0.0	14.8	0.0	0.0	0.0	11.0
1st-Term Q (Q1), veh/ln	0.0	1.7	0.0	12.7	0.0	0.0	0.0	10.8
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	1.1	0.0	0.0	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.8	0.0	13.8	0.0	0.0	0.0	11.1
%ile Storage Ratio (RQ%)	0.00	0.17	0.00	0.36	0.00	0.00	0.00	0.15
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	17.3
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	1460	134	220	1686	6	279	0	420	1	1	0
Future Volume (veh/h)	5	1460	134	220	1686	6	279	0	420	1	1	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1845	1845	1845	1900	1845	1900
Adj Flow Rate, veh/h	5	1587	146	239	1833	7	303	0	457	1	1	0
Adj No. of Lanes	1	2	1	1	2	0	1	1	1	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	105	1339	599	263	1924	7	585	650	553	270	248	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.38	0.38	0.38	0.10	0.53	0.53	0.35	0.00	0.35	0.35	0.35	0.00
Ln Grp Delay, s/veh	36.0	108.5	16.7	23.2	20.3	20.3	24.1	0.0	36.3	16.4	0.0	0.0
Ln Grp LOS	D	F	B	C	C	C	C		D	B		
Approach Vol, veh/h		1738			2079			760			2	
Approach Delay, s/veh		100.6			20.6			31.5			16.4	
Approach LOS		F			C			C			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Case No		5.0	1.2	5.0		8.0		4.0
Phs Duration (G+Y+Rc), s		32.0	12.0	34.0		32.0		46.0
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5		4.5
Max Green (Gmax), s		27.5	7.5	29.5		27.5		41.5
Max Allow Headway (MAH), s		4.0	3.8	5.2		4.0		5.2
Max Q Clear (g_c+I1), s		22.8	8.3	31.5		2.1		39.6
Green Ext Time (g_e), s		1.3	0.0	0.0		2.7		1.9
Prob of Phs Call (p_c)		1.00	0.99	1.00		1.00		1.00
Prob of Max Out (p_x)		0.00	1.00	0.00		0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3	7		1		
Mvmt Sat Flow, veh/h		1397	1774	251		570		

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1845		3539		704		3616

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		1583		0		14

Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	1	0	0
Lane Assignment			(Pr/Pm)			L+T		

Lanes in Grp	0	1	1	1	0	1	0	0
Grp Vol (v), veh/h	0	303	239	5	0	2	0	0
Grp Sat Flow (s), veh/h/ln	0	1397	1774	251	0	1274	0	0
Q Serve Time (g_s), s	0.0	13.9	6.3	1.5	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	14.0	6.3	27.1	0.0	0.1	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1397	278	251	0	949	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	1757	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	27.5	31.5	29.5	0.0	27.5	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	27.4	0.0	3.9	0.0	27.5	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	13.9	0.0	1.5	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	1.00	0.00	0.50	0.00	0.00
Lane Grp Cap (c), veh/h	0	585	263	105	0	518	0	0
V/C Ratio (X)	0.00	0.52	0.91	0.05	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	585	263	105	0	518	0	0
Upstream Filter (I)	0.00	1.00	0.09	0.09	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	20.9	18.4	35.9	0.0	16.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	3.3	4.7	0.1	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	24.1	23.2	36.0	0.0	16.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	5.4	5.0	0.1	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.3	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	5.9	5.4	0.1	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.08	0.43	0.01	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T				T
Lanes in Grp	0	1	0	2	0	0	0	1
Grp Vol (v), veh/h	0	0	0	1587	0	0	0	897
Grp Sat Flow (s), veh/h/ln	0	1845	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	29.5	0.0	0.0	0.0	37.5
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	29.5	0.0	0.0	0.0	37.5
Lane Grp Cap (c), veh/h	0	650	0	1339	0	0	0	942
V/C Ratio (X)	0.00	0.00	0.00	1.19	0.00	0.00	0.00	0.95
Avail Cap (c_a), veh/h	0	650	0	1339	0	0	0	942
Upstream Filter (I)	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	0.0	0.0	24.2	0.0	0.0	0.0	17.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	84.3	0.0	0.0	0.0	3.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	108.5	0.0	0.0	0.0	20.3
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	14.3	0.0	0.0	0.0	17.9

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	15.7	0.0	0.0	0.0	0.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	30.0	0.0	0.0	0.0	18.7
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.41	0.00	0.00	0.00	0.49
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	62.1	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R				T+R
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	457	0	146	0	0	0	943
Grp Sat Flow (s), veh/h/ln	0	1568	0	1583	0	0	0	1860
Q Serve Time (g_s), s	0.0	20.8	0.0	4.9	0.0	0.0	0.0	37.6
Cycle Q Clear Time (g_c), s	0.0	20.8	0.0	4.9	0.0	0.0	0.0	37.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.01
Lane Grp Cap (c), veh/h	0	553	0	599	0	0	0	990
V/C Ratio (X)	0.00	0.83	0.00	0.24	0.00	0.00	0.00	0.95
Avail Cap (c_a), veh/h	0	553	0	599	0	0	0	990
Upstream Filter (I)	0.00	1.00	0.00	0.09	0.00	0.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	23.1	0.0	16.6	0.0	0.0	0.0	17.3
Incr Delay (d2), s/veh	0.0	13.3	0.0	0.1	0.0	0.0	0.0	2.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	36.3	0.0	16.7	0.0	0.0	0.0	20.3
1st-Term Q (Q1), veh/ln	0.0	8.9	0.0	2.1	0.0	0.0	0.0	19.1
2nd-Term Q (Q2), veh/ln	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	11.0	0.0	2.2	0.0	0.0	0.0	19.9
%ile Storage Ratio (RQ%)	0.00	0.92	0.00	0.03	0.00	0.00	0.00	0.52
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		52.8						
HCM 2010 LOS		D						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	500	1315	210	320	1004	145	260	815	273	347	1058	494
Future Volume (veh/h)	500	1315	210	320	1004	145	260	815	273	347	1058	494
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	521	1370	219	333	1046	151	271	849	284	361	1102	515
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	505	1524	474	392	1357	423	325	1301	405	414	1432	446
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.15	0.30	0.30	0.11	0.27	0.27	0.10	0.26	0.26	0.12	0.28	0.28
Ln Grp Delay, s/veh	99.8	49.1	37.4	65.2	44.9	38.0	69.0	42.3	50.0	69.2	43.4	135.3
Ln Grp LOS	F	D	D	E	D	D	E	D	D	E	D	F
Approach Vol, veh/h		2110			1530			1404			1978	
Approach Delay, s/veh		60.4			48.6			49.0			72.0	
Approach LOS		E			D			D			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	20.6	37.0	20.1	42.4	17.4	40.1	24.0	38.4
Change Period (Y+Rc), s	6.0	6.0	6.4	6.4	6.0	6.0	6.4	6.4
Max Green (Gmax), s	15.0	31.0	15.6	33.6	12.0	34.0	17.6	31.6
Max Allow Headway (MAH), s	3.8	4.9	3.8	5.1	3.8	4.9	3.8	5.1
Max Q Clear (g_c+I1), s	14.5	21.7	13.4	33.0	11.4	36.1	19.6	24.8
Green Ext Time (g_e), s	0.1	8.2	0.3	0.6	0.1	0.0	0.0	6.3
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3408		3442		3408		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5036		5085		5036		5085

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		1583		1568		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	361	0	333	0	271	0	521	0
Grp Sat Flow (s), veh/h/ln	1704	0	1721	0	1704	0	1721	0
Q Serve Time (g_s), s	12.5	0.0	11.4	0.0	9.4	0.0	17.6	0.0
Cycle Q Clear Time (g_c), s	12.5	0.0	11.4	0.0	9.4	0.0	17.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	414	0	392	0	325	0	505	0
V/C Ratio (X)	0.87	0.00	0.85	0.00	0.83	0.00	1.03	0.00
Avail Cap (c_a), veh/h	426	0	447	0	341	0	505	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	51.8	0.0	52.2	0.0	53.3	0.0	51.2	0.0
Incr Delay (d2), s/veh	17.4	0.0	13.0	0.0	15.6	0.0	48.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	69.2	0.0	65.2	0.0	69.0	0.0	99.8	0.0
1st-Term Q (Q1), veh/ln	5.9	0.0	5.4	0.0	4.4	0.0	8.3	0.0
2nd-Term Q (Q2), veh/ln	1.0	0.0	0.7	0.0	0.7	0.0	3.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	6.9	0.0	6.1	0.0	5.1	0.0	11.7	0.0
%ile Storage Ratio (RQ%)	0.60	0.00	0.46	0.00	0.38	0.00	0.99	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	4.1	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	3	0	3	0	3
Grp Vol (v), veh/h	0	849	0	1370	0	1102	0	1046
Grp Sat Flow (s), veh/h/ln	0	1679	0	1695	0	1679	0	1695
Q Serve Time (g_s), s	0.0	18.0	0.0	31.0	0.0	24.1	0.0	22.8
Cycle Q Clear Time (g_c), s	0.0	18.0	0.0	31.0	0.0	24.1	0.0	22.8
Lane Grp Cap (c), veh/h	0	1301	0	1524	0	1432	0	1357
V/C Ratio (X)	0.00	0.65	0.00	0.90	0.00	0.77	0.00	0.77
Avail Cap (c_a), veh/h	0	1301	0	1524	0	1432	0	1357
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	39.7	0.0	40.3	0.0	39.3	0.0	40.6
Incr Delay (d2), s/veh	0.0	2.6	0.0	8.8	0.0	4.0	0.0	4.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	42.3	0.0	49.1	0.0	43.4	0.0	44.9
1st-Term Q (Q1), veh/ln	0.0	8.3	0.0	14.5	0.0	11.1	0.0	10.7

2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	1.2	0.0	0.5	0.0	0.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	8.6	0.0	15.7	0.0	11.7	0.0	11.2
%ile Storage Ratio (RQ%)	0.00	0.49	0.00	0.64	0.00	0.45	0.00	1.92
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	284	0	219	0	515	0	151
Grp Sat Flow (s), veh/h/ln	0	1568	0	1583	0	1568	0	1583
Q Serve Time (g_s), s	0.0	19.7	0.0	13.5	0.0	34.1	0.0	9.3
Cycle Q Clear Time (g_c), s	0.0	19.7	0.0	13.5	0.0	34.1	0.0	9.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	405	0	474	0	446	0	423
V/C Ratio (X)	0.00	0.70	0.00	0.46	0.00	1.15	0.00	0.36
Avail Cap (c_a), veh/h	0	405	0	474	0	446	0	423
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	40.3	0.0	34.2	0.0	42.9	0.0	35.6
Incr Delay (d2), s/veh	0.0	9.7	0.0	3.2	0.0	92.4	0.0	2.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	50.0	0.0	37.4	0.0	135.3	0.0	38.0
1st-Term Q (Q1), veh/ln	0.0	8.5	0.0	5.9	0.0	14.7	0.0	4.1
2nd-Term Q (Q2), veh/ln	0.0	1.1	0.0	0.4	0.0	11.4	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	9.6	0.0	6.3	0.0	26.2	0.0	4.3
%ile Storage Ratio (RQ%)	0.00	0.54	0.00	0.26	0.00	1.01	0.00	0.75
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	17.3	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		58.8						
HCM 2010 LOS		E						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	107	2039	18	1	1038	117	114	38	0	264	112	303
Future Volume (veh/h)	107	2039	18	1	1038	117	114	38	0	264	112	303
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	116	2216	20	1	1128	127	124	41	0	287	122	329
Adj No. of Lanes	1	3	0	0	2	0	1	1	1	2	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	73	3861	35	23	2079	233	36	223	190	70	223	190
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.04	0.74	0.74	0.66	0.66	0.66	0.02	0.12	0.00	0.02	0.12	0.12
Ln Grp Delay, s/veh	400.0	10.2	11.0	15.4	0.0	15.6	1244.9	65.4	0.0	1510.9	75.9	421.4
Ln Grp LOS	F	B	B	B		B	F	E		F	E	F
Approach Vol, veh/h		2352			1256			165			738	
Approach Delay, s/veh		29.7			15.5			951.8			788.0	
Approach LOS		C			B			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6	7	8
Case No	2.0	3.0		4.0	2.0	3.0	2.0	8.0
Phs Duration (G+Y+Rc), s	9.0	26.0		126.0	9.0	26.0	13.0	113.0
Change Period (Y+Rc), s	* 5.7	6.5		6.4	* 5.7	6.5	6.4	6.4
Max Green (Gmax), s	* 3.3	19.5		119.6	* 3.3	19.5	6.6	100.6
Max Allow Headway (MAH), s	3.8	4.4		5.3	3.8	4.4	3.8	5.3
Max Q Clear (g_c+I1), s	5.3	5.2		32.8	5.3	21.5	8.6	32.6
Green Ext Time (g_e), s	0.0	1.8		70.4	0.0	0.0	0.0	57.5
Prob of Phs Call (p_c)	1.00	1.00		1.00	1.00	1.00	0.99	1.00
Prob of Max Out (p_x)	0.00	0.00		0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1				5		7	3
Mvmt Sat Flow, veh/h	3408				1757		1774	0

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1845		5198		1845		3140

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		47		1568		353

Left Lane Group Data								
Assigned Mvmt	1	0	0	0	5	0	7	3
Lane Assignment	(Prot)				(Prot)		(Prot)	L+T

Lanes in Grp	2	0	0	0	1	0	1	1
Grp Vol (v), veh/h	287	0	0	0	124	0	116	668
Grp Sat Flow (s), veh/h/ln	1704	0	0	0	1757	0	1774	1860
Q Serve Time (g_s), s	3.3	0.0	0.0	0.0	3.3	0.0	6.6	0.0
Cycle Q Clear Time (g_c), s	3.3	0.0	0.0	0.0	3.3	0.0	6.6	30.4
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	173
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	106.6
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	88.8
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	94.9
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.4
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	70	0	0	0	36	0	73	1254
V/C Ratio (X)	4.11	0.00	0.00	0.00	3.44	0.00	1.60	0.53
Avail Cap (c_a), veh/h	70	0	0	0	36	0	73	1254
Upstream Filter (I)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.64
Uniform Delay (d1), s/veh	78.8	0.0	0.0	0.0	78.8	0.0	77.2	14.3
Incr Delay (d2), s/veh	1432.0	0.0	0.0	0.0	1166.0	0.0	322.8	1.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	1510.9	0.0	0.0	0.0	1244.9	0.0	400.0	15.4
1st-Term Q (Q1), veh/ln	1.6	0.0	0.0	0.0	1.6	0.0	3.2	15.6
2nd-Term Q (Q2), veh/ln	13.9	0.0	0.0	0.0	11.7	0.0	6.5	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	15.4	0.0	0.0	0.0	13.3	0.0	9.8	15.9
%ile Storage Ratio (RQ%)	3.95	0.00	0.00	0.00	2.43	0.00	0.59	0.21
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	54.3	0.0	0.0	0.0	22.0	0.0	10.8	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	1.0	0.0	0.0	0.0	0.9	0.0	0.4	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		
Lanes in Grp	0	1	0	2	0	1	0	0
Grp Vol (v), veh/h	0	41	0	1445	0	122	0	0
Grp Sat Flow (s), veh/h/ln	0	1845	0	1695	0	1845	0	0
Q Serve Time (g_s), s	0.0	3.2	0.0	30.7	0.0	10.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	3.2	0.0	30.7	0.0	10.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	223	0	2518	0	223	0	0
V/C Ratio (X)	0.00	0.18	0.00	0.57	0.00	0.55	0.00	0.00
Avail Cap (c_a), veh/h	0	223	0	2518	0	223	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	63.6	0.0	9.3	0.0	66.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.8	0.0	1.0	0.0	9.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	65.4	0.0	10.2	0.0	75.9	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.6	0.0	14.2	0.0	5.1	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.3	0.0	0.6	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.8	0.0	14.6	0.0	5.7	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.20	0.00	0.17	0.00	0.29	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	791	0	329	0	588
Grp Sat Flow (s), veh/h/ln	0	1568	0	1854	0	1568	0	1633
Q Serve Time (g_s), s	0.0	0.0	0.0	30.8	0.0	19.5	0.0	30.6
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	30.8	0.0	19.5	0.0	30.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.03	0.00	1.00	0.00	0.22
Lane Grp Cap (c), veh/h	0	190	0	1378	0	190	0	1081
V/C Ratio (X)	0.00	0.00	0.00	0.57	0.00	1.73	0.00	0.54
Avail Cap (c_a), veh/h	0	190	0	1378	0	190	0	1081
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.64
Uniform Delay (d1), s/veh	0.0	0.0	0.0	9.3	0.0	70.8	0.0	14.4
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.7	0.0	350.7	0.0	1.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	11.0	0.0	421.4	0.0	15.6
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	15.6	0.0	8.5	0.0	13.7
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.7	0.0	18.5	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	16.3	0.0	27.0	0.0	14.1
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.19	0.00	1.40	0.00	0.19
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	34.8	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	183.5
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	488	1113	219	168	698	130	277	1228	146	438	2015	276
Future Volume (veh/h)	488	1113	219	168	698	130	277	1228	146	438	2015	276
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	503	1147	226	173	720	134	286	1266	151	452	2077	285
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	348	1000	311	218	808	251	331	2326	724	399	2427	756
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.10	0.20	0.20	0.06	0.16	0.16	0.10	0.46	0.46	0.12	0.48	0.48
Ln Grp Delay, s/veh	275.0	133.4	62.6	82.1	78.2	65.1	88.4	32.6	26.9	158.8	41.6	28.3
Ln Grp LOS	F	F	E	F	E	E	F	C	C	F	D	C
Approach Vol, veh/h		1876			1027			1703			2814	
Approach Delay, s/veh		162.8			77.2			41.5			59.1	
Approach LOS		F			E			D			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	26.0	82.6	16.8	38.6	22.7	85.8	23.0	32.4
Change Period (Y+Rc), s	6.8	6.8	6.4	6.4	6.8	6.8	6.4	6.4
Max Green (Gmax), s	19.2	73.2	16.6	28.6	19.2	73.2	16.6	28.6
Max Allow Headway (MAH), s	3.8	5.1	3.8	5.0	3.8	5.1	3.8	5.0
Max Q Clear (g_c+I1), s	21.2	31.6	10.1	34.2	15.6	61.6	18.6	24.8
Green Ext Time (g_e), s	0.0	38.2	0.3	0.0	0.3	11.3	0.0	1.3
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	0.09	1.00	1.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3408		3442		3408		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5036		5085		5036		5085

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		1583		1568		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	452	0	173	0	286	0	503	0
Grp Sat Flow (s), veh/h/ln	1704	0	1721	0	1704	0	1721	0
Q Serve Time (g_s), s	19.2	0.0	8.1	0.0	13.6	0.0	16.6	0.0
Cycle Q Clear Time (g_c), s	19.2	0.0	8.1	0.0	13.6	0.0	16.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	399	0	218	0	331	0	348	0
V/C Ratio (X)	1.13	0.00	0.79	0.00	0.86	0.00	1.44	0.00
Avail Cap (c_a), veh/h	399	0	348	0	399	0	348	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	0.09	0.00
Uniform Delay (d1), s/veh	72.4	0.0	75.7	0.0	73.0	0.0	73.7	0.0
Incr Delay (d2), s/veh	86.4	0.0	6.4	0.0	15.4	0.0	201.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	158.8	0.0	82.1	0.0	88.4	0.0	275.0	0.0
1st-Term Q (Q1), veh/ln	9.0	0.0	3.9	0.0	6.4	0.0	7.9	0.0
2nd-Term Q (Q2), veh/ln	4.8	0.0	0.2	0.0	0.7	0.0	9.7	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	13.8	0.0	4.1	0.0	7.1	0.0	17.6	0.0
%ile Storage Ratio (RQ%)	0.62	0.00	0.21	0.00	0.45	0.00	0.90	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	13.2	0.0	0.0	0.0	0.0	0.0	38.7	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.0	0.0	0.0	0.0	0.4	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	3	0	3	0	3
Grp Vol (v), veh/h	0	1266	0	1147	0	2077	0	720
Grp Sat Flow (s), veh/h/ln	0	1679	0	1695	0	1679	0	1695
Q Serve Time (g_s), s	0.0	29.6	0.0	32.2	0.0	59.6	0.0	22.8
Cycle Q Clear Time (g_c), s	0.0	29.6	0.0	32.2	0.0	59.6	0.0	22.8
Lane Grp Cap (c), veh/h	0	2326	0	1000	0	2427	0	808
V/C Ratio (X)	0.00	0.54	0.00	1.15	0.00	0.86	0.00	0.89
Avail Cap (c_a), veh/h	0	2326	0	1000	0	2427	0	887
Upstream Filter (I)	0.00	1.00	0.00	0.09	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	31.7	0.0	65.9	0.0	37.5	0.0	67.6
Incr Delay (d2), s/veh	0.0	0.9	0.0	67.5	0.0	4.1	0.0	10.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	32.6	0.0	133.4	0.0	41.6	0.0	78.2
1st-Term Q (Q1), veh/ln	0.0	13.7	0.0	15.1	0.0	27.5	0.0	10.7

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	6.3	0.0	0.9	0.0	0.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	13.9	0.0	21.3	0.0	28.4	0.0	11.5
%ile Storage Ratio (RQ%)	0.00	0.65	0.00	0.29	0.00	1.10	0.00	0.19
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	36.8	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	151	0	226	0	285	0	134
Grp Sat Flow (s), veh/h/ln	0	1568	0	1583	0	1568	0	1583
Q Serve Time (g_s), s	0.0	9.4	0.0	21.9	0.0	18.9	0.0	12.8
Cycle Q Clear Time (g_c), s	0.0	9.4	0.0	21.9	0.0	18.9	0.0	12.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	724	0	311	0	756	0	251
V/C Ratio (X)	0.00	0.21	0.00	0.73	0.00	0.38	0.00	0.53
Avail Cap (c_a), veh/h	0	724	0	311	0	756	0	276
Upstream Filter (I)	0.00	1.00	0.00	0.09	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	26.3	0.0	61.7	0.0	26.9	0.0	63.4
Incr Delay (d2), s/veh	0.0	0.7	0.0	0.8	0.0	1.4	0.0	1.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	26.9	0.0	62.6	0.0	28.3	0.0	65.1
1st-Term Q (Q1), veh/ln	0.0	4.1	0.0	9.6	0.0	8.2	0.0	5.6
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.0	0.3	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	4.2	0.0	9.7	0.0	8.5	0.0	5.7
%ile Storage Ratio (RQ%)	0.00	0.20	0.00	0.13	0.00	0.33	0.00	0.20
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		83.8						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	943	1556	35	107	745	577	19	19	163	487	33	35
Future Volume (veh/h)	943	1556	35	107	745	577	19	19	163	487	33	35
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1696	1696	1696	1696	1696	1696	1900	1696	1696	1696	1696	1696
Adj Flow Rate, veh/h	982	1621	36	111	776	0	20	20	170	507	34	0
Adj No. of Lanes	2	2	1	1	2	1	0	1	1	2	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	12	12	12	12	12	12	12	12	12	12	12	12
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	1083	1835	821	134	989	443	0	167	142	132	320	272
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.35	0.57	0.57	0.08	0.31	0.00	0.00	0.10	0.10	0.04	0.19	0.00
Ln Grp Delay, s/veh	47.1	31.4	12.7	61.2	42.7	0.0	0.0	55.0	198.0	1360.6	44.8	0.0
Ln Grp LOS	D	C	B	E	D			E	F	F	D	
Approach Vol, veh/h		2639			887			190			541	
Approach Delay, s/veh		37.0			45.0			183.0			1277.9	
Approach LOS		D			D			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	0.0	3.0
Phs Duration (G+Y+Rc), s	53.1	47.9	12.0	20.0	18.2	82.8	0.0	32.0
Change Period (Y+Rc), s	7.1	7.1	6.4	6.9	7.1	7.1	6.9	* 6.9
Max Green (Gmax), s	67.9	18.9	5.6	13.1	30.9	55.9	13.1	* 5.6
Max Allow Headway (MAH), s	3.8	5.3	3.8	4.4	3.8	5.3	0.0	4.4
Max Q Clear (g_c+I1), s	41.7	31.2	7.6	15.1	11.0	59.9	0.0	4.2
Green Ext Time (g_e), s	4.3	0.0	0.0	0.0	0.3	0.0	0.0	0.1
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.98	1.00	0.00	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3134		3134		1616		0	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3223		1696		3223		1696

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1442		1442		1442		1442

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)			

Lanes in Grp	2	0	2	0	1	0	0	0
Grp Vol (v), veh/h	982	0	507	0	111	0	0	0
Grp Sat Flow (s), veh/h/ln	1567	0	1567	0	1616	0	0	0
Q Serve Time (g_s), s	39.7	0.0	5.6	0.0	9.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	39.7	0.0	5.6	0.0	9.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	1083	0	132	0	134	0	0	0
V/C Ratio (X)	0.91	0.00	3.84	0.00	0.83	0.00	0.00	0.00
Avail Cap (c_a), veh/h	1600	0	132	0	375	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.09	0.00	0.00	0.00
Uniform Delay (d1), s/veh	41.5	0.0	63.7	0.0	60.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	5.6	0.0	1296.9	0.0	1.2	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	47.1	0.0	1360.6	0.0	61.2	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	17.2	0.0	2.4	0.0	4.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.8	0.0	23.8	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	18.0	0.0	26.2	0.0	4.1	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.57	0.00	1.16	0.00	0.33	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	93.8	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	776	0	20	0	1621	0	34
Grp Sat Flow (s), veh/h/ln	0	1612	0	1696	0	1612	0	1696
Q Serve Time (g_s), s	0.0	29.2	0.0	1.4	0.0	57.9	0.0	2.2
Cycle Q Clear Time (g_c), s	0.0	29.2	0.0	1.4	0.0	57.9	0.0	2.2
Lane Grp Cap (c), veh/h	0	989	0	167	0	1835	0	320
V/C Ratio (X)	0.00	0.78	0.00	0.12	0.00	0.88	0.00	0.11
Avail Cap (c_a), veh/h	0	989	0	167	0	1835	0	320
Upstream Filter (I)	0.00	0.09	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	42.1	0.0	54.7	0.0	24.8	0.0	44.7
Incr Delay (d2), s/veh	0.0	0.6	0.0	0.3	0.0	6.6	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	42.7	0.0	55.0	0.0	31.4	0.0	44.8
1st-Term Q (Q1), veh/ln	0.0	13.0	0.0	0.7	0.0	25.7	0.0	1.0

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	1.7	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	13.1	0.0	0.7	0.0	27.3	0.0	1.1
%ile Storage Ratio (RQ%)	0.00	0.18	0.00	0.04	0.00	0.24	0.00	0.05
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	170	0	36	0	0
Grp Sat Flow (s), veh/h/ln	0	1442	0	1442	0	1442	0	1442
Q Serve Time (g_s), s	0.0	0.0	0.0	13.1	0.0	1.5	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	13.1	0.0	1.5	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	443	0	142	0	821	0	272
V/C Ratio (X)	0.00	0.00	0.00	1.20	0.00	0.04	0.00	0.00
Avail Cap (c_a), veh/h	0	443	0	142	0	821	0	272
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	60.0	0.0	12.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	138.1	0.0	0.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	198.0	0.0	12.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	5.2	0.0	0.6	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	5.4	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	10.7	0.0	0.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.69	0.00	0.07	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	7.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	202.9
HCM 2010 LOS	F

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	429	1544	2195	371	716	3144
Future Volume (veh/h)	429	1544	2195	371	716	3144
Number	3	18	2	12	1	6
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1845	1845	1845	1845
Adj Flow Rate, veh/h	447	1608	2286	0	746	3275
Adj No. of Lanes	2	2	3	1	2	3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	3	3	3	3
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	881	713	2306	718	741	3839
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.26	0.26	0.46	0.00	0.22	0.76
Ln Grp Delay, s/veh	22.2	594.9	31.3	0.0	61.8	8.2
Ln Grp LOS	C	F	C		F	A
Approach Vol, veh/h	2055		2286			4021
Approach Delay, s/veh	470.3		31.3			18.1
Approach LOS	F		C			B

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8			6		
Case No	2.0	7.0	9.0			4.0		
Phs Duration (G+Y+Rc), s	21.0	38.0	24.4			59.0		
Change Period (Y+Rc), s	6.0	6.0	6.4			6.0		
Max Green (Gmax), s	15.0	18.0	18.0			39.0		
Max Allow Headway (MAH), s	3.8	5.2	4.0			5.2		
Max Q Clear (g_c+I1), s	17.0	33.1	20.0			32.5		
Green Ext Time (g_e), s	0.0	0.0	0.0			6.5		
Prob of Phs Call (p_c)	1.00	1.00	1.00			1.00		
Prob of Max Out (p_x)	1.00	0.00	1.00			0.00		

Left-Turn Movement Data			
Assigned Mvmt	1	5	3
Mvmt Sat Flow, veh/h	3408	0	3375

Through Movement Data			
Assigned Mvmt		2	8			6
Mvmt Sat Flow, veh/h		5202	0			5202

Right-Turn Movement Data			
Assigned Mvmt		12	18			16
Mvmt Sat Flow, veh/h		1568	2733			0

Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	0	0
Lane Assignment	(Prot)							

Lanes in Grp	2	0	2	0	0	0	0	0
Grp Vol (v), veh/h	746	0	447	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1704	0	1688	0	0	0	0	0
Q Serve Time (g_s), s	15.0	0.0	7.8	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	15.0	0.0	7.8	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1688	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	31.6	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	741	0	881	0	0	0	0	0
V/C Ratio (X)	1.01	0.00	0.51	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	741	0	881	0	0	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	27.0	0.0	21.7	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	34.8	0.0	0.5	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	61.8	0.0	22.2	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	7.0	0.0	3.6	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	3.6	0.0	0.1	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	10.6	0.0	3.7	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.63	0.00	0.20	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	3	0	0	0	3	0	0
Grp Vol (v), veh/h	0	2286	0	0	0	3275	0	0
Grp Sat Flow (s), veh/h/ln	0	1679	0	0	0	1679	0	0
Q Serve Time (g_s), s	0.0	31.1	0.0	0.0	0.0	30.5	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	31.1	0.0	0.0	0.0	30.5	0.0	0.0
Lane Grp Cap (c), veh/h	0	2306	0	0	0	3839	0	0
V/C Ratio (X)	0.00	0.99	0.00	0.00	0.00	0.85	0.00	0.00
Avail Cap (c_a), veh/h	0	2306	0	0	0	3839	0	0
Upstream Filter (I)	0.00	0.61	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	18.6	0.0	0.0	0.0	5.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	12.8	0.0	0.0	0.0	2.6	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	31.3	0.0	0.0	0.0	8.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	14.2	0.0	0.0	0.0	13.6	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	2.7	0.0	0.0	0.0	0.9	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	16.9	0.0	0.0	0.0	14.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.27	0.00	0.00	0.00	0.35	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lane Assignment		R	R					
Lanes in Grp	0	1	2	0	0	0	0	0
Grp Vol (v), veh/h	0	0	1608	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1568	1367	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	18.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	18.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	718	713	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	2.26	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	718	713	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	25.5	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	569.4	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	594.9	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	6.7	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	56.4	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	63.1	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	2.51	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	223.8	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		132.9						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	729	1329	329	178	491	131	103	112	75	243	271	894
Future Volume (veh/h)	729	1329	329	178	491	131	103	112	75	243	271	894
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1712	1712	1712	1712	1712	1712	1900	1712	1712	1712
Adj Flow Rate, veh/h	759	1384	343	185	511	0	107	117	78	253	282	931
Adj No. of Lanes	1	3	1	1	3	1	1	2	0	1	1	2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	11	11	11	11	11	11	11	11	11	11	11	11
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	433	2023	630	208	1377	429	127	167	104	271	299	447
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.27	0.43	0.43	0.13	0.29	0.00	0.08	0.09	0.09	0.17	0.17	0.17
Ln Grp Delay, s/veh	398.4	36.7	34.0	81.0	45.5	0.0	86.8	76.9	79.7	102.0	102.5	560.9
Ln Grp LOS	F	D	C	F	D		F	E	E	F	F	F
Approach Vol, veh/h		2486			696			302			1466	
Approach Delay, s/veh		146.8			54.9			81.3			393.5	
Approach LOS		F			D			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	4.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	50.0	54.2	34.2	21.6	27.9	76.4	20.1	35.6
Change Period (Y+Rc), s	7.5	7.1	7.6	* 7.7	7.5	7.1	* 7.7	* 7.7
Max Green (Gmax), s	42.5	37.9	27.4	* 22	42.5	37.9	* 22	* 27
Max Allow Headway (MAH), s	3.8	5.1	3.8	4.5	3.8	5.1	3.8	4.5
Max Q Clear (g_c+I1), s	44.5	15.9	26.5	12.2	19.9	40.2	12.4	29.9
Green Ext Time (g_e), s	0.0	15.8	0.1	1.7	0.5	0.0	0.2	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.56	0.00	0.00	0.00	1.00

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	1630	1630	1630	1630

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	4673	1927	4673	1712

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	1455	1199	1455	2561

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	759	0	253	0	185	0	107	0
Grp Sat Flow (s), veh/h/ln	1630	0	1630	0	1630	0	1630	0
Q Serve Time (g_s), s	42.5	0.0	24.5	0.0	17.9	0.0	10.4	0.0
Cycle Q Clear Time (g_c), s	42.5	0.0	24.5	0.0	17.9	0.0	10.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	433	0	271	0	208	0	127	0
V/C Ratio (X)	1.75	0.00	0.93	0.00	0.89	0.00	0.85	0.00
Avail Cap (c_a), veh/h	433	0	279	0	433	0	227	0
Upstream Filter (I)	0.09	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	58.8	0.0	65.8	0.0	68.7	0.0	72.8	0.0
Incr Delay (d2), s/veh	339.6	0.0	36.2	0.0	12.3	0.0	14.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	398.4	0.0	102.0	0.0	81.0	0.0	86.8	0.0
1st-Term Q (Q1), veh/ln	19.1	0.0	11.0	0.0	8.1	0.0	4.7	0.0
2nd-Term Q (Q2), veh/ln	40.9	0.0	2.7	0.0	0.7	0.0	0.5	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	60.0	0.0	13.8	0.0	8.8	0.0	5.2	0.0
%ile Storage Ratio (RQ%)	2.22	0.00	3.40	0.00	0.57	0.00	0.28	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	81.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	1	0	3	0	1
Grp Vol (v), veh/h	0	511	0	97	0	1384	0	282
Grp Sat Flow (s), veh/h/ln	0	1558	0	1626	0	1558	0	1712
Q Serve Time (g_s), s	0.0	13.9	0.0	9.3	0.0	38.2	0.0	26.0
Cycle Q Clear Time (g_c), s	0.0	13.9	0.0	9.3	0.0	38.2	0.0	26.0
Lane Grp Cap (c), veh/h	0	1377	0	141	0	2023	0	299
V/C Ratio (X)	0.00	0.37	0.00	0.69	0.00	0.68	0.00	0.94
Avail Cap (c_a), veh/h	0	1377	0	227	0	2023	0	299
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	44.7	0.0	71.0	0.0	36.5	0.0	65.3
Incr Delay (d2), s/veh	0.0	0.8	0.0	5.9	0.0	0.2	0.0	37.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	45.5	0.0	76.9	0.0	36.7	0.0	102.5
1st-Term Q (Q1), veh/ln	0.0	6.0	0.0	4.2	0.0	16.4	0.0	12.3

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.2	0.0	0.0	0.0	3.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	6.1	0.0	4.4	0.0	16.4	0.0	15.4
%ile Storage Ratio (RQ%)	0.00	0.07	0.00	0.24	0.00	0.13	0.00	0.46
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	2
Grp Vol (v), veh/h	0	0	0	98	0	343	0	931
Grp Sat Flow (s), veh/h/ln	0	1455	0	1500	0	1455	0	1280
Q Serve Time (g_s), s	0.0	0.0	0.0	10.2	0.0	28.0	0.0	27.9
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	10.2	0.0	28.0	0.0	27.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.80	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	429	0	130	0	630	0	447
V/C Ratio (X)	0.00	0.00	0.00	0.75	0.00	0.54	0.00	2.08
Avail Cap (c_a), veh/h	0	429	0	209	0	630	0	447
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	71.4	0.0	33.7	0.0	66.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	8.4	0.0	0.3	0.0	494.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	79.7	0.0	34.0	0.0	560.9
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	4.2	0.0	11.2	0.0	9.9
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.3	0.0	0.1	0.0	30.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	4.5	0.0	11.3	0.0	40.6
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.25	0.00	0.63	0.00	1.21
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	121.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	202.9
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	207	1052	175	526	1130	219	146	565	166	678	1530	207
Future Volume (veh/h)	207	1052	175	526	1130	219	146	565	166	678	1530	207
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1776	1776	1776	1776	1776	1776	1776	1776	1776	1776	1776
Adj Flow Rate, veh/h	218	1107	184	554	1189	231	154	595	175	714	1611	218
Adj No. of Lanes	2	3	1	2	3	2	2	3	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	7	7	7	7	7	7	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	264	1302	405	213	1227	672	196	1751	545	374	1989	619
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.27	0.27	0.06	0.25	0.25	0.06	0.36	0.36	0.11	0.41	0.41
Ln Grp Delay, s/veh	80.4	59.5	49.6	804.9	75.2	47.5	87.8	35.2	35.2	486.5	41.7	31.0
Ln Grp LOS	F	E	D	F	E	D	F	D	D	F	D	C
Approach Vol, veh/h		1509			1974			924			2543	
Approach Delay, s/veh		61.3			276.7			44.0			165.7	
Approach LOS		E			F			D			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	19.3	45.5	24.0	62.2	17.0	47.8	16.6	69.6
Change Period (Y+Rc), s	7.2	* 7.3	6.8	* 7.6	7.2	* 7.3	* 7.6	* 7.6
Max Green (Gmax), s	15.8	* 31	17.2	* 59	9.8	* 37	* 9.4	* 65
Max Allow Headway (MAH), s	3.8	5.1	3.8	5.1	3.8	5.1	3.8	5.1
Max Q Clear (g_c+I1), s	11.9	38.7	19.2	15.5	11.8	34.7	9.0	46.3
Green Ext Time (g_e), s	0.3	0.0	0.0	29.4	0.0	1.9	0.0	15.6
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	0.93	0.00	1.00	0.53	1.00	0.00	1.00	0.79

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3281		3281		3281		3281	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		4848		4848		4848		4848

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		2656		1509		1509		1509

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	218	0	714	0	554	0	154	0
Grp Sat Flow (s), veh/h/ln	1640	0	1640	0	1640	0	1640	0
Q Serve Time (g_s), s	9.9	0.0	17.2	0.0	9.8	0.0	7.0	0.0
Cycle Q Clear Time (g_c), s	9.9	0.0	17.2	0.0	9.8	0.0	7.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	264	0	374	0	213	0	196	0
V/C Ratio (X)	0.83	0.00	1.91	0.00	2.60	0.00	0.79	0.00
Avail Cap (c_a), veh/h	343	0	374	0	213	0	204	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	68.4	0.0	66.9	0.0	70.6	0.0	70.1	0.0
Incr Delay (d2), s/veh	12.1	0.0	419.6	0.0	734.3	0.0	17.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	80.4	0.0	486.5	0.0	804.9	0.0	87.8	0.0
1st-Term Q (Q1), veh/ln	4.5	0.0	7.8	0.0	4.4	0.0	3.2	0.0
2nd-Term Q (Q2), veh/ln	0.4	0.0	21.8	0.0	21.7	0.0	0.5	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	4.9	0.0	29.6	0.0	26.2	0.0	3.7	0.0
%ile Storage Ratio (RQ%)	0.28	0.00	0.59	0.00	1.33	0.00	0.10	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	85.1	0.0	85.3	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.5	0.0	0.7	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	3	0	3	0	3
Grp Vol (v), veh/h	0	1189	0	595	0	1107	0	1611
Grp Sat Flow (s), veh/h/ln	0	1616	0	1616	0	1616	0	1616
Q Serve Time (g_s), s	0.0	36.7	0.0	13.5	0.0	32.7	0.0	44.3
Cycle Q Clear Time (g_c), s	0.0	36.7	0.0	13.5	0.0	32.7	0.0	44.3
Lane Grp Cap (c), veh/h	0	1227	0	1751	0	1302	0	1989
V/C Ratio (X)	0.00	0.97	0.00	0.34	0.00	0.85	0.00	0.81
Avail Cap (c_a), veh/h	0	1227	0	1901	0	1302	0	2100
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	55.8	0.0	35.1	0.0	52.4	0.0	39.3
Incr Delay (d2), s/veh	0.0	19.3	0.0	0.1	0.0	7.1	0.0	2.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	75.2	0.0	35.2	0.0	59.5	0.0	41.7
1st-Term Q (Q1), veh/ln	0.0	16.4	0.0	6.0	0.0	14.6	0.0	19.7

2nd-Term Q (Q2), veh/ln	0.0	2.2	0.0	0.0	0.0	0.9	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	18.6	0.0	6.0	0.0	15.4	0.0	20.1
%ile Storage Ratio (RQ%)	0.00	0.10	0.00	0.16	0.00	0.14	0.00	0.40
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	2	0	1	0	1	0	1
Grp Vol (v), veh/h	0	231	0	175	0	184	0	218
Grp Sat Flow (s), veh/h/ln	0	1328	0	1509	0	1509	0	1509
Q Serve Time (g_s), s	0.0	10.7	0.0	12.6	0.0	15.3	0.0	15.0
Cycle Q Clear Time (g_c), s	0.0	10.7	0.0	12.6	0.0	15.3	0.0	15.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	672	0	545	0	405	0	619
V/C Ratio (X)	0.00	0.34	0.00	0.32	0.00	0.45	0.00	0.35
Avail Cap (c_a), veh/h	0	672	0	592	0	405	0	654
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	46.1	0.0	34.8	0.0	46.0	0.0	30.7
Incr Delay (d2), s/veh	0.0	1.4	0.0	0.3	0.0	3.6	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	47.5	0.0	35.2	0.0	49.6	0.0	31.0
1st-Term Q (Q1), veh/ln	0.0	3.9	0.0	5.3	0.0	6.4	0.0	6.2
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.0	0.4	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	4.1	0.0	5.3	0.0	6.8	0.0	6.3
%ile Storage Ratio (RQ%)	0.00	0.16	0.00	0.14	0.00	0.43	0.00	0.13
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	158.4
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	3170	758	1240	1965	1	0	0	966	0	0	250
Future Volume (veh/h)	0	3170	758	1240	1965	1	0	0	966	0	0	250
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	1900	0	0	1863	0	0	1863
Adj Flow Rate, veh/h	0	3268	781	1278	2026	1	0	0	996	0	0	258
Adj No. of Lanes	0	3	2	2	3	0	0	0	3	0	0	3
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	2	2	2	2	2	0	0	2	0	0	2
Opposing Right Turn Influence	No			Yes			No			No		
Cap, veh/h	0	3320	1819	942	5057	2	0	0	0	0	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.00	0.65	0.65	0.27	0.96	0.96	0.00	0.00	0.00	0.00	0.00	0.00
Ln Grp Delay, s/veh	0.0	41.7	15.3	224.7	0.2	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Ln Grp LOS		D	B	F	A	A						
Approach Vol, veh/h		4049			3305			0			0	
Approach Delay, s/veh		36.6			87.0			0.0			0.0	
Approach LOS		D			F							

Timer:	1	2	3	4	5	6	7	8
Assigned Phs			3	4				8
Case No			2.0	7.0				4.0
Phs Duration (G+Y+Rc), s			54.0	120.0				174.0
Change Period (Y+Rc), s			6.4	6.4				6.4
Max Green (Gmax), s			47.6	93.6				147.6
Max Allow Headway (MAH), s			3.8	5.1				5.1
Max Q Clear (g_c+I1), s			49.6	110.6				6.0
Green Ext Time (g_e), s			0.0	0.0				139.9
Prob of Phs Call (p_c)			1.00	1.00				1.00
Prob of Max Out (p_x)			1.00	0.00				0.00

Left-Turn Movement Data								
Assigned Mvmt			3	7				
Mvmt Sat Flow, veh/h			3442	0				

Through Movement Data								
Assigned Mvmt				4				8
Mvmt Sat Flow, veh/h				5253				5250

Right-Turn Movement Data								
Assigned Mvmt				14				18
Mvmt Sat Flow, veh/h				2787				3

Left Lane Group Data								
Assigned Mvmt	0	0	3	7	0	0	0	0
Lane Assignment			(Prot)					

Lanes in Grp	0	0	2	0	0	0	0	0
Grp Vol (v), veh/h	0	0	1278	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1721	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	47.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	47.6	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	113.6	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	942	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	1.36	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	942	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	63.2	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	161.5	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	224.7	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	22.6	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	21.1	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	43.7	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	1.88	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	84.1	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	3	0	0	0	2
Grp Vol (v), veh/h	0	0	0	3268	0	0	0	1308
Grp Sat Flow (s), veh/h/ln	0	0	0	1695	0	0	0	1695
Q Serve Time (g_s), s	0.0	0.0	0.0	108.6	0.0	0.0	0.0	4.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	108.6	0.0	0.0	0.0	4.0
Lane Grp Cap (c), veh/h	0	0	0	3320	0	0	0	3265
V/C Ratio (X)	0.00	0.00	0.00	0.98	0.00	0.00	0.00	0.40
Avail Cap (c_a), veh/h	0	0	0	3320	0	0	0	3265
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	0.0	0.0	29.3	0.0	0.0	0.0	0.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	12.4	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	41.7	0.0	0.0	0.0	0.2
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	50.5	0.0	0.0	0.0	1.6

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	54.3	0.0	0.0	0.0	1.7
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.90	0.00	0.00	0.00	0.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	0	0	18
Lane Assignment				R				T+R
Lanes in Grp	0	0	0	2	0	0	0	1
Grp Vol (v), veh/h	0	0	0	781	0	0	0	719
Grp Sat Flow (s), veh/h/ln	0	0	0	1393	0	0	0	1862
Q Serve Time (g_s), s	0.0	0.0	0.0	23.5	0.0	0.0	0.0	4.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	23.5	0.0	0.0	0.0	4.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	1819	0	0	0	1794
V/C Ratio (X)	0.00	0.00	0.00	0.43	0.00	0.00	0.00	0.40
Avail Cap (c_a), veh/h	0	0	0	1819	0	0	0	1794
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	0.0	0.0	14.6	0.0	0.0	0.0	0.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	15.3	0.0	0.0	0.0	0.3
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	9.0	0.0	0.0	0.0	1.8
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	9.2	0.0	0.0	0.0	1.8
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.33	0.00	0.00	0.00	0.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	59.3
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	345	277	387	407	335	143	789	369	215	1462	14
Future Volume (veh/h)	29	345	277	387	407	335	143	789	369	215	1462	14
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	33	392	315	440	462	381	162	897	419	244	1661	16
Adj No. of Lanes	1	2	1	2	2	0	1	2	0	1	2	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	40	780	349	140	441	362	90	1057	489	90	1614	16
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.02	0.22	0.22	0.04	0.24	0.24	0.05	0.47	0.47	0.05	0.47	0.47
Ln Grp Delay, s/veh	73.3	29.4	56.7	1020.1	89.4	92.5	444.9	30.5	32.0	847.2	61.8	61.5
Ln Grp LOS	E	C	E	F	F	F	F	C	C	F	F	F
Approach Vol, veh/h		740			1283			1478			1921	
Approach Delay, s/veh		43.0			409.5			76.6			161.4	
Approach LOS		D			F			E			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	3.0	2.0	4.0	2.0	4.0
Phs Duration (G+Y+Rc), s	9.0	44.6	8.0	23.4	9.0	44.6	6.4	25.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green (Gmax), s	4.5	39.5	3.5	19.5	4.5	39.5	3.5	19.5
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.1	3.8	5.3	3.8	5.1
Max Q Clear (g_c+I1), s	6.5	32.4	5.5	18.6	6.5	42.1	3.6	22.5
Green Ext Time (g_e), s	0.0	6.7	0.0	0.3	0.0	0.0	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.98	1.00	0.54	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	1691	3408	1691	1757

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	2242	3505	3424	1828

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	1037	1568	33	1504

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	2	0	1	0	1	0
Grp Vol (v), veh/h	244	0	440	0	162	0	33	0
Grp Sat Flow (s), veh/h/ln	1691	0	1704	0	1691	0	1757	0
Q Serve Time (g_s), s	4.5	0.0	3.5	0.0	4.5	0.0	1.6	0.0
Cycle Q Clear Time (g_c), s	4.5	0.0	3.5	0.0	4.5	0.0	1.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	90	0	140	0	90	0	40	0
V/C Ratio (X)	2.73	0.00	3.14	0.00	1.81	0.00	0.82	0.00
Avail Cap (c_a), veh/h	90	0	140	0	90	0	72	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	40.3	0.0	40.8	0.0	40.3	0.0	41.4	0.0
Incr Delay (d2), s/veh	806.9	0.0	979.3	0.0	404.7	0.0	31.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	847.2	0.0	1020.1	0.0	444.9	0.0	73.3	0.0
1st-Term Q (Q1), veh/ln	2.1	0.0	1.6	0.0	2.1	0.0	0.8	0.0
2nd-Term Q (Q2), veh/ln	20.1	0.0	19.1	0.0	10.1	0.0	0.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	22.2	0.0	20.7	0.0	12.2	0.0	1.1	0.0
%ile Storage Ratio (RQ%)	1.80	0.00	2.26	0.00	1.94	0.00	0.23	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	38.6	0.0	74.9	0.0	18.1	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.7	0.0	0.8	0.0	0.5	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	1	0	1
Grp Vol (v), veh/h	0	673	0	392	0	818	0	443
Grp Sat Flow (s), veh/h/ln	0	1687	0	1752	0	1687	0	1752
Q Serve Time (g_s), s	0.0	29.8	0.0	8.3	0.0	40.1	0.0	20.5
Cycle Q Clear Time (g_c), s	0.0	29.8	0.0	8.3	0.0	40.1	0.0	20.5
Lane Grp Cap (c), veh/h	0	795	0	780	0	795	0	422
V/C Ratio (X)	0.00	0.85	0.00	0.50	0.00	1.03	0.00	1.05
Avail Cap (c_a), veh/h	0	795	0	804	0	795	0	422
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	19.7	0.0	28.9	0.0	22.5	0.0	32.3
Incr Delay (d2), s/veh	0.0	10.8	0.0	0.5	0.0	39.3	0.0	57.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	30.5	0.0	29.4	0.0	61.8	0.0	89.4
1st-Term Q (Q1), veh/ln	0.0	13.8	0.0	4.0	0.0	18.6	0.0	9.9

2nd-Term Q (Q2), veh/ln	0.0	2.4	0.0	0.1	0.0	8.7	0.0	6.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	16.2	0.0	4.1	0.0	27.2	0.0	16.6
%ile Storage Ratio (RQ%)	0.00	1.36	0.00	0.10	0.00	2.14	0.00	0.33
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	5.6	0.0	5.1
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	643	0	315	0	859	0	400
Grp Sat Flow (s), veh/h/ln	0	1593	0	1568	0	1770	0	1579
Q Serve Time (g_s), s	0.0	30.4	0.0	16.6	0.0	40.1	0.0	20.5
Cycle Q Clear Time (g_c), s	0.0	30.4	0.0	16.6	0.0	40.1	0.0	20.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.65	0.00	1.00	0.00	0.02	0.00	0.95
Lane Grp Cap (c), veh/h	0	751	0	349	0	834	0	381
V/C Ratio (X)	0.00	0.86	0.00	0.90	0.00	1.03	0.00	1.05
Avail Cap (c_a), veh/h	0	751	0	360	0	834	0	381
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	19.9	0.0	32.1	0.0	22.5	0.0	32.3
Incr Delay (d2), s/veh	0.0	12.1	0.0	24.6	0.0	39.0	0.0	60.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	32.0	0.0	56.7	0.0	61.5	0.0	92.5
1st-Term Q (Q1), veh/ln	0.0	13.2	0.0	7.2	0.0	19.5	0.0	8.9
2nd-Term Q (Q2), veh/ln	0.0	2.5	0.0	2.4	0.0	9.1	0.0	6.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	15.7	0.0	9.6	0.0	28.5	0.0	15.3
%ile Storage Ratio (RQ%)	0.00	1.32	0.00	0.22	0.00	2.24	0.00	0.31
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	6.2	0.0	4.9
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3
Intersection Summary								
HCM 2010 Ctrl Delay		180.8						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	76	210	337	409	76	312	84	610	358	156	590	24
Future Volume (veh/h)	76	210	337	409	76	312	84	610	358	156	590	24
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1712	1712	1712	1712	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	80	221	355	431	80	328	88	642	377	164	621	25
Adj No. of Lanes	1	1	1	2	1	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	11	11	11	11	11	11	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	100	441	375	196	442	376	74	757	444	74	1222	49
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.26	0.26	0.06	0.26	0.26	0.04	0.37	0.37	0.04	0.37	0.37
Ln Grp Delay, s/veh	78.1	30.0	66.6	599.3	26.7	52.2	211.4	40.1	41.0	639.0	25.4	25.4
Ln Grp LOS	E	C	E	F	C	D	F	D	D	F	C	C
Approach Vol, veh/h		656			839			1107			810	
Approach Delay, s/veh		55.7			330.8			54.1			149.6	
Approach LOS		E			F			D			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	3.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	10.0	40.0	12.0	30.0	10.0	40.0	11.9	30.1
Change Period (Y+Rc), s	6.0	6.0	* 6.3	* 6.3	6.0	6.0	* 6.3	* 6.3
Max Green (Gmax), s	4.0	34.0	* 5.7	* 24	4.0	34.0	* 5.7	* 24
Max Allow Headway (MAH), s	3.8	5.3	3.8	4.4	3.8	5.3	3.8	4.4
Max Q Clear (g_c+I1), s	6.0	28.5	7.7	24.0	6.0	15.4	6.5	21.9
Green Ext Time (g_e), s	0.0	4.2	0.0	0.0	0.0	10.8	0.0	0.9
Prob of Phs Call (p_c)	0.98	1.00	1.00	1.00	0.89	1.00	0.87	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1691		3163		1691		1630	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2048		1712		3306		1712

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1202		1455		133		1455

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	2	0	1	0	1	0
Grp Vol (v), veh/h	164	0	431	0	88	0	80	0
Grp Sat Flow (s), veh/h/ln	1691	0	1581	0	1691	0	1630	0
Q Serve Time (g_s), s	4.0	0.0	5.7	0.0	4.0	0.0	4.5	0.0
Cycle Q Clear Time (g_c), s	4.0	0.0	5.7	0.0	4.0	0.0	4.5	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	74	0	196	0	74	0	100	0
V/C Ratio (X)	2.23	0.00	2.20	0.00	1.20	0.00	0.80	0.00
Avail Cap (c_a), veh/h	74	0	196	0	74	0	101	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	44.0	0.0	43.2	0.0	44.0	0.0	42.6	0.0
Incr Delay (d2), s/veh	595.0	0.0	556.2	0.0	167.4	0.0	35.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	639.0	0.0	599.3	0.0	211.4	0.0	78.1	0.0
1st-Term Q (Q1), veh/ln	1.9	0.0	2.5	0.0	1.9	0.0	2.0	0.0
2nd-Term Q (Q2), veh/ln	12.2	0.0	15.1	0.0	3.4	0.0	1.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	14.0	0.0	17.6	0.0	5.3	0.0	3.0	0.0
%ile Storage Ratio (RQ%)	1.63	0.00	3.42	0.00	0.44	0.00	0.54	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	22.6	0.0	58.8	0.0	3.6	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.6	0.0	0.5	0.0	0.3	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	529	0	221	0	317	0	80
Grp Sat Flow (s), veh/h/ln	0	1687	0	1712	0	1687	0	1712
Q Serve Time (g_s), s	0.0	26.5	0.0	10.1	0.0	13.4	0.0	3.3
Cycle Q Clear Time (g_c), s	0.0	26.5	0.0	10.1	0.0	13.4	0.0	3.3
Lane Grp Cap (c), veh/h	0	623	0	441	0	623	0	442
V/C Ratio (X)	0.00	0.85	0.00	0.50	0.00	0.51	0.00	0.18
Avail Cap (c_a), veh/h	0	623	0	441	0	623	0	442
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	26.6	0.0	29.1	0.0	22.5	0.0	26.5
Incr Delay (d2), s/veh	0.0	13.5	0.0	0.9	0.0	2.9	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	40.1	0.0	30.0	0.0	25.4	0.0	26.7
1st-Term Q (Q1), veh/ln	0.0	12.3	0.0	4.8	0.0	6.2	0.0	1.6

2nd-Term Q (Q2), veh/ln	0.0	2.3	0.0	0.1	0.0	0.5	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	14.7	0.0	4.9	0.0	6.8	0.0	1.6
%ile Storage Ratio (RQ%)	0.00	0.48	0.00	0.12	0.00	0.20	0.00	0.05
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	490	0	355	0	329	0	328
Grp Sat Flow (s), veh/h/ln	0	1564	0	1455	0	1752	0	1455
Q Serve Time (g_s), s	0.0	26.5	0.0	22.0	0.0	13.4	0.0	19.9
Cycle Q Clear Time (g_c), s	0.0	26.5	0.0	22.0	0.0	13.4	0.0	19.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.77	0.00	1.00	0.00	0.08	0.00	1.00
Lane Grp Cap (c), veh/h	0	578	0	375	0	648	0	376
V/C Ratio (X)	0.00	0.85	0.00	0.95	0.00	0.51	0.00	0.87
Avail Cap (c_a), veh/h	0	578	0	375	0	648	0	376
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	26.6	0.0	33.5	0.0	22.5	0.0	32.7
Incr Delay (d2), s/veh	0.0	14.4	0.0	33.0	0.0	2.8	0.0	19.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	41.0	0.0	66.6	0.0	25.4	0.0	52.2
1st-Term Q (Q1), veh/ln	0.0	11.4	0.0	8.8	0.0	6.5	0.0	7.9
2nd-Term Q (Q2), veh/ln	0.0	2.3	0.0	3.4	0.0	0.5	0.0	2.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	13.7	0.0	12.2	0.0	7.0	0.0	10.0
%ile Storage Ratio (RQ%)	0.00	0.45	0.00	0.30	0.00	0.21	0.00	1.75
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	145.1
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	311	60	266	211	241	102	860	190	360	1282	65
Future Volume (veh/h)	160	311	60	266	211	241	102	860	190	360	1282	65
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	163	317	61	271	215	246	104	878	194	367	1308	66
Adj No. of Lanes	1	2	0	2	1	1	1	2	0	2	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	61	602	114	119	378	321	39	1259	278	76	1497	75
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.20	0.20	0.03	0.20	0.20	0.02	0.46	0.46	0.02	0.46	0.46
Ln Grp Delay, s/veh	832.8	31.6	31.8	643.0	32.1	38.4	849.4	23.7	23.8	1765.9	25.7	25.7
Ln Grp LOS	F	C	C	F	C	D	F	C	C	F	C	C
Approach Vol, veh/h		541			732			1176			1741	
Approach Delay, s/veh		273.1			260.4			96.8			392.5	
Approach LOS		F			F			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	8.0	45.4	9.0	23.6	8.0	45.4	9.0	23.6
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green (Gmax), s	2.0	34.0	3.0	23.0	2.0	34.0	3.0	23.0
Max Allow Headway (MAH), s	3.8	5.3	3.8	4.9	3.8	5.3	3.8	4.9
Max Q Clear (g_c+I1), s	4.0	23.9	5.0	10.4	4.0	33.2	5.0	14.7
Green Ext Time (g_e), s	0.0	8.8	0.0	3.7	0.0	0.8	0.0	2.9
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.92	1.00	0.98	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.27	1.00	0.00	1.00	0.56

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3281		3408		1691		1757	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2748		2940		3269		1845

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		607		559		165		1568

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	1	0	1	0
Grp Vol (v), veh/h	367	0	271	0	104	0	163	0
Grp Sat Flow (s), veh/h/ln	1640	0	1704	0	1691	0	1757	0
Q Serve Time (g_s), s	2.0	0.0	3.0	0.0	2.0	0.0	3.0	0.0
Cycle Q Clear Time (g_c), s	2.0	0.0	3.0	0.0	2.0	0.0	3.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	76	0	119	0	39	0	61	0
V/C Ratio (X)	4.81	0.00	2.28	0.00	2.64	0.00	2.66	0.00
Avail Cap (c_a), veh/h	76	0	119	0	39	0	61	0
Upstream Filter (I)	0.32	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	42.0	0.0	41.5	0.0	42.0	0.0	41.5	0.0
Incr Delay (d2), s/veh	1723.9	0.0	601.5	0.0	807.4	0.0	791.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	1765.9	0.0	643.0	0.0	849.4	0.0	832.8	0.0
1st-Term Q (Q1), veh/ln	0.9	0.0	1.4	0.0	0.9	0.0	1.4	0.0
2nd-Term Q (Q2), veh/ln	18.3	0.0	9.9	0.0	8.8	0.0	13.5	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	19.2	0.0	11.3	0.0	9.7	0.0	14.9	0.0
%ile Storage Ratio (RQ%)	2.02	0.00	2.15	0.00	1.20	0.00	2.31	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	72.7	0.0	38.0	0.0	16.2	0.0	25.4	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	1.2	0.0	0.6	0.0	0.7	0.0	0.7	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	539	0	187	0	674	0	215
Grp Sat Flow (s), veh/h/ln	0	1687	0	1752	0	1687	0	1845
Q Serve Time (g_s), s	0.0	21.9	0.0	8.2	0.0	31.0	0.0	9.0
Cycle Q Clear Time (g_c), s	0.0	21.9	0.0	8.2	0.0	31.0	0.0	9.0
Lane Grp Cap (c), veh/h	0	773	0	359	0	773	0	378
V/C Ratio (X)	0.00	0.70	0.00	0.52	0.00	0.87	0.00	0.57
Avail Cap (c_a), veh/h	0	773	0	469	0	773	0	493
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.32	0.00	1.00
Uniform Delay (d1), s/veh	0.0	18.6	0.0	30.5	0.0	21.0	0.0	30.8
Incr Delay (d2), s/veh	0.0	5.2	0.0	1.2	0.0	4.6	0.0	1.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	23.7	0.0	31.6	0.0	25.7	0.0	32.1
1st-Term Q (Q1), veh/ln	0.0	10.2	0.0	4.0	0.0	14.4	0.0	4.6

2nd-Term Q (Q2), veh/ln	0.0	1.1	0.0	0.1	0.0	1.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	11.3	0.0	4.1	0.0	15.4	0.0	4.7
%ile Storage Ratio (RQ%)	0.00	0.59	0.00	0.12	0.00	0.32	0.00	0.13
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	533	0	191	0	700	0	246
Grp Sat Flow (s), veh/h/ln	0	1669	0	1746	0	1747	0	1568
Q Serve Time (g_s), s	0.0	21.9	0.0	8.4	0.0	31.2	0.0	12.7
Cycle Q Clear Time (g_c), s	0.0	21.9	0.0	8.4	0.0	31.2	0.0	12.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.36	0.00	0.32	0.00	0.09	0.00	1.00
Lane Grp Cap (c), veh/h	0	764	0	357	0	800	0	321
V/C Ratio (X)	0.00	0.70	0.00	0.53	0.00	0.87	0.00	0.77
Avail Cap (c_a), veh/h	0	764	0	467	0	800	0	419
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.32	0.00	1.00
Uniform Delay (d1), s/veh	0.0	18.6	0.0	30.5	0.0	21.1	0.0	32.3
Incr Delay (d2), s/veh	0.0	5.2	0.0	1.2	0.0	4.6	0.0	6.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	23.8	0.0	31.8	0.0	25.7	0.0	38.4
1st-Term Q (Q1), veh/ln	0.0	10.1	0.0	4.0	0.0	15.0	0.0	5.5
2nd-Term Q (Q2), veh/ln	0.0	1.1	0.0	0.1	0.0	1.0	0.0	0.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	11.2	0.0	4.1	0.0	16.0	0.0	6.0
%ile Storage Ratio (RQ%)	0.00	0.58	0.00	0.12	0.00	0.34	0.00	0.17
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		271.0						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	132	326	71	84	257	227	81	1107	61	282	1502	63
Future Volume (veh/h)	132	326	71	84	257	227	81	1107	61	282	1502	63
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	142	351	76	90	276	244	87	1190	66	303	1615	68
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	2	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	220	531	452	193	531	452	110	1472	82	368	1650	69
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.07	0.45	0.45	0.11	0.50	0.50
Ln Grp Delay, s/veh	44.9	31.8	24.7	41.1	28.3	28.9	44.3	23.2	23.2	41.6	28.3	29.3
Ln Grp LOS	D	C	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		569			610			1343			1986	
Approach Delay, s/veh		34.1			30.4			24.5			30.8	
Approach LOS		C			C			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Case No	2.0	4.0		5.0	2.0	4.0		5.0
Phs Duration (G+Y+Rc), s	14.8	46.2		31.0	10.5	50.5		31.0
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green (Gmax), s	10.5	41.5		26.5	10.5	41.5		26.5
Max Allow Headway (MAH), s	3.8	5.3		4.9	3.8	5.3		4.9
Max Q Clear (g_c+I1), s	10.3	31.1		28.5	6.7	46.4		25.9
Green Ext Time (g_e), s	0.0	9.7		0.0	0.1	0.0		0.4
Prob of Phs Call (p_c)	1.00	1.00		1.00	0.89	1.00		1.00
Prob of Max Out (p_x)	1.00	0.00		1.00	0.99	0.00		1.00

Left-Turn Movement Data								
Assigned Mvmt	1			7	5			3
Mvmt Sat Flow, veh/h	3281			870	1691			947

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3251		1845		3300		1845

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		180		1568		138		1568

Left Lane Group Data								
Assigned Mvmt	1	0	0	7	5	0	0	3
Lane Assignment	(Prot)				(Prot)			

Lanes in Grp	2	0	0	1	1	0	0	1
Grp Vol (v), veh/h	303	0	0	142	87	0	0	90
Grp Sat Flow (s), veh/h/ln	1640	0	0	870	1691	0	0	947
Q Serve Time (g_s), s	8.3	0.0	0.0	15.0	4.7	0.0	0.0	8.5
Cycle Q Clear Time (g_c), s	8.3	0.0	0.0	26.5	4.7	0.0	0.0	23.9
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	870	0	0	0	947
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	26.5	0.0	0.0	0.0	26.5
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	15.0	0.0	0.0	0.0	11.1
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	15.0	0.0	0.0	0.0	8.5
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	368	0	0	220	110	0	0	193
V/C Ratio (X)	0.82	0.00	0.00	0.65	0.79	0.00	0.00	0.47
Avail Cap (c_a), veh/h	374	0	0	220	193	0	0	193
Upstream Filter (I)	0.11	0.00	0.00	1.00	0.15	0.00	0.00	1.00
Uniform Delay (d1), s/veh	39.9	0.0	0.0	38.5	42.4	0.0	0.0	39.3
Incr Delay (d2), s/veh	1.7	0.0	0.0	6.4	2.0	0.0	0.0	1.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	41.6	0.0	0.0	44.9	44.3	0.0	0.0	41.1
1st-Term Q (Q1), veh/ln	3.7	0.0	0.0	3.6	2.2	0.0	0.0	2.2
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.0	0.4	0.1	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	3.8	0.0	0.0	4.0	2.2	0.0	0.0	2.3
%ile Storage Ratio (RQ%)	0.37	0.00	0.00	0.60	0.30	0.00	0.00	0.32
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	617	0	351	0	823	0	276
Grp Sat Flow (s), veh/h/ln	0	1687	0	1845	0	1687	0	1845
Q Serve Time (g_s), s	0.0	29.0	0.0	15.4	0.0	43.8	0.0	11.5
Cycle Q Clear Time (g_c), s	0.0	29.0	0.0	15.4	0.0	43.8	0.0	11.5
Lane Grp Cap (c), veh/h	0	764	0	531	0	844	0	531
V/C Ratio (X)	0.00	0.81	0.00	0.66	0.00	0.98	0.00	0.52
Avail Cap (c_a), veh/h	0	764	0	531	0	844	0	531
Upstream Filter (I)	0.00	0.15	0.00	1.00	0.00	0.11	0.00	1.00
Uniform Delay (d1), s/veh	0.0	21.7	0.0	28.8	0.0	22.4	0.0	27.4
Incr Delay (d2), s/veh	0.0	1.5	0.0	3.0	0.0	5.9	0.0	0.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	23.2	0.0	31.8	0.0	28.3	0.0	28.3
1st-Term Q (Q1), veh/ln	0.0	13.4	0.0	7.8	0.0	20.1	0.0	5.8

2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.4	0.0	1.4	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	13.7	0.0	8.2	0.0	21.5	0.0	6.0
%ile Storage Ratio (RQ%)	0.00	0.29	0.00	0.25	0.00	0.96	0.00	0.14
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	639	0	76	0	860	0	244
Grp Sat Flow (s), veh/h/ln	0	1744	0	1568	0	1751	0	1568
Q Serve Time (g_s), s	0.0	29.1	0.0	3.3	0.0	44.4	0.0	12.1
Cycle Q Clear Time (g_c), s	0.0	29.1	0.0	3.3	0.0	44.4	0.0	12.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.10	0.00	1.00	0.00	0.08	0.00	1.00
Lane Grp Cap (c), veh/h	0	790	0	452	0	876	0	452
V/C Ratio (X)	0.00	0.81	0.00	0.17	0.00	0.98	0.00	0.54
Avail Cap (c_a), veh/h	0	790	0	452	0	876	0	452
Upstream Filter (I)	0.00	0.15	0.00	1.00	0.00	0.11	0.00	1.00
Uniform Delay (d1), s/veh	0.0	21.7	0.0	24.5	0.0	22.6	0.0	27.6
Incr Delay (d2), s/veh	0.0	1.4	0.0	0.2	0.0	6.7	0.0	1.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	23.2	0.0	24.7	0.0	29.3	0.0	28.9
1st-Term Q (Q1), veh/ln	0.0	13.8	0.0	1.4	0.0	21.3	0.0	5.2
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	1.6	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	14.2	0.0	1.5	0.0	22.9	0.0	5.3
%ile Storage Ratio (RQ%)	0.00	0.30	0.00	0.26	0.00	1.02	0.00	0.76
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		29.3						
HCM 2010 LOS		C						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	158	55	29	100	16	684	21	1474	41	626	1757	64
Future Volume (veh/h)	158	55	29	100	16	684	21	1474	41	626	1757	64
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	165	57	30	104	17	712	22	1535	43	652	1830	67
Adj No. of Lanes	1	1	0	1	1	1	1	3	0	2	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	232	253	133	130	659	560	73	1385	39	569	1728	63
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.22	0.22	0.22	0.07	0.36	0.36	0.29	0.29	0.29	0.17	0.52	0.52
Ln Grp Delay, s/veh	48.2	0.0	31.5	69.2	20.5	167.2	55.3	93.8	100.5	108.2	50.7	55.4
Ln Grp LOS	D		C	E	C	F	E	F	F	F	F	F
Approach Vol, veh/h		252			833			1600			2549	
Approach Delay, s/veh		42.4			152.0			95.6			67.2	
Approach LOS		D			F			F			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	2	1	3	4		6		8
Case No	6.4	2.0	2.0	6.0		4.0		3.0
Phs Duration (G+Y+Rc), s	34.0	23.0	13.3	27.7		57.0		41.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0		6.0		6.0
Max Green (Gmax), s	28.0	17.0	8.0	15.0		51.0		35.0
Max Allow Headway (MAH), s	5.4	5.0	3.8	4.5		5.0		4.5
Max Q Clear (g_c+I1), s	30.0	19.0	7.7	23.7		53.0		37.0
Green Ext Time (g_e), s	0.0	0.0	0.0	0.0		0.0		0.0
Prob of Phs Call (p_c)	1.00	1.00	0.94	1.00		1.00		1.00
Prob of Max Out (p_x)	0.00	1.00	1.00	1.00		0.00		1.00

Left-Turn Movement Data				
Assigned Mvmt	5	1	3	7
Mvmt Sat Flow, veh/h	226	3281	1757	716

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	4848	1139	3320	1845

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	136	600	121	1568

Left Lane Group Data								
Assigned Mvmt	5	1	3	7	0	0	0	0
Lane Assignment		(Prot)	(Prot)					

Lanes in Grp	1	2	1	1	0	0	0	0
Grp Vol (v), veh/h	22	652	104	165	0	0	0	0
Grp Sat Flow (s), veh/h/ln	226	1640	1757	716	0	0	0	0
Q Serve Time (g_s), s	0.0	17.0	5.7	21.7	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	28.0	17.0	5.7	21.7	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	226	0	0	716	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	28.0	0.0	0.0	21.7	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	21.7	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	21.7	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	73	569	130	232	0	0	0	0
V/C Ratio (X)	0.30	1.15	0.80	0.71	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	73	569	143	232	0	0	0	0
Upstream Filter (I)	0.61	0.09	1.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	49.0	40.5	44.7	38.5	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	6.3	67.7	24.6	9.6	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	55.3	108.2	69.2	48.2	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.6	7.7	2.8	4.4	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.1	5.4	0.9	0.6	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.7	13.0	3.7	5.1	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.09	1.37	0.42	1.62	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	20.7	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	2	0	0	4	0	6	0	8
Lane Assignment	T					T		T
Lanes in Grp	2	0	0	0	0	1	0	1
Grp Vol (v), veh/h	1023	0	0	0	0	925	0	17
Grp Sat Flow (s), veh/h/ln	1616	0	0	0	0	1687	0	1845
Q Serve Time (g_s), s	28.0	0.0	0.0	0.0	0.0	51.0	0.0	0.6
Cycle Q Clear Time (g_c), s	28.0	0.0	0.0	0.0	0.0	51.0	0.0	0.6
Lane Grp Cap (c), veh/h	923	0	0	0	0	878	0	659
V/C Ratio (X)	1.11	0.00	0.00	0.00	0.00	1.05	0.00	0.03
Avail Cap (c_a), veh/h	923	0	0	0	0	878	0	659
Upstream Filter (I)	0.61	0.00	0.00	0.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	35.0	0.0	0.0	0.0	0.0	23.5	0.0	20.4
Incr Delay (d2), s/veh	58.8	0.0	0.0	0.0	0.0	27.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	93.8	0.0	0.0	0.0	0.0	50.7	0.0	20.5
1st-Term Q (Q1), veh/ln	12.4	0.0	0.0	0.0	0.0	23.4	0.0	0.3

2nd-Term Q (Q2), veh/ln	7.5	0.0	0.0	0.0	0.0	6.6	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	20.0	0.0	0.0	0.0	0.0	30.1	0.0	0.3
%ile Storage Ratio (RQ%)	0.89	0.00	0.00	0.00	0.00	1.62	0.00	0.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	25.0	0.0	0.0	0.0	0.0	11.7	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	12	0	0	14	0	16	0	18
Lane Assignment	T+R			T+R		T+R		R
Lanes in Grp	1	0	0	1	0	1	0	1
Grp Vol (v), veh/h	555	0	0	87	0	972	0	712
Grp Sat Flow (s), veh/h/ln	1752	0	0	1739	0	1754	0	1568
Q Serve Time (g_s), s	28.0	0.0	0.0	4.0	0.0	51.0	0.0	35.0
Cycle Q Clear Time (g_c), s	28.0	0.0	0.0	4.0	0.0	51.0	0.0	35.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.08	0.00	0.00	0.34	0.00	0.07	0.00	1.00
Lane Grp Cap (c), veh/h	500	0	0	386	0	913	0	560
V/C Ratio (X)	1.11	0.00	0.00	0.23	0.00	1.06	0.00	1.27
Avail Cap (c_a), veh/h	500	0	0	386	0	913	0	560
Upstream Filter (I)	0.61	0.00	0.00	1.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	35.0	0.0	0.0	31.2	0.0	23.5	0.0	31.5
Incr Delay (d2), s/veh	65.5	0.0	0.0	0.3	0.0	31.9	0.0	135.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	100.5	0.0	0.0	31.5	0.0	55.4	0.0	167.2
1st-Term Q (Q1), veh/ln	13.5	0.0	0.0	1.9	0.0	24.3	0.0	15.1
2nd-Term Q (Q2), veh/ln	9.1	0.0	0.0	0.0	0.0	8.1	0.0	21.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	22.6	0.0	0.0	2.0	0.0	32.4	0.0	36.2
%ile Storage Ratio (RQ%)	1.01	0.00	0.00	0.26	0.00	1.74	0.00	4.16
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	13.6	0.0	0.0	0.0	0.0	14.8	0.0	38.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.0	0.0	0.0	0.3	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	88.2
HCM 2010 LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	350	650	314	641	843	425	310	1222	8	8	1397	709
Future Volume (veh/h)	350	650	314	641	843	425	310	1222	8	8	1397	709
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1759	1759	1759	1900	1776	1776	1776	1776	1776	1776
Adj Flow Rate, veh/h	361	670	324	661	869	438	320	1260	0	8	1440	0
Adj No. of Lanes	2	3	1	2	3	0	2	2	1	1	3	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	8	8	8	8	8	8	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	446	712	222	766	790	369	321	1397	625	105	1216	379
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.14	0.15	0.15	0.24	0.25	0.25	0.10	0.41	0.00	0.25	0.25	0.00
Ln Grp Delay, s/veh	43.7	59.4	270.1	40.2	97.6	142.9	62.9	27.4	0.0	42.4	125.8	0.0
Ln Grp LOS	D	E	F	D	F	F	E	C		D	F	
Approach Vol, veh/h		1355			1968			1580			1448	
Approach Delay, s/veh		105.6			88.4			34.6			125.4	
Approach LOS		F			F			C			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Case No		3.0	2.0	3.0	2.0	5.0	2.0	4.0
Phs Duration (G+Y+Rc), s		44.4	27.7	19.9	15.0	29.4	18.6	29.0
Change Period (Y+Rc), s		6.3	6.0	6.3	6.0	6.3	6.0	6.3
Max Green (Gmax), s		32.7	28.0	12.7	9.0	17.7	18.0	22.7
Max Allow Headway (MAH), s		5.3	3.8	5.2	3.8	5.3	3.8	5.2
Max Q Clear (g_c+I1), s		34.1	20.0	15.6	11.0	25.1	11.9	24.7
Green Ext Time (g_e), s		0.0	1.7	0.0	0.0	0.0	0.7	0.0
Prob of Phs Call (p_c)		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)		0.00	0.20	1.00	1.00	0.00	0.26	1.00

Left-Turn Movement Data								
Assigned Mvmt			3		5	1	7	
Mvmt Sat Flow, veh/h			3250		3281	418	3250	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3374		4803		4848		3202

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1509		1495		1509		1495

Left Lane Group Data								
Assigned Mvmt	0	0	3	0	5	1	7	0
Lane Assignment			(Prot)		(Prot)		(Prot)	

Lanes in Grp	0	0	2	0	2	1	2	0
Grp Vol (v), veh/h	0	0	661	0	320	8	361	0
Grp Sat Flow (s), veh/h/ln	0	0	1625	0	1640	418	1625	0
Q Serve Time (g_s), s	0.0	0.0	18.0	0.0	9.0	1.7	9.9	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	18.0	0.0	9.0	18.8	9.9	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	418	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	23.1	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	5.9	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	766	0	321	105	446	0
V/C Ratio (X)	0.00	0.00	0.86	0.00	1.00	0.08	0.81	0.00
Avail Cap (c_a), veh/h	0	0	989	0	321	105	636	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.19	1.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	33.7	0.0	41.5	41.0	38.5	0.0
Incr Delay (d2), s/veh	0.0	0.0	6.4	0.0	21.4	1.4	5.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	40.2	0.0	62.9	42.4	43.7	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	8.1	0.0	4.0	0.2	4.5	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.7	0.0	1.0	0.0	0.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	8.8	0.0	5.0	0.2	4.8	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.58	0.00	0.56	0.01	0.45	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	3	0	3	0	2
Grp Vol (v), veh/h	0	1260	0	670	0	1440	0	869
Grp Sat Flow (s), veh/h/ln	0	1687	0	1601	0	1616	0	1601
Q Serve Time (g_s), s	0.0	32.1	0.0	12.7	0.0	23.1	0.0	22.7
Cycle Q Clear Time (g_c), s	0.0	32.1	0.0	12.7	0.0	23.1	0.0	22.7
Lane Grp Cap (c), veh/h	0	1397	0	712	0	1216	0	790
V/C Ratio (X)	0.00	0.90	0.00	0.94	0.00	1.18	0.00	1.10
Avail Cap (c_a), veh/h	0	1397	0	712	0	1216	0	790
Upstream Filter (I)	0.00	0.19	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	25.2	0.0	38.8	0.0	34.5	0.0	34.7
Incr Delay (d2), s/veh	0.0	2.2	0.0	20.6	0.0	91.4	0.0	62.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	27.4	0.0	59.4	0.0	125.8	0.0	97.6
1st-Term Q (Q1), veh/ln	0.0	14.9	0.0	5.6	0.0	10.2	0.0	10.0

2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	1.4	0.0	10.3	0.0	6.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	15.3	0.0	6.9	0.0	20.5	0.0	16.9
%ile Storage Ratio (RQ%)	0.00	0.82	0.00	0.25	0.00	0.70	0.00	0.51
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	55.9	0.0	19.7
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	324	0	0	0	438
Grp Sat Flow (s), veh/h/ln	0	1509	0	1495	0	1509	0	1495
Q Serve Time (g_s), s	0.0	0.0	0.0	13.6	0.0	0.0	0.0	22.7
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	13.6	0.0	0.0	0.0	22.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	625	0	222	0	379	0	369
V/C Ratio (X)	0.00	0.00	0.00	1.46	0.00	0.00	0.00	1.19
Avail Cap (c_a), veh/h	0	625	0	222	0	379	0	369
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	39.2	0.0	0.0	0.0	34.7
Incr Delay (d2), s/veh	0.0	0.0	0.0	231.0	0.0	0.0	0.0	108.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	270.1	0.0	0.0	0.0	142.9
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	5.6	0.0	0.0	0.0	9.3
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	14.2	0.0	0.0	0.0	11.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	19.8	0.0	0.0	0.0	20.4
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.70	0.00	0.00	0.00	0.62
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	25.6	0.0	0.0	0.0	17.3
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	87.1
HCM 2010 LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

APPENDIX IV-C3:
Year 2040 Zoning Intersection Total with Combined LOS PM Analysis without Mitigation

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	757	1915	1025	241	1192	92	601	335	229	186	224	257
Future Volume (veh/h)	757	1915	1025	241	1192	92	601	335	229	186	224	257
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1743	1743	1900	1743	1743	1900
Adj Flow Rate, veh/h	805	2037	1090	256	1268	98	639	356	244	198	238	273
Adj No. of Lanes	2	2	1	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	9	9	9	9	9	9
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	843	1615	723	193	1543	119	109	469	316	33	334	299
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.24	0.45	0.45	0.11	0.32	0.32	0.07	0.25	0.25	0.02	0.20	0.20
Ln Grp Delay, s/veh	78.2	164.8	278.1	246.5	55.6	61.0	2282.7	66.0	68.1	2354.7	69.4	93.9
Ln Grp LOS	E	F	F	F	E	E	F	E	E	F	E	F
Approach Vol, veh/h		3932			1622			1239			709	
Approach Delay, s/veh		178.5			87.3			1209.8			717.0	
Approach LOS		F			F			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	3.0	2.0	4.0	2.0	4.0
Phs Duration (G+Y+Rc), s	10.0	45.0	23.0	76.0	17.0	38.0	43.7	55.3
Change Period (Y+Rc), s	6.9	6.9	6.4	6.4	6.9	6.9	6.4	6.4
Max Green (Gmax), s	3.1	38.1	16.6	69.6	10.1	31.1	37.6	48.6
Max Allow Headway (MAH), s	3.8	5.4	3.7	4.8	3.8	5.4	3.8	4.8
Max Q Clear (g_c+I1), s	5.1	29.4	18.6	71.6	12.1	29.8	37.2	39.1
Green Ext Time (g_e), s	0.0	4.5	0.0	0.0	0.0	0.9	0.2	9.4
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1660		1792		1660		3476	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1896		3574		1656		4863

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1278		1599		1482		376

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	2	0
Grp Vol (v), veh/h	198	0	256	0	639	0	805	0
Grp Sat Flow (s), veh/h/ln	1660	0	1792	0	1660	0	1738	0
Q Serve Time (g_s), s	3.1	0.0	16.6	0.0	10.1	0.0	35.2	0.0
Cycle Q Clear Time (g_c), s	3.1	0.0	16.6	0.0	10.1	0.0	35.2	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	33	0	193	0	109	0	843	0
V/C Ratio (X)	5.92	0.00	1.33	0.00	5.87	0.00	0.96	0.00
Avail Cap (c_a), veh/h	33	0	193	0	109	0	849	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	75.4	0.0	68.7	0.0	72.0	0.0	57.5	0.0
Incr Delay (d2), s/veh	2279.2	0.0	177.8	0.0	2210.8	0.0	20.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	2354.7	0.0	246.5	0.0	2282.7	0.0	78.2	0.0
1st-Term Q (Q1), veh/ln	1.4	0.0	8.2	0.0	4.6	0.0	16.9	0.0
2nd-Term Q (Q2), veh/ln	21.2	0.0	9.5	0.0	66.9	0.0	2.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	22.6	0.0	17.7	0.0	71.5	0.0	19.3	0.0
%ile Storage Ratio (RQ%)	1.89	0.00	1.40	0.00	5.99	0.00	0.78	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	41.1	0.0	15.7	0.0	132.5	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	1.5	0.0	0.3	0.0	1.5	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	1	0	2
Grp Vol (v), veh/h	0	310	0	2037	0	238	0	893
Grp Sat Flow (s), veh/h/ln	0	1656	0	1787	0	1656	0	1712
Q Serve Time (g_s), s	0.0	26.7	0.0	69.6	0.0	20.6	0.0	37.1
Cycle Q Clear Time (g_c), s	0.0	26.7	0.0	69.6	0.0	20.6	0.0	37.1
Lane Grp Cap (c), veh/h	0	410	0	1615	0	334	0	1086
V/C Ratio (X)	0.00	0.76	0.00	1.26	0.00	0.71	0.00	0.82
Avail Cap (c_a), veh/h	0	410	0	1615	0	334	0	1086
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	53.7	0.0	42.2	0.0	57.3	0.0	48.6
Incr Delay (d2), s/veh	0.0	12.3	0.0	122.6	0.0	12.1	0.0	7.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	66.0	0.0	164.8	0.0	69.4	0.0	55.6
1st-Term Q (Q1), veh/ln	0.0	12.2	0.0	34.3	0.0	9.5	0.0	17.5

2nd-Term Q (Q2), veh/ln	0.0	1.4	0.0	27.5	0.0	1.1	0.0	1.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	13.6	0.0	61.8	0.0	10.6	0.0	18.5
%ile Storage Ratio (RQ%)	0.00	0.49	0.00	1.36	0.00	0.41	0.00	0.85
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	105.4	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	290	0	1090	0	273	0	473
Grp Sat Flow (s), veh/h/ln	0	1518	0	1599	0	1482	0	1815
Q Serve Time (g_s), s	0.0	27.4	0.0	69.6	0.0	27.8	0.0	37.1
Cycle Q Clear Time (g_c), s	0.0	27.4	0.0	69.6	0.0	27.8	0.0	37.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.84	0.00	1.00	0.00	1.00	0.00	0.21
Lane Grp Cap (c), veh/h	0	375	0	723	0	299	0	576
V/C Ratio (X)	0.00	0.77	0.00	1.51	0.00	0.91	0.00	0.82
Avail Cap (c_a), veh/h	0	375	0	723	0	299	0	576
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	53.9	0.0	42.2	0.0	60.1	0.0	48.6
Incr Delay (d2), s/veh	0.0	14.2	0.0	235.9	0.0	33.8	0.0	12.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	68.1	0.0	278.1	0.0	93.9	0.0	61.0
1st-Term Q (Q1), veh/ln	0.0	11.5	0.0	30.6	0.0	11.4	0.0	18.5
2nd-Term Q (Q2), veh/ln	0.0	1.5	0.0	47.4	0.0	2.8	0.0	2.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	13.0	0.0	77.9	0.0	14.2	0.0	20.5
%ile Storage Ratio (RQ%)	0.00	0.47	0.00	8.18	0.00	0.55	0.00	0.95
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	91.8	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		380.0						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	197	1905	258	155	1213	149	270	136	211	164	73	95
Future Volume (veh/h)	197	1905	258	155	1213	149	270	136	211	164	73	95
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	210	2027	274	165	1290	159	287	145	224	174	78	101
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	99	1384	183	99	1398	171	310	145	225	199	292	248
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.44	0.44	0.06	0.44	0.44	0.18	0.22	0.22	0.11	0.16	0.16
Ln Grp Delay, s/veh	608.9	247.8	273.7	385.2	47.2	47.9	88.6	0.0	106.1	78.7	59.2	63.2
Ln Grp LOS	F	F	F	F	D	D	F		F	E	E	E
Approach Vol, veh/h		2511			1614			656			353	
Approach Delay, s/veh		290.2			82.1			98.4			70.0	
Approach LOS		F			F			F			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	24.0	40.8	15.0	74.2	33.8	31.0	15.0	74.2
Change Period (Y+Rc), s	6.6	6.6	6.4	6.4	6.6	6.6	6.4	6.4
Max Green (Gmax), s	32.4	24.4	8.6	62.6	32.4	24.4	8.6	62.6
Max Allow Headway (MAH), s	3.8	5.2	3.7	5.0	3.8	5.2	3.7	5.0
Max Q Clear (g_c+I1), s	17.0	36.1	10.6	69.8	26.8	10.9	10.6	61.5
Green Ext Time (g_e), s	0.4	0.0	0.0	0.0	0.4	2.7	0.0	1.1
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.00	0.31	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1757		1774		1757		1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		655		3144		1845		3174

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1011		416		1568		389

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	174	0	165	0	287	0	210	0
Grp Sat Flow (s), veh/h/ln	1757	0	1774	0	1757	0	1774	0
Q Serve Time (g_s), s	15.0	0.0	8.6	0.0	24.8	0.0	8.6	0.0
Cycle Q Clear Time (g_c), s	15.0	0.0	8.6	0.0	24.8	0.0	8.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	199	0	99	0	310	0	99	0
V/C Ratio (X)	0.88	0.00	1.67	0.00	0.93	0.00	2.12	0.00
Avail Cap (c_a), veh/h	370	0	99	0	370	0	99	0
Upstream Filter (I)	1.00	0.00	0.30	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	67.2	0.0	72.7	0.0	62.4	0.0	72.7	0.0
Incr Delay (d2), s/veh	11.5	0.0	312.5	0.0	26.2	0.0	536.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	78.7	0.0	385.2	0.0	88.6	0.0	608.9	0.0
1st-Term Q (Q1), veh/ln	7.3	0.0	4.2	0.0	12.0	0.0	4.2	0.0
2nd-Term Q (Q2), veh/ln	0.6	0.0	8.6	0.0	2.3	0.0	14.8	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	7.9	0.0	12.8	0.0	14.3	0.0	19.0	0.0
%ile Storage Ratio (RQ%)	1.50	0.00	1.21	0.00	2.71	0.00	1.51	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	16.5	0.0	0.0	0.0	27.7	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.4	0.0	0.0	0.0	0.5	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T		T		T
Lanes in Grp	0	0	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	1121	0	78	0	716
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	1845	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	67.8	0.0	5.7	0.0	58.6
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	67.8	0.0	5.7	0.0	58.6
Lane Grp Cap (c), veh/h	0	0	0	779	0	292	0	779
V/C Ratio (X)	0.00	0.00	0.00	1.44	0.00	0.27	0.00	0.92
Avail Cap (c_a), veh/h	0	0	0	779	0	292	0	779
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.30
Uniform Delay (d1), s/veh	0.0	0.0	0.0	43.1	0.0	56.9	0.0	40.5
Incr Delay (d2), s/veh	0.0	0.0	0.0	204.7	0.0	2.2	0.0	6.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	247.8	0.0	59.2	0.0	47.2
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	33.1	0.0	2.9	0.0	28.7

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	44.3	0.0	0.2	0.0	1.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	77.4	0.0	3.1	0.0	30.1
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.80	0.00	0.11	0.00	0.55
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	85.5	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	369	0	1180	0	101	0	733
Grp Sat Flow (s), veh/h/ln	0	1666	0	1789	0	1568	0	1794
Q Serve Time (g_s), s	0.0	34.1	0.0	67.8	0.0	8.9	0.0	59.5
Cycle Q Clear Time (g_c), s	0.0	34.1	0.0	67.8	0.0	8.9	0.0	59.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.61	0.00	0.23	0.00	1.00	0.00	0.22
Lane Grp Cap (c), veh/h	0	370	0	788	0	248	0	790
V/C Ratio (X)	0.00	1.00	0.00	1.50	0.00	0.41	0.00	0.93
Avail Cap (c_a), veh/h	0	370	0	788	0	248	0	790
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.30
Uniform Delay (d1), s/veh	0.0	59.9	0.0	43.1	0.0	58.3	0.0	40.8
Incr Delay (d2), s/veh	0.0	46.2	0.0	230.6	0.0	4.9	0.0	7.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	106.1	0.0	273.7	0.0	63.2	0.0	47.9
1st-Term Q (Q1), veh/ln	0.0	15.7	0.0	33.5	0.0	3.9	0.0	29.5
2nd-Term Q (Q2), veh/ln	0.0	4.7	0.0	50.5	0.0	0.3	0.0	1.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	20.4	0.0	84.0	0.0	4.2	0.0	31.1
%ile Storage Ratio (RQ%)	0.00	0.68	0.00	0.87	0.00	0.15	0.00	0.57
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	98.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		185.1						
HCM 2010 LOS		F						

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	275	2078	1386	325	255	125
Future Volume (veh/h)	275	2078	1386	325	255	125
Number	7	4	8	18	1	16
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00			1.00	1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1676	1676	1676	1710	1660	1660
Adj Flow Rate, veh/h	284	2142	1429	335	263	129
Adj No. of Lanes	1	2	2	0	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	3	3
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	140	2300	1537	351	317	283
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.09	0.72	0.60	0.60	0.20	0.20
Ln Grp Delay, s/veh	544.0	20.6	40.8	47.1	85.5	63.9
Ln Grp LOS	F	C	D	D	F	E
Approach Vol, veh/h		2426	1764		392	
Approach Delay, s/veh		81.9	44.0		78.4	
Approach LOS		F	D		E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	6			4			7	8
Case No	9.0			4.0			2.0	8.0
Phs Duration (G+Y+Rc), s	40.0			127.0			21.0	106.0
Change Period (Y+Rc), s	6.5			6.4			6.4	6.4
Max Green (Gmax), s	33.5			120.6			14.6	99.6
Max Allow Headway (MAH), s	3.9			5.0			3.7	5.0
Max Q Clear (g_c+I1), s	28.6			97.3			16.6	91.0
Green Ext Time (g_e), s	0.6			22.6			0.0	8.5
Prob of Phs Call (p_c)	1.00			1.00			1.00	1.00
Prob of Max Out (p_x)	0.00			0.00			1.00	0.00
Left-Turn Movement Data								
Assigned Mvmt	1						7	3
Mvmt Sat Flow, veh/h	1581						1597	0
Through Movement Data								
Assigned Mvmt	6			4				8
Mvmt Sat Flow, veh/h	0			3269				2660
Right-Turn Movement Data								
Assigned Mvmt	16			14				18
Mvmt Sat Flow, veh/h	1411			0				589
Left Lane Group Data								
Assigned Mvmt	1	0	0	0	0	0	7	3
Lane Assignment							(Prot)	

Lanes in Grp	1	0	0	0	0	0	1	0
Grp Vol (v), veh/h	263	0	0	0	0	0	284	0
Grp Sat Flow (s), veh/h/ln	1581	0	0	0	0	0	1597	0
Q Serve Time (g_s), s	26.6	0.0	0.0	0.0	0.0	0.0	14.6	0.0
Cycle Q Clear Time (g_c), s	26.6	0.0	0.0	0.0	0.0	0.0	14.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1581	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	99.6
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	317	0	0	0	0	0	140	0
V/C Ratio (X)	0.83	0.00	0.00	0.00	0.00	0.00	2.03	0.00
Avail Cap (c_a), veh/h	317	0	0	0	0	0	140	0
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00
Uniform Delay (d1), s/veh	64.0	0.0	0.0	0.0	0.0	0.0	76.2	0.0
Incr Delay (d2), s/veh	21.5	0.0	0.0	0.0	0.0	0.0	467.8	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	85.5	0.0	0.0	0.0	0.0	0.0	544.0	0.0
1st-Term Q (Q1), veh/ln	11.6	0.0	0.0	0.0	0.0	0.0	6.4	0.0
2nd-Term Q (Q2), veh/ln	1.9	0.0	0.0	0.0	0.0	0.0	18.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	13.5	0.0	0.0	0.0	0.0	0.0	24.6	0.0
%ile Storage Ratio (RQ%)	0.67	0.00	0.00	0.00	0.00	0.00	2.84	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	36.1	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0
Middle Lane Group Data								
Assigned Mvmt	6	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	1
Grp Vol (v), veh/h	0	0	0	2142	0	0	0	869
Grp Sat Flow (s), veh/h/ln	0	0	0	1593	0	0	0	1593
Q Serve Time (g_s), s	0.0	0.0	0.0	95.3	0.0	0.0	0.0	81.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	95.3	0.0	0.0	0.0	81.0
Lane Grp Cap (c), veh/h	0	0	0	2300	0	0	0	950
V/C Ratio (X)	0.00	0.00	0.00	0.93	0.00	0.00	0.00	0.92
Avail Cap (c_a), veh/h	0	0	0	2300	0	0	0	950
Upstream Filter (I)	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.68
Uniform Delay (d1), s/veh	0.0	0.0	0.0	19.7	0.0	0.0	0.0	29.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.9	0.0	0.0	0.0	10.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	20.6	0.0	0.0	0.0	40.8
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	41.4	0.0	0.0	0.0	35.5

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.3	0.0	0.0	0.0	2.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	41.6	0.0	0.0	0.0	38.4
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.76	0.00	0.00	0.00	0.58
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	16	0	0	14	0	0	0	18
Lane Assignment	R							T+R
Lanes in Grp	1	0	0	0	0	0	0	1
Grp Vol (v), veh/h	129	0	0	0	0	0	0	895
Grp Sat Flow (s), veh/h/ln	1411	0	0	0	0	0	0	1573
Q Serve Time (g_s), s	13.4	0.0	0.0	0.0	0.0	0.0	0.0	89.0
Cycle Q Clear Time (g_c), s	13.4	0.0	0.0	0.0	0.0	0.0	0.0	89.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37
Lane Grp Cap (c), veh/h	283	0	0	0	0	0	0	938
V/C Ratio (X)	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.95
Avail Cap (c_a), veh/h	283	0	0	0	0	0	0	938
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68
Uniform Delay (d1), s/veh	58.7	0.0	0.0	0.0	0.0	0.0	0.0	31.6
Incr Delay (d2), s/veh	5.2	0.0	0.0	0.0	0.0	0.0	0.0	15.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	63.9	0.0	0.0	0.0	0.0	0.0	0.0	47.1
1st-Term Q (Q1), veh/ln	10.7	0.0	0.0	0.0	0.0	0.0	0.0	38.5
2nd-Term Q (Q2), veh/ln	0.4	0.0	0.0	0.0	0.0	0.0	0.0	4.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	11.1	0.0	0.0	0.0	0.0	0.0	0.0	42.6
%ile Storage Ratio (RQ%)	0.55	0.00	0.00	0.00	0.00	0.00	0.00	0.64
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		67.0						
HCM 2010 LOS		E						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	101	2066	52	87	1562	105	78	20	81	72	7	82
Future Volume (veh/h)	101	2066	52	87	1562	105	78	20	81	72	7	82
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1845	1845	1900	1845	1845
Adj Flow Rate, veh/h	103	2108	57	89	1594	107	80	20	83	73	7	84
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.98	0.98	0.92	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	77	2495	67	77	2386	159	47	12	52	66	6	65
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.04	0.71	0.71	0.04	0.71	0.71	0.03	0.03	0.03	0.04	0.04	0.04
Ln Grp Delay, s/veh	250.6	18.1	18.3	210.2	14.3	14.4	447.2	0.0	411.5	209.8	0.0	285.7
Ln Grp LOS	F	B	B	F	B	B	F		F	F		F
Approach Vol, veh/h		2268			1790			183			164	
Approach Delay, s/veh		28.8			24.1			431.0			248.7	
Approach LOS		C			C			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	6	2	3	4			7	8
Case No	11.0	11.0	2.0	4.0			2.0	4.0
Phs Duration (G+Y+Rc), s	13.0	12.0	13.0	115.0			13.0	115.0
Change Period (Y+Rc), s	6.7	6.9	6.4	* 6.6			6.4	* 6.6
Max Green (Gmax), s	6.3	5.1	6.6	* 1.1E2			6.6	* 1.1E2
Max Allow Headway (MAH), s	4.7	4.7	3.8	5.1			3.7	5.1
Max Q Clear (g_c+I1), s	8.3	7.1	8.6	69.3			8.6	42.6
Green Ext Time (g_e), s	0.0	0.0	0.0	37.2			0.0	60.8
Prob of Phs Call (p_c)	1.00	1.00	0.98	1.00			0.99	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.00			1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1	5	3				7	
Mvmt Sat Flow, veh/h	1610	1419	1774				1774	

Through Movement Data								
Assigned Mvmt	6	2		4				8
Mvmt Sat Flow, veh/h	154	355		3521				3368

Right-Turn Movement Data								
Assigned Mvmt	16	12		14				18
Mvmt Sat Flow, veh/h	1568	1568		95				225

Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	7	0
Lane Assignment	L+T	L+T	(Prot)				(Prot)	

Lanes in Grp	1	1	1	0	0	0	1	0
Grp Vol (v), veh/h	80	100	89	0	0	0	103	0
Grp Sat Flow (s), veh/h/ln	1764	1774	1774	0	0	0	1774	0
Q Serve Time (g_s), s	6.3	5.1	6.6	0.0	0.0	0.0	6.6	0.0
Cycle Q Clear Time (g_c), s	6.3	5.1	6.6	0.0	0.0	0.0	6.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.91	0.80	1.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	73	59	77	0	0	0	77	0
V/C Ratio (X)	1.10	1.69	1.16	0.00	0.00	0.00	1.35	0.00
Avail Cap (c_a), veh/h	73	59	77	0	0	0	77	0
Upstream Filter (I)	1.00	1.00	0.71	0.00	0.00	0.00	0.27	0.00
Uniform Delay (d1), s/veh	73.4	74.0	73.2	0.0	0.0	0.0	73.2	0.0
Incr Delay (d2), s/veh	135.9	373.2	137.0	0.0	0.0	0.0	177.4	0.0
Initial Q Delay (d3), s/veh	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	209.8	447.2	210.2	0.0	0.0	0.0	250.6	0.0
1st-Term Q (Q1), veh/ln	3.1	2.5	3.2	0.0	0.0	0.0	3.2	0.0
2nd-Term Q (Q2), veh/ln	2.7	6.1	2.9	0.0	0.0	0.0	3.8	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	5.8	8.6	6.1	0.0	0.0	0.0	7.0	0.0
%ile Storage Ratio (RQ%)	0.30	0.48	0.46	0.00	0.00	0.00	0.99	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	1.8	10.2	3.1	0.0	0.0	0.0	6.6	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.4	0.3	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	6	2	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	1055	0	0	0	833
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	65.8	0.0	0.0	0.0	39.6
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	65.8	0.0	0.0	0.0	39.6
Lane Grp Cap (c), veh/h	0	0	0	1254	0	0	0	1254
V/C Ratio (X)	0.00	0.00	0.00	0.84	0.00	0.00	0.00	0.66
Avail Cap (c_a), veh/h	0	0	0	1254	0	0	0	1254
Upstream Filter (I)	0.00	0.00	0.00	0.27	0.00	0.00	0.00	0.71
Uniform Delay (d1), s/veh	0.0	0.0	0.0	16.1	0.0	0.0	0.0	12.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.0	0.0	0.0	0.0	2.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	18.1	0.0	0.0	0.0	14.3
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	31.6	0.0	0.0	0.0	19.2

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	32.3	0.0	0.0	0.0	19.9
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.47	0.00	0.00	0.00	1.17
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	16	12	0	14	0	0	0	18
Lane Assignment	R	R		T+R				T+R
Lanes in Grp	1	1	0	1	0	0	0	1
Grp Vol (v), veh/h	84	83	0	1110	0	0	0	868
Grp Sat Flow (s), veh/h/ln	1568	1568	0	1846	0	0	0	1823
Q Serve Time (g_s), s	6.3	5.1	0.0	67.3	0.0	0.0	0.0	40.6
Cycle Q Clear Time (g_c), s	6.3	5.1	0.0	67.3	0.0	0.0	0.0	40.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	1.00	0.00	0.05	0.00	0.00	0.00	0.12
Lane Grp Cap (c), veh/h	65	52	0	1308	0	0	0	1292
V/C Ratio (X)	1.30	1.59	0.00	0.85	0.00	0.00	0.00	0.67
Avail Cap (c_a), veh/h	65	52	0	1308	0	0	0	1292
Upstream Filter (I)	1.00	1.00	0.00	0.27	0.00	0.00	0.00	0.71
Uniform Delay (d1), s/veh	73.3	73.9	0.0	16.3	0.0	0.0	0.0	12.4
Incr Delay (d2), s/veh	212.3	337.5	0.0	2.0	0.0	0.0	0.0	2.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	285.7	411.5	0.0	18.3	0.0	0.0	0.0	14.4
1st-Term Q (Q1), veh/ln	2.7	2.2	0.0	33.9	0.0	0.0	0.0	20.3
2nd-Term Q (Q2), veh/ln	3.8	4.9	0.0	0.7	0.0	0.0	0.0	0.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	6.5	7.1	0.0	34.7	0.0	0.0	0.0	21.0
%ile Storage Ratio (RQ%)	4.19	1.66	0.00	0.50	0.00	0.00	0.00	1.23
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	4.9	7.7	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	51.8
HCM 2010 LOS	D

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1915	286	308	1420	318	324
Future Volume (veh/h)	1915	286	308	1420	318	324
Number	4	14	3	8	5	12
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)		1.00	1.00		1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1845	1845
Adj Flow Rate, veh/h	1995	298	321	1479	331	338
Adj No. of Lanes	2	0	1	2	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	3	3
Opposing Right Turn Influence			Yes		Yes	
Cap, veh/h	1812	264	219	2641	310	277
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.58	0.58	0.12	0.75	0.18	0.18
Ln Grp Delay, s/veh	78.6	98.1	297.6	9.8	138.6	196.0
Ln Grp LOS	F	F	F	A	F	F
Approach Vol, veh/h	2293			1800	669	
Approach Delay, s/veh	88.6			61.1	167.6	
Approach LOS	F			E	F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Case No		9.0	2.0	8.0				4.0
Phs Duration (G+Y+Rc), s		36.0	27.0	104.0				131.0
Change Period (Y+Rc), s		6.5	6.4	6.4				6.4
Max Green (Gmax), s		29.5	20.6	97.6				124.6
Max Allow Headway (MAH), s		3.9	3.8	5.3				5.3
Max Q Clear (g_c+I1), s		31.5	22.6	99.6				32.4
Green Ext Time (g_e), s		0.0	0.0	0.0				84.6
Prob of Phs Call (p_c)		1.00	1.00	1.00				1.00
Prob of Max Out (p_x)		0.00	1.00	0.00				0.00

Left-Turn Movement Data			
Assigned Mvmt	5	3	7
Mvmt Sat Flow, veh/h	1757	1774	0

Through Movement Data			
Assigned Mvmt	2	4	8
Mvmt Sat Flow, veh/h	0	3194	3632

Right-Turn Movement Data			
Assigned Mvmt	12	14	18
Mvmt Sat Flow, veh/h	1568	452	0

Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	0	0	0
Lane Assignment			(Prot)					

Lanes in Grp	0	1	1	0	0	0	0	0
Grp Vol (v), veh/h	0	331	321	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1757	1774	0	0	0	0	0
Q Serve Time (g_s), s	0.0	29.5	20.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	29.5	20.6	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1757	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	97.6	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	310	219	0	0	0	0	0
V/C Ratio (X)	0.00	1.07	1.47	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	310	219	0	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.59	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	68.8	73.2	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	69.8	224.4	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	138.6	297.6	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	14.3	10.1	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	6.0	13.6	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	20.3	23.7	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.85	2.62	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	5.2	25.5	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.4	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	2
Grp Vol (v), veh/h	0	0	0	1117	0	0	0	1479
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	97.6	0.0	0.0	0.0	30.4
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	97.6	0.0	0.0	0.0	30.4
Lane Grp Cap (c), veh/h	0	0	0	1034	0	0	0	2641
V/C Ratio (X)	0.00	0.00	0.00	1.08	0.00	0.00	0.00	0.56
Avail Cap (c_a), veh/h	0	0	0	1034	0	0	0	2641
Upstream Filter (I)	0.00	0.00	0.00	0.41	0.00	0.00	0.00	0.59
Uniform Delay (d1), s/veh	0.0	0.0	0.0	34.7	0.0	0.0	0.0	9.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	43.9	0.0	0.0	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	78.6	0.0	0.0	0.0	9.8
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	47.4	0.0	0.0	0.0	14.8

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	12.6	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	60.0	0.0	0.0	0.0	15.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	3.53	0.00	0.00	0.00	0.39
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	20.7	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	0	0	18
Lane Assignment		R		T+R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	338	0	1176	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1568	0	1783	0	0	0	0
Q Serve Time (g_s), s	0.0	29.5	0.0	97.6	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	29.5	0.0	97.6	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.25	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	277	0	1042	0	0	0	0
V/C Ratio (X)	0.00	1.22	0.00	1.13	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	277	0	1042	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.41	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	68.8	0.0	34.7	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	127.2	0.0	63.4	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	196.0	0.0	98.1	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	12.8	0.0	47.8	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	9.8	0.0	18.4	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	22.6	0.0	66.1	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.94	0.00	3.89	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	15.3	0.0	33.5	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		89.3						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	2010	316	104	1632	22	125	4	84	14	4	25
Future Volume (veh/h)	48	2010	316	104	1632	22	125	4	84	14	4	25
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1900	1900	1845	1900
Adj Flow Rate, veh/h	51	2116	333	109	1718	23	132	4	88	15	4	26
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	55	2259	346	55	2625	35	300	14	302	104	37	153
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.73	0.73	0.03	0.73	0.73	0.20	0.20	0.20	0.20	0.20	0.20
Ln Grp Delay, s/veh	98.0	18.8	22.0	559.0	12.7	12.6	63.1	0.0	57.0	54.1	0.0	0.0
Ln Grp LOS	F	B	C	F	B	B	E		E	D		
Approach Vol, veh/h		2500			1850			224			45	
Approach Delay, s/veh		22.0			44.8			60.6			54.1	
Approach LOS		C			D			E			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		6.0	2.0	4.0		8.0	2.0	4.0
Phs Duration (G+Y+Rc), s		39.0	11.4	125.0		39.0	11.4	125.0
Change Period (Y+Rc), s		* 6.8	6.4	6.4		* 6.8	6.4	6.4
Max Green (Gmax), s		* 32	5.0	104.6		* 32	5.0	104.6
Max Allow Headway (MAH), s		4.7	3.8	5.3		4.7	3.8	5.3
Max Q Clear (g_c+I1), s		18.0	7.0	104.7		10.1	6.6	41.7
Green Ext Time (g_e), s		1.0	0.0	0.0		1.2	0.0	61.2
Prob of Phs Call (p_c)		1.00	0.99	1.00		1.00	0.90	1.00
Prob of Max Out (p_x)		0.00	1.00	0.00		0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		1361	1774			371	1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		69		3077		187		3576

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1510		472		763		48

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0
Lane Assignment			(Prot)			L+T+R	(Prot)	

Lanes in Grp	0	1	1	0	0	1	1	0
Grp Vol (v), veh/h	0	132	109	0	0	45	51	0
Grp Sat Flow (s), veh/h/ln	0	1361	1774	0	0	1321	1774	0
Q Serve Time (g_s), s	0.0	7.9	5.0	0.0	0.0	0.1	4.6	0.0
Cycle Q Clear Time (g_c), s	0.0	16.0	5.0	0.0	0.0	8.1	4.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1361	0	0	0	1325	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	1028	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	32.2	0.0	0.0	0.0	32.2	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	24.1	0.0	0.0	0.0	24.2	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	7.9	0.0	0.0	0.0	0.1	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	3.6	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	0.00	0.33	1.00	0.00
Lane Grp Cap (c), veh/h	0	300	55	0	0	294	55	0
V/C Ratio (X)	0.00	0.44	1.98	0.00	0.00	0.15	0.93	0.00
Avail Cap (c_a), veh/h	0	300	55	0	0	294	55	0
Upstream Filter (I)	0.00	1.00	0.67	0.00	0.00	1.00	0.09	0.00
Uniform Delay (d1), s/veh	0.0	58.4	78.0	0.0	0.0	53.0	77.8	0.0
Incr Delay (d2), s/veh	0.0	4.6	481.0	0.0	0.0	1.1	20.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	63.1	559.0	0.0	0.0	54.1	98.0	0.0
1st-Term Q (Q1), veh/ln	0.0	5.3	2.4	0.0	0.0	1.7	2.3	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	7.4	0.0	0.0	0.1	0.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	5.7	9.8	0.0	0.0	1.7	2.6	0.0
%ile Storage Ratio (RQ%)	0.00	0.66	1.04	0.00	0.00	0.14	0.34	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	13.5	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	1193	0	0	0	849
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	88.6	0.0	0.0	0.0	39.5
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	88.6	0.0	0.0	0.0	39.5
Lane Grp Cap (c), veh/h	0	0	0	1299	0	0	0	1299
V/C Ratio (X)	0.00	0.00	0.00	0.92	0.00	0.00	0.00	0.65
Avail Cap (c_a), veh/h	0	0	0	1299	0	0	0	1299
Upstream Filter (I)	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.67
Uniform Delay (d1), s/veh	0.0	0.0	0.0	17.5	0.0	0.0	0.0	10.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.4	0.0	0.0	0.0	1.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	18.8	0.0	0.0	0.0	12.7
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	42.8	0.0	0.0	0.0	19.1

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	43.2	0.0	0.0	0.0	19.7
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	1.39	0.00	0.00	0.00	0.28
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R				T+R
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	92	0	1256	0	0	0	892
Grp Sat Flow (s), veh/h/ln	0	1578	0	1779	0	0	0	1854
Q Serve Time (g_s), s	0.0	8.0	0.0	102.7	0.0	0.0	0.0	39.7
Cycle Q Clear Time (g_c), s	0.0	8.0	0.0	102.7	0.0	0.0	0.0	39.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.96	0.00	0.27	0.00	0.58	0.00	0.03
Lane Grp Cap (c), veh/h	0	316	0	1306	0	0	0	1361
V/C Ratio (X)	0.00	0.29	0.00	0.96	0.00	0.00	0.00	0.66
Avail Cap (c_a), veh/h	0	316	0	1306	0	0	0	1361
Upstream Filter (I)	0.00	1.00	0.00	0.09	0.00	0.00	0.00	0.67
Uniform Delay (d1), s/veh	0.0	54.7	0.0	19.3	0.0	0.0	0.0	11.0
Incr Delay (d2), s/veh	0.0	2.3	0.0	2.7	0.0	0.0	0.0	1.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	57.0	0.0	22.0	0.0	0.0	0.0	12.6
1st-Term Q (Q1), veh/ln	0.0	3.5	0.0	49.9	0.0	0.0	0.0	20.1
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	1.0	0.0	0.0	0.0	0.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	3.7	0.0	50.9	0.0	0.0	0.0	20.7
%ile Storage Ratio (RQ%)	0.00	0.33	0.00	1.64	0.00	0.00	0.00	0.30
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	33.4
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	1812	330	306	1618	6	251	0	238	4	5	5
Future Volume (veh/h)	7	1812	330	306	1618	6	251	0	238	4	5	5
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1845	1900	1845	1900
Adj Flow Rate, veh/h	7	1888	344	319	1685	6	261	0	248	4	5	5
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	0	1	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	208	1900	336	240	2783	10	290	326	277	90	111	96
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.63	0.63	0.63	0.11	0.77	0.77	0.18	0.00	0.18	0.18	0.18	0.18
Ln Grp Delay, s/veh	16.0	33.3	46.0	216.9	8.5	8.5	101.7	0.0	100.0	57.4	0.0	0.0
Ln Grp LOS	B	C	F	F	A	A	F		F	E		
Approach Vol, veh/h		2239			2010			509			14	
Approach Delay, s/veh		39.8			41.6			100.9			57.4	
Approach LOS		D			D			F			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Case No		5.0	1.2	6.0		8.0		4.0
Phs Duration (G+Y+Rc), s		34.0	23.0	110.0		34.0		133.0
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5		4.5
Max Green (Gmax), s		29.5	18.5	105.5		29.5		128.5
Max Allow Headway (MAH), s		4.0	3.8	5.3		4.0		5.3
Max Q Clear (g_c+I1), s		31.5	20.5	107.5		3.1		35.6
Green Ext Time (g_e), s		0.0	0.0	0.0		1.8		86.2
Prob of Phs Call (p_c)		1.00	1.00	1.00		1.00		1.00
Prob of Max Out (p_x)		0.00	1.00	0.00		0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3	7		1		
Mvmt Sat Flow, veh/h		1385	1774	290		351		

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1845		3007		626		3617

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		532		543		13

Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	1	0	0
Lane Assignment			(Pr/Pm)			L+T+R		

Lanes in Grp	0	1	1	1	0	1	0	0
Grp Vol (v), veh/h	0	261	319	7	0	14	0	0
Grp Sat Flow (s), veh/h/ln	0	1385	1774	290	0	1520	0	0
Q Serve Time (g_s), s	0.0	28.4	18.5	1.8	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	29.5	18.5	12.4	0.0	1.1	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1385	171	290	0	1150	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	1757	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	29.5	107.5	105.5	0.0	29.5	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	28.4	0.0	94.9	0.0	29.5	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	28.4	0.0	1.8	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	1.00	0.00	0.29	0.00	0.00
Lane Grp Cap (c), veh/h	0	290	240	208	0	296	0	0
V/C Ratio (X)	0.00	0.90	1.33	0.03	0.00	0.05	0.00	0.00
Avail Cap (c_a), veh/h	0	290	240	208	0	296	0	0
Upstream Filter (I)	0.00	1.00	0.09	0.09	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	69.4	65.2	15.9	0.0	57.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	32.3	151.7	0.0	0.0	0.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	101.7	216.9	16.0	0.0	57.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	12.0	11.1	0.1	0.0	0.5	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	2.6	10.1	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	14.6	21.1	0.1	0.0	0.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	2.68	1.68	0.02	0.00	0.05	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	19.8	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T				T
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	1087	0	0	0	824
Grp Sat Flow (s), veh/h/ln	0	1845	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	98.0	0.0	0.0	0.0	33.6
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	98.0	0.0	0.0	0.0	33.6
Lane Grp Cap (c), veh/h	0	326	0	1118	0	0	0	1362
V/C Ratio (X)	0.00	0.00	0.00	0.97	0.00	0.00	0.00	0.61
Avail Cap (c_a), veh/h	0	326	0	1118	0	0	0	1362
Upstream Filter (I)	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	0.0	0.0	29.4	0.0	0.0	0.0	8.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	3.9	0.0	0.0	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	33.3	0.0	0.0	0.0	8.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	47.4	0.0	0.0	0.0	16.3

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	48.6	0.0	0.0	0.0	16.3
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.69	0.00	0.00	0.00	0.42
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R				T+R
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	248	0	1145	0	0	0	867
Grp Sat Flow (s), veh/h/ln	0	1568	0	1769	0	0	0	1860
Q Serve Time (g_s), s	0.0	25.8	0.0	105.5	0.0	0.0	0.0	33.6
Cycle Q Clear Time (g_c), s	0.0	25.8	0.0	105.5	0.0	0.0	0.0	33.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.30	0.00	0.36	0.00	0.01
Lane Grp Cap (c), veh/h	0	277	0	1117	0	0	0	1432
V/C Ratio (X)	0.00	0.90	0.00	1.02	0.00	0.00	0.00	0.61
Avail Cap (c_a), veh/h	0	277	0	1117	0	0	0	1432
Upstream Filter (I)	0.00	1.00	0.00	0.09	0.00	0.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	67.2	0.0	30.8	0.0	0.0	0.0	8.3
Incr Delay (d2), s/veh	0.0	32.8	0.0	15.3	0.0	0.0	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	100.0	0.0	46.0	0.0	0.0	0.0	8.5
1st-Term Q (Q1), veh/ln	0.0	11.2	0.0	51.2	0.0	0.0	0.0	17.1
2nd-Term Q (Q2), veh/ln	0.0	2.5	0.0	4.7	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	13.7	0.0	56.0	0.0	0.0	0.0	17.2
%ile Storage Ratio (RQ%)	0.00	1.11	0.00	0.80	0.00	0.00	0.00	0.45
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	6.8	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		47.1						
HCM 2010 LOS		D						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	2056	0	27	1981	182	0	0	33	126	0	46
Future Volume (veh/h)	71	2056	0	27	1981	182	0	0	33	126	0	46
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	0	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	72	2098	0	28	2021	186	0	0	34	129	0	47
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	1	1	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	0	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			No			Yes		
Cap, veh/h	103	1259	0	55	1078	98	0	0	470	506	0	470
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.36	0.00	0.03	0.33	0.33	0.00	0.00	0.30	0.30	0.00	0.30
Ln Grp Delay, s/veh	29.0	320.0	0.0	35.7	409.3	433.1	0.0	0.0	15.3	18.2	0.0	15.6
Ln Grp LOS	C	F		D	F	F			B	B		B
Approach Vol, veh/h		2170			2235			34			176	
Approach Delay, s/veh		310.4			416.6			15.3			17.5	
Approach LOS		F			F			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		8.0	2.0	4.0		6.0	2.0	4.0
Phs Duration (G+Y+Rc), s		24.0	8.3	27.7		24.0	9.9	26.1
Change Period (Y+Rc), s		6.0	6.4	6.4		6.0	6.4	6.4
Max Green (Gmax), s		18.0	5.0	18.6		18.0	5.0	18.6
Max Allow Headway (MAH), s		4.5	3.8	5.3		4.5	3.8	5.3
Max Q Clear (g_c+I1), s		2.9	2.9	23.3		7.4	4.4	21.7
Green Ext Time (g_e), s		0.7	0.0	0.0		0.6	0.0	0.0
Prob of Phs Call (p_c)		1.00	0.37	1.00		1.00	0.70	1.00
Prob of Max Out (p_x)		0.00	1.00	0.00		0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		0	1774			1356	1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		0		3632		0		3282

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		0		1568		297

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0
Lane Assignment			(Prot)				(Prot)	

Lanes in Grp	0	0	1	0	0	1	1	0
Grp Vol (v), veh/h	0	0	28	0	0	129	72	0
Grp Sat Flow (s), veh/h/ln	0	0	1774	0	0	1356	1774	0
Q Serve Time (g_s), s	0.0	0.0	0.9	0.0	0.0	4.5	2.4	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.9	0.0	0.0	5.4	2.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	1356	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	18.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	17.1	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	4.5	0.0	0.0
Time to First Blk (g_f), s	0.0	18.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	55	0	0	506	103	0
V/C Ratio (X)	0.00	0.00	0.51	0.00	0.00	0.26	0.70	0.00
Avail Cap (c_a), veh/h	0	0	148	0	0	506	148	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	1.00	0.15	0.00
Uniform Delay (d1), s/veh	0.0	0.0	28.6	0.0	0.0	17.0	27.7	0.0
Incr Delay (d2), s/veh	0.0	0.0	7.1	0.0	0.0	1.2	1.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	35.7	0.0	0.0	18.2	29.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.5	0.0	0.0	1.7	1.2	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.1	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.6	0.0	0.0	1.9	1.2	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.08	0.00	0.00	0.32	0.17	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	1
Grp Vol (v), veh/h	0	0	0	2098	0	0	0	1075
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	21.3	0.0	0.0	0.0	19.7
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	21.3	0.0	0.0	0.0	19.7
Lane Grp Cap (c), veh/h	0	0	0	1259	0	0	0	581
V/C Ratio (X)	0.00	0.00	0.00	1.67	0.00	0.00	0.00	1.85
Avail Cap (c_a), veh/h	0	0	0	1259	0	0	0	581
Upstream Filter (I)	0.00	0.00	0.00	0.15	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	19.3	0.0	0.0	0.0	20.1
Incr Delay (d2), s/veh	0.0	0.0	0.0	300.7	0.0	0.0	0.0	389.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	320.0	0.0	0.0	0.0	409.3
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	10.3	0.0	0.0	0.0	9.5

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	52.6	0.0	0.0	0.0	62.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	62.9	0.0	0.0	0.0	72.3
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	1.64	0.00	0.00	0.00	5.97
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	209.9	0.0	0.0	0.0	123.5
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.5
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R				T+R		T+R
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	34	0	0	0	47	0	1132
Grp Sat Flow (s), veh/h/ln	0	1568	0	0	0	1568	0	1810
Q Serve Time (g_s), s	0.0	0.9	0.0	0.0	0.0	1.3	0.0	19.7
Cycle Q Clear Time (g_c), s	0.0	0.9	0.0	0.0	0.0	1.3	0.0	19.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.16
Lane Grp Cap (c), veh/h	0	470	0	0	0	470	0	595
V/C Ratio (X)	0.00	0.07	0.00	0.00	0.00	0.10	0.00	1.90
Avail Cap (c_a), veh/h	0	470	0	0	0	470	0	595
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	15.0	0.0	0.0	0.0	15.2	0.0	20.1
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.0	0.0	0.4	0.0	412.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	15.3	0.0	0.0	0.0	15.6	0.0	433.1
1st-Term Q (Q1), veh/ln	0.0	0.4	0.0	0.0	0.0	0.6	0.0	9.7
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	68.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.4	0.0	0.0	0.0	0.6	0.0	77.9
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.00	0.00	0.05	0.00	6.43
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	134.3
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
Intersection Summary								
HCM 2010 Ctrl Delay		348.5						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	597	1288	272	422	1095	136	393	1197	365	293	1146	584
Future Volume (veh/h)	597	1288	272	422	1095	136	393	1197	365	293	1146	584
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	635	1370	289	449	1165	145	418	1273	388	312	1219	621
Adj No. of Lanes	2	3	0	2	3	0	2	3	0	2	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	522	1110	234	463	1130	141	353	1070	325	370	955	446
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.15	0.26	0.26	0.13	0.25	0.25	0.10	0.28	0.28	0.11	0.28	0.28
Ln Grp Delay, s/veh	163.0	157.4	166.5	84.0	83.1	95.2	160.6	137.9	148.2	64.3	174.0	231.3
Ln Grp LOS	F	F	F	F	F	F	F	F	F	E	F	F
Approach Vol, veh/h		2294			1759			2079			2152	
Approach Delay, s/veh		161.2			86.4			145.1			174.6	
Approach LOS		F			F			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	4.0
Phs Duration (G+Y+Rc), s	18.6	38.4	22.0	37.0	18.0	39.0	24.0	35.0
Change Period (Y+Rc), s	6.0	6.0	6.4	6.4	6.0	6.0	6.4	6.4
Max Green (Gmax), s	14.0	31.0	15.6	30.6	12.0	33.0	17.6	28.6
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.3	3.8	5.3	3.8	5.3
Max Q Clear (g_c+I1), s	12.4	34.4	17.1	32.6	14.0	35.0	19.6	30.6
Green Ext Time (g_e), s	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3408		3442		3408		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3831		4210		3357		4582

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1165		887		1568		570

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	312	0	449	0	418	0	635	0
Grp Sat Flow (s), veh/h/ln	1704	0	1721	0	1704	0	1721	0
Q Serve Time (g_s), s	10.4	0.0	15.1	0.0	12.0	0.0	17.6	0.0
Cycle Q Clear Time (g_c), s	10.4	0.0	15.1	0.0	12.0	0.0	17.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	370	0	463	0	353	0	522	0
V/C Ratio (X)	0.84	0.00	0.97	0.00	1.19	0.00	1.22	0.00
Avail Cap (c_a), veh/h	411	0	463	0	353	0	522	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	50.7	0.0	50.0	0.0	52.0	0.0	49.2	0.0
Incr Delay (d2), s/veh	13.5	0.0	34.1	0.0	108.6	0.0	113.8	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	64.3	0.0	84.0	0.0	160.6	0.0	163.0	0.0
1st-Term Q (Q1), veh/ln	4.9	0.0	7.2	0.0	5.6	0.0	8.3	0.0
2nd-Term Q (Q2), veh/ln	0.7	0.0	2.2	0.0	5.3	0.0	8.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	5.6	0.0	9.4	0.0	10.9	0.0	16.6	0.0
%ile Storage Ratio (RQ%)	0.45	0.00	1.40	0.00	0.88	0.00	1.40	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	16.4	0.0	28.2	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.3	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	2	0	2
Grp Vol (v), veh/h	0	1115	0	1103	0	1219	0	862
Grp Sat Flow (s), veh/h/ln	0	1679	0	1695	0	1679	0	1695
Q Serve Time (g_s), s	0.0	32.4	0.0	30.6	0.0	33.0	0.0	28.6
Cycle Q Clear Time (g_c), s	0.0	32.4	0.0	30.6	0.0	33.0	0.0	28.6
Lane Grp Cap (c), veh/h	0	937	0	894	0	955	0	836
V/C Ratio (X)	0.00	1.19	0.00	1.23	0.00	1.28	0.00	1.03
Avail Cap (c_a), veh/h	0	937	0	894	0	955	0	836
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	41.8	0.0	42.7	0.0	41.5	0.0	43.7
Incr Delay (d2), s/veh	0.0	96.1	0.0	114.7	0.0	132.5	0.0	39.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	137.9	0.0	157.4	0.0	174.0	0.0	83.1
1st-Term Q (Q1), veh/ln	0.0	15.0	0.0	14.3	0.0	15.3	0.0	13.4

2nd-Term Q (Q2), veh/ln	0.0	12.5	0.0	14.3	0.0	17.6	0.0	4.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	27.5	0.0	28.5	0.0	32.8	0.0	17.9
%ile Storage Ratio (RQ%)	0.00	1.54	0.00	1.14	0.00	1.26	0.00	2.84
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	44.5	0.0	52.2	0.0	66.0	0.0	6.5
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.3	0.0	0.3	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	546	0	556	0	621	0	448
Grp Sat Flow (s), veh/h/ln	0	1639	0	1706	0	1568	0	1762
Q Serve Time (g_s), s	0.0	32.4	0.0	30.6	0.0	33.0	0.0	28.6
Cycle Q Clear Time (g_c), s	0.0	32.4	0.0	30.6	0.0	33.0	0.0	28.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.71	0.00	0.52	0.00	1.00	0.00	0.32
Lane Grp Cap (c), veh/h	0	458	0	450	0	446	0	434
V/C Ratio (X)	0.00	1.19	0.00	1.24	0.00	1.39	0.00	1.03
Avail Cap (c_a), veh/h	0	458	0	450	0	446	0	434
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	41.8	0.0	42.7	0.0	41.5	0.0	43.7
Incr Delay (d2), s/veh	0.0	106.3	0.0	123.8	0.0	189.8	0.0	51.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	148.2	0.0	166.5	0.0	231.3	0.0	95.2
1st-Term Q (Q1), veh/ln	0.0	14.6	0.0	14.4	0.0	14.2	0.0	13.9
2nd-Term Q (Q2), veh/ln	0.0	13.5	0.0	15.5	0.0	23.5	0.0	6.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	28.1	0.0	29.9	0.0	37.8	0.0	20.1
%ile Storage Ratio (RQ%)	0.00	1.57	0.00	1.20	0.00	1.45	0.00	3.19
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	22.0	0.0	26.5	0.0	43.7	0.0	3.4
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.3	0.0	0.3	0.0	0.3
Intersection Summary								
HCM 2010 Ctrl Delay		144.8						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	192	1670	54	0	1521	159	150	56	4	109	42	83
Future Volume (veh/h)	192	1670	54	0	1521	159	150	56	4	109	42	83
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	0	1863	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	198	1722	56	0	1568	164	155	58	4	112	43	86
Adj No. of Lanes	1	2	0	0	2	0	1	1	1	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	0	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			No			Yes			Yes		
Cap, veh/h	96	2396	78	0	1926	199	49	337	286	49	337	286
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.68	0.68	0.00	0.59	0.59	0.03	0.18	0.18	0.03	0.18	0.18
Ln Grp Delay, s/veh	599.4	21.0	21.1	0.0	34.7	35.7	1100.7	62.5	59.7	716.9	61.7	65.6
Ln Grp LOS	F	C	C		C	D	F	E	E	F	E	E
Approach Vol, veh/h		1976			1732			217			241	
Approach Delay, s/veh		79.0			35.2			804.0			367.6	
Approach LOS		E			D			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6	7	8
Case No	2.0	3.0		4.0	2.0	3.0	2.0	8.0
Phs Duration (G+Y+Rc), s	10.7	39.0		128.3	10.7	39.0	16.0	112.3
Change Period (Y+Rc), s	* 5.7	6.5		6.4	* 5.7	6.5	6.4	6.4
Max Green (Gmax), s	* 5	32.5		121.6	* 5	32.5	9.6	105.6
Max Allow Headway (MAH), s	3.8	4.7		5.3	3.8	4.7	3.8	5.3
Max Q Clear (g_c+I1), s	7.0	6.7		56.8	7.0	10.4	11.6	71.1
Green Ext Time (g_e), s	0.0	0.8		56.9	0.0	0.8	0.0	32.1
Prob of Phs Call (p_c)	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	0.00	0.00		0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1				5		7	3
Mvmt Sat Flow, veh/h	1757				1757		1774	0

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1845		3499		1845		3331

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		113		1568		335

Left Lane Group Data								
Assigned Mvmt	1	0	0	0	5	0	7	3
Lane Assignment	(Prot)				(Prot)		(Prot)	

Lanes in Grp	1	0	0	0	1	0	1	0
Grp Vol (v), veh/h	112	0	0	0	155	0	198	0
Grp Sat Flow (s), veh/h/ln	1757	0	0	0	1757	0	1774	0
Q Serve Time (g_s), s	5.0	0.0	0.0	0.0	5.0	0.0	9.6	0.0
Cycle Q Clear Time (g_c), s	5.0	0.0	0.0	0.0	5.0	0.0	9.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	105.9
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	49	0	0	0	49	0	96	0
V/C Ratio (X)	2.27	0.00	0.00	0.00	3.14	0.00	2.07	0.00
Avail Cap (c_a), veh/h	49	0	0	0	49	0	96	0
Upstream Filter (I)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	86.5	0.0	0.0	0.0	86.5	0.0	84.2	0.0
Incr Delay (d2), s/veh	630.4	0.0	0.0	0.0	1014.2	0.0	515.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	716.9	0.0	0.0	0.0	1100.7	0.0	599.4	0.0
1st-Term Q (Q1), veh/ln	2.4	0.0	0.0	0.0	2.4	0.0	4.7	0.0
2nd-Term Q (Q2), veh/ln	8.6	0.0	0.0	0.0	13.9	0.0	13.7	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	11.1	0.0	0.0	0.0	16.3	0.0	18.4	0.0
%ile Storage Ratio (RQ%)	2.83	0.00	0.00	0.00	2.99	0.00	1.11	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	15.7	0.0	0.0	0.0	26.4	0.0	25.6	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.6	0.0	0.0	0.0	0.8	0.0	0.5	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	58	0	868	0	43	0	849
Grp Sat Flow (s), veh/h/ln	0	1845	0	1770	0	1845	0	1770
Q Serve Time (g_s), s	0.0	4.7	0.0	54.0	0.0	3.5	0.0	66.5
Cycle Q Clear Time (g_c), s	0.0	4.7	0.0	54.0	0.0	3.5	0.0	66.5
Lane Grp Cap (c), veh/h	0	337	0	1212	0	337	0	1053
V/C Ratio (X)	0.00	0.17	0.00	0.72	0.00	0.13	0.00	0.81
Avail Cap (c_a), veh/h	0	337	0	1212	0	337	0	1053
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	61.4	0.0	17.3	0.0	60.9	0.0	28.1
Incr Delay (d2), s/veh	0.0	1.1	0.0	3.6	0.0	0.8	0.0	6.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	62.5	0.0	21.0	0.0	61.7	0.0	34.7
1st-Term Q (Q1), veh/ln	0.0	2.4	0.0	26.3	0.0	1.8	0.0	32.3

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	1.2	0.0	0.1	0.0	1.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.5	0.0	27.5	0.0	1.8	0.0	34.3
%ile Storage Ratio (RQ%)	0.00	0.27	0.00	0.32	0.00	0.09	0.00	0.66
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	4	0	910	0	86	0	883
Grp Sat Flow (s), veh/h/ln	0	1568	0	1843	0	1568	0	1804
Q Serve Time (g_s), s	0.0	0.4	0.0	54.8	0.0	8.4	0.0	69.1
Cycle Q Clear Time (g_c), s	0.0	0.4	0.0	54.8	0.0	8.4	0.0	69.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.06	0.00	1.00	0.00	0.19
Lane Grp Cap (c), veh/h	0	286	0	1262	0	286	0	1073
V/C Ratio (X)	0.00	0.01	0.00	0.72	0.00	0.30	0.00	0.82
Avail Cap (c_a), veh/h	0	286	0	1262	0	286	0	1073
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	59.6	0.0	17.5	0.0	62.9	0.0	28.6
Incr Delay (d2), s/veh	0.0	0.1	0.0	3.6	0.0	2.7	0.0	7.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	59.7	0.0	21.1	0.0	65.6	0.0	35.7
1st-Term Q (Q1), veh/ln	0.0	0.2	0.0	27.6	0.0	7.7	0.0	34.3
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.3	0.0	0.2	0.0	2.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.2	0.0	28.8	0.0	7.9	0.0	36.5
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.34	0.00	0.41	0.00	0.71
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	115.3
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	520	1068	218	285	905	283	508	1953	259	434	1216	289
Future Volume (veh/h)	520	1068	218	285	905	283	508	1953	259	434	1216	289
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	531	1090	222	291	923	289	518	1993	264	443	1241	295
Adj No. of Lanes	2	3	1	2	3	1	2	3	0	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	327	1011	315	159	763	237	544	2030	266	489	1765	419
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.10	0.20	0.20	0.05	0.15	0.15	0.16	0.45	0.45	0.14	0.43	0.43
Ln Grp Delay, s/veh	367.8	117.6	73.7	472.7	176.3	199.3	95.1	62.6	75.6	86.8	40.7	43.4
Ln Grp LOS	F	F	E	F	F	F	F	E	E	F	D	D
Approach Vol, veh/h		1843			1503			2775			1979	
Approach Delay, s/veh		184.4			238.1			72.3			51.7	
Approach LOS		F			F			E			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	3.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	30.3	80.7	14.0	39.0	33.0	78.0	22.0	31.0
Change Period (Y+Rc), s	6.8	6.8	6.4	6.4	6.8	6.8	6.4	6.4
Max Green (Gmax), s	26.2	71.2	7.6	32.6	26.2	71.2	15.6	24.6
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.0	3.8	5.3	3.8	5.0
Max Q Clear (g_c+I1), s	23.0	75.1	9.6	34.6	26.7	42.8	17.6	26.6
Green Ext Time (g_e), s	0.6	0.0	0.0	0.0	0.0	27.1	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3408		3442		3408		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		4508		5085		4065		5085

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		590		1583		966		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	443	0	291	0	518	0	531	0
Grp Sat Flow (s), veh/h/ln	1704	0	1721	0	1704	0	1721	0
Q Serve Time (g_s), s	21.0	0.0	7.6	0.0	24.7	0.0	15.6	0.0
Cycle Q Clear Time (g_c), s	21.0	0.0	7.6	0.0	24.7	0.0	15.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	489	0	159	0	544	0	327	0
V/C Ratio (X)	0.91	0.00	1.82	0.00	0.95	0.00	1.62	0.00
Avail Cap (c_a), veh/h	544	0	159	0	544	0	327	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	69.1	0.0	78.2	0.0	68.3	0.0	74.2	0.0
Incr Delay (d2), s/veh	17.6	0.0	394.5	0.0	26.8	0.0	293.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	86.8	0.0	472.7	0.0	95.1	0.0	367.8	0.0
1st-Term Q (Q1), veh/ln	9.9	0.0	3.6	0.0	11.7	0.0	7.4	0.0
2nd-Term Q (Q2), veh/ln	1.2	0.0	8.7	0.0	2.0	0.0	13.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	11.1	0.0	12.4	0.0	13.7	0.0	20.8	0.0
%ile Storage Ratio (RQ%)	0.49	0.00	0.64	0.00	0.88	0.00	1.05	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	32.9	0.0	0.0	0.0	50.9	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.5	0.0	0.0	0.0	0.4	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	3	0	2	0	3
Grp Vol (v), veh/h	0	1478	0	1090	0	1025	0	923
Grp Sat Flow (s), veh/h/ln	0	1679	0	1695	0	1679	0	1695
Q Serve Time (g_s), s	0.0	70.9	0.0	32.6	0.0	40.8	0.0	24.6
Cycle Q Clear Time (g_c), s	0.0	70.9	0.0	32.6	0.0	40.8	0.0	24.6
Lane Grp Cap (c), veh/h	0	1512	0	1011	0	1458	0	763
V/C Ratio (X)	0.00	0.98	0.00	1.08	0.00	0.70	0.00	1.21
Avail Cap (c_a), veh/h	0	1512	0	1011	0	1458	0	763
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	44.2	0.0	65.7	0.0	37.8	0.0	69.7
Incr Delay (d2), s/veh	0.0	18.3	0.0	51.9	0.0	2.9	0.0	106.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	62.6	0.0	117.6	0.0	40.7	0.0	176.3
1st-Term Q (Q1), veh/ln	0.0	32.8	0.0	15.3	0.0	18.9	0.0	11.5

2nd-Term Q (Q2), veh/ln	0.0	3.9	0.0	4.9	0.0	0.6	0.0	7.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	36.7	0.0	20.1	0.0	19.5	0.0	19.0
%ile Storage Ratio (RQ%)	0.00	1.70	0.00	0.94	0.00	0.75	0.00	0.32
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	19.8	0.0	0.0	0.0	40.1
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	779	0	222	0	511	0	289
Grp Sat Flow (s), veh/h/ln	0	1741	0	1583	0	1674	0	1583
Q Serve Time (g_s), s	0.0	73.1	0.0	21.4	0.0	40.8	0.0	24.6
Cycle Q Clear Time (g_c), s	0.0	73.1	0.0	21.4	0.0	40.8	0.0	24.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.34	0.00	1.00	0.00	0.58	0.00	1.00
Lane Grp Cap (c), veh/h	0	784	0	315	0	727	0	237
V/C Ratio (X)	0.00	0.99	0.00	0.71	0.00	0.70	0.00	1.22
Avail Cap (c_a), veh/h	0	784	0	315	0	727	0	237
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	44.9	0.0	61.2	0.0	37.8	0.0	69.7
Incr Delay (d2), s/veh	0.0	30.7	0.0	12.5	0.0	5.6	0.0	129.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	75.6	0.0	73.7	0.0	43.4	0.0	199.3
1st-Term Q (Q1), veh/ln	0.0	35.1	0.0	9.4	0.0	18.9	0.0	10.8
2nd-Term Q (Q2), veh/ln	0.0	6.7	0.0	1.1	0.0	1.1	0.0	8.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	41.8	0.0	10.5	0.0	20.0	0.0	19.3
%ile Storage Ratio (RQ%)	0.00	1.93	0.00	0.49	0.00	0.77	0.00	0.69
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.9
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Intersection Summary								
HCM 2010 Ctrl Delay		123.5						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	76	1319	236	335	1100	149	76	71	163	179	85	85
Future Volume (veh/h)	76	1319	236	335	1100	149	76	71	163	179	85	85
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1900	1712	1712	1712	1776	1776	1900	1776	1776	1776
Adj Flow Rate, veh/h	80	1388	248	353	1158	157	80	75	172	188	89	89
Adj No. of Lanes	2	3	0	2	3	1	1	2	0	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	11	11	11	11	11	11	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	90	1442	257	90	1690	526	101	672	601	246	1395	624
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.36	0.36	0.03	0.36	0.36	0.06	0.40	0.40	0.07	0.41	0.41
Ln Grp Delay, s/veh	129.2	62.4	72.5	1415.4	39.4	32.5	78.2	27.0	30.0	68.9	25.0	26.2
Ln Grp LOS	F	E	E	F	D	C	E	C	C	E	C	C
Approach Vol, veh/h		1716			1668			327			366	
Approach Delay, s/veh		68.8			329.9			41.1			47.8	
Approach LOS		E			F			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	14.6	61.4	8.0	57.0	12.4	63.6	8.0	57.0
Change Period (Y+Rc), s	4.0	5.3	4.0	* 6	4.0	5.3	4.0	* 6
Max Green (Gmax), s	42.0	24.7	4.0	* 51	42.0	24.7	4.0	* 51
Max Allow Headway (MAH), s	3.8	5.1	3.8	5.2	3.8	5.1	3.8	5.2
Max Q Clear (g_c+I1), s	9.9	12.9	6.0	50.1	8.6	7.2	5.6	31.7
Green Ext Time (g_e), s	0.7	1.9	0.0	0.9	0.2	2.2	0.0	17.2
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.96	1.00	0.96	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	1.00	0.00	0.00	1.00	0.88

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	3281	3163	1691	3163

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	1687	3989	3374	4673

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	1509	712	1509	1455

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	1	0	2	0
Grp Vol (v), veh/h	188	0	353	0	80	0	80	0
Grp Sat Flow (s), veh/h/ln	1640	0	1581	0	1691	0	1581	0
Q Serve Time (g_s), s	7.9	0.0	4.0	0.0	6.6	0.0	3.6	0.0
Cycle Q Clear Time (g_c), s	7.9	0.0	4.0	0.0	6.6	0.0	3.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	246	0	90	0	101	0	90	0
V/C Ratio (X)	0.76	0.00	3.93	0.00	0.79	0.00	0.89	0.00
Avail Cap (c_a), veh/h	977	0	90	0	504	0	90	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.98	0.00	1.00	0.00
Uniform Delay (d1), s/veh	64.0	0.0	68.5	0.0	65.4	0.0	68.3	0.0
Incr Delay (d2), s/veh	4.9	0.0	1346.9	0.0	12.8	0.0	60.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	68.9	0.0	1415.4	0.0	78.2	0.0	129.2	0.0
1st-Term Q (Q1), veh/ln	3.6	0.0	1.7	0.0	3.1	0.0	1.6	0.0
2nd-Term Q (Q2), veh/ln	0.2	0.0	16.8	0.0	0.4	0.0	0.8	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	3.8	0.0	18.5	0.0	3.4	0.0	2.3	0.0
%ile Storage Ratio (RQ%)	0.51	0.00	2.58	0.00	0.57	0.00	0.18	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	65.8	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	2	0	3
Grp Vol (v), veh/h	0	75	0	1084	0	89	0	1158
Grp Sat Flow (s), veh/h/ln	0	1687	0	1558	0	1687	0	1558
Q Serve Time (g_s), s	0.0	3.9	0.0	48.0	0.0	2.2	0.0	29.7
Cycle Q Clear Time (g_c), s	0.0	3.9	0.0	48.0	0.0	2.2	0.0	29.7
Lane Grp Cap (c), veh/h	0	672	0	1126	0	1395	0	1690
V/C Ratio (X)	0.00	0.11	0.00	0.96	0.00	0.06	0.00	0.69
Avail Cap (c_a), veh/h	0	672	0	1127	0	1395	0	1690
Upstream Filter (I)	0.00	0.98	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	26.7	0.0	44.1	0.0	24.9	0.0	38.2
Incr Delay (d2), s/veh	0.0	0.3	0.0	18.4	0.0	0.1	0.0	1.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	27.0	0.0	62.4	0.0	25.0	0.0	39.4
1st-Term Q (Q1), veh/ln	0.0	1.8	0.0	20.6	0.0	1.0	0.0	12.8

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	2.9	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.9	0.0	23.5	0.0	1.1	0.0	12.9
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.25	0.00	0.01	0.00	0.22
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	172	0	552	0	89	0	157
Grp Sat Flow (s), veh/h/ln	0	1509	0	1586	0	1509	0	1455
Q Serve Time (g_s), s	0.0	10.9	0.0	48.1	0.0	5.2	0.0	10.9
Cycle Q Clear Time (g_c), s	0.0	10.9	0.0	48.1	0.0	5.2	0.0	10.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.45	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	601	0	573	0	624	0	526
V/C Ratio (X)	0.00	0.29	0.00	0.96	0.00	0.14	0.00	0.30
Avail Cap (c_a), veh/h	0	601	0	574	0	624	0	526
Upstream Filter (I)	0.00	0.98	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	28.8	0.0	44.1	0.0	25.8	0.0	32.2
Incr Delay (d2), s/veh	0.0	1.2	0.0	28.5	0.0	0.5	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	30.0	0.0	72.5	0.0	26.2	0.0	32.5
1st-Term Q (Q1), veh/ln	0.0	4.5	0.0	21.0	0.0	2.2	0.0	4.4
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	4.5	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	4.7	0.0	25.6	0.0	2.3	0.0	4.4
%ile Storage Ratio (RQ%)	0.00	0.05	0.00	0.27	0.00	0.37	0.00	0.65
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	171.5
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	94	406	59	51	389	178	40	91	41	169	95	106
Future Volume (veh/h)	94	406	59	51	389	178	40	91	41	169	95	106
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1900	1900	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	100	432	63	54	414	189	43	97	44	180	101	113
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	140	370	49	132	629	627	502	463	210	569	307	343
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Ln Grp Delay, s/veh	71.5	0.0	0.0	12.4	0.0	9.5	11.5	0.0	9.5	11.5	0.0	9.5
Ln Grp LOS	F			B		A	B		A	B		A
Approach Vol, veh/h		595			657			184			394	
Approach Delay, s/veh		71.5			11.5			10.0			10.4	
Approach LOS		E			B			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		8.0		6.0		7.0
Phs Duration (G+Y+Rc), s		22.5		22.5		22.5		22.5
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green (Gmax), s		18.0		18.0		18.0		18.0
Max Allow Headway (MAH), s		5.0		5.3		5.0		5.3
Max Q Clear (g_c+I1), s		7.4		20.0		9.7		11.7
Green Ext Time (g_e), s		2.3		0.0		2.0		4.0
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		1.00		0.00		0.93

Left-Turn Movement Data				
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		1108		116		1184		108

Through Movement Data				
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1158		924		767		1573

Right-Turn Movement Data				
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		525		123		858		1568

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment				L+T+R				L+T

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	43	0	595	0	180	0	468
Grp Sat Flow (s), veh/h/ln	0	1108	0	1164	0	1184	0	1681
Q Serve Time (g_s), s	0.0	1.3	0.0	8.3	0.0	5.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	5.4	0.0	18.0	0.0	7.7	0.0	9.7
Perm LT Sat Flow (s_l), veh/h/ln	0	1108	0	829	0	1184	0	917
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	1570
Perm LT Eff Green (g_p), s	0.0	18.0	0.0	18.0	0.0	18.0	0.0	18.0
Perm LT Serve Time (g_u), s	0.0	13.9	0.0	8.3	0.0	15.5	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	1.3	0.0	8.3	0.0	5.3	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	4.7	0.0	0.0	0.0	7.3
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	4.7	0.0	0.0	0.0	7.3
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	0.17	0.00	1.00	0.00	0.12
Lane Grp Cap (c), veh/h	0	502	0	559	0	569	0	762
V/C Ratio (X)	0.00	0.09	0.00	1.06	0.00	0.32	0.00	0.61
Avail Cap (c_a), veh/h	0	502	0	559	0	569	0	762
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	11.2	0.0	15.1	0.0	11.4	0.0	10.9
Incr Delay (d2), s/veh	0.0	0.3	0.0	56.4	0.0	0.1	0.0	1.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	11.5	0.0	71.5	0.0	11.5	0.0	12.4
1st-Term Q (Q1), veh/ln	0.0	0.4	0.0	6.8	0.0	1.7	0.0	4.7
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	8.8	0.0	0.0	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.4	0.0	15.6	0.0	1.7	0.0	5.0
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.67	0.00	0.02	0.00	0.19
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	9.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment								
Lanes in Grp	0	0	0	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R				T+R		R
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	141	0	0	0	214	0	189
Grp Sat Flow (s), veh/h/ln	0	1683	0	0	0	1624	0	1568
Q Serve Time (g_s), s	0.0	2.5	0.0	0.0	0.0	4.1	0.0	3.7
Cycle Q Clear Time (g_c), s	0.0	2.5	0.0	0.0	0.0	4.1	0.0	3.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.31	0.00	0.11	0.00	0.53	0.00	1.00
Lane Grp Cap (c), veh/h	0	673	0	0	0	650	0	627
V/C Ratio (X)	0.00	0.21	0.00	0.00	0.00	0.33	0.00	0.30
Avail Cap (c_a), veh/h	0	673	0	0	0	650	0	627
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	8.8	0.0	0.0	0.0	9.3	0.0	9.2
Incr Delay (d2), s/veh	0.0	0.7	0.0	0.0	0.0	0.1	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.5	0.0	0.0	0.0	9.5	0.0	9.5
1st-Term Q (Q1), veh/ln	0.0	1.1	0.0	0.0	0.0	1.8	0.0	1.6
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.3	0.0	0.0	0.0	1.8	0.0	1.6
%ile Storage Ratio (RQ%)	0.00	0.06	0.00	0.00	0.00	0.02	0.00	0.06
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		30.6						
HCM 2010 LOS		C						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	191	836	4	22	1679	708	3	17	29	393	1	122
Future Volume (veh/h)	191	836	4	22	1679	708	3	17	29	393	1	122
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1696	1696	1696	1696	1696	1696	1900	1696	1900	1696	1696	1696
Adj Flow Rate, veh/h	201	880	4	23	1767	0	3	18	31	414	1	0
Adj No. of Lanes	1	2	1	1	2	1	0	1	0	2	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	12	12	12	12	12	12	12	12	12	12	12	12
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	229	2235	1000	27	1833	820	0	23	39	132	222	189
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.14	0.69	0.69	0.02	0.57	0.00	0.00	0.04	0.04	0.04	0.13	0.00
Ln Grp Delay, s/veh	66.3	9.1	6.3	71.5	29.4	0.0	0.0	0.0	82.6	1045.0	50.3	0.0
Ln Grp LOS	E	A	A	E	C				F	F	D	
Approach Vol, veh/h		1085			1790			49			415	
Approach Delay, s/veh		19.7			30.0			82.6			1042.6	
Approach LOS		B			C			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	4.0	2.0	3.0	0.0	3.0
Phs Duration (G+Y+Rc), s	25.9	82.8	12.0	12.3	9.3	99.3	0.0	24.3
Change Period (Y+Rc), s	7.1	7.1	6.4	6.9	7.1	7.1	6.9	* 6.9
Max Green (Gmax), s	67.9	18.9	5.6	13.1	30.9	55.9	13.1	* 5.6
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.5	3.8	5.3	0.0	5.5
Max Q Clear (g_c+I1), s	18.2	71.6	7.6	6.2	3.9	17.3	0.0	2.1
Green Ext Time (g_e), s	0.6	0.0	0.0	0.1	0.0	30.6	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	0.86	0.57	1.00	0.00	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.30	0.00	0.00	0.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1616		3134		1616		0	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3223		561		3223		1696

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1442		965		1442		1442

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)			

Lanes in Grp	1	0	2	0	1	0	0	0
Grp Vol (v), veh/h	201	0	414	0	23	0	0	0
Grp Sat Flow (s), veh/h/ln	1616	0	1567	0	1616	0	0	0
Q Serve Time (g_s), s	16.2	0.0	5.6	0.0	1.9	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	16.2	0.0	5.6	0.0	1.9	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	229	0	132	0	27	0	0	0
V/C Ratio (X)	0.88	0.00	3.14	0.00	0.84	0.00	0.00	0.00
Avail Cap (c_a), veh/h	825	0	132	0	375	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.09	0.00	0.00	0.00
Uniform Delay (d1), s/veh	56.0	0.0	63.7	0.0	65.2	0.0	0.0	0.0
Incr Delay (d2), s/veh	10.4	0.0	981.3	0.0	6.3	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	66.3	0.0	1045.0	0.0	71.5	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	7.3	0.0	2.4	0.0	0.8	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.7	0.0	18.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	7.9	0.0	20.4	0.0	0.9	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.25	0.00	0.89	0.00	0.07	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	70.5	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	2	0	0	0	2	0	1
Grp Vol (v), veh/h	0	1767	0	0	0	880	0	1
Grp Sat Flow (s), veh/h/ln	0	1612	0	0	0	1612	0	1696
Q Serve Time (g_s), s	0.0	69.6	0.0	0.0	0.0	15.3	0.0	0.1
Cycle Q Clear Time (g_c), s	0.0	69.6	0.0	0.0	0.0	15.3	0.0	0.1
Lane Grp Cap (c), veh/h	0	1833	0	0	0	2235	0	222
V/C Ratio (X)	0.00	0.96	0.00	0.00	0.00	0.39	0.00	0.00
Avail Cap (c_a), veh/h	0	1833	0	0	0	2235	0	222
Upstream Filter (I)	0.00	0.09	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	27.4	0.0	0.0	0.0	8.6	0.0	50.3
Incr Delay (d2), s/veh	0.0	2.1	0.0	0.0	0.0	0.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	29.4	0.0	0.0	0.0	9.1	0.0	50.3
1st-Term Q (Q1), veh/ln	0.0	30.7	0.0	0.0	0.0	6.7	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	31.2	0.0	0.0	0.0	6.9	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.43	0.00	0.00	0.00	0.06	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	49	0	4	0	0
Grp Sat Flow (s), veh/h/ln	0	1442	0	1526	0	1442	0	1442
Q Serve Time (g_s), s	0.0	0.0	0.0	4.2	0.0	0.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	4.2	0.0	0.1	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.63	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	820	0	62	0	1000	0	189
V/C Ratio (X)	0.00	0.00	0.00	0.79	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	820	0	150	0	1000	0	189
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	63.2	0.0	6.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	19.4	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	82.6	0.0	6.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	2.1	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.14	0.00	0.01	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	153.3
HCM 2010 LOS	F

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	129	1155	2224	488	768	397
Future Volume (veh/h)	129	1155	2224	488	768	397
Number	1	6	2	12	3	18
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00			1.00	1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1696	1696	1696	1696	1696	1696
Adj Flow Rate, veh/h	136	1216	2341	0	808	0
Adj No. of Lanes	1	2	2	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	12	12	12	12	12	12
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	160	1781	1177	526	889	409
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.10	0.55	0.37	0.00	0.28	0.00
Ln Grp Delay, s/veh	39.7	13.1	471.0	0.0	39.8	0.0
Ln Grp LOS	D	B	F		D	
Approach Vol, veh/h		1352	2341		808	
Approach Delay, s/veh		15.7	471.0		39.8	
Approach LOS		B	F		D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8			6		
Case No	2.0	7.0	9.0			4.0		
Phs Duration (G+Y+Rc), s	15.0	36.3	28.7			51.3		
Change Period (Y+Rc), s	7.1	7.1	6.0			7.1		
Max Green (Gmax), s	7.9	27.9	24.0			42.9		
Max Allow Headway (MAH), s	3.8	5.3	3.8			5.3		
Max Q Clear (g_c+I1), s	8.6	31.2	21.9			23.7		
Green Ext Time (g_e), s	0.0	0.0	0.8			18.7		
Prob of Phs Call (p_c)	0.95	1.00	1.00			1.00		
Prob of Max Out (p_x)	1.00	0.00	1.00			0.00		

Left-Turn Movement Data			
Assigned Mvmt	1	5	3
Mvmt Sat Flow, veh/h	1616	0	3134

Through Movement Data			
Assigned Mvmt		2	8			6
Mvmt Sat Flow, veh/h		3308	0			3308

Right-Turn Movement Data			
Assigned Mvmt		12	18			16
Mvmt Sat Flow, veh/h		1442	1442			0

Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	0	0
Lane Assignment	(Prot)							

Lanes in Grp	1	0	2	0	0	0	0	0
Grp Vol (v), veh/h	136	0	808	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1616	0	1567	0	0	0	0	0
Q Serve Time (g_s), s	6.6	0.0	19.9	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	6.6	0.0	19.9	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1567	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	29.2	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	160	0	889	0	0	0	0	0
V/C Ratio (X)	0.85	0.00	0.91	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	160	0	940	0	0	0	0	0
Upstream Filter (I)	0.09	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	35.5	0.0	27.6	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	4.2	0.0	12.1	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	39.7	0.0	39.8	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	2.9	0.0	8.5	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.2	0.0	1.5	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	3.1	0.0	10.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.18	0.00	0.62	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	2341	0	0	0	1216	0	0
Grp Sat Flow (s), veh/h/ln	0	1612	0	0	0	1612	0	0
Q Serve Time (g_s), s	0.0	29.2	0.0	0.0	0.0	21.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	29.2	0.0	0.0	0.0	21.7	0.0	0.0
Lane Grp Cap (c), veh/h	0	1177	0	0	0	1781	0	0
V/C Ratio (X)	0.00	1.99	0.00	0.00	0.00	0.68	0.00	0.00
Avail Cap (c_a), veh/h	0	1177	0	0	0	1781	0	0
Upstream Filter (I)	0.00	0.09	0.00	0.00	0.00	0.09	0.00	0.00
Uniform Delay (d1), s/veh	0.0	25.4	0.0	0.0	0.0	12.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	445.6	0.0	0.0	0.0	0.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	471.0	0.0	0.0	0.0	13.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	12.9	0.0	0.0	0.0	9.5	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	72.8	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	85.7	0.0	0.0	0.0	9.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.68	0.00	0.00	0.00	0.13	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	291.1	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lane Assignment		R	R					
Lanes in Grp	0	1	1	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1442	1442	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	526	409	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	526	433	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		256.9						
HCM 2010 LOS		F						

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	620	334	418	1810	2576	896
Future Volume (veh/h)	620	334	418	1810	2576	896
Number	7	14	5	2	6	16
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00	1.00			1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1827	1827	1827	1827
Adj Flow Rate, veh/h	681	0	459	1989	2831	0
Adj No. of Lanes	2	1	2	3	3	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	4	4	4	4
Opposing Right Turn Influence	Yes		Yes			
Cap, veh/h	544	250	536	3767	2766	861
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.16	0.00	0.16	0.76	0.55	0.00
Ln Grp Delay, s/veh	188.2	0.0	62.7	7.7	44.5	0.0
Ln Grp LOS	F		E	A	F	
Approach Vol, veh/h	681			2448	2831	
Approach Delay, s/veh	188.2			18.0	44.5	
Approach LOS	F			B	D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Case No		4.0		9.0	2.0	7.0		
Phs Duration (G+Y+Rc), s		114.0		29.0	28.7	85.3		
Change Period (Y+Rc), s		6.0		6.4	6.0	6.0		
Max Green (Gmax), s		108.0		22.6	84.0	18.0		
Max Allow Headway (MAH), s		5.2		3.8	3.8	5.2		
Max Q Clear (g_c+I1), s		25.2		24.6	20.9	81.3		
Green Ext Time (g_e), s		81.1		0.0	1.8	0.0		
Prob of Phs Call (p_c)		1.00		1.00	1.00	1.00		
Prob of Max Out (p_x)		0.00		1.00	0.00	0.00		
Left-Turn Movement Data								
Assigned Mvmt				7	5	1		
Mvmt Sat Flow, veh/h				3442	3375	0		
Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		5152		0		5152		
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		0		1583		1553		
Left Lane Group Data								
Assigned Mvmt	0	0	0	7	5	1	0	0
Lane Assignment					(Prot)			

Lanes in Grp	0	0	0	2	2	0	0	0
Grp Vol (v), veh/h	0	0	0	681	459	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1721	1688	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	22.6	18.9	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	22.6	18.9	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1721	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	79.3	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	544	536	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	1.25	0.86	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	544	1983	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	60.2	58.6	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	128.0	4.1	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	188.2	62.7	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	10.7	8.9	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	9.7	0.3	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	20.4	9.2	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	1.59	0.55	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	34.3	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	3	0	0	0	3	0	0
Grp Vol (v), veh/h	0	1989	0	0	0	2831	0	0
Grp Sat Flow (s), veh/h/ln	0	1663	0	0	0	1663	0	0
Q Serve Time (g_s), s	0.0	23.2	0.0	0.0	0.0	79.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	23.2	0.0	0.0	0.0	79.3	0.0	0.0
Lane Grp Cap (c), veh/h	0	3767	0	0	0	2766	0	0
V/C Ratio (X)	0.00	0.53	0.00	0.00	0.00	1.02	0.00	0.00
Avail Cap (c_a), veh/h	0	3767	0	0	0	2766	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.09	0.00	0.00
Uniform Delay (d1), s/veh	0.0	7.1	0.0	0.0	0.0	31.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	0.0	0.0	0.0	12.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	7.7	0.0	0.0	0.0	44.5	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	10.5	0.0	0.0	0.0	36.1	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	3.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	10.7	0.0	0.0	0.0	39.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.33	0.00	0.00	0.00	0.68	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	16.2	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment				R		R		
Lanes in Grp	0	0	0	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1583	0	1553	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	250	0	861	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	250	0	861	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		50.0						
HCM 2010 LOS		D						

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	784	1708	2214	113	612	3295
Future Volume (veh/h)	784	1708	2214	113	612	3295
Number	3	18	2	12	1	6
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1845	1845	1845	1845
Adj Flow Rate, veh/h	825	1798	2331	0	644	3468
Adj No. of Lanes	2	2	3	1	2	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	4	3	3	3	3
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	881	713	2324	724	729	3839
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.26	0.26	0.46	0.00	0.21	0.76
Ln Grp Delay, s/veh	42.0	714.5	34.1	0.0	38.4	10.3
Ln Grp LOS	D	F	F		D	B
Approach Vol, veh/h	2623		2331			4112
Approach Delay, s/veh	503.0		34.1			14.7
Approach LOS	F		C			B

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8			6		
Case No	2.0	7.0	9.0			4.0		
Phs Duration (G+Y+Rc), s	20.8	38.2	24.4			59.0		
Change Period (Y+Rc), s	6.0	6.0	6.4			6.0		
Max Green (Gmax), s	15.0	18.0	18.0			39.0		
Max Allow Headway (MAH), s	3.8	5.2	4.0			5.2		
Max Q Clear (g_c+I1), s	14.6	33.8	20.0			38.3		
Green Ext Time (g_e), s	0.1	0.0	0.0			0.7		
Prob of Phs Call (p_c)	1.00	1.00	1.00			1.00		
Prob of Max Out (p_x)	1.00	0.00	1.00			0.00		

Left-Turn Movement Data			
Assigned Mvmt	1	5	3
Mvmt Sat Flow, veh/h	3408	0	3375

Through Movement Data			
Assigned Mvmt		2	8	6
Mvmt Sat Flow, veh/h		5202	0	5202

Right-Turn Movement Data			
Assigned Mvmt		12	18	16
Mvmt Sat Flow, veh/h		1568	2733	0

Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	0	0
Lane Assignment	(Prot)							

Lanes in Grp	2	0	2	0	0	0	0	0
Grp Vol (v), veh/h	644	0	825	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1704	0	1688	0	0	0	0	0
Q Serve Time (g_s), s	12.6	0.0	16.5	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	12.6	0.0	16.5	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1688	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	31.8	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	729	0	881	0	0	0	0	0
V/C Ratio (X)	0.88	0.00	0.94	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	741	0	881	0	0	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	26.3	0.0	24.9	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	12.1	0.0	17.1	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	38.4	0.0	42.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	5.9	0.0	7.7	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	1.2	0.0	2.1	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	7.1	0.0	9.8	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.57	0.00	0.52	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	3	0	0	0	3	0	0
Grp Vol (v), veh/h	0	2331	0	0	0	3468	0	0
Grp Sat Flow (s), veh/h/ln	0	1679	0	0	0	1679	0	0
Q Serve Time (g_s), s	0.0	31.8	0.0	0.0	0.0	36.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	31.8	0.0	0.0	0.0	36.3	0.0	0.0
Lane Grp Cap (c), veh/h	0	2324	0	0	0	3839	0	0
V/C Ratio (X)	0.00	1.00	0.00	0.00	0.00	0.90	0.00	0.00
Avail Cap (c_a), veh/h	0	2324	0	0	0	3839	0	0
Upstream Filter (I)	0.00	0.63	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	18.6	0.0	0.0	0.0	6.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	15.5	0.0	0.0	0.0	4.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	34.1	0.0	0.0	0.0	10.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	14.6	0.0	0.0	0.0	16.1	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	3.3	0.0	0.0	0.0	1.4	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	18.0	0.0	0.0	0.0	17.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.28	0.00	0.00	0.00	0.42	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lane Assignment		R	R					
Lanes in Grp	0	1	2	0	0	0	0	0
Grp Vol (v), veh/h	0	0	1798	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1568	1367	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	18.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	18.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	724	713	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	2.52	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	724	713	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	25.5	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	689.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	714.5	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	6.7	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	68.2	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	75.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	8.06	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	271.3	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		160.9						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	831	871	83	51	1164	325	415	367	234	175	73	1036
Future Volume (veh/h)	831	871	83	51	1164	325	415	367	234	175	73	1036
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1712	1712	1712	1712	1712	1712	1900	1900	1712	1712
Adj Flow Rate, veh/h	839	880	84	52	1176	0	419	371	236	177	74	1046
Adj No. of Lanes	1	3	1	1	3	1	1	2	0	0	1	2
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	11	11	11	11	11	11	11	11	11	11	11	11
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	433	2256	702	66	1203	375	227	689	432	0	293	439
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.27	0.48	0.48	0.04	0.26	0.00	0.14	0.36	0.36	0.00	0.17	0.17
Ln Grp Delay, s/veh	485.3	26.7	22.9	94.6	80.0	0.0	465.3	41.7	42.1	0.0	57.9	696.7
Ln Grp LOS	F	C	C	F	E		F	D	D		E	F
Approach Vol, veh/h		1803			1228			1026			1120	
Approach Delay, s/veh		239.9			80.6			214.8			654.5	
Approach LOS		F			F			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	0.0	4.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	50.0	48.4	0.0	65.1	14.0	84.4	30.0	35.1
Change Period (Y+Rc), s	7.5	7.1	7.6	* 7.7	7.5	7.1	* 7.7	* 7.7
Max Green (Gmax), s	42.5	37.9	27.4	* 22	42.5	37.9	* 22	* 27
Max Allow Headway (MAH), s	3.8	5.2	0.0	4.6	3.8	5.2	3.8	4.6
Max Q Clear (g_c+I1), s	44.5	42.0	0.0	27.0	7.1	21.2	24.3	29.4
Green Ext Time (g_e), s	0.0	0.0	0.0	0.0	0.1	12.7	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	0.00	1.00	0.90	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1630		0		1630		1630	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		4673		1921		4673		1712

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1455		1204		1455		2561

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)				(Prot)		(Prot)	

Lanes in Grp	1	0	0	0	1	0	1	0
Grp Vol (v), veh/h	839	0	0	0	52	0	419	0
Grp Sat Flow (s), veh/h/ln	1630	0	0	0	1630	0	1630	0
Q Serve Time (g_s), s	42.5	0.0	0.0	0.0	5.1	0.0	22.3	0.0
Cycle Q Clear Time (g_c), s	42.5	0.0	0.0	0.0	5.1	0.0	22.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	433	0	0	0	66	0	227	0
V/C Ratio (X)	1.94	0.00	0.00	0.00	0.79	0.00	1.84	0.00
Avail Cap (c_a), veh/h	433	0	0	0	433	0	227	0
Upstream Filter (I)	0.55	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	58.8	0.0	0.0	0.0	76.1	0.0	68.8	0.0
Incr Delay (d2), s/veh	426.6	0.0	0.0	0.0	18.5	0.0	396.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	485.3	0.0	0.0	0.0	94.6	0.0	465.3	0.0
1st-Term Q (Q1), veh/ln	19.1	0.0	0.0	0.0	2.3	0.0	10.0	0.0
2nd-Term Q (Q2), veh/ln	51.3	0.0	0.0	0.0	0.3	0.0	25.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	70.4	0.0	0.0	0.0	2.6	0.0	35.1	0.0
%ile Storage Ratio (RQ%)	2.61	0.00	0.00	0.00	0.17	0.00	1.92	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	101.5	0.0	0.0	0.0	0.0	0.0	47.9	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.5	0.0	0.0	0.0	0.0	0.0	0.5	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	1	0	3	0	1
Grp Vol (v), veh/h	0	1176	0	313	0	880	0	74
Grp Sat Flow (s), veh/h/ln	0	1558	0	1626	0	1558	0	1712
Q Serve Time (g_s), s	0.0	40.0	0.0	24.5	0.0	19.2	0.0	6.0
Cycle Q Clear Time (g_c), s	0.0	40.0	0.0	24.5	0.0	19.2	0.0	6.0
Lane Grp Cap (c), veh/h	0	1203	0	583	0	2256	0	293
V/C Ratio (X)	0.00	0.98	0.00	0.54	0.00	0.39	0.00	0.25
Avail Cap (c_a), veh/h	0	1203	0	583	0	2256	0	293
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.55	0.00	1.00
Uniform Delay (d1), s/veh	0.0	58.9	0.0	40.7	0.0	26.4	0.0	57.4
Incr Delay (d2), s/veh	0.0	21.0	0.0	1.0	0.0	0.3	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	80.0	0.0	41.7	0.0	26.7	0.0	57.9
1st-Term Q (Q1), veh/ln	0.0	17.2	0.0	11.0	0.0	8.2	0.0	2.8

2nd-Term Q (Q2), veh/ln	0.0	2.3	0.0	0.2	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	19.5	0.0	11.1	0.0	8.3	0.0	2.9
%ile Storage Ratio (RQ%)	0.00	0.22	0.00	0.61	0.00	0.07	0.00	0.09
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	2
Grp Vol (v), veh/h	0	0	0	294	0	84	0	1046
Grp Sat Flow (s), veh/h/ln	0	1455	0	1499	0	1455	0	1280
Q Serve Time (g_s), s	0.0	0.0	0.0	25.0	0.0	5.1	0.0	27.4
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	25.0	0.0	5.1	0.0	27.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.80	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	375	0	538	0	702	0	439
V/C Ratio (X)	0.00	0.00	0.00	0.55	0.00	0.12	0.00	2.39
Avail Cap (c_a), veh/h	0	375	0	538	0	702	0	439
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.55	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	40.9	0.0	22.7	0.0	66.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.2	0.0	0.2	0.0	630.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	42.1	0.0	22.9	0.0	696.7
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	10.4	0.0	2.0	0.0	9.7
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	38.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	10.5	0.0	2.1	0.0	48.1
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.58	0.00	0.12	0.00	1.43
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	151.9
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay	286.8
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	529	1147	82	275	959	932	197	1388	299	290	782	255
Future Volume (veh/h)	529	1147	82	275	959	932	197	1388	299	290	782	255
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1776	1776	1776	1776	1776	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	534	1159	83	278	969	941	199	1402	302	293	790	258
Adj No. of Lanes	2	3	1	2	3	2	2	2	0	2	2	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	7	7	7	7	7	7	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	80	1491	464	80	1491	817	273	616	130	370	605	197
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.02	0.31	0.31	0.02	0.31	0.31	0.08	0.22	0.22	0.11	0.24	0.24
Ln Grp Delay, s/veh	2619.2	29.9	21.6	1184.1	26.8	110.4	44.8	601.8	636.0	44.8	185.5	186.3
Ln Grp LOS	F	C	C	F	C	F	D	F	F	D	F	F
Approach Vol, veh/h		1776			2188			1903			1341	
Approach Delay, s/veh		808.0			209.8			559.0			155.1	
Approach LOS		F			F			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	4.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	9.2	32.6	16.0	25.8	9.2	32.6	14.4	27.4
Change Period (Y+Rc), s	7.2	* 7.3	6.8	* 7.6	7.2	* 7.3	* 7.6	* 7.6
Max Green (Gmax), s	2.0	* 24	10.2	* 18	2.0	* 24	* 7.4	* 19
Max Allow Headway (MAH), s	3.8	4.9	3.8	5.3	3.8	4.9	3.8	5.3
Max Q Clear (g_c+I1), s	4.0	27.2	9.1	20.2	4.0	19.8	6.9	21.8
Green Ext Time (g_e), s	0.0	0.0	0.1	0.0	0.0	3.7	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3281		3281		3281		3281	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		4848		2774		4848		2502

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		2656		586		1509		817

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	534	0	293	0	278	0	199	0
Grp Sat Flow (s), veh/h/ln	1640	0	1640	0	1640	0	1640	0
Q Serve Time (g_s), s	2.0	0.0	7.1	0.0	2.0	0.0	4.9	0.0
Cycle Q Clear Time (g_c), s	2.0	0.0	7.1	0.0	2.0	0.0	4.9	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	80	0	370	0	80	0	273	0
V/C Ratio (X)	6.67	0.00	0.79	0.00	3.47	0.00	0.73	0.00
Avail Cap (c_a), veh/h	80	0	408	0	80	0	296	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	40.0	0.0	35.4	0.0	40.0	0.0	36.7	0.0
Incr Delay (d2), s/veh	2579.2	0.0	9.4	0.0	1144.1	0.0	8.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	2619.2	0.0	44.8	0.0	1184.1	0.0	44.8	0.0
1st-Term Q (Q1), veh/ln	0.9	0.0	3.2	0.0	0.9	0.0	2.2	0.0
2nd-Term Q (Q2), veh/ln	28.7	0.0	0.5	0.0	12.7	0.0	0.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	29.6	0.0	3.7	0.0	13.6	0.0	2.5	0.0
%ile Storage Ratio (RQ%)	1.70	0.00	0.07	0.00	0.69	0.00	0.07	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	113.5	0.0	0.0	0.0	49.5	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	1.7	0.0	0.0	0.0	0.9	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	1	0	3	0	1
Grp Vol (v), veh/h	0	969	0	841	0	1159	0	533
Grp Sat Flow (s), veh/h/ln	0	1616	0	1687	0	1616	0	1687
Q Serve Time (g_s), s	0.0	14.2	0.0	18.2	0.0	17.8	0.0	19.8
Cycle Q Clear Time (g_c), s	0.0	14.2	0.0	18.2	0.0	17.8	0.0	19.8
Lane Grp Cap (c), veh/h	0	1491	0	374	0	1491	0	408
V/C Ratio (X)	0.00	0.65	0.00	2.25	0.00	0.78	0.00	1.31
Avail Cap (c_a), veh/h	0	1491	0	374	0	1491	0	408
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	24.6	0.0	31.9	0.0	25.8	0.0	31.1
Incr Delay (d2), s/veh	0.0	2.2	0.0	569.9	0.0	4.0	0.0	154.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	26.8	0.0	601.8	0.0	29.9	0.0	185.5
1st-Term Q (Q1), veh/ln	0.0	6.3	0.0	8.4	0.0	7.9	0.0	9.2

2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	59.3	0.0	0.6	0.0	17.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	6.6	0.0	67.7	0.0	8.5	0.0	26.7
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	1.81	0.00	0.10	0.00	0.53
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	116.8	0.0	0.0	0.0	31.2
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		T+R
Lanes in Grp	0	2	0	1	0	1	0	1
Grp Vol (v), veh/h	0	941	0	863	0	83	0	515
Grp Sat Flow (s), veh/h/ln	0	1328	0	1672	0	1509	0	1632
Q Serve Time (g_s), s	0.0	25.2	0.0	18.2	0.0	3.3	0.0	19.8
Cycle Q Clear Time (g_c), s	0.0	25.2	0.0	18.2	0.0	3.3	0.0	19.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.35	0.00	1.00	0.00	0.50
Lane Grp Cap (c), veh/h	0	817	0	371	0	464	0	395
V/C Ratio (X)	0.00	1.15	0.00	2.32	0.00	0.18	0.00	1.31
Avail Cap (c_a), veh/h	0	817	0	371	0	464	0	395
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	28.4	0.0	31.9	0.0	20.8	0.0	31.1
Incr Delay (d2), s/veh	0.0	82.0	0.0	604.1	0.0	0.8	0.0	155.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	110.4	0.0	636.0	0.0	21.6	0.0	186.3
1st-Term Q (Q1), veh/ln	0.0	9.2	0.0	8.4	0.0	1.4	0.0	8.9
2nd-Term Q (Q2), veh/ln	0.0	9.3	0.0	62.3	0.0	0.1	0.0	17.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	18.5	0.0	70.6	0.0	1.5	0.0	25.9
%ile Storage Ratio (RQ%)	0.00	0.72	0.00	1.88	0.00	0.09	0.00	0.51
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	30.9	0.0	122.8	0.0	0.0	0.0	30.2
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.6	0.0	0.0	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	439.2
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	568	2037	8	27	2802	987	0	0	1274	0	0	0
Future Volume (veh/h)	568	2037	8	27	2802	987	0	0	1274	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q, veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1845	1845	1900	1900	1845	1845	0	0	1845			
Adj Flow Rate, veh/h	580	2079	8	28	2859	0	0	0	1300			
Adj No. of Lanes	2	3	0	0	3	1	0	0	2			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98			
Percent Heavy Veh, %	3	3	3	3	3	3	0	0	3			
Opposing Right Turn Influence	Yes			Yes			No					
Cap, veh/h	562	4947	19	44	3478	1169	0	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Prop Arrive On Green	0.17	0.96	0.96	0.75	0.75	0.00	0.00	0.00	0.00			
Ln Grp Delay, s/veh	105.9	0.6	1.0	20.0	14.2	0.0	0.0	0.0	0.0			
Ln Grp LOS	F	A	A	B	B							

Approach Vol, veh/h		2667			2887			0				Timer:
Approach Delay, s/veh		23.6			16.4			0.0				Assigned Phs
Approach LOS		C			B							Case No
Phs Duration (G+Y+Rc), s					143.0			30.0	113.0			
Change Period (Y+Rc), s					6.4			6.4	6.4			
Max Green (Gmax), s					76.6			23.6	46.6			
Max Allow Headway (MAH), s					5.3			3.8	5.3			
Max Q Clear (g_c+I1), s					6.3			25.6	63.5			
Green Ext Time (g_e), s					69.3			0.0	0.0			
Prob of Phs Call (p_c)					1.00			1.00	1.00			
Prob of Max Out (p_x)					0.00			1.00	0.00			

Left-Turn Movement Data												
Assigned Mvmt								7	3			
Mvmt Sat Flow, veh/h								3408	25			

Through Movement Data												
Assigned Mvmt					4				8			
Mvmt Sat Flow, veh/h					5179				4666			

Right-Turn Movement Data												
Assigned Mvmt					14				18			
Mvmt Sat Flow, veh/h					20				1568			

Left Lane Group Data												
Assigned Mvmt		0	0	0	0	0	0	7	3			
Lane Assignment								(Prot)	L+T			
Lanes in Grp		0	0	0	0	0	0	2	1			
Grp Vol (v), veh/h		0	0	0	0	0	0	580	1083			
Grp Sat Flow (s), veh/h/ln		0	0	0	0	0	0	1704	1635			

Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	23.6	22.3
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	23.6	61.5
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	201
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	106.6
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	106.6
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.3
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.1
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.1
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.03
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	562	1245
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	1.03	0.87
Avail Cap (c_a), veh/h	0	0	0	0	0	0	562	1245
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	59.7	11.5
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	46.2	8.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	105.9	20.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	11.1	28.6
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	3.6	2.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	14.7	31.5
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	2.51	2.33
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	4.4	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	2
Grp Vol (v), veh/h	0	0	0	1348	0	0	0	1804
Grp Sat Flow (s), veh/h/ln	0	0	0	1679	0	0	0	1528
Q Serve Time (g_s), s	0.0	0.0	0.0	4.3	0.0	0.0	0.0	52.5
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	4.3	0.0	0.0	0.0	52.5
Lane Grp Cap (c), veh/h	0	0	0	3207	0	0	0	2277
V/C Ratio (X)	0.00	0.00	0.00	0.42	0.00	0.00	0.00	0.79
Avail Cap (c_a), veh/h	0	0	0	3207	0	0	0	2277
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	11.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.4	0.0	0.0	0.0	2.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.6	0.0	0.0	0.0	14.2
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.9	0.0	0.0	0.0	21.8
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00

%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	2.1	0.0	0.0	0.0	22.7
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.31	0.00	0.00	0.00	1.68
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	0	0	18
Lane Assignment				T+R				R
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	739	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1841	0	0	0	1568
Q Serve Time (g_s), s	0.0	0.0	0.0	4.3	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	4.3	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.01	0.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	0	0	1759	0	0	0	1169
V/C Ratio (X)	0.00	0.00	0.00	0.42	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	1759	0	0	0	1169
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	2.1	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	2.4	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.37	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		19.9						
HCM 2010 LOS		B						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1711	946	1286	3134	0	0	0	816	0	0	771
Future Volume (veh/h)	0	1711	946	1286	3134	0	0	0	816	0	0	771
Number	7	4	14	3	8	18				1	6	16
Initial Q, veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1845	1845	1845	1845	0				0	0	1845
Adj Flow Rate, veh/h	0	1746	0	1312	3198	0				0	0	787
Adj No. of Lanes	0	3	1	2	3	0				0	0	2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98				0.98	0.98	0.98
Percent Heavy Veh, %	0	3	3	3	3	0				0	0	3
Opposing Right Turn Influence	No			Yes						No		
Cap, veh/h	0	2216	690	1237	4540	0				0	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Prop Arrive On Green	0.00	0.44	0.00	0.36	0.90	0.00				0.00	0.00	0.00
Ln Grp Delay, s/veh	0.0	18.5	0.0	63.9	1.8	0.0				0.0	0.0	0.0
Ln Grp LOS		B		F	A							
Approach Vol, veh/h		1746			4510						0	
Approach Delay, s/veh		18.5			19.9						0.0	
Approach LOS		B			B							

Timer:	1	2	3	4	5	6	7	8
Assigned Phs			3	4				8
Case No			2.0	7.0				4.0
Phs Duration (G+Y+Rc), s			30.0	35.0				65.0
Change Period (Y+Rc), s			6.4	6.4				6.4
Max Green (Gmax), s			23.6	18.0				48.0
Max Allow Headway (MAH), s			3.8	5.2				5.2
Max Q Clear (g_c+I1), s			25.6	21.3				13.1
Green Ext Time (g_e), s			0.0	0.0				34.7
Prob of Phs Call (p_c)			1.00	1.00				1.00
Prob of Max Out (p_x)			1.00	0.00				0.00

Left-Turn Movement Data		
Assigned Mvmt	3	7
Mvmt Sat Flow, veh/h	3408	0

Through Movement Data		
Assigned Mvmt	4	8
Mvmt Sat Flow, veh/h	5202	5202

Right-Turn Movement Data		
Assigned Mvmt	14	18
Mvmt Sat Flow, veh/h	1568	0

Left Lane Group Data								
Assigned Mvmt	0	0	3	7	0	0	0	0
Lane Assignment			(Prot)					

Lanes in Grp	0	0	2	0	0	0	0	0
Grp Vol (v), veh/h	0	0	1312	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1704	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	23.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	23.6	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	28.6	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	1237	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	1.06	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	1237	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	20.7	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	43.2	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	63.9	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	11.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	7.4	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	18.4	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	1.47	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	18.6	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	3	0	0	0	3
Grp Vol (v), veh/h	0	0	0	1746	0	0	0	3198
Grp Sat Flow (s), veh/h/ln	0	0	0	1679	0	0	0	1679
Q Serve Time (g_s), s	0.0	0.0	0.0	19.3	0.0	0.0	0.0	11.1
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	19.3	0.0	0.0	0.0	11.1
Lane Grp Cap (c), veh/h	0	0	0	2216	0	0	0	4540
V/C Ratio (X)	0.00	0.00	0.00	0.79	0.00	0.00	0.00	0.70
Avail Cap (c_a), veh/h	0	0	0	2216	0	0	0	4540
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	15.6	0.0	0.0	0.0	0.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.9	0.0	0.0	0.0	0.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	18.5	0.0	0.0	0.0	1.8
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	8.9	0.0	0.0	0.0	4.7

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	9.5	0.0	0.0	0.0	5.1
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.42	0.00	0.00	0.00	0.32
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	0	0	18
Lane Assignment				R				
Lanes in Grp	0	0	0	1	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1568	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	690	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	690	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		19.5						
HCM 2010 LOS		B						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	547	3098	0	0	2970	1307	0	0	1295	0	0	1303
Future Volume (veh/h)	547	3098	0	0	2970	1307	0	0	1295	0	0	1303
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	0	0	1863	0	0	1863
Adj Flow Rate, veh/h	570	3227	0	0	3094	1361	0	0	1349	0	0	1357
Adj No. of Lanes	2	3	0	0	3	2	0	0	3	0	0	3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	0	0	2	2	0	0	2	0	0	2
Opposing Right Turn Influence	Yes			No			No			No		
Cap, veh/h	654	4795	0	0	3538	1939	0	0	0	0	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.19	0.94	0.00	0.00	0.70	0.70	0.00	0.00	0.00	0.00	0.00	0.00
Ln Grp Delay, s/veh	44.9	0.6	0.0	0.0	16.6	12.3	0.0	0.0	0.0	0.0	0.0	0.0
Ln Grp LOS	D	A			B	B						
Approach Vol, veh/h		3797			4455			0			0	
Approach Delay, s/veh		7.2			15.3			0.0			0.0	
Approach LOS		A			B							

Timer:	1	2	3	4	5	6	7	8
Assigned Phs				4			7	8
Case No				4.0			2.0	7.0
Phs Duration (G+Y+Rc), s				112.0			27.7	84.3
Change Period (Y+Rc), s				6.4			6.4	6.4
Max Green (Gmax), s				81.6			26.6	48.6
Max Allow Headway (MAH), s				5.0			3.8	5.0
Max Q Clear (g_c+I1), s				13.1			20.0	55.0
Green Ext Time (g_e), s				68.0			1.3	0.0
Prob of Phs Call (p_c)				1.00			1.00	1.00
Prob of Max Out (p_x)				0.00			0.30	0.00
Left-Turn Movement Data								
Assigned Mvmt							7	3
Mvmt Sat Flow, veh/h							3442	0
Through Movement Data								
Assigned Mvmt				4				8
Mvmt Sat Flow, veh/h				5253				5253
Right-Turn Movement Data								
Assigned Mvmt				14				18
Mvmt Sat Flow, veh/h				0				2787
Left Lane Group Data								
Assigned Mvmt	0	0	0	0	0	0	7	3
Lane Assignment							(Prot)	

Lanes in Grp	0	0	0	0	0	0	2	0
Grp Vol (v), veh/h	0	0	0	0	0	0	570	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	1721	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	18.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	18.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	77.9
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	654	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.87	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	817	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	44.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	44.9	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	8.5	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	8.6	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	3	0	0	0	3
Grp Vol (v), veh/h	0	0	0	3227	0	0	0	3094
Grp Sat Flow (s), veh/h/ln	0	0	0	1695	0	0	0	1695
Q Serve Time (g_s), s	0.0	0.0	0.0	11.1	0.0	0.0	0.0	53.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	11.1	0.0	0.0	0.0	53.0
Lane Grp Cap (c), veh/h	0	0	0	4795	0	0	0	3538
V/C Ratio (X)	0.00	0.00	0.00	0.67	0.00	0.00	0.00	0.87
Avail Cap (c_a), veh/h	0	0	0	4795	0	0	0	3538
Upstream Filter (I)	0.00	0.00	0.00	0.09	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.5	0.0	0.0	0.0	13.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.0	0.0	3.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.6	0.0	0.0	0.0	16.6
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	4.8	0.0	0.0	0.0	24.4

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	4.8	0.0	0.0	0.0	25.4
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.41
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	0	0	18
Lane Assignment								R
Lanes in Grp	0	0	0	0	0	0	0	2
Grp Vol (v), veh/h	0	0	0	0	0	0	0	1361
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	1393
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.5
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	1939
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	1939
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.1
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.3
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.4
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.05
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	11.6
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2502	808	796	3120	13	0	0	1234	0	0	754
Future Volume (veh/h)	0	2502	808	796	3120	13	0	0	1234	0	0	754
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	1900	0	0	1863	0	0	1863
Adj Flow Rate, veh/h	0	2690	869	856	3355	14	0	0	1327	0	0	811
Adj No. of Lanes	0	3	2	2	3	0	0	0	3	0	0	3
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	2	2	2	2	2	0	0	2	0	0	2
Opposing Right Turn Influence	No			Yes			No			No		
Cap, veh/h	0	3377	1850	903	5035	21	0	0	0	0	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.00	0.66	0.66	0.26	0.96	0.96	0.00	0.00	0.00	0.00	0.00	0.00
Ln Grp Delay, s/veh	0.0	22.9	15.1	65.5	0.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0
Ln Grp LOS		C	B	E	A	A						
Approach Vol, veh/h		3559			4225			0			0	
Approach Delay, s/veh		21.0			13.6			0.0			0.0	
Approach LOS		C			B							

Timer:	1	2	3	4	5	6	7	8
Assigned Phs			3	4				8
Case No			2.0	7.0				4.0
Phs Duration (G+Y+Rc), s			52.1	121.9				174.0
Change Period (Y+Rc), s			6.4	6.4				6.4
Max Green (Gmax), s			47.6	93.6				147.6
Max Allow Headway (MAH), s			3.8	5.1				5.1
Max Q Clear (g_c+I1), s			44.5	67.6				13.5
Green Ext Time (g_e), s			1.2	25.9				132.4
Prob of Phs Call (p_c)			1.00	1.00				1.00
Prob of Max Out (p_x)			1.00	0.00				0.00

Left-Turn Movement Data								
Assigned Mvmt			3	7				
Mvmt Sat Flow, veh/h			3442	0				

Through Movement Data								
Assigned Mvmt				4				8
Mvmt Sat Flow, veh/h				5253				5227

Right-Turn Movement Data								
Assigned Mvmt				14				18
Mvmt Sat Flow, veh/h				2787				22

Left Lane Group Data								
Assigned Mvmt	0	0	3	7	0	0	0	0
Lane Assignment			(Prot)					

Lanes in Grp	0	0	2	0	0	0	0	0
Grp Vol (v), veh/h	0	0	856	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1721	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	42.5	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	42.5	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	115.5	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	903	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.95	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	942	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	63.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	65.5	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	20.2	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	20.5	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	1.63	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	3	0	0	0	2
Grp Vol (v), veh/h	0	0	0	2690	0	0	0	2174
Grp Sat Flow (s), veh/h/ln	0	0	0	1695	0	0	0	1695
Q Serve Time (g_s), s	0.0	0.0	0.0	65.6	0.0	0.0	0.0	11.4
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	65.6	0.0	0.0	0.0	11.4
Lane Grp Cap (c), veh/h	0	0	0	3377	0	0	0	3265
V/C Ratio (X)	0.00	0.00	0.00	0.80	0.00	0.00	0.00	0.67
Avail Cap (c_a), veh/h	0	0	0	3377	0	0	0	3265
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	0.0	0.0	20.8	0.0	0.0	0.0	0.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	22.9	0.0	0.0	0.0	0.4
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	30.6	0.0	0.0	0.0	4.8

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	31.3	0.0	0.0	0.0	4.9
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.52	0.00	0.00	0.00	0.09
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	0	0	18
Lane Assignment				R				T+R
Lanes in Grp	0	0	0	2	0	0	0	1
Grp Vol (v), veh/h	0	0	0	869	0	0	0	1195
Grp Sat Flow (s), veh/h/ln	0	0	0	1393	0	0	0	1859
Q Serve Time (g_s), s	0.0	0.0	0.0	26.5	0.0	0.0	0.0	11.5
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	26.5	0.0	0.0	0.0	11.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.01
Lane Grp Cap (c), veh/h	0	0	0	1850	0	0	0	1791
V/C Ratio (X)	0.00	0.00	0.00	0.47	0.00	0.00	0.00	0.67
Avail Cap (c_a), veh/h	0	0	0	1850	0	0	0	1791
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	0.0	0.0	14.3	0.0	0.0	0.0	0.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	15.1	0.0	0.0	0.0	0.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	10.2	0.0	0.0	0.0	5.3
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	10.4	0.0	0.0	0.0	5.4
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	1.10	0.00	0.00	0.00	0.10
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		17.0						
HCM 2010 LOS		B						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	476	201	327	451	308	229	1409	463	443	1037	69
Future Volume (veh/h)	65	476	201	327	451	308	229	1409	463	443	1037	69
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	67	491	207	337	465	318	236	1453	477	457	1069	71
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	85	303	127	187	368	250	202	1136	354	344	1709	114
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.13	0.13	0.11	0.18	0.18	0.12	0.45	0.45	0.20	0.53	0.53
Ln Grp Delay, s/veh	88.1	365.2	371.6	450.6	204.3	208.6	184.7	163.9	208.0	228.9	28.7	28.6
Ln Grp LOS	F	F	F	F	F	F	F	F	F	F	C	C
Approach Vol, veh/h		765			1120			2166			1597	
Approach Delay, s/veh		343.8			279.9			186.3			85.9	
Approach LOS		F			F			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	4.0
Phs Duration (G+Y+Rc), s	36.0	74.0	21.0	24.0	23.0	87.0	12.0	33.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green (Gmax), s	31.5	69.5	16.5	19.5	18.5	82.5	13.5	22.5
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.4	3.8	5.3	3.8	5.4
Max Q Clear (g_c+I1), s	33.5	71.5	18.5	21.5	20.5	38.2	7.8	30.5
Green Ext Time (g_e), s	0.0	0.0	0.0	0.0	0.0	37.8	0.1	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	0.94	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	1.00	1.00	0.00	0.11	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1691		1757		1691		1757	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2534		2409		3212		1997

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		790		1010		213		1360

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	457	0	337	0	236	0	67	0
Grp Sat Flow (s), veh/h/ln	1691	0	1757	0	1691	0	1757	0
Q Serve Time (g_s), s	31.5	0.0	16.5	0.0	18.5	0.0	5.8	0.0
Cycle Q Clear Time (g_c), s	31.5	0.0	16.5	0.0	18.5	0.0	5.8	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	344	0	187	0	202	0	85	0
V/C Ratio (X)	1.33	0.00	1.80	0.00	1.17	0.00	0.79	0.00
Avail Cap (c_a), veh/h	344	0	187	0	202	0	153	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	61.7	0.0	69.3	0.0	68.3	0.0	73.0	0.0
Incr Delay (d2), s/veh	167.1	0.0	381.4	0.0	116.4	0.0	15.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	228.9	0.0	450.6	0.0	184.7	0.0	88.1	0.0
1st-Term Q (Q1), veh/ln	14.7	0.0	8.0	0.0	8.6	0.0	2.8	0.0
2nd-Term Q (Q2), veh/ln	16.0	0.0	19.8	0.0	6.5	0.0	0.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	30.7	0.0	27.8	0.0	15.2	0.0	3.2	0.0
%ile Storage Ratio (RQ%)	2.49	0.00	3.03	0.00	2.43	0.00	0.66	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	28.3	0.0	37.5	0.0	8.5	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.5	0.0	0.3	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	942	0	356	0	561	0	408
Grp Sat Flow (s), veh/h/ln	0	1687	0	1752	0	1687	0	1752
Q Serve Time (g_s), s	0.0	69.5	0.0	19.5	0.0	36.2	0.0	28.5
Cycle Q Clear Time (g_c), s	0.0	69.5	0.0	19.5	0.0	36.2	0.0	28.5
Lane Grp Cap (c), veh/h	0	756	0	220	0	898	0	323
V/C Ratio (X)	0.00	1.24	0.00	1.62	0.00	0.63	0.00	1.26
Avail Cap (c_a), veh/h	0	756	0	220	0	898	0	323
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	42.8	0.0	67.8	0.0	25.4	0.0	63.2
Incr Delay (d2), s/veh	0.0	121.2	0.0	297.5	0.0	3.3	0.0	141.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	163.9	0.0	365.2	0.0	28.7	0.0	204.3
1st-Term Q (Q1), veh/ln	0.0	32.4	0.0	9.4	0.0	16.8	0.0	13.8

2nd-Term Q (Q2), veh/ln	0.0	25.5	0.0	18.2	0.0	0.8	0.0	12.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	57.8	0.0	27.6	0.0	17.7	0.0	26.5
%ile Storage Ratio (RQ%)	0.00	4.56	0.00	0.64	0.00	1.36	0.00	0.60
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	46.3	0.0	34.0	0.0	0.0	0.0	21.3
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.4	0.0	0.0	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	988	0	342	0	579	0	375
Grp Sat Flow (s), veh/h/ln	0	1636	0	1666	0	1738	0	1605
Q Serve Time (g_s), s	0.0	69.5	0.0	19.5	0.0	36.2	0.0	28.5
Cycle Q Clear Time (g_c), s	0.0	69.5	0.0	19.5	0.0	36.2	0.0	28.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.48	0.00	0.61	0.00	0.12	0.00	0.85
Lane Grp Cap (c), veh/h	0	734	0	210	0	925	0	295
V/C Ratio (X)	0.00	1.35	0.00	1.63	0.00	0.63	0.00	1.27
Avail Cap (c_a), veh/h	0	734	0	210	0	925	0	295
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	42.8	0.0	67.8	0.0	25.4	0.0	63.2
Incr Delay (d2), s/veh	0.0	165.2	0.0	303.9	0.0	3.2	0.0	145.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	208.0	0.0	371.6	0.0	28.6	0.0	208.6
1st-Term Q (Q1), veh/ln	0.0	31.4	0.0	9.0	0.0	17.4	0.0	12.6
2nd-Term Q (Q2), veh/ln	0.0	33.7	0.0	17.7	0.0	0.8	0.0	11.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	65.1	0.0	26.7	0.0	18.2	0.0	24.6
%ile Storage Ratio (RQ%)	0.00	5.13	0.00	0.62	0.00	1.40	0.00	0.56
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	63.7	0.0	33.0	0.0	0.0	0.0	19.9
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.4	0.0	0.0	0.0	0.3
Intersection Summary								
HCM 2010 Ctrl Delay		197.8						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	41	81	95	41	208	88	713	196	257	651	57
Future Volume (veh/h)	42	41	81	95	41	208	88	713	196	257	651	57
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1900	1712	1712	1712	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	45	44	86	101	44	221	94	759	209	273	693	61
Adj No. of Lanes	1	1	0	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	11	11	11	11	11	11	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	61	81	158	101	310	263	74	1232	339	74	1478	130
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.04	0.16	0.16	0.06	0.18	0.18	0.04	0.47	0.47	0.04	0.47	0.47
Ln Grp Delay, s/veh	60.2	0.0	37.7	132.7	31.9	47.4	240.8	21.7	21.8	1297.4	18.5	18.5
Ln Grp LOS	E		D	F	C	D	F	C	C	F	B	B
Approach Vol, veh/h		175			366			1062			1027	
Approach Delay, s/veh		43.5			69.1			41.1			358.5	
Approach LOS		D			E			D			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	10.0	49.3	12.0	20.7	10.0	49.3	9.7	23.0
Change Period (Y+Rc), s	6.0	6.0	* 6.3	* 6.3	6.0	6.0	* 6.3	* 6.3
Max Green (Gmax), s	4.0	34.0	* 5.7	* 24	4.0	34.0	* 5.7	* 24
Max Allow Headway (MAH), s	3.8	5.3	3.8	4.7	3.8	5.3	3.8	4.7
Max Q Clear (g_c+I1), s	6.0	21.9	7.7	9.2	6.0	15.8	4.5	15.5
Green Ext Time (g_e), s	0.0	8.2	0.0	1.6	0.0	10.9	0.0	1.2
Prob of Phs Call (p_c)	1.00	1.00	0.92	1.00	0.91	1.00	0.68	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.02	1.00	0.00	1.00	0.26

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1691		1630		1691		1630	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2615		519		3138		1712

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		720		1014		276		1455

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	273	0	101	0	94	0	45	0
Grp Sat Flow (s), veh/h/ln	1691	0	1630	0	1691	0	1630	0
Q Serve Time (g_s), s	4.0	0.0	5.7	0.0	4.0	0.0	2.5	0.0
Cycle Q Clear Time (g_c), s	4.0	0.0	5.7	0.0	4.0	0.0	2.5	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	74	0	101	0	74	0	61	0
V/C Ratio (X)	3.71	0.00	1.00	0.00	1.28	0.00	0.74	0.00
Avail Cap (c_a), veh/h	74	0	101	0	74	0	101	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	44.0	0.0	43.1	0.0	44.0	0.0	43.9	0.0
Incr Delay (d2), s/veh	1253.4	0.0	89.5	0.0	196.8	0.0	16.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	1297.4	0.0	132.7	0.0	240.8	0.0	60.2	0.0
1st-Term Q (Q1), veh/ln	1.9	0.0	2.6	0.0	1.9	0.0	1.1	0.0
2nd-Term Q (Q2), veh/ln	25.6	0.0	2.5	0.0	4.0	0.0	0.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	27.5	0.0	5.1	0.0	5.9	0.0	1.4	0.0
%ile Storage Ratio (RQ%)	3.19	0.00	0.98	0.00	0.49	0.00	0.26	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	49.9	0.0	0.0	0.0	5.1	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.9	0.0	0.0	0.0	0.3	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	490	0	0	0	372	0	44
Grp Sat Flow (s), veh/h/ln	0	1687	0	0	0	1687	0	1712
Q Serve Time (g_s), s	0.0	19.9	0.0	0.0	0.0	13.8	0.0	2.0
Cycle Q Clear Time (g_c), s	0.0	19.9	0.0	0.0	0.0	13.8	0.0	2.0
Lane Grp Cap (c), veh/h	0	795	0	0	0	795	0	310
V/C Ratio (X)	0.00	0.62	0.00	0.00	0.00	0.47	0.00	0.14
Avail Cap (c_a), veh/h	0	795	0	0	0	795	0	441
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	18.1	0.0	0.0	0.0	16.5	0.0	31.7
Incr Delay (d2), s/veh	0.0	3.6	0.0	0.0	0.0	2.0	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	21.7	0.0	0.0	0.0	18.5	0.0	31.9
1st-Term Q (Q1), veh/ln	0.0	9.2	0.0	0.0	0.0	6.4	0.0	0.9

2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	0.0	0.0	0.4	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	10.0	0.0	0.0	0.0	6.8	0.0	1.0
%ile Storage Ratio (RQ%)	0.00	0.32	0.00	0.00	0.00	0.20	0.00	0.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	478	0	130	0	382	0	221
Grp Sat Flow (s), veh/h/ln	0	1649	0	1533	0	1727	0	1455
Q Serve Time (g_s), s	0.0	19.9	0.0	7.2	0.0	13.8	0.0	13.5
Cycle Q Clear Time (g_c), s	0.0	19.9	0.0	7.2	0.0	13.8	0.0	13.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.44	0.00	0.66	0.00	0.16	0.00	1.00
Lane Grp Cap (c), veh/h	0	777	0	239	0	813	0	263
V/C Ratio (X)	0.00	0.62	0.00	0.54	0.00	0.47	0.00	0.84
Avail Cap (c_a), veh/h	0	777	0	395	0	813	0	375
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	18.1	0.0	35.8	0.0	16.5	0.0	36.4
Incr Delay (d2), s/veh	0.0	3.6	0.0	1.9	0.0	1.9	0.0	11.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	21.8	0.0	37.7	0.0	18.5	0.0	47.4
1st-Term Q (Q1), veh/ln	0.0	9.0	0.0	3.0	0.0	6.6	0.0	5.4
2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	0.1	0.0	0.4	0.0	0.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	9.8	0.0	3.2	0.0	7.0	0.0	6.2
%ile Storage Ratio (RQ%)	0.00	0.32	0.00	0.08	0.00	0.21	0.00	1.09
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	169.1
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	122	322	51	185	276	256	110	1284	228	450	1313	85
Future Volume (veh/h)	122	322	51	185	276	256	110	1284	228	450	1313	85
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	124	329	52	189	282	261	112	1310	233	459	1340	87
Adj No. of Lanes	1	1	0	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	96	389	61	96	461	392	127	1208	213	185	1465	95
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.25	0.25	0.05	0.25	0.25	0.08	0.42	0.42	0.11	0.46	0.46
Ln Grp Delay, s/veh	256.5	0.0	59.3	537.7	49.8	51.2	112.2	98.5	105.0	731.0	39.1	39.3
Ln Grp LOS	F		E	F	D	D	F	F	F	F	D	D
Approach Vol, veh/h		505			732			1655			1886	
Approach Delay, s/veh		107.7			176.3			102.5			207.6	
Approach LOS		F			F			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	22.0	67.5	14.0	42.5	17.0	72.5	14.0	42.5
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green (Gmax), s	16.0	46.0	8.0	52.0	11.0	51.0	8.0	52.0
Max Allow Headway (MAH), s	3.8	5.3	3.8	4.9	3.8	5.3	3.8	4.9
Max Q Clear (g_c+I1), s	18.0	63.5	10.0	31.4	11.6	59.0	10.0	23.9
Green Ext Time (g_e), s	0.0	0.0	0.0	5.1	0.0	0.0	0.0	5.5
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.99	1.00	0.99	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.10	1.00	0.00	1.00	0.03

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	1691	1757	1691	1757

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	2868	1555	3217	1845

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	505	246	208	1568

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	459	0	189	0	112	0	124	0
Grp Sat Flow (s), veh/h/ln	1691	0	1757	0	1691	0	1757	0
Q Serve Time (g_s), s	16.0	0.0	8.0	0.0	9.6	0.0	8.0	0.0
Cycle Q Clear Time (g_c), s	16.0	0.0	8.0	0.0	9.6	0.0	8.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	185	0	96	0	127	0	96	0
V/C Ratio (X)	2.48	0.00	1.96	0.00	0.88	0.00	1.29	0.00
Avail Cap (c_a), veh/h	185	0	96	0	127	0	96	0
Upstream Filter (I)	0.09	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	65.0	0.0	69.0	0.0	66.8	0.0	69.0	0.0
Incr Delay (d2), s/veh	666.0	0.0	468.7	0.0	45.4	0.0	187.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	731.0	0.0	537.7	0.0	112.2	0.0	256.5	0.0
1st-Term Q (Q1), veh/ln	7.5	0.0	3.9	0.0	4.5	0.0	3.9	0.0
2nd-Term Q (Q2), veh/ln	34.3	0.0	12.5	0.0	1.6	0.0	5.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	41.7	0.0	16.4	0.0	6.1	0.0	8.9	0.0
%ile Storage Ratio (RQ%)	4.41	0.00	3.11	0.00	0.75	0.00	1.38	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	68.4	0.0	23.2	0.0	0.0	0.0	6.9	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.6	0.0	0.5	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	765	0	0	0	701	0	282
Grp Sat Flow (s), veh/h/ln	0	1687	0	0	0	1687	0	1845
Q Serve Time (g_s), s	0.0	61.5	0.0	0.0	0.0	56.5	0.0	19.8
Cycle Q Clear Time (g_c), s	0.0	61.5	0.0	0.0	0.0	56.5	0.0	19.8
Lane Grp Cap (c), veh/h	0	711	0	0	0	768	0	461
V/C Ratio (X)	0.00	1.08	0.00	0.00	0.00	0.91	0.00	0.61
Avail Cap (c_a), veh/h	0	711	0	0	0	768	0	657
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	42.2	0.0	0.0	0.0	37.0	0.0	48.5
Incr Delay (d2), s/veh	0.0	56.2	0.0	0.0	0.0	2.1	0.0	1.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	98.5	0.0	0.0	0.0	39.1	0.0	49.8
1st-Term Q (Q1), veh/ln	0.0	28.6	0.0	0.0	0.0	26.3	0.0	10.1

2nd-Term Q (Q2), veh/ln	0.0	11.1	0.0	0.0	0.0	0.4	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	39.7	0.0	0.0	0.0	26.7	0.0	10.3
%ile Storage Ratio (RQ%)	0.00	2.00	0.00	0.00	0.00	0.56	0.00	0.29
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	13.6	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	778	0	381	0	726	0	261
Grp Sat Flow (s), veh/h/ln	0	1687	0	1801	0	1739	0	1568
Q Serve Time (g_s), s	0.0	61.5	0.0	29.4	0.0	57.0	0.0	21.9
Cycle Q Clear Time (g_c), s	0.0	61.5	0.0	29.4	0.0	57.0	0.0	21.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.30	0.00	0.14	0.00	0.12	0.00	1.00
Lane Grp Cap (c), veh/h	0	710	0	450	0	792	0	392
V/C Ratio (X)	0.00	1.10	0.00	0.85	0.00	0.92	0.00	0.67
Avail Cap (c_a), veh/h	0	710	0	642	0	792	0	558
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	42.2	0.0	52.1	0.0	37.2	0.0	49.3
Incr Delay (d2), s/veh	0.0	62.8	0.0	7.2	0.0	2.1	0.0	2.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	105.0	0.0	59.3	0.0	39.3	0.0	51.2
1st-Term Q (Q1), veh/ln	0.0	28.6	0.0	14.6	0.0	27.2	0.0	9.5
2nd-Term Q (Q2), veh/ln	0.0	12.4	0.0	0.9	0.0	0.5	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	41.0	0.0	15.5	0.0	27.7	0.0	9.7
%ile Storage Ratio (RQ%)	0.00	2.07	0.00	0.44	0.00	0.58	0.00	0.27
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	16.9	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		155.8						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	162	285	127	159	374	231	131	1238	91	305	1527	127
Future Volume (veh/h)	162	285	127	159	374	231	131	1238	91	305	1527	127
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	172	303	135	169	398	246	139	1317	97	324	1624	135
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	169	625	531	243	625	531	160	1415	104	217	1507	124
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.09	0.44	0.44	0.13	0.48	0.48
Ln Grp Delay, s/veh	141.5	40.3	36.6	66.3	44.5	40.0	70.6	42.6	42.8	295.5	78.9	85.9
Ln Grp LOS	F	D	D	E	D	D	E	D	D	F	F	F
Approach Vol, veh/h		610			813			1553			2083	
Approach Delay, s/veh		68.0			47.7			45.2			115.6	
Approach LOS		E			D			D			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Case No	2.0	4.0		5.0	2.0	4.0		5.0
Phs Duration (G+Y+Rc), s	24.0	72.0		56.0	18.9	77.1		56.0
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green (Gmax), s	19.5	67.5		51.5	19.5	67.5		51.5
Max Allow Headway (MAH), s	3.8	5.3		5.0	3.8	5.3		5.0
Max Q Clear (g_c+I1), s	21.5	61.8		53.5	14.3	74.6		48.2
Green Ext Time (g_e), s	0.0	5.6		0.0	0.1	0.0		2.3
Prob of Phs Call (p_c)	1.00	1.00		1.00	1.00	1.00		1.00
Prob of Max Out (p_x)	1.00	0.00		1.00	0.29	0.00		1.00

Left-Turn Movement Data								
Assigned Mvmt	1			7	5			3
Mvmt Sat Flow, veh/h	1691			775	1691			938

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3187		1845		3157		1845

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		234		1568		260		1568

Left Lane Group Data								
Assigned Mvmt	1	0	0	7	5	0	0	3
Lane Assignment	(Prot)				(Prot)			

Lanes in Grp	1	0	0	1	1	0	0	1
Grp Vol (v), veh/h	324	0	0	172	139	0	0	169
Grp Sat Flow (s), veh/h/ln	1691	0	0	775	1691	0	0	938
Q Serve Time (g_s), s	19.5	0.0	0.0	23.9	12.3	0.0	0.0	26.4
Cycle Q Clear Time (g_c), s	19.5	0.0	0.0	51.5	12.3	0.0	0.0	46.2
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	775	0	0	0	938
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	51.5	0.0	0.0	0.0	51.5
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	23.9	0.0	0.0	0.0	31.7
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	23.9	0.0	0.0	0.0	26.4
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	217	0	0	169	160	0	0	243
V/C Ratio (X)	1.49	0.00	0.00	1.02	0.87	0.00	0.00	0.69
Avail Cap (c_a), veh/h	217	0	0	169	217	0	0	243
Upstream Filter (I)	0.30	0.00	0.00	1.00	0.09	0.00	0.00	1.00
Uniform Delay (d1), s/veh	66.3	0.0	0.0	67.4	67.8	0.0	0.0	58.0
Incr Delay (d2), s/veh	229.3	0.0	0.0	73.9	2.7	0.0	0.0	8.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	295.5	0.0	0.0	141.5	70.6	0.0	0.0	66.3
1st-Term Q (Q1), veh/ln	9.1	0.0	0.0	7.1	5.8	0.0	0.0	6.9
2nd-Term Q (Q2), veh/ln	13.8	0.0	0.0	3.5	0.1	0.0	0.0	0.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	22.9	0.0	0.0	10.6	5.9	0.0	0.0	7.4
%ile Storage Ratio (RQ%)	2.24	0.00	0.00	1.59	0.80	0.00	0.00	1.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	26.8	0.0	0.0	0.7	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.4	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	695	0	303	0	861	0	398
Grp Sat Flow (s), veh/h/ln	0	1687	0	1845	0	1687	0	1845
Q Serve Time (g_s), s	0.0	59.3	0.0	19.8	0.0	72.6	0.0	27.6
Cycle Q Clear Time (g_c), s	0.0	59.3	0.0	19.8	0.0	72.6	0.0	27.6
Lane Grp Cap (c), veh/h	0	749	0	625	0	805	0	625
V/C Ratio (X)	0.00	0.93	0.00	0.48	0.00	1.07	0.00	0.64
Avail Cap (c_a), veh/h	0	749	0	625	0	805	0	625
Upstream Filter (I)	0.00	0.09	0.00	1.00	0.00	0.30	0.00	1.00
Uniform Delay (d1), s/veh	0.0	40.0	0.0	39.8	0.0	39.7	0.0	42.4
Incr Delay (d2), s/veh	0.0	2.6	0.0	0.6	0.0	39.2	0.0	2.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	42.6	0.0	40.3	0.0	78.9	0.0	44.5
1st-Term Q (Q1), veh/ln	0.0	27.6	0.0	10.1	0.0	33.8	0.0	14.0

2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.1	0.0	8.8	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	28.2	0.0	10.2	0.0	42.6	0.0	14.4
%ile Storage Ratio (RQ%)	0.00	0.59	0.00	0.30	0.00	1.87	0.00	0.34
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	13.9	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	719	0	135	0	898	0	246
Grp Sat Flow (s), veh/h/ln	0	1734	0	1568	0	1730	0	1568
Q Serve Time (g_s), s	0.0	59.8	0.0	9.5	0.0	72.6	0.0	18.7
Cycle Q Clear Time (g_c), s	0.0	59.8	0.0	9.5	0.0	72.6	0.0	18.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.14	0.00	1.00	0.00	0.15	0.00	1.00
Lane Grp Cap (c), veh/h	0	770	0	531	0	826	0	531
V/C Ratio (X)	0.00	0.93	0.00	0.25	0.00	1.09	0.00	0.46
Avail Cap (c_a), veh/h	0	770	0	531	0	826	0	531
Upstream Filter (I)	0.00	0.09	0.00	1.00	0.00	0.30	0.00	1.00
Uniform Delay (d1), s/veh	0.0	40.1	0.0	36.4	0.0	39.7	0.0	39.4
Incr Delay (d2), s/veh	0.0	2.7	0.0	0.2	0.0	46.2	0.0	0.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	42.8	0.0	36.6	0.0	85.9	0.0	40.0
1st-Term Q (Q1), veh/ln	0.0	28.5	0.0	4.1	0.0	34.6	0.0	8.1
2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.0	0.0	10.6	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	29.1	0.0	4.1	0.0	45.2	0.0	8.2
%ile Storage Ratio (RQ%)	0.00	0.61	0.00	0.73	0.00	1.98	0.00	1.16
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	18.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		77.3						
HCM 2010 LOS		E						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	56	48	140	47	669	52	1558	95	596	1828	108
Future Volume (veh/h)	80	56	48	140	47	669	52	1558	95	596	1828	108
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	85	60	51	149	50	712	55	1657	101	634	1945	115
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	46	109	93	170	26	375	77	1473	89	300	2173	127
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.12	0.12	0.12	0.10	0.25	0.25	0.46	0.46	0.46	0.18	0.67	0.67
Ln Grp Delay, s/veh	540.3	0.0	68.9	97.2	0.0	473.6	89.8	103.2	108.9	568.0	22.2	23.0
Ln Grp LOS	F		E	F		F	F	F	F	F	C	C
Approach Vol, veh/h		196			911			1813			2694	
Approach Delay, s/veh		273.3			412.0			105.6			151.0	
Approach LOS		F			F			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4		6		8
Case No	2.0	6.0	2.0	6.0		4.0		4.0
Phs Duration (G+Y+Rc), s	34.0	78.0	21.3	24.7		112.0		46.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0		6.0		6.0
Max Green (Gmax), s	28.0	72.0	19.0	15.0		106.0		40.0
Max Allow Headway (MAH), s	3.8	5.4	3.8	5.6		5.4		5.6
Max Q Clear (g_c+I1), s	30.0	74.0	15.2	20.7		82.1		42.0
Green Ext Time (g_e), s	0.0	0.0	0.1	0.0		23.4		0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00		1.00		1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00		0.00		1.00

Left-Turn Movement Data				
Assigned Mvmt	1	5	3	7
Mvmt Sat Flow, veh/h	1691	193	1757	695

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	3232	922	3239	104

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	196	784	190	1480

Left Lane Group Data								
Assigned Mvmt	1	5	3	7	0	0	0	0
Lane Assignment	(Prot)		(Prot)					

Lanes in Grp	1	1	1	1	0	0	0	0
Grp Vol (v), veh/h	634	55	149	85	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1691	193	1757	695	0	0	0	0
Q Serve Time (g_s), s	28.0	25.9	13.2	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	28.0	72.0	13.2	18.7	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	193	0	695	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	72.0	0.0	18.7	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	25.9	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	25.9	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	300	77	170	46	0	0	0	0
V/C Ratio (X)	2.12	0.71	0.87	1.87	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	300	77	211	46	0	0	0	0
Upstream Filter (I)	0.09	0.36	1.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	65.0	71.6	70.4	79.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	503.0	18.2	26.8	461.3	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	568.0	89.8	97.2	540.3	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	13.1	2.4	6.4	2.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	41.9	0.4	1.3	5.8	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	54.9	2.8	7.7	7.8	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	5.80	0.34	0.87	2.50	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	83.6	0.0	0.0	9.9	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.5	0.0	0.0	0.5	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	859	0	0	0	1004	0	0
Grp Sat Flow (s), veh/h/ln	0	1687	0	0	0	1687	0	0
Q Serve Time (g_s), s	0.0	72.0	0.0	0.0	0.0	76.4	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	72.0	0.0	0.0	0.0	76.4	0.0	0.0
Lane Grp Cap (c), veh/h	0	769	0	0	0	1132	0	0
V/C Ratio (X)	0.00	1.12	0.00	0.00	0.00	0.89	0.00	0.00
Avail Cap (c_a), veh/h	0	769	0	0	0	1132	0	0
Upstream Filter (I)	0.00	0.36	0.00	0.00	0.00	0.09	0.00	0.00
Uniform Delay (d1), s/veh	0.0	43.0	0.0	0.0	0.0	21.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	60.2	0.0	0.0	0.0	1.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	103.2	0.0	0.0	0.0	22.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	33.5	0.0	0.0	0.0	35.1	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	12.8	0.0	0.0	0.0	0.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	46.4	0.0	0.0	0.0	35.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	2.03	0.00	0.00	0.00	1.81	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	22.7	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data

Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	899	0	111	0	1056	0	762
Grp Sat Flow (s), veh/h/ln	0	1741	0	1706	0	1742	0	1584
Q Serve Time (g_s), s	0.0	72.0	0.0	9.7	0.0	80.1	0.0	40.0
Cycle Q Clear Time (g_c), s	0.0	72.0	0.0	9.7	0.0	80.1	0.0	40.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.11	0.00	0.46	0.00	0.11	0.00	0.93
Lane Grp Cap (c), veh/h	0	793	0	202	0	1169	0	401
V/C Ratio (X)	0.00	1.13	0.00	0.55	0.00	0.90	0.00	1.90
Avail Cap (c_a), veh/h	0	793	0	202	0	1169	0	401
Upstream Filter (I)	0.00	0.36	0.00	1.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	43.0	0.0	65.7	0.0	21.7	0.0	59.0
Incr Delay (d2), s/veh	0.0	65.9	0.0	3.2	0.0	1.3	0.0	414.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	108.9	0.0	68.9	0.0	23.0	0.0	473.6
1st-Term Q (Q1), veh/ln	0.0	34.6	0.0	4.6	0.0	38.1	0.0	17.5
2nd-Term Q (Q2), veh/ln	0.0	14.5	0.0	0.2	0.0	0.4	0.0	46.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	49.1	0.0	4.8	0.0	38.6	0.0	63.7
%ile Storage Ratio (RQ%)	0.00	2.15	0.00	0.62	0.00	1.97	0.00	6.79
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	26.3	0.0	0.0	0.0	0.0	0.0	90.3
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.5

Intersection Summary

HCM 2010 Ctrl Delay	182.9
HCM 2010 LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	620	789	487	854	950	19	343	1293	3	9	1131	401
Future Volume (veh/h)	620	789	487	854	950	19	343	1293	3	9	1131	401
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1759	1759	1759	1900	1776	1776	1776	1900	1776	1776
Adj Flow Rate, veh/h	646	822	507	890	990	20	357	1347	0	9	1178	0
Adj No. of Lanes	2	2	1	2	2	0	1	2	1	0	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	8	8	8	8	8	8	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	710	455	204	855	606	12	134	1614	722	27	1159	543
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.22	0.14	0.14	0.26	0.18	0.18	0.08	0.48	0.00	0.36	0.36	0.00
Ln Grp Delay, s/veh	70.1	436.9	750.4	97.8	361.9	361.3	825.2	34.9	0.0	80.6	92.2	0.0
Ln Grp LOS	E	F	F	F	F	F	F	C		F	F	
Approach Vol, veh/h		1975			1900			1704			1187	
Approach Delay, s/veh		397.4			238.0			200.5			86.1	
Approach LOS		F			F			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Case No		3.0	2.0	3.0	2.0	7.0	2.0	4.0
Phs Duration (G+Y+Rc), s		79.0	46.0	27.0	18.0	61.0	39.2	33.8
Change Period (Y+Rc), s		6.3	6.0	6.3	6.0	6.3	6.0	6.3
Max Green (Gmax), s		72.7	40.0	20.7	12.0	54.7	40.0	20.7
Max Allow Headway (MAH), s		5.3	3.8	5.0	3.8	5.3	3.8	5.0
Max Q Clear (g_c+I1), s		54.7	42.0	22.7	14.0	56.7	31.5	29.5
Green Ext Time (g_e), s		15.2	0.0	0.0	0.0	0.0	1.7	0.0
Prob of Phs Call (p_c)		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)		0.00	1.00	1.00	1.00	0.00	0.16	1.00

Left-Turn Movement Data								
Assigned Mvmt			3		5	1	7	
Mvmt Sat Flow, veh/h			3250		1691	9	3250	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3374		3343		3221		3351

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1509		1495		1509		68

Left Lane Group Data								
Assigned Mvmt	0	0	3	0	5	1	7	0
Lane Assignment			(Prot)		(Prot)	L+T	(Prot)	

Lanes in Grp	0	0	2	0	1	1	2	0
Grp Vol (v), veh/h	0	0	890	0	357	623	646	0
Grp Sat Flow (s), veh/h/ln	0	0	1625	0	1691	1695	1625	0
Q Serve Time (g_s), s	0.0	0.0	40.0	0.0	12.0	20.0	29.5	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	40.0	0.0	12.0	54.7	29.5	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	412	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	54.7	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	20.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	20.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	33.2	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	33.2	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	1.00	0.01	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	855	0	134	634	710	0
V/C Ratio (X)	0.00	0.00	1.04	0.00	2.67	0.98	0.91	0.00
Avail Cap (c_a), veh/h	0	0	855	0	134	634	855	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.09	1.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	56.0	0.0	70.0	48.7	57.9	0.0
Incr Delay (d2), s/veh	0.0	0.0	41.8	0.0	755.2	31.9	12.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	97.8	0.0	825.2	80.6	70.1	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	17.9	0.0	5.6	26.1	13.3	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	5.0	0.0	28.0	5.6	1.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	22.9	0.0	33.6	31.8	14.5	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	1.52	0.00	3.78	1.06	1.38	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	8.7	0.0	55.9	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.7	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	1	0	1
Grp Vol (v), veh/h	0	1347	0	822	0	564	0	494
Grp Sat Flow (s), veh/h/ln	0	1687	0	1671	0	1535	0	1671
Q Serve Time (g_s), s	0.0	52.7	0.0	20.7	0.0	54.7	0.0	27.5
Cycle Q Clear Time (g_c), s	0.0	52.7	0.0	20.7	0.0	54.7	0.0	27.5
Lane Grp Cap (c), veh/h	0	1614	0	455	0	552	0	302
V/C Ratio (X)	0.00	0.83	0.00	1.81	0.00	1.02	0.00	1.63
Avail Cap (c_a), veh/h	0	1614	0	455	0	552	0	302
Upstream Filter (I)	0.00	0.09	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	34.4	0.0	65.7	0.0	48.7	0.0	62.3
Incr Delay (d2), s/veh	0.0	0.5	0.0	371.2	0.0	43.5	0.0	299.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	34.9	0.0	436.9	0.0	92.2	0.0	361.9
1st-Term Q (Q1), veh/ln	0.0	24.5	0.0	9.5	0.0	23.2	0.0	12.7

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	23.5	0.0	6.7	0.0	25.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	24.6	0.0	33.0	0.0	29.9	0.0	37.8
%ile Storage Ratio (RQ%)	0.00	1.26	0.00	1.14	0.00	1.00	0.00	1.15
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	91.7	0.0	2.8	0.0	47.9
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.5	0.0	0.3	0.0	0.4
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	507	0	0	0	516
Grp Sat Flow (s), veh/h/ln	0	1509	0	1495	0	1509	0	1747
Q Serve Time (g_s), s	0.0	0.0	0.0	20.7	0.0	0.0	0.0	27.5
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	20.7	0.0	0.0	0.0	27.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.04
Lane Grp Cap (c), veh/h	0	722	0	204	0	543	0	316
V/C Ratio (X)	0.00	0.00	0.00	2.49	0.00	0.00	0.00	1.63
Avail Cap (c_a), veh/h	0	722	0	204	0	543	0	316
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	65.7	0.0	0.0	0.0	62.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	684.8	0.0	0.0	0.0	299.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	750.4	0.0	0.0	0.0	361.3
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	8.6	0.0	0.0	0.0	13.3
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	38.7	0.0	0.0	0.0	26.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	47.3	0.0	0.0	0.0	39.5
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	1.63	0.00	0.00	0.00	1.20
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	75.8	0.0	0.0	0.0	50.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.4
Intersection Summary								
HCM 2010 Ctrl Delay		248.4						
HCM 2010 LOS		F						

APPENDIX IV-C4:
Year 2040 Zoning Intersection Total with Combined LOS PM Analysis with Mitigation

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	757	1915	1025	241	1192	92	601	335	229	186	224	257
Future Volume (veh/h)	757	1915	1025	241	1192	92	601	335	229	186	224	257
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1743	1743	1743	1743	1743	1743
Adj Flow Rate, veh/h	805	2037	1090	256	1268	98	639	356	244	198	238	273
Adj No. of Lanes	2	2	1	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	9	9	9	9	9	9
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	843	1689	755	304	1629	507	211	1177	367	65	961	299
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.24	0.47	0.47	0.09	0.32	0.32	0.07	0.25	0.25	0.02	0.20	0.20
Ln Grp Delay, s/veh	78.2	139.4	247.4	82.7	51.4	39.1	995.9	47.8	61.4	1039.4	52.2	93.9
Ln Grp LOS	E	F	F	F	D	D	F	D	E	F	D	F
Approach Vol, veh/h		3932			1622			1239			709	
Approach Delay, s/veh		156.8			55.6			539.4			343.9	
Approach LOS		F			E			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	10.0	45.0	19.8	79.2	17.0	38.0	43.7	55.3
Change Period (Y+Rc), s	6.9	6.9	6.4	6.4	6.9	6.9	6.4	6.4
Max Green (Gmax), s	3.1	38.1	16.6	69.6	10.1	31.1	37.6	48.6
Max Allow Headway (MAH), s	3.8	4.7	3.7	4.8	3.8	4.7	3.8	4.8
Max Q Clear (g_c+I1), s	5.1	24.8	13.2	74.8	12.1	29.8	37.2	36.5
Green Ext Time (g_e), s	0.0	5.0	0.3	0.0	0.0	0.8	0.2	12.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	3221	3476	3221	3476

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	4759	3574	4759	5136

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	1482	1599	1482	1599

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	198	0	256	0	639	0	805	0
Grp Sat Flow (s), veh/h/ln	1610	0	1738	0	1610	0	1738	0
Q Serve Time (g_s), s	3.1	0.0	11.2	0.0	10.1	0.0	35.2	0.0
Cycle Q Clear Time (g_c), s	3.1	0.0	11.2	0.0	10.1	0.0	35.2	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	65	0	304	0	211	0	843	0
V/C Ratio (X)	3.05	0.00	0.84	0.00	3.03	0.00	0.96	0.00
Avail Cap (c_a), veh/h	65	0	375	0	211	0	849	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	75.4	0.0	69.2	0.0	71.9	0.0	57.5	0.0
Incr Delay (d2), s/veh	963.9	0.0	13.5	0.0	923.9	0.0	20.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	1039.4	0.0	82.7	0.0	995.9	0.0	78.2	0.0
1st-Term Q (Q1), veh/ln	1.4	0.0	5.4	0.0	4.5	0.0	16.9	0.0
2nd-Term Q (Q2), veh/ln	8.7	0.0	0.6	0.0	27.1	0.0	2.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	10.1	0.0	5.9	0.0	31.6	0.0	19.3	0.0
%ile Storage Ratio (RQ%)	0.84	0.00	0.47	0.00	2.65	0.00	0.78	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	33.3	0.0	0.0	0.0	106.9	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.8	0.0	0.0	0.0	0.8	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	2	0	3	0	3
Grp Vol (v), veh/h	0	356	0	2037	0	238	0	1268
Grp Sat Flow (s), veh/h/ln	0	1586	0	1787	0	1586	0	1712
Q Serve Time (g_s), s	0.0	9.4	0.0	72.8	0.0	6.5	0.0	34.5
Cycle Q Clear Time (g_c), s	0.0	9.4	0.0	72.8	0.0	6.5	0.0	34.5
Lane Grp Cap (c), veh/h	0	1177	0	1689	0	961	0	1629
V/C Ratio (X)	0.00	0.30	0.00	1.21	0.00	0.25	0.00	0.78
Avail Cap (c_a), veh/h	0	1177	0	1689	0	961	0	1629
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	47.1	0.0	40.6	0.0	51.6	0.0	47.7
Incr Delay (d2), s/veh	0.0	0.7	0.0	98.7	0.0	0.6	0.0	3.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	47.8	0.0	139.4	0.0	52.2	0.0	51.4
1st-Term Q (Q1), veh/ln	0.0	4.1	0.0	35.9	0.0	2.8	0.0	16.3

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	23.2	0.0	0.1	0.0	0.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	4.2	0.0	59.0	0.0	2.9	0.0	16.9
%ile Storage Ratio (RQ%)	0.00	0.15	0.00	1.33	0.00	0.11	0.00	0.82
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	87.1	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	244	0	1090	0	273	0	98
Grp Sat Flow (s), veh/h/ln	0	1482	0	1599	0	1482	0	1599
Q Serve Time (g_s), s	0.0	22.8	0.0	72.8	0.0	27.8	0.0	6.9
Cycle Q Clear Time (g_c), s	0.0	22.8	0.0	72.8	0.0	27.8	0.0	6.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	367	0	755	0	299	0	507
V/C Ratio (X)	0.00	0.67	0.00	1.44	0.00	0.91	0.00	0.19
Avail Cap (c_a), veh/h	0	367	0	755	0	299	0	507
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	52.2	0.0	40.6	0.0	60.1	0.0	38.2
Incr Delay (d2), s/veh	0.0	9.2	0.0	206.8	0.0	33.8	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	61.4	0.0	247.4	0.0	93.9	0.0	39.1
1st-Term Q (Q1), veh/ln	0.0	9.3	0.0	31.9	0.0	11.4	0.0	3.0
2nd-Term Q (Q2), veh/ln	0.0	0.9	0.0	43.4	0.0	2.8	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	10.3	0.0	75.3	0.0	14.2	0.0	3.1
%ile Storage Ratio (RQ%)	0.00	0.38	0.00	7.91	0.00	1.58	0.00	0.15
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	83.7	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		215.8						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	197	1905	258	155	1213	149	270	136	211	164	73	95
Future Volume (veh/h)	197	1905	258	155	1213	149	270	136	211	164	73	95
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	210	2027	274	165	1290	159	287	145	224	174	78	101
Adj No. of Lanes	2	3	1	2	2	0	2	1	1	2	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	192	2621	816	192	1636	201	346	356	303	227	292	248
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.52	0.52	0.06	0.52	0.52	0.10	0.19	0.19	0.07	0.16	0.16
Ln Grp Delay, s/veh	164.5	32.4	23.0	83.3	32.5	32.7	73.0	57.8	73.4	76.0	59.2	63.2
Ln Grp LOS	F	C	C	F	C	C	E	E	E	E	E	E
Approach Vol, veh/h		2511			1614			656			353	
Approach Delay, s/veh		42.4			37.8			69.8			68.6	
Approach LOS		D			D			E			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	16.9	36.4	15.0	85.8	22.2	31.0	15.0	85.8
Change Period (Y+Rc), s	6.6	6.6	6.4	6.4	6.6	6.6	6.4	6.4
Max Green (Gmax), s	32.4	24.4	8.6	62.6	32.4	24.4	8.6	62.6
Max Allow Headway (MAH), s	3.8	4.5	3.7	4.9	3.8	4.5	3.7	4.9
Max Q Clear (g_c+I1), s	9.7	22.7	9.3	51.5	14.7	10.9	10.6	53.5
Green Ext Time (g_e), s	0.5	0.5	0.0	10.8	0.9	2.0	0.0	8.8
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3408		3442		3408		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1845		5085		1845		3174

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		1583		1568		389

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	174	0	165	0	287	0	210	0
Grp Sat Flow (s), veh/h/ln	1704	0	1721	0	1704	0	1721	0
Q Serve Time (g_s), s	7.7	0.0	7.3	0.0	12.7	0.0	8.6	0.0
Cycle Q Clear Time (g_c), s	7.7	0.0	7.3	0.0	12.7	0.0	8.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	227	0	192	0	346	0	192	0
V/C Ratio (X)	0.77	0.00	0.86	0.00	0.83	0.00	1.09	0.00
Avail Cap (c_a), veh/h	717	0	192	0	717	0	192	0
Upstream Filter (I)	1.00	0.00	0.30	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	70.7	0.0	72.1	0.0	67.9	0.0	72.7	0.0
Incr Delay (d2), s/veh	5.3	0.0	11.2	0.0	5.1	0.0	91.8	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	76.0	0.0	83.3	0.0	73.0	0.0	164.5	0.0
1st-Term Q (Q1), veh/ln	3.6	0.0	3.5	0.0	6.0	0.0	4.1	0.0
2nd-Term Q (Q2), veh/ln	0.2	0.0	0.3	0.0	0.2	0.0	2.5	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	3.8	0.0	3.8	0.0	6.3	0.0	6.5	0.0
%ile Storage Ratio (RQ%)	0.72	0.00	0.36	0.00	1.19	0.00	0.52	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	4.5	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	3	0	1	0	1
Grp Vol (v), veh/h	0	145	0	2027	0	78	0	716
Grp Sat Flow (s), veh/h/ln	0	1845	0	1695	0	1845	0	1770
Q Serve Time (g_s), s	0.0	10.6	0.0	49.5	0.0	5.7	0.0	50.8
Cycle Q Clear Time (g_c), s	0.0	10.6	0.0	49.5	0.0	5.7	0.0	50.8
Lane Grp Cap (c), veh/h	0	356	0	2621	0	292	0	912
V/C Ratio (X)	0.00	0.41	0.00	0.77	0.00	0.27	0.00	0.79
Avail Cap (c_a), veh/h	0	356	0	2621	0	292	0	912
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.30
Uniform Delay (d1), s/veh	0.0	54.4	0.0	30.1	0.0	56.9	0.0	30.4
Incr Delay (d2), s/veh	0.0	3.4	0.0	2.3	0.0	2.2	0.0	2.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	57.8	0.0	32.4	0.0	59.2	0.0	32.5
1st-Term Q (Q1), veh/ln	0.0	5.4	0.0	23.1	0.0	2.9	0.0	24.7

2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.6	0.0	0.2	0.0	0.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	5.7	0.0	23.6	0.0	3.1	0.0	25.2
%ile Storage Ratio (RQ%)	0.00	0.20	0.00	0.25	0.00	0.11	0.00	0.47
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	224	0	274	0	101	0	733
Grp Sat Flow (s), veh/h/ln	0	1568	0	1583	0	1568	0	1794
Q Serve Time (g_s), s	0.0	20.7	0.0	15.6	0.0	8.9	0.0	51.5
Cycle Q Clear Time (g_c), s	0.0	20.7	0.0	15.6	0.0	8.9	0.0	51.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.22
Lane Grp Cap (c), veh/h	0	303	0	816	0	248	0	925
V/C Ratio (X)	0.00	0.74	0.00	0.34	0.00	0.41	0.00	0.79
Avail Cap (c_a), veh/h	0	303	0	816	0	248	0	925
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.30
Uniform Delay (d1), s/veh	0.0	58.5	0.0	21.9	0.0	58.3	0.0	30.6
Incr Delay (d2), s/veh	0.0	14.9	0.0	1.1	0.0	4.9	0.0	2.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	73.4	0.0	23.0	0.0	63.2	0.0	32.7
1st-Term Q (Q1), veh/ln	0.0	9.0	0.0	6.8	0.0	3.9	0.0	25.4
2nd-Term Q (Q2), veh/ln	0.0	1.3	0.0	0.3	0.0	0.3	0.0	0.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	10.2	0.0	7.1	0.0	4.2	0.0	26.0
%ile Storage Ratio (RQ%)	0.00	0.35	0.00	0.07	0.00	0.15	0.00	0.48
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		46.3						
HCM 2010 LOS		D						

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	275	2078	1386	325	255	125
Future Volume (veh/h)	275	2078	1386	325	255	125
Number	7	4	8	18	1	16
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00			1.00	1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1676	1676	1676	1710	1660	1660
Adj Flow Rate, veh/h	284	2142	1429	335	263	129
Adj No. of Lanes	2	2	2	0	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	3	3
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	271	2300	1537	351	317	283
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.09	0.72	0.60	0.60	0.20	0.20
Ln Grp Delay, s/veh	120.7	22.8	40.8	47.1	85.5	63.9
Ln Grp LOS	F	C	D	D	F	E
Approach Vol, veh/h		2426	1764		392	
Approach Delay, s/veh		34.2	44.0		78.4	
Approach LOS		C	D		E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	6			4			7	8
Case No	9.0			4.0			2.0	8.0
Phs Duration (G+Y+Rc), s	40.0			127.0			21.0	106.0
Change Period (Y+Rc), s	6.5			6.4			6.4	6.4
Max Green (Gmax), s	33.5			120.6			14.6	99.6
Max Allow Headway (MAH), s	3.9			5.0			3.7	5.0
Max Q Clear (g_c+I1), s	28.6			97.3			16.6	91.0
Green Ext Time (g_e), s	0.6			22.6			0.0	8.5
Prob of Phs Call (p_c)	1.00			1.00			1.00	1.00
Prob of Max Out (p_x)	0.00			0.00			1.00	0.00
Left-Turn Movement Data								
Assigned Mvmt	1						7	3
Mvmt Sat Flow, veh/h	1581						3097	0
Through Movement Data								
Assigned Mvmt	6			4				8
Mvmt Sat Flow, veh/h	0			3269				2660
Right-Turn Movement Data								
Assigned Mvmt	16			14				18
Mvmt Sat Flow, veh/h	1411			0				589
Left Lane Group Data								
Assigned Mvmt	1	0	0	0	0	0	7	3
Lane Assignment							(Prot)	

Lanes in Grp	1	0	0	0	0	0	2	0
Grp Vol (v), veh/h	263	0	0	0	0	0	284	0
Grp Sat Flow (s), veh/h/ln	1581	0	0	0	0	0	1549	0
Q Serve Time (g_s), s	26.6	0.0	0.0	0.0	0.0	0.0	14.6	0.0
Cycle Q Clear Time (g_c), s	26.6	0.0	0.0	0.0	0.0	0.0	14.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1581	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	99.6
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	317	0	0	0	0	0	271	0
V/C Ratio (X)	0.83	0.00	0.00	0.00	0.00	0.00	1.05	0.00
Avail Cap (c_a), veh/h	317	0	0	0	0	0	271	0
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.32	0.00
Uniform Delay (d1), s/veh	64.0	0.0	0.0	0.0	0.0	0.0	76.2	0.0
Incr Delay (d2), s/veh	21.5	0.0	0.0	0.0	0.0	0.0	44.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	85.5	0.0	0.0	0.0	0.0	0.0	120.7	0.0
1st-Term Q (Q1), veh/ln	11.6	0.0	0.0	0.0	0.0	0.0	6.2	0.0
2nd-Term Q (Q2), veh/ln	1.9	0.0	0.0	0.0	0.0	0.0	1.7	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	13.5	0.0	0.0	0.0	0.0	0.0	7.9	0.0
%ile Storage Ratio (RQ%)	0.67	0.00	0.00	0.00	0.00	0.00	0.91	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	3.3	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	6	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	1
Grp Vol (v), veh/h	0	0	0	2142	0	0	0	869
Grp Sat Flow (s), veh/h/ln	0	0	0	1593	0	0	0	1593
Q Serve Time (g_s), s	0.0	0.0	0.0	95.3	0.0	0.0	0.0	81.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	95.3	0.0	0.0	0.0	81.0
Lane Grp Cap (c), veh/h	0	0	0	2300	0	0	0	950
V/C Ratio (X)	0.00	0.00	0.00	0.93	0.00	0.00	0.00	0.92
Avail Cap (c_a), veh/h	0	0	0	2300	0	0	0	950
Upstream Filter (I)	0.00	0.00	0.00	0.32	0.00	0.00	0.00	0.68
Uniform Delay (d1), s/veh	0.0	0.0	0.0	19.7	0.0	0.0	0.0	29.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	3.1	0.0	0.0	0.0	10.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	22.8	0.0	0.0	0.0	40.8
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	41.4	0.0	0.0	0.0	35.5

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.0	0.0	0.0	0.0	2.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	42.3	0.0	0.0	0.0	38.4
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.79	0.00	0.00	0.00	0.59
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	16	0	0	14	0	0	0	18
Lane Assignment	R							T+R
Lanes in Grp	1	0	0	0	0	0	0	1
Grp Vol (v), veh/h	129	0	0	0	0	0	0	895
Grp Sat Flow (s), veh/h/ln	1411	0	0	0	0	0	0	1573
Q Serve Time (g_s), s	13.4	0.0	0.0	0.0	0.0	0.0	0.0	89.0
Cycle Q Clear Time (g_c), s	13.4	0.0	0.0	0.0	0.0	0.0	0.0	89.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37
Lane Grp Cap (c), veh/h	283	0	0	0	0	0	0	938
V/C Ratio (X)	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.95
Avail Cap (c_a), veh/h	283	0	0	0	0	0	0	938
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68
Uniform Delay (d1), s/veh	58.7	0.0	0.0	0.0	0.0	0.0	0.0	31.6
Incr Delay (d2), s/veh	5.2	0.0	0.0	0.0	0.0	0.0	0.0	15.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	63.9	0.0	0.0	0.0	0.0	0.0	0.0	47.1
1st-Term Q (Q1), veh/ln	10.7	0.0	0.0	0.0	0.0	0.0	0.0	38.5
2nd-Term Q (Q2), veh/ln	0.4	0.0	0.0	0.0	0.0	0.0	0.0	4.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	11.1	0.0	0.0	0.0	0.0	0.0	0.0	42.6
%ile Storage Ratio (RQ%)	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.65
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		41.8						
HCM 2010 LOS		D						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	101	2066	52	87	1562	105	78	20	81	72	7	82
Future Volume (veh/h)	101	2066	52	87	1562	105	78	20	81	72	7	82
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	103	2108	57	89	1594	107	80	20	83	73	7	84
Adj No. of Lanes	2	2	0	2	2	0	2	2	1	2	1	1
Peak Hour Factor	0.98	0.98	0.92	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	145	2513	68	130	2390	159	114	117	52	140	76	65
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.04	0.71	0.71	0.04	0.71	0.71	0.03	0.03	0.03	0.04	0.04	0.04
Ln Grp Delay, s/veh	76.5	17.4	17.7	81.2	14.4	14.6	103.9	75.1	411.5	85.0	73.0	285.7
Ln Grp LOS	E	B	B	F	B	B	F	E	F	F	E	F
Approach Vol, veh/h		2268			1790			183			164	
Approach Delay, s/veh		20.2			17.8			240.2			187.3	
Approach LOS		C			B			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	6	2	3	4			7	8
Case No	9.0	9.0	2.0	4.0			2.0	4.0
Phs Duration (G+Y+Rc), s	13.0	12.0	12.2	115.8			12.8	115.2
Change Period (Y+Rc), s	6.7	6.9	6.4	* 6.6			6.4	* 6.6
Max Green (Gmax), s	6.3	5.1	6.6	* 1.1E2			6.6	* 1.1E2
Max Allow Headway (MAH), s	4.0	4.1	3.8	5.1			3.7	5.1
Max Q Clear (g_c+I1), s	8.3	7.1	5.9	68.1			6.5	42.4
Green Ext Time (g_e), s	0.0	0.0	0.0	38.4			0.0	60.9
Prob of Phs Call (p_c)	1.00	1.00	0.98	1.00			0.99	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.00			1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1	5	3				7	
Mvmt Sat Flow, veh/h	3408	3408	3442				3442	

Through Movement Data								
Assigned Mvmt	6	2		4				8
Mvmt Sat Flow, veh/h	1845	3505		3521				3368

Right-Turn Movement Data								
Assigned Mvmt	16	12		14				18
Mvmt Sat Flow, veh/h	1568	1568		95				225

Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	7	0
Lane Assignment			(Prot)				(Prot)	

Lanes in Grp	2	2	2	0	0	0	2	0
Grp Vol (v), veh/h	73	80	89	0	0	0	103	0
Grp Sat Flow (s), veh/h/ln	1704	1704	1721	0	0	0	1721	0
Q Serve Time (g_s), s	3.2	3.6	3.9	0.0	0.0	0.0	4.5	0.0
Cycle Q Clear Time (g_c), s	3.2	3.6	3.9	0.0	0.0	0.0	4.5	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1704	1704	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	140	114	130	0	0	0	145	0
V/C Ratio (X)	0.52	0.70	0.68	0.00	0.00	0.00	0.71	0.00
Avail Cap (c_a), veh/h	140	114	148	0	0	0	148	0
Upstream Filter (I)	1.00	1.00	0.81	0.00	0.00	0.00	0.27	0.00
Uniform Delay (d1), s/veh	71.9	73.2	72.7	0.0	0.0	0.0	72.4	0.0
Incr Delay (d2), s/veh	13.1	30.7	8.5	0.0	0.0	0.0	4.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	85.0	103.9	81.2	0.0	0.0	0.0	76.5	0.0
1st-Term Q (Q1), veh/ln	1.5	1.7	1.9	0.0	0.0	0.0	2.2	0.0
2nd-Term Q (Q2), veh/ln	0.3	0.5	0.2	0.0	0.0	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	1.8	2.2	2.0	0.0	0.0	0.0	2.2	0.0
%ile Storage Ratio (RQ%)	0.09	0.12	0.15	0.00	0.00	0.00	0.32	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	6	2	0	4	0	0	0	8
Lane Assignment	T	T		T				T
Lanes in Grp	1	2	0	1	0	0	0	1
Grp Vol (v), veh/h	7	20	0	1055	0	0	0	833
Grp Sat Flow (s), veh/h/ln	1845	1752	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.6	0.8	0.0	64.6	0.0	0.0	0.0	39.5
Cycle Q Clear Time (g_c), s	0.6	0.8	0.0	64.6	0.0	0.0	0.0	39.5
Lane Grp Cap (c), veh/h	76	117	0	1263	0	0	0	1256
V/C Ratio (X)	0.09	0.17	0.00	0.83	0.00	0.00	0.00	0.66
Avail Cap (c_a), veh/h	76	117	0	1263	0	0	0	1256
Upstream Filter (I)	1.00	1.00	0.00	0.27	0.00	0.00	0.00	0.81
Uniform Delay (d1), s/veh	70.6	71.9	0.0	15.5	0.0	0.0	0.0	12.2
Incr Delay (d2), s/veh	2.4	3.2	0.0	1.9	0.0	0.0	0.0	2.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	73.0	75.1	0.0	17.4	0.0	0.0	0.0	14.4
1st-Term Q (Q1), veh/ln	0.3	0.4	0.0	31.1	0.0	0.0	0.0	19.2

2nd-Term Q (Q2), veh/ln	0.1	0.1	0.0	0.7	0.0	0.0	0.0	0.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.3	0.5	0.0	31.7	0.0	0.0	0.0	20.0
%ile Storage Ratio (RQ%)	0.02	0.03	0.00	0.46	0.00	0.00	0.00	1.30
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	16	12	0	14	0	0	0	18
Lane Assignment	R	R		T+R				T+R
Lanes in Grp	1	1	0	1	0	0	0	1
Grp Vol (v), veh/h	84	83	0	1110	0	0	0	868
Grp Sat Flow (s), veh/h/ln	1568	1568	0	1846	0	0	0	1823
Q Serve Time (g_s), s	6.3	5.1	0.0	66.1	0.0	0.0	0.0	40.4
Cycle Q Clear Time (g_c), s	6.3	5.1	0.0	66.1	0.0	0.0	0.0	40.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	1.00	0.00	0.05	0.00	0.00	0.00	0.12
Lane Grp Cap (c), veh/h	65	52	0	1318	0	0	0	1294
V/C Ratio (X)	1.30	1.59	0.00	0.84	0.00	0.00	0.00	0.67
Avail Cap (c_a), veh/h	65	52	0	1318	0	0	0	1294
Upstream Filter (I)	1.00	1.00	0.00	0.27	0.00	0.00	0.00	0.81
Uniform Delay (d1), s/veh	73.3	73.9	0.0	15.7	0.0	0.0	0.0	12.3
Incr Delay (d2), s/veh	212.3	337.5	0.0	1.9	0.0	0.0	0.0	2.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	285.7	411.5	0.0	17.7	0.0	0.0	0.0	14.6
1st-Term Q (Q1), veh/ln	2.7	2.2	0.0	33.3	0.0	0.0	0.0	20.3
2nd-Term Q (Q2), veh/ln	3.8	4.9	0.0	0.7	0.0	0.0	0.0	0.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	6.5	7.1	0.0	34.0	0.0	0.0	0.0	21.1
%ile Storage Ratio (RQ%)	4.19	1.66	0.00	0.49	0.00	0.00	0.00	1.38
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	4.9	7.7	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	34.6
HCM 2010 LOS	C

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1915	286	308	1420	318	324
Future Volume (veh/h)	1915	286	308	1420	318	324
Number	4	14	3	8	5	12
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)		1.00	1.00		1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1845	1845
Adj Flow Rate, veh/h	1995	298	321	1479	331	338
Adj No. of Lanes	3	0	2	2	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	3	3
Opposing Right Turn Influence			Yes		Yes	
Cap, veh/h	2694	396	365	2641	602	277
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.60	0.60	0.11	0.75	0.18	0.18
Ln Grp Delay, s/veh	24.8	26.4	90.4	10.1	66.3	196.0
Ln Grp LOS	C	C	F	B	E	F
Approach Vol, veh/h	2293			1800	669	
Approach Delay, s/veh	25.4			24.4	131.8	
Approach LOS	C			C	F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Case No		9.0	2.0	8.0				4.0
Phs Duration (G+Y+Rc), s		36.0	24.1	106.9				131.0
Change Period (Y+Rc), s		6.5	6.4	6.4				6.4
Max Green (Gmax), s		29.5	20.6	97.6				124.6
Max Allow Headway (MAH), s		3.9	3.8	5.3				5.3
Max Q Clear (g_c+I1), s		31.5	17.4	57.0				32.4
Green Ext Time (g_e), s		0.0	0.4	38.2				80.7
Prob of Phs Call (p_c)		1.00	1.00	1.00				1.00
Prob of Max Out (p_x)		0.00	1.00	0.00				0.00

Left-Turn Movement Data			
Assigned Mvmt	5	3	7
Mvmt Sat Flow, veh/h	3408	3442	0

Through Movement Data			
Assigned Mvmt	2	4	8
Mvmt Sat Flow, veh/h	0	4646	3632

Right-Turn Movement Data			
Assigned Mvmt	12	14	18
Mvmt Sat Flow, veh/h	1568	659	0

Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	0	0	0
Lane Assignment			(Prot)					

Lanes in Grp	0	2	2	0	0	0	0	0
Grp Vol (v), veh/h	0	331	321	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1704	1721	0	0	0	0	0
Q Serve Time (g_s), s	0.0	14.8	15.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	14.8	15.4	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1704	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	100.5	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	602	365	0	0	0	0	0
V/C Ratio (X)	0.00	0.55	0.88	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	602	425	0	0	0	0	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	62.7	73.6	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	3.6	16.9	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	66.3	90.4	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	7.0	7.3	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.9	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	7.3	8.2	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.31	0.90	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	2
Grp Vol (v), veh/h	0	0	0	1503	0	0	0	1479
Grp Sat Flow (s), veh/h/ln	0	0	0	1695	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	53.0	0.0	0.0	0.0	30.4
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	53.0	0.0	0.0	0.0	30.4
Lane Grp Cap (c), veh/h	0	0	0	2040	0	0	0	2641
V/C Ratio (X)	0.00	0.00	0.00	0.74	0.00	0.00	0.00	0.56
Avail Cap (c_a), veh/h	0	0	0	2040	0	0	0	2641
Upstream Filter (I)	0.00	0.00	0.00	0.42	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	23.8	0.0	0.0	0.0	9.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	24.8	0.0	0.0	0.0	10.1
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	24.6	0.0	0.0	0.0	14.8

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	24.9	0.0	0.0	0.0	15.1
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	1.63	0.00	0.00	0.00	1.57
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	0	0	18
Lane Assignment		R		T+R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	338	0	790	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1568	0	1747	0	0	0	0
Q Serve Time (g_s), s	0.0	29.5	0.0	55.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	29.5	0.0	55.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.38	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	277	0	1051	0	0	0	0
V/C Ratio (X)	0.00	1.22	0.00	0.75	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	277	0	1051	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.42	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	68.8	0.0	24.2	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	127.2	0.0	2.2	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	196.0	0.0	26.4	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	12.8	0.0	26.3	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	9.8	0.0	0.6	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	22.6	0.0	27.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.97	0.00	1.76	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	15.3	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		40.0						
HCM 2010 LOS		D						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	2010	316	104	1632	22	125	4	84	14	4	25
Future Volume (veh/h)	48	2010	316	104	1632	22	125	4	84	14	4	25
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1900	1900	1845	1900
Adj Flow Rate, veh/h	51	2116	333	109	1718	23	132	4	88	15	4	26
Adj No. of Lanes	2	2	0	2	2	0	1	1	0	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	96	2259	346	107	2637	35	300	14	302	104	37	153
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.73	0.73	0.03	0.74	0.74	0.20	0.20	0.20	0.20	0.20	0.20
Ln Grp Delay, s/veh	81.7	29.3	36.6	159.2	12.6	12.5	63.1	0.0	57.0	54.1	0.0	0.0
Ln Grp LOS	F	C	D	F	B	B	E		E	D		
Approach Vol, veh/h		2500			1850			224			45	
Approach Delay, s/veh		34.0			21.2			60.6			54.1	
Approach LOS		C			C			E			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		6.0	2.0	4.0		8.0	2.0	4.0
Phs Duration (G+Y+Rc), s		39.0	11.4	125.0		39.0	10.9	125.5
Change Period (Y+Rc), s		* 6.8	6.4	6.4		* 6.8	6.4	6.4
Max Green (Gmax), s		* 32	5.0	104.6		* 32	5.0	104.6
Max Allow Headway (MAH), s		4.7	3.8	5.3		4.7	3.8	5.3
Max Q Clear (g_c+I1), s		18.0	7.0	104.7		10.1	4.4	41.2
Green Ext Time (g_e), s		1.0	0.0	0.0		1.2	0.0	61.6
Prob of Phs Call (p_c)		1.00	0.99	1.00		1.00	0.90	1.00
Prob of Max Out (p_x)		0.00	1.00	0.00		0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		1361	3442			371	3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		69		3077		187		3576

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1510		472		763		48

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0
Lane Assignment			(Prot)			L+T+R	(Prot)	

Lanes in Grp	0	1	2	0	0	1	2	0
Grp Vol (v), veh/h	0	132	109	0	0	45	51	0
Grp Sat Flow (s), veh/h/ln	0	1361	1721	0	0	1321	1721	0
Q Serve Time (g_s), s	0.0	7.9	5.0	0.0	0.0	0.1	2.4	0.0
Cycle Q Clear Time (g_c), s	0.0	16.0	5.0	0.0	0.0	8.1	2.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1361	0	0	0	1325	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	1028	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	32.2	0.0	0.0	0.0	32.2	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	24.1	0.0	0.0	0.0	24.2	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	7.9	0.0	0.0	0.0	0.1	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	3.6	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	0.00	0.33	1.00	0.00
Lane Grp Cap (c), veh/h	0	300	107	0	0	294	96	0
V/C Ratio (X)	0.00	0.44	1.02	0.00	0.00	0.15	0.53	0.00
Avail Cap (c_a), veh/h	0	300	107	0	0	294	107	0
Upstream Filter (I)	0.00	1.00	0.76	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	58.4	78.0	0.0	0.0	53.0	77.2	0.0
Incr Delay (d2), s/veh	0.0	4.6	81.0	0.0	0.0	1.1	4.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	63.1	159.2	0.0	0.0	54.1	81.7	0.0
1st-Term Q (Q1), veh/ln	0.0	5.3	2.4	0.0	0.0	1.7	1.1	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	1.2	0.0	0.0	0.1	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	5.7	3.6	0.0	0.0	1.7	1.2	0.0
%ile Storage Ratio (RQ%)	0.00	0.66	0.38	0.00	0.00	0.15	0.16	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	1193	0	0	0	849
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	88.6	0.0	0.0	0.0	39.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	88.6	0.0	0.0	0.0	39.0
Lane Grp Cap (c), veh/h	0	0	0	1299	0	0	0	1305
V/C Ratio (X)	0.00	0.00	0.00	0.92	0.00	0.00	0.00	0.65
Avail Cap (c_a), veh/h	0	0	0	1299	0	0	0	1305
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.76
Uniform Delay (d1), s/veh	0.0	0.0	0.0	17.5	0.0	0.0	0.0	10.7
Incr Delay (d2), s/veh	0.0	0.0	0.0	11.8	0.0	0.0	0.0	1.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	29.3	0.0	0.0	0.0	12.6
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	42.8	0.0	0.0	0.0	18.9

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	4.3	0.0	0.0	0.0	0.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	47.0	0.0	0.0	0.0	19.6
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	1.53	0.00	0.00	0.00	0.28
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R				T+R
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	92	0	1256	0	0	0	892
Grp Sat Flow (s), veh/h/ln	0	1578	0	1779	0	0	0	1854
Q Serve Time (g_s), s	0.0	8.0	0.0	102.7	0.0	0.0	0.0	39.2
Cycle Q Clear Time (g_c), s	0.0	8.0	0.0	102.7	0.0	0.0	0.0	39.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.96	0.00	0.27	0.00	0.58	0.00	0.03
Lane Grp Cap (c), veh/h	0	316	0	1306	0	0	0	1367
V/C Ratio (X)	0.00	0.29	0.00	0.96	0.00	0.00	0.00	0.65
Avail Cap (c_a), veh/h	0	316	0	1306	0	0	0	1367
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.76
Uniform Delay (d1), s/veh	0.0	54.7	0.0	19.3	0.0	0.0	0.0	10.7
Incr Delay (d2), s/veh	0.0	2.3	0.0	17.2	0.0	0.0	0.0	1.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	57.0	0.0	36.6	0.0	0.0	0.0	12.5
1st-Term Q (Q1), veh/ln	0.0	3.5	0.0	49.9	0.0	0.0	0.0	19.8
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	6.2	0.0	0.0	0.0	0.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	3.7	0.0	56.1	0.0	0.0	0.0	20.5
%ile Storage Ratio (RQ%)	0.00	0.33	0.00	1.83	0.00	0.00	0.00	0.30
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	30.4
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	2056	0	27	1981	182	0	0	33	126	0	46
Future Volume (veh/h)	71	2056	0	27	1981	182	0	0	33	126	0	46
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	0	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	72	2098	0	28	2021	186	0	0	34	129	0	47
Adj No. of Lanes	1	2	0	1	3	1	0	1	0	1	1	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	0	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			No			Yes		
Cap, veh/h	103	1259	0	55	1670	520	0	0	470	506	0	470
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.36	0.00	0.03	0.33	0.33	0.00	0.00	0.30	0.30	0.00	0.30
Ln Grp Delay, s/veh	35.9	323.0	0.0	35.7	120.5	17.2	0.0	0.0	15.3	18.2	0.0	15.6
Ln Grp LOS	D	F		D	F	B			B	B		B
Approach Vol, veh/h		2170			2235			34			176	
Approach Delay, s/veh		313.5			110.9			15.3			17.5	
Approach LOS		F			F			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		8.0	2.0	4.0		6.0	2.0	3.0
Phs Duration (G+Y+Rc), s		24.0	8.3	27.7		24.0	9.9	26.1
Change Period (Y+Rc), s		6.0	6.4	6.4		6.0	6.4	6.4
Max Green (Gmax), s		18.0	5.0	18.6		18.0	5.0	18.6
Max Allow Headway (MAH), s		4.5	3.8	5.2		4.5	3.8	5.2
Max Q Clear (g_c+I1), s		2.9	2.9	23.3		7.4	4.4	21.7
Green Ext Time (g_e), s		0.7	0.0	0.0		0.6	0.0	0.0
Prob of Phs Call (p_c)		1.00	0.37	1.00		1.00	0.70	1.00
Prob of Max Out (p_x)		0.00	1.00	0.00		0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		0	1774			1356	1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		0		3632		0		5085

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		0		1568		1583

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0
Lane Assignment			(Prot)				(Prot)	

Lanes in Grp	0	0	1	0	0	1	1	0
Grp Vol (v), veh/h	0	0	28	0	0	129	72	0
Grp Sat Flow (s), veh/h/ln	0	0	1774	0	0	1356	1774	0
Q Serve Time (g_s), s	0.0	0.0	0.9	0.0	0.0	4.5	2.4	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.9	0.0	0.0	5.4	2.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	1356	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	18.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	17.1	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	4.5	0.0	0.0
Time to First Blk (g_f), s	0.0	18.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	55	0	0	506	103	0
V/C Ratio (X)	0.00	0.00	0.51	0.00	0.00	0.26	0.70	0.00
Avail Cap (c_a), veh/h	0	0	148	0	0	506	148	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	28.6	0.0	0.0	17.0	27.7	0.0
Incr Delay (d2), s/veh	0.0	0.0	7.1	0.0	0.0	1.2	8.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	35.7	0.0	0.0	18.2	35.9	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.5	0.0	0.0	1.7	1.2	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.1	0.0	0.0	0.2	0.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.6	0.0	0.0	1.9	1.4	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.08	0.00	0.00	0.32	0.20	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	3
Grp Vol (v), veh/h	0	0	0	2098	0	0	0	2021
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1695
Q Serve Time (g_s), s	0.0	0.0	0.0	21.3	0.0	0.0	0.0	19.7
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	21.3	0.0	0.0	0.0	19.7
Lane Grp Cap (c), veh/h	0	0	0	1259	0	0	0	1670
V/C Ratio (X)	0.00	0.00	0.00	1.67	0.00	0.00	0.00	1.21
Avail Cap (c_a), veh/h	0	0	0	1259	0	0	0	1670
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	19.3	0.0	0.0	0.0	20.1
Incr Delay (d2), s/veh	0.0	0.0	0.0	303.7	0.0	0.0	0.0	100.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	323.0	0.0	0.0	0.0	120.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	10.3	0.0	0.0	0.0	9.1

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	53.1	0.0	0.0	0.0	15.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	63.4	0.0	0.0	0.0	24.6
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	7.49	0.00	0.00	0.00	2.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	209.9	0.0	0.0	0.0	87.7
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R				T+R		R
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	34	0	0	0	47	0	186
Grp Sat Flow (s), veh/h/ln	0	1568	0	0	0	1568	0	1583
Q Serve Time (g_s), s	0.0	0.9	0.0	0.0	0.0	1.3	0.0	5.4
Cycle Q Clear Time (g_c), s	0.0	0.9	0.0	0.0	0.0	1.3	0.0	5.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	470	0	0	0	470	0	520
V/C Ratio (X)	0.00	0.07	0.00	0.00	0.00	0.10	0.00	0.36
Avail Cap (c_a), veh/h	0	470	0	0	0	470	0	520
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	15.0	0.0	0.0	0.0	15.2	0.0	15.3
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.0	0.0	0.4	0.0	1.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	15.3	0.0	0.0	0.0	15.6	0.0	17.2
1st-Term Q (Q1), veh/ln	0.0	0.4	0.0	0.0	0.0	0.6	0.0	2.3
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.4	0.0	0.0	0.0	0.6	0.0	2.6
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.00	0.00	0.05	0.00	0.21
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		201.9						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	597	1288	272	422	1095	136	393	1197	365	293	1146	584
Future Volume (veh/h)	597	1288	272	422	1095	136	393	1197	365	293	1146	584
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	635	1370	289	449	1165	145	418	1273	388	312	1219	621
Adj No. of Lanes	2	3	0	2	3	0	2	3	0	2	3	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	522	1110	234	463	1130	141	353	1070	325	370	1433	446
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.15	0.26	0.26	0.13	0.25	0.25	0.10	0.28	0.28	0.11	0.28	0.28
Ln Grp Delay, s/veh	163.0	157.4	166.5	84.0	83.1	95.2	160.6	137.9	148.2	64.3	45.7	231.3
Ln Grp LOS	F	F	F	F	F	F	F	F	F	E	D	F
Approach Vol, veh/h		2294			1759			2079			2152	
Approach Delay, s/veh		161.2			86.4			145.1			102.0	
Approach LOS		F			F			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	18.6	38.4	22.0	37.0	18.0	39.0	24.0	35.0
Change Period (Y+Rc), s	6.0	6.0	6.4	6.4	6.0	6.0	6.4	6.4
Max Green (Gmax), s	14.0	31.0	15.6	30.6	12.0	33.0	17.6	28.6
Max Allow Headway (MAH), s	3.8	5.1	3.8	5.3	3.8	5.1	3.8	5.3
Max Q Clear (g_c+I1), s	12.4	34.4	17.1	32.6	14.0	35.0	19.6	30.6
Green Ext Time (g_e), s	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3408		3442		3408		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3831		4210		5036		4582

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1165		887		1568		570

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	312	0	449	0	418	0	635	0
Grp Sat Flow (s), veh/h/ln	1704	0	1721	0	1704	0	1721	0
Q Serve Time (g_s), s	10.4	0.0	15.1	0.0	12.0	0.0	17.6	0.0
Cycle Q Clear Time (g_c), s	10.4	0.0	15.1	0.0	12.0	0.0	17.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	370	0	463	0	353	0	522	0
V/C Ratio (X)	0.84	0.00	0.97	0.00	1.19	0.00	1.22	0.00
Avail Cap (c_a), veh/h	411	0	463	0	353	0	522	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	50.7	0.0	50.0	0.0	52.0	0.0	49.2	0.0
Incr Delay (d2), s/veh	13.5	0.0	34.1	0.0	108.6	0.0	113.8	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	64.3	0.0	84.0	0.0	160.6	0.0	163.0	0.0
1st-Term Q (Q1), veh/ln	4.9	0.0	7.2	0.0	5.6	0.0	8.3	0.0
2nd-Term Q (Q2), veh/ln	0.7	0.0	2.2	0.0	5.3	0.0	8.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	5.6	0.0	9.4	0.0	10.9	0.0	16.6	0.0
%ile Storage Ratio (RQ%)	0.45	0.00	1.40	0.00	0.88	0.00	1.40	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	16.4	0.0	28.2	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.3	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	3	0	2
Grp Vol (v), veh/h	0	1115	0	1103	0	1219	0	862
Grp Sat Flow (s), veh/h/ln	0	1679	0	1695	0	1679	0	1695
Q Serve Time (g_s), s	0.0	32.4	0.0	30.6	0.0	26.5	0.0	28.6
Cycle Q Clear Time (g_c), s	0.0	32.4	0.0	30.6	0.0	26.5	0.0	28.6
Lane Grp Cap (c), veh/h	0	937	0	894	0	1433	0	836
V/C Ratio (X)	0.00	1.19	0.00	1.23	0.00	0.85	0.00	1.03
Avail Cap (c_a), veh/h	0	937	0	894	0	1433	0	836
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	41.8	0.0	42.7	0.0	39.2	0.0	43.7
Incr Delay (d2), s/veh	0.0	96.1	0.0	114.7	0.0	6.5	0.0	39.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	137.9	0.0	157.4	0.0	45.7	0.0	83.1
1st-Term Q (Q1), veh/ln	0.0	15.0	0.0	14.3	0.0	12.3	0.0	13.4

2nd-Term Q (Q2), veh/ln	0.0	12.5	0.0	14.3	0.0	0.9	0.0	4.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	27.5	0.0	28.5	0.0	13.2	0.0	17.9
%ile Storage Ratio (RQ%)	0.00	1.54	0.00	1.17	0.00	0.50	0.00	2.84
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	44.5	0.0	52.2	0.0	0.0	0.0	6.5
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	546	0	556	0	621	0	448
Grp Sat Flow (s), veh/h/ln	0	1639	0	1706	0	1568	0	1762
Q Serve Time (g_s), s	0.0	32.4	0.0	30.6	0.0	33.0	0.0	28.6
Cycle Q Clear Time (g_c), s	0.0	32.4	0.0	30.6	0.0	33.0	0.0	28.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.71	0.00	0.52	0.00	1.00	0.00	0.32
Lane Grp Cap (c), veh/h	0	458	0	450	0	446	0	434
V/C Ratio (X)	0.00	1.19	0.00	1.24	0.00	1.39	0.00	1.03
Avail Cap (c_a), veh/h	0	458	0	450	0	446	0	434
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	41.8	0.0	42.7	0.0	41.5	0.0	43.7
Incr Delay (d2), s/veh	0.0	106.3	0.0	123.8	0.0	189.8	0.0	51.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	148.2	0.0	166.5	0.0	231.3	0.0	95.2
1st-Term Q (Q1), veh/ln	0.0	14.6	0.0	14.4	0.0	14.2	0.0	13.9
2nd-Term Q (Q2), veh/ln	0.0	13.5	0.0	15.5	0.0	23.5	0.0	6.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	28.1	0.0	29.9	0.0	37.8	0.0	20.1
%ile Storage Ratio (RQ%)	0.00	1.57	0.00	1.22	0.00	1.45	0.00	3.19
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	22.0	0.0	26.5	0.0	43.7	0.0	3.4
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.3	0.0	0.3	0.0	0.3
Intersection Summary								
HCM 2010 Ctrl Delay		125.9						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	192	1670	54	0	1521	159	150	56	4	109	42	83
Future Volume (veh/h)	192	1670	54	0	1521	159	150	56	4	109	42	83
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	0	1863	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	198	1722	56	0	1568	164	155	58	4	112	43	86
Adj No. of Lanes	2	2	0	0	2	0	2	1	1	2	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	0	2	2	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			No			Yes			Yes		
Cap, veh/h	186	2396	78	0	1926	199	96	337	286	96	337	286
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.68	0.68	0.00	0.59	0.59	0.03	0.18	0.18	0.03	0.18	0.18
Ln Grp Delay, s/veh	169.1	21.0	21.1	0.0	34.7	35.7	407.7	62.5	59.7	231.3	61.7	65.6
Ln Grp LOS	F	C	C		C	D	F	E	E	F	E	E
Approach Vol, veh/h		1976			1732			217			241	
Approach Delay, s/veh		35.9			35.2			309.0			141.9	
Approach LOS		D			D			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6	7	8
Case No	2.0	3.0		4.0	2.0	3.0	2.0	8.0
Phs Duration (G+Y+Rc), s	10.7	39.0		128.3	10.7	39.0	16.0	112.3
Change Period (Y+Rc), s	* 5.7	6.5		6.4	* 5.7	6.5	6.4	6.4
Max Green (Gmax), s	* 5	32.5		121.6	* 5	32.5	9.6	105.6
Max Allow Headway (MAH), s	3.8	4.7		5.3	3.8	4.7	3.8	5.3
Max Q Clear (g_c+I1), s	7.0	6.7		56.8	7.0	10.4	11.6	71.1
Green Ext Time (g_e), s	0.0	0.8		56.9	0.0	0.8	0.0	32.1
Prob of Phs Call (p_c)	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	0.00	0.00		0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1				5		7	3
Mvmt Sat Flow, veh/h	3408				3408		3442	0

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1845		3499		1845		3331

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1568		113		1568		335

Left Lane Group Data								
Assigned Mvmt	1	0	0	0	5	0	7	3
Lane Assignment	(Prot)				(Prot)		(Prot)	

Lanes in Grp	2	0	0	0	2	0	2	0
Grp Vol (v), veh/h	112	0	0	0	155	0	198	0
Grp Sat Flow (s), veh/h/ln	1704	0	0	0	1704	0	1721	0
Q Serve Time (g_s), s	5.0	0.0	0.0	0.0	5.0	0.0	9.6	0.0
Cycle Q Clear Time (g_c), s	5.0	0.0	0.0	0.0	5.0	0.0	9.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	105.9
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	96	0	0	0	96	0	186	0
V/C Ratio (X)	1.17	0.00	0.00	0.00	1.62	0.00	1.07	0.00
Avail Cap (c_a), veh/h	96	0	0	0	96	0	186	0
Upstream Filter (I)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	86.5	0.0	0.0	0.0	86.5	0.0	84.2	0.0
Incr Delay (d2), s/veh	144.8	0.0	0.0	0.0	321.2	0.0	84.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	231.3	0.0	0.0	0.0	407.7	0.0	169.1	0.0
1st-Term Q (Q1), veh/ln	2.4	0.0	0.0	0.0	2.4	0.0	4.6	0.0
2nd-Term Q (Q2), veh/ln	1.9	0.0	0.0	0.0	4.3	0.0	2.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	0.00	1.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	4.3	0.0	0.0	0.0	6.6	0.0	6.8	0.0
%ile Storage Ratio (RQ%)	1.10	0.00	0.00	0.00	1.21	0.00	0.41	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	4.1	0.0	0.0	0.0	14.8	0.0	3.1	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.0	0.0	0.4	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	58	0	868	0	43	0	849
Grp Sat Flow (s), veh/h/ln	0	1845	0	1770	0	1845	0	1770
Q Serve Time (g_s), s	0.0	4.7	0.0	54.0	0.0	3.5	0.0	66.5
Cycle Q Clear Time (g_c), s	0.0	4.7	0.0	54.0	0.0	3.5	0.0	66.5
Lane Grp Cap (c), veh/h	0	337	0	1212	0	337	0	1053
V/C Ratio (X)	0.00	0.17	0.00	0.72	0.00	0.13	0.00	0.81
Avail Cap (c_a), veh/h	0	337	0	1212	0	337	0	1053
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	61.4	0.0	17.3	0.0	60.9	0.0	28.1
Incr Delay (d2), s/veh	0.0	1.1	0.0	3.6	0.0	0.8	0.0	6.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	62.5	0.0	21.0	0.0	61.7	0.0	34.7
1st-Term Q (Q1), veh/ln	0.0	2.4	0.0	26.3	0.0	1.8	0.0	32.3

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	1.2	0.0	0.1	0.0	1.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.5	0.0	27.5	0.0	1.8	0.0	34.3
%ile Storage Ratio (RQ%)	0.00	0.27	0.00	0.32	0.00	0.10	0.00	0.69
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	4	0	910	0	86	0	883
Grp Sat Flow (s), veh/h/ln	0	1568	0	1843	0	1568	0	1804
Q Serve Time (g_s), s	0.0	0.4	0.0	54.8	0.0	8.4	0.0	69.1
Cycle Q Clear Time (g_c), s	0.0	0.4	0.0	54.8	0.0	8.4	0.0	69.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.06	0.00	1.00	0.00	0.19
Lane Grp Cap (c), veh/h	0	286	0	1262	0	286	0	1073
V/C Ratio (X)	0.00	0.01	0.00	0.72	0.00	0.30	0.00	0.82
Avail Cap (c_a), veh/h	0	286	0	1262	0	286	0	1073
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	59.6	0.0	17.5	0.0	62.9	0.0	28.6
Incr Delay (d2), s/veh	0.0	0.1	0.0	3.6	0.0	2.7	0.0	7.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	59.7	0.0	21.1	0.0	65.6	0.0	35.7
1st-Term Q (Q1), veh/ln	0.0	0.2	0.0	27.6	0.0	7.7	0.0	34.3
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.3	0.0	0.2	0.0	2.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.2	0.0	28.8	0.0	7.9	0.0	36.5
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.34	0.00	0.43	0.00	0.73
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	56.0
HCM 2010 LOS	E

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	191	836	4	22	1679	708	3	17	29	393	1	122
Future Volume (veh/h)	191	836	4	22	1679	708	3	17	29	393	1	122
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1696	1696	1696	1696	1696	1696	1900	1696	1900	1696	1696	1696
Adj Flow Rate, veh/h	201	880	4	23	1767	0	3	18	31	414	1	0
Adj No. of Lanes	1	2	1	1	2	1	0	2	0	2	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	12	12	12	12	12	12	12	12	12	12	12	12
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	229	2263	1012	27	1861	832	0	52	47	132	208	177
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.14	0.70	0.70	0.02	0.58	0.00	0.00	0.03	0.03	0.04	0.12	0.00
Ln Grp Delay, s/veh	66.3	8.6	5.9	71.5	27.8	0.0	0.0	66.9	78.8	1045.0	51.2	0.0
Ln Grp LOS	E	A	A	E	C			E	E	F	D	
Approach Vol, veh/h		1085			1790			49			415	
Approach Delay, s/veh		19.3			28.4			74.4			1042.6	
Approach LOS		B			C			E			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	4.0	2.0	3.0	0.0	3.0
Phs Duration (G+Y+Rc), s	25.9	83.9	12.0	11.2	9.3	100.5	0.0	23.2
Change Period (Y+Rc), s	7.1	7.1	6.4	6.9	7.1	7.1	6.9	* 6.9
Max Green (Gmax), s	67.9	18.9	5.6	13.1	30.9	55.9	13.1	* 5.6
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.5	3.8	5.3	0.0	5.5
Max Q Clear (g_c+I1), s	18.2	70.2	7.6	4.8	3.9	16.9	0.0	2.1
Green Ext Time (g_e), s	0.6	0.0	0.0	0.1	0.0	30.9	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	0.86	0.57	1.00	0.00	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.09	0.00	0.00	0.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1616		3134		1616		0	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3223		1612		3223		1696

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1442		1442		1442		1442

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)			

Lanes in Grp	1	0	2	0	1	0	0	0
Grp Vol (v), veh/h	201	0	414	0	23	0	0	0
Grp Sat Flow (s), veh/h/ln	1616	0	1567	0	1616	0	0	0
Q Serve Time (g_s), s	16.2	0.0	5.6	0.0	1.9	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	16.2	0.0	5.6	0.0	1.9	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	229	0	132	0	27	0	0	0
V/C Ratio (X)	0.88	0.00	3.14	0.00	0.84	0.00	0.00	0.00
Avail Cap (c_a), veh/h	825	0	132	0	375	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.09	0.00	0.00	0.00
Uniform Delay (d1), s/veh	56.0	0.0	63.7	0.0	65.2	0.0	0.0	0.0
Incr Delay (d2), s/veh	10.4	0.0	981.3	0.0	6.3	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	66.3	0.0	1045.0	0.0	71.5	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	7.3	0.0	2.4	0.0	0.8	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.7	0.0	18.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	7.9	0.0	20.4	0.0	0.9	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.25	0.00	0.89	0.00	0.07	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	70.5	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	1767	0	18	0	880	0	1
Grp Sat Flow (s), veh/h/ln	0	1612	0	1612	0	1612	0	1696
Q Serve Time (g_s), s	0.0	68.2	0.0	1.5	0.0	14.9	0.0	0.1
Cycle Q Clear Time (g_c), s	0.0	68.2	0.0	1.5	0.0	14.9	0.0	0.1
Lane Grp Cap (c), veh/h	0	1861	0	52	0	2263	0	208
V/C Ratio (X)	0.00	0.95	0.00	0.35	0.00	0.39	0.00	0.00
Avail Cap (c_a), veh/h	0	1861	0	159	0	2263	0	208
Upstream Filter (I)	0.00	0.09	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	26.3	0.0	63.0	0.0	8.1	0.0	51.2
Incr Delay (d2), s/veh	0.0	1.5	0.0	3.9	0.0	0.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	27.8	0.0	66.9	0.0	8.6	0.0	51.2
1st-Term Q (Q1), veh/ln	0.0	30.2	0.0	0.7	0.0	6.6	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.1	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	30.6	0.0	0.7	0.0	6.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.42	0.00	0.05	0.00	0.06	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	31	0	4	0	0
Grp Sat Flow (s), veh/h/ln	0	1442	0	1442	0	1442	0	1442
Q Serve Time (g_s), s	0.0	0.0	0.0	2.8	0.0	0.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	2.8	0.0	0.1	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	832	0	47	0	1012	0	177
V/C Ratio (X)	0.00	0.00	0.00	0.67	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	832	0	142	0	1012	0	177
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	63.6	0.0	5.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	15.1	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	78.8	0.0	5.9	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.09	0.00	0.01	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	152.2
HCM 2010 LOS	F

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	129	1155	2224	488	768	397
Future Volume (veh/h)	129	1155	2224	488	768	397
Number	1	6	2	12	3	18
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00			1.00	1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1696	1696	1696	1696	1696	1696
Adj Flow Rate, veh/h	136	1216	2341	0	808	0
Adj No. of Lanes	1	2	3	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	12	12	12	12	12	12
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	160	1781	1691	526	889	409
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.10	0.55	0.37	0.00	0.28	0.00
Ln Grp Delay, s/veh	39.7	13.1	198.9	0.0	39.8	0.0
Ln Grp LOS	D	B	F		D	
Approach Vol, veh/h		1352	2341		808	
Approach Delay, s/veh		15.7	198.9		39.8	
Approach LOS		B	F		D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8			6		
Case No	2.0	7.0	9.0			4.0		
Phs Duration (G+Y+Rc), s	15.0	36.3	28.7			51.3		
Change Period (Y+Rc), s	7.1	7.1	6.0			7.1		
Max Green (Gmax), s	7.9	27.9	24.0			42.9		
Max Allow Headway (MAH), s	3.8	5.3	3.8			5.3		
Max Q Clear (g_c+I1), s	8.6	31.2	21.9			23.7		
Green Ext Time (g_e), s	0.0	0.0	0.8			18.5		
Prob of Phs Call (p_c)	0.95	1.00	1.00			1.00		
Prob of Max Out (p_x)	1.00	0.00	1.00			0.00		

Left-Turn Movement Data			
Assigned Mvmt	1	5	3
Mvmt Sat Flow, veh/h	1616	0	3134

Through Movement Data			
Assigned Mvmt		2	8	6
Mvmt Sat Flow, veh/h		4784	0	3308

Right-Turn Movement Data			
Assigned Mvmt		12	18	16
Mvmt Sat Flow, veh/h		1442	1442	0

Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	0	0
Lane Assignment	(Prot)							

Lanes in Grp	1	0	2	0	0	0	0	0
Grp Vol (v), veh/h	136	0	808	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1616	0	1567	0	0	0	0	0
Q Serve Time (g_s), s	6.6	0.0	19.9	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	6.6	0.0	19.9	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1567	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	29.2	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	160	0	889	0	0	0	0	0
V/C Ratio (X)	0.85	0.00	0.91	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	160	0	940	0	0	0	0	0
Upstream Filter (I)	0.09	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	35.5	0.0	27.6	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	4.2	0.0	12.1	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	39.7	0.0	39.8	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	2.9	0.0	8.5	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.2	0.0	1.5	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	3.1	0.0	10.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.18	0.00	0.62	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	3	0	0	0	2	0	0
Grp Vol (v), veh/h	0	2341	0	0	0	1216	0	0
Grp Sat Flow (s), veh/h/ln	0	1544	0	0	0	1612	0	0
Q Serve Time (g_s), s	0.0	29.2	0.0	0.0	0.0	21.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	29.2	0.0	0.0	0.0	21.7	0.0	0.0
Lane Grp Cap (c), veh/h	0	1691	0	0	0	1781	0	0
V/C Ratio (X)	0.00	1.38	0.00	0.00	0.00	0.68	0.00	0.00
Avail Cap (c_a), veh/h	0	1691	0	0	0	1781	0	0
Upstream Filter (I)	0.00	0.09	0.00	0.00	0.00	0.09	0.00	0.00
Uniform Delay (d1), s/veh	0.0	25.4	0.0	0.0	0.0	12.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	173.5	0.0	0.0	0.0	0.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	198.9	0.0	0.0	0.0	13.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	12.4	0.0	0.0	0.0	9.5	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	27.2	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	39.5	0.0	0.0	0.0	9.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.32	0.00	0.00	0.00	0.13	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	162.6	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lane Assignment		R	R					
Lanes in Grp	0	1	1	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1442	1442	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	526	409	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	526	433	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		115.3						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	831	871	83	51	1164	325	415	367	234	175	73	1036
Future Volume (veh/h)	831	871	83	51	1164	325	415	367	234	175	73	1036
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1712	1712	1712	1712	1712	1712	1900	1712	1712	1712
Adj Flow Rate, veh/h	839	880	84	52	1176	0	419	371	236	177	74	1046
Adj No. of Lanes	2	3	1	2	3	1	2	2	0	1	1	2
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	11	11	11	11	11	11	11	11	11	11	11	11
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	840	2313	720	89	1203	375	441	365	229	198	293	439
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.27	0.49	0.49	0.03	0.26	0.00	0.14	0.19	0.19	0.12	0.17	0.17
Ln Grp Delay, s/veh	81.4	25.4	21.8	82.8	80.0	0.0	98.8	119.6	126.6	91.7	57.9	696.7
Ln Grp LOS	F	C	C	F	E		F	F	F	F	E	F
Approach Vol, veh/h		1803			1228			1026			1297	
Approach Delay, s/veh		51.3			80.1			113.1			577.7	
Approach LOS		D			F			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	4.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	50.0	48.4	27.0	38.1	12.0	86.4	30.0	35.1
Change Period (Y+Rc), s	7.5	7.1	7.6	* 7.7	7.5	7.1	* 7.7	* 7.7
Max Green (Gmax), s	42.5	37.9	27.4	* 22	42.5	37.9	* 22	* 27
Max Allow Headway (MAH), s	3.8	5.2	3.8	4.6	3.8	5.2	3.8	4.6
Max Q Clear (g_c+I1), s	44.4	42.0	19.1	32.4	4.6	20.7	23.0	29.4
Green Ext Time (g_e), s	0.0	0.0	0.3	0.0	0.2	13.0	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	0.03	1.00	0.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3163		1630		3163		3163	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		4673		1921		4673		1712

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1455		1204		1455		2561

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	1	0	2	0	2	0
Grp Vol (v), veh/h	839	0	177	0	52	0	419	0
Grp Sat Flow (s), veh/h/ln	1581	0	1630	0	1581	0	1581	0
Q Serve Time (g_s), s	42.4	0.0	17.1	0.0	2.6	0.0	21.0	0.0
Cycle Q Clear Time (g_c), s	42.4	0.0	17.1	0.0	2.6	0.0	21.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	840	0	198	0	89	0	441	0
V/C Ratio (X)	1.00	0.00	0.90	0.00	0.58	0.00	0.95	0.00
Avail Cap (c_a), veh/h	840	0	279	0	840	0	441	0
Upstream Filter (I)	0.55	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	58.7	0.0	69.3	0.0	76.8	0.0	68.3	0.0
Incr Delay (d2), s/veh	22.7	0.0	22.4	0.0	5.9	0.0	30.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	81.4	0.0	91.7	0.0	82.8	0.0	98.8	0.0
1st-Term Q (Q1), veh/ln	18.5	0.0	7.7	0.0	1.1	0.0	9.2	0.0
2nd-Term Q (Q2), veh/ln	2.6	0.0	1.2	0.0	0.1	0.0	1.9	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	21.2	0.0	9.0	0.0	1.2	0.0	11.1	0.0
%ile Storage Ratio (RQ%)	0.78	0.00	2.21	0.00	0.08	0.00	0.61	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	1	0	3	0	1
Grp Vol (v), veh/h	0	1176	0	313	0	880	0	74
Grp Sat Flow (s), veh/h/ln	0	1558	0	1626	0	1558	0	1712
Q Serve Time (g_s), s	0.0	40.0	0.0	30.4	0.0	18.7	0.0	6.0
Cycle Q Clear Time (g_c), s	0.0	40.0	0.0	30.4	0.0	18.7	0.0	6.0
Lane Grp Cap (c), veh/h	0	1203	0	309	0	2313	0	293
V/C Ratio (X)	0.00	0.98	0.00	1.01	0.00	0.38	0.00	0.25
Avail Cap (c_a), veh/h	0	1203	0	309	0	2313	0	293
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.55	0.00	1.00
Uniform Delay (d1), s/veh	0.0	58.9	0.0	64.8	0.0	25.1	0.0	57.4
Incr Delay (d2), s/veh	0.0	21.0	0.0	54.8	0.0	0.3	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	80.0	0.0	119.6	0.0	25.4	0.0	57.9
1st-Term Q (Q1), veh/ln	0.0	17.2	0.0	13.6	0.0	8.1	0.0	2.8

2nd-Term Q (Q2), veh/ln	0.0	2.3	0.0	4.7	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	19.5	0.0	18.3	0.0	8.1	0.0	2.9
%ile Storage Ratio (RQ%)	0.00	0.22	0.00	1.01	0.00	0.06	0.00	0.09
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	2
Grp Vol (v), veh/h	0	0	0	294	0	84	0	1046
Grp Sat Flow (s), veh/h/ln	0	1455	0	1499	0	1455	0	1280
Q Serve Time (g_s), s	0.0	0.0	0.0	30.4	0.0	5.0	0.0	27.4
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	30.4	0.0	5.0	0.0	27.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.80	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	375	0	285	0	720	0	439
V/C Ratio (X)	0.00	0.00	0.00	1.03	0.00	0.12	0.00	2.39
Avail Cap (c_a), veh/h	0	375	0	285	0	720	0	439
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.55	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	64.8	0.0	21.7	0.0	66.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	61.8	0.0	0.2	0.0	630.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	126.6	0.0	21.8	0.0	696.7
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	12.6	0.0	2.0	0.0	9.7
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	4.9	0.0	0.0	0.0	38.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	17.5	0.0	2.0	0.0	48.1
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.96	0.00	0.11	0.00	1.47
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	2.3	0.0	0.0	0.0	151.9
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay	197.3
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	529	1147	82	275	959	932	197	1388	299	290	782	255
Future Volume (veh/h)	529	1147	82	275	959	932	197	1388	299	290	782	255
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1776	1776	1776	1776	1776	1776	1776	1776	1776	1776	1900
Adj Flow Rate, veh/h	534	1159	83	278	969	941	199	1402	302	293	790	258
Adj No. of Lanes	2	3	1	2	3	2	2	3	1	2	2	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	7	7	7	7	7	7	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	80	1491	464	80	1491	817	273	1076	335	370	605	197
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.02	0.31	0.31	0.02	0.31	0.31	0.08	0.22	0.22	0.11	0.24	0.24
Ln Grp Delay, s/veh	2619.2	29.9	21.6	1184.1	26.8	110.4	44.8	175.1	57.2	44.8	185.5	186.3
Ln Grp LOS	F	C	C	F	C	F	D	F	E	D	F	F
Approach Vol, veh/h		1776			2188			1903			1341	
Approach Delay, s/veh		808.0			209.8			142.8			155.1	
Approach LOS		F			F			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	9.2	32.6	16.0	25.8	9.2	32.6	14.4	27.4
Change Period (Y+Rc), s	7.2	* 7.3	6.8	* 7.6	7.2	* 7.3	* 7.6	* 7.6
Max Green (Gmax), s	2.0	* 24	10.2	* 18	2.0	* 24	* 7.4	* 19
Max Allow Headway (MAH), s	3.8	4.9	3.8	5.2	3.8	4.9	3.8	5.2
Max Q Clear (g_c+I1), s	4.0	27.2	9.1	20.2	4.0	19.8	6.9	21.8
Green Ext Time (g_e), s	0.0	0.0	0.1	0.0	0.0	3.7	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3281		3281		3281		3281	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		4848		4848		4848		2502

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		2656		1509		1509		817

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	534	0	293	0	278	0	199	0
Grp Sat Flow (s), veh/h/ln	1640	0	1640	0	1640	0	1640	0
Q Serve Time (g_s), s	2.0	0.0	7.1	0.0	2.0	0.0	4.9	0.0
Cycle Q Clear Time (g_c), s	2.0	0.0	7.1	0.0	2.0	0.0	4.9	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	80	0	370	0	80	0	273	0
V/C Ratio (X)	6.67	0.00	0.79	0.00	3.47	0.00	0.73	0.00
Avail Cap (c_a), veh/h	80	0	408	0	80	0	296	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	40.0	0.0	35.4	0.0	40.0	0.0	36.7	0.0
Incr Delay (d2), s/veh	2579.2	0.0	9.4	0.0	1144.1	0.0	8.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	2619.2	0.0	44.8	0.0	1184.1	0.0	44.8	0.0
1st-Term Q (Q1), veh/ln	0.9	0.0	3.2	0.0	0.9	0.0	2.2	0.0
2nd-Term Q (Q2), veh/ln	28.7	0.0	0.5	0.0	12.7	0.0	0.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	29.6	0.0	3.7	0.0	13.6	0.0	2.5	0.0
%ile Storage Ratio (RQ%)	1.70	0.00	0.07	0.00	0.69	0.00	0.07	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	113.5	0.0	0.0	0.0	49.5	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	1.7	0.0	0.0	0.0	0.9	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	3	0	3	0	1
Grp Vol (v), veh/h	0	969	0	1402	0	1159	0	533
Grp Sat Flow (s), veh/h/ln	0	1616	0	1616	0	1616	0	1687
Q Serve Time (g_s), s	0.0	14.2	0.0	18.2	0.0	17.8	0.0	19.8
Cycle Q Clear Time (g_c), s	0.0	14.2	0.0	18.2	0.0	17.8	0.0	19.8
Lane Grp Cap (c), veh/h	0	1491	0	1076	0	1491	0	408
V/C Ratio (X)	0.00	0.65	0.00	1.30	0.00	0.78	0.00	1.31
Avail Cap (c_a), veh/h	0	1491	0	1076	0	1491	0	408
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	24.6	0.0	31.9	0.0	25.8	0.0	31.1
Incr Delay (d2), s/veh	0.0	2.2	0.0	143.2	0.0	4.0	0.0	154.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	26.8	0.0	175.1	0.0	29.9	0.0	185.5
1st-Term Q (Q1), veh/ln	0.0	6.3	0.0	8.1	0.0	7.9	0.0	9.2

2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	14.3	0.0	0.6	0.0	17.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	6.6	0.0	22.3	0.0	8.5	0.0	26.7
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.60	0.00	0.10	0.00	0.53
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	81.5	0.0	0.0	0.0	31.2
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	2	0	1	0	1	0	1
Grp Vol (v), veh/h	0	941	0	302	0	83	0	515
Grp Sat Flow (s), veh/h/ln	0	1328	0	1509	0	1509	0	1632
Q Serve Time (g_s), s	0.0	25.2	0.0	16.0	0.0	3.3	0.0	19.8
Cycle Q Clear Time (g_c), s	0.0	25.2	0.0	16.0	0.0	3.3	0.0	19.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.50
Lane Grp Cap (c), veh/h	0	817	0	335	0	464	0	395
V/C Ratio (X)	0.00	1.15	0.00	0.90	0.00	0.18	0.00	1.31
Avail Cap (c_a), veh/h	0	817	0	335	0	464	0	395
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	28.4	0.0	31.0	0.0	20.8	0.0	31.1
Incr Delay (d2), s/veh	0.0	82.0	0.0	26.2	0.0	0.8	0.0	155.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	110.4	0.0	57.2	0.0	21.6	0.0	186.3
1st-Term Q (Q1), veh/ln	0.0	9.2	0.0	6.6	0.0	1.4	0.0	8.9
2nd-Term Q (Q2), veh/ln	0.0	9.3	0.0	2.4	0.0	0.1	0.0	17.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	18.5	0.0	9.0	0.0	1.5	0.0	25.9
%ile Storage Ratio (RQ%)	0.00	0.72	0.00	0.24	0.00	0.09	0.00	0.51
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	30.9	0.0	0.0	0.0	0.0	0.0	30.2
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	329.3
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	476	201	327	451	308	229	1409	463	443	1037	69
Future Volume (veh/h)	65	476	201	327	451	308	229	1409	463	443	1037	69
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1776	1776	1776	1776	1776	1900
Adj Flow Rate, veh/h	67	491	207	337	465	318	236	1453	477	457	1069	71
Adj No. of Lanes	2	3	1	2	2	1	2	2	1	2	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	106	634	197	363	705	316	283	1513	677	667	1816	121
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.13	0.13	0.11	0.20	0.20	0.09	0.45	0.45	0.20	0.57	0.57
Ln Grp Delay, s/veh	80.3	71.6	145.4	98.5	59.3	114.6	80.4	56.9	40.6	62.8	24.6	24.5
Ln Grp LOS	F	E	F	F	E	F	F	E	D	E	C	C
Approach Vol, veh/h		765			1120			2166			1597	
Approach Delay, s/veh		92.4			86.8			55.8			35.5	
Approach LOS		F			F			E			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	36.0	74.0	21.0	24.0	17.9	92.1	9.3	35.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green (Gmax), s	31.5	69.5	16.5	19.5	18.5	82.5	13.5	22.5
Max Allow Headway (MAH), s	3.8	5.1	3.8	4.8	3.8	5.1	3.8	4.8
Max Q Clear (g_c+I1), s	22.0	66.7	17.2	21.5	13.0	35.6	5.0	33.2
Green Ext Time (g_e), s	1.2	2.7	0.0	0.0	0.4	36.5	0.1	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	0.94	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	1.00	0.27	0.00	0.00	1.00

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	3281	3408	3281	3408

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	3374	5036	3212	3505

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	1509	1568	213	1568

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	457	0	337	0	236	0	67	0
Grp Sat Flow (s), veh/h/ln	1640	0	1704	0	1640	0	1704	0
Q Serve Time (g_s), s	20.0	0.0	15.2	0.0	11.0	0.0	3.0	0.0
Cycle Q Clear Time (g_c), s	20.0	0.0	15.2	0.0	11.0	0.0	3.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	667	0	363	0	283	0	106	0
V/C Ratio (X)	0.69	0.00	0.93	0.00	0.84	0.00	0.63	0.00
Avail Cap (c_a), veh/h	667	0	363	0	392	0	297	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	57.2	0.0	68.7	0.0	69.7	0.0	74.2	0.0
Incr Delay (d2), s/veh	5.7	0.0	29.8	0.0	10.6	0.0	6.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	62.8	0.0	98.5	0.0	80.4	0.0	80.3	0.0
1st-Term Q (Q1), veh/ln	9.1	0.0	7.2	0.0	5.0	0.0	1.4	0.0
2nd-Term Q (Q2), veh/ln	0.5	0.0	1.5	0.0	0.4	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	9.6	0.0	8.7	0.0	5.4	0.0	1.5	0.0
%ile Storage Ratio (RQ%)	0.78	0.00	0.94	0.00	0.86	0.00	0.31	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	3	0	1	0	2
Grp Vol (v), veh/h	0	1453	0	491	0	561	0	465
Grp Sat Flow (s), veh/h/ln	0	1687	0	1679	0	1687	0	1752
Q Serve Time (g_s), s	0.0	64.7	0.0	14.6	0.0	33.6	0.0	18.9
Cycle Q Clear Time (g_c), s	0.0	64.7	0.0	14.6	0.0	33.6	0.0	18.9
Lane Grp Cap (c), veh/h	0	1513	0	634	0	954	0	705
V/C Ratio (X)	0.00	0.96	0.00	0.77	0.00	0.59	0.00	0.66
Avail Cap (c_a), veh/h	0	1513	0	634	0	954	0	705
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	41.4	0.0	65.6	0.0	21.9	0.0	57.0
Incr Delay (d2), s/veh	0.0	15.5	0.0	6.0	0.0	2.7	0.0	2.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	56.9	0.0	71.6	0.0	24.6	0.0	59.3
1st-Term Q (Q1), veh/ln	0.0	30.1	0.0	6.8	0.0	15.6	0.0	9.2

2nd-Term Q (Q2), veh/ln	0.0	3.2	0.0	0.4	0.0	0.7	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	33.3	0.0	7.2	0.0	16.3	0.0	9.4
%ile Storage Ratio (RQ%)	0.00	2.94	0.00	0.17	0.00	1.35	0.00	0.88
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	477	0	207	0	579	0	318
Grp Sat Flow (s), veh/h/ln	0	1509	0	1568	0	1738	0	1568
Q Serve Time (g_s), s	0.0	39.5	0.0	19.5	0.0	33.6	0.0	31.2
Cycle Q Clear Time (g_c), s	0.0	39.5	0.0	19.5	0.0	33.6	0.0	31.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.12	0.00	1.00
Lane Grp Cap (c), veh/h	0	677	0	197	0	983	0	316
V/C Ratio (X)	0.00	0.70	0.00	1.05	0.00	0.59	0.00	1.01
Avail Cap (c_a), veh/h	0	677	0	197	0	983	0	316
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	34.5	0.0	67.8	0.0	21.9	0.0	61.9
Incr Delay (d2), s/veh	0.0	6.1	0.0	77.7	0.0	2.6	0.0	52.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	40.6	0.0	145.4	0.0	24.5	0.0	114.6
1st-Term Q (Q1), veh/ln	0.0	16.5	0.0	8.5	0.0	16.1	0.0	13.5
2nd-Term Q (Q2), veh/ln	0.0	1.1	0.0	4.3	0.0	0.7	0.0	4.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	17.6	0.0	12.7	0.0	16.8	0.0	18.1
%ile Storage Ratio (RQ%)	0.00	1.56	0.00	0.30	0.00	1.39	0.00	1.70
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	2.4	0.0	0.0	0.0	0.6
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3
Intersection Summary								
HCM 2010 Ctrl Delay		61.2						
HCM 2010 LOS		E						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	41	81	95	41	208	88	713	196	257	651	57
Future Volume (veh/h)	42	41	81	95	41	208	88	713	196	257	651	57
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1900	1712	1712	1712	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	45	44	86	101	44	221	94	759	209	273	693	61
Adj No. of Lanes	1	1	0	2	1	1	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	11	11	11	11	11	11	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	61	87	170	159	310	263	74	1232	339	74	1478	130
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.04	0.17	0.17	0.05	0.18	0.18	0.04	0.47	0.47	0.04	0.47	0.47
Ln Grp Delay, s/veh	60.2	0.0	36.3	47.5	31.9	47.4	240.8	21.7	21.8	1297.4	18.5	18.5
Ln Grp LOS	E		D	D	C	D	F	C	C	F	B	B
Approach Vol, veh/h		175			366			1062			1027	
Approach Delay, s/veh		42.5			45.6			41.1			358.5	
Approach LOS		D			D			D			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	4.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	10.0	49.3	10.9	21.7	10.0	49.3	9.7	23.0
Change Period (Y+Rc), s	6.0	6.0	* 6.3	* 6.3	6.0	6.0	* 6.3	* 6.3
Max Green (Gmax), s	4.0	34.0	* 5.7	* 24	4.0	34.0	* 5.7	* 24
Max Allow Headway (MAH), s	3.8	5.3	3.8	4.7	3.8	5.3	3.8	4.7
Max Q Clear (g_c+I1), s	6.0	21.9	4.9	9.1	6.0	15.8	4.5	15.5
Green Ext Time (g_e), s	0.0	8.2	0.0	1.6	0.0	10.9	0.0	1.2
Prob of Phs Call (p_c)	1.00	1.00	0.92	1.00	0.91	1.00	0.68	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.02	1.00	0.00	1.00	0.26

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1691		3163		1691		1630	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2615		519		3138		1712

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		720		1014		276		1455

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	2	0	1	0	1	0
Grp Vol (v), veh/h	273	0	101	0	94	0	45	0
Grp Sat Flow (s), veh/h/ln	1691	0	1581	0	1691	0	1630	0
Q Serve Time (g_s), s	4.0	0.0	2.9	0.0	4.0	0.0	2.5	0.0
Cycle Q Clear Time (g_c), s	4.0	0.0	2.9	0.0	4.0	0.0	2.5	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	74	0	159	0	74	0	61	0
V/C Ratio (X)	3.71	0.00	0.64	0.00	1.28	0.00	0.74	0.00
Avail Cap (c_a), veh/h	74	0	196	0	74	0	101	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	44.0	0.0	42.9	0.0	44.0	0.0	43.9	0.0
Incr Delay (d2), s/veh	1253.4	0.0	4.6	0.0	196.8	0.0	16.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	1297.4	0.0	47.5	0.0	240.8	0.0	60.2	0.0
1st-Term Q (Q1), veh/ln	1.9	0.0	1.3	0.0	1.9	0.0	1.1	0.0
2nd-Term Q (Q2), veh/ln	25.6	0.0	0.1	0.0	4.0	0.0	0.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	27.5	0.0	1.4	0.0	5.9	0.0	1.4	0.0
%ile Storage Ratio (RQ%)	3.19	0.00	0.27	0.00	0.49	0.00	0.26	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	49.9	0.0	0.0	0.0	5.1	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.9	0.0	0.0	0.0	0.3	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	490	0	0	0	372	0	44
Grp Sat Flow (s), veh/h/ln	0	1687	0	0	0	1687	0	1712
Q Serve Time (g_s), s	0.0	19.9	0.0	0.0	0.0	13.8	0.0	2.0
Cycle Q Clear Time (g_c), s	0.0	19.9	0.0	0.0	0.0	13.8	0.0	2.0
Lane Grp Cap (c), veh/h	0	795	0	0	0	795	0	310
V/C Ratio (X)	0.00	0.62	0.00	0.00	0.00	0.47	0.00	0.14
Avail Cap (c_a), veh/h	0	795	0	0	0	795	0	441
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	18.1	0.0	0.0	0.0	16.5	0.0	31.7
Incr Delay (d2), s/veh	0.0	3.6	0.0	0.0	0.0	2.0	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	21.7	0.0	0.0	0.0	18.5	0.0	31.9
1st-Term Q (Q1), veh/ln	0.0	9.2	0.0	0.0	0.0	6.4	0.0	0.9

2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	0.0	0.0	0.4	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	10.0	0.0	0.0	0.0	6.8	0.0	1.0
%ile Storage Ratio (RQ%)	0.00	0.33	0.00	0.00	0.00	0.20	0.00	0.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	478	0	130	0	382	0	221
Grp Sat Flow (s), veh/h/ln	0	1649	0	1533	0	1727	0	1455
Q Serve Time (g_s), s	0.0	19.9	0.0	7.1	0.0	13.8	0.0	13.5
Cycle Q Clear Time (g_c), s	0.0	19.9	0.0	7.1	0.0	13.8	0.0	13.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.44	0.00	0.66	0.00	0.16	0.00	1.00
Lane Grp Cap (c), veh/h	0	777	0	257	0	813	0	263
V/C Ratio (X)	0.00	0.62	0.00	0.51	0.00	0.47	0.00	0.84
Avail Cap (c_a), veh/h	0	777	0	395	0	813	0	375
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	18.1	0.0	34.8	0.0	16.5	0.0	36.4
Incr Delay (d2), s/veh	0.0	3.6	0.0	1.5	0.0	1.9	0.0	11.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	21.8	0.0	36.3	0.0	18.5	0.0	47.4
1st-Term Q (Q1), veh/ln	0.0	9.0	0.0	3.0	0.0	6.6	0.0	5.4
2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	0.1	0.0	0.4	0.0	0.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	9.8	0.0	3.1	0.0	7.0	0.0	6.2
%ile Storage Ratio (RQ%)	0.00	0.32	0.00	0.08	0.00	0.21	0.00	1.09
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	165.8
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	122	322	51	185	276	256	110	1284	228	450	1313	85
Future Volume (veh/h)	122	322	51	185	276	256	110	1284	228	450	1313	85
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	124	329	52	189	282	261	112	1310	233	459	1340	87
Adj No. of Lanes	2	2	1	2	1	1	1	3	0	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	168	713	319	187	385	327	127	1938	345	185	1616	105
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.20	0.20	0.05	0.21	0.21	0.08	0.47	0.47	0.11	0.50	0.50
Ln Grp Delay, s/veh	81.2	51.6	48.2	138.1	56.7	59.3	112.2	32.7	35.0	745.4	40.1	40.1
Ln Grp LOS	F	D	D	F	E	E	F	C	C	F	D	D
Approach Vol, veh/h		505			732			1655			1886	
Approach Delay, s/veh		58.5			78.6			38.8			211.8	
Approach LOS		E			E			D			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	3.0	2.0	4.0	2.0	3.0
Phs Duration (G+Y+Rc), s	22.0	74.3	14.0	35.7	17.0	79.3	13.2	36.5
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green (Gmax), s	16.0	46.0	8.0	52.0	11.0	51.0	8.0	52.0
Max Allow Headway (MAH), s	3.8	5.3	3.8	4.8	3.8	5.3	3.8	4.8
Max Q Clear (g_c+I1), s	18.0	38.0	10.0	14.0	11.6	54.1	7.2	25.1
Green Ext Time (g_e), s	0.0	7.6	0.0	5.7	0.0	0.0	0.0	5.4
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.99	1.00	0.99	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.03

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1691		3408		1691		3408	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		4141		3505		3217		1845

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		736		1568		208		1568

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	1	0	2	0	1	0	2	0
Grp Vol (v), veh/h	459	0	189	0	112	0	124	0
Grp Sat Flow (s), veh/h/ln	1691	0	1704	0	1691	0	1704	0
Q Serve Time (g_s), s	16.0	0.0	8.0	0.0	9.6	0.0	5.2	0.0
Cycle Q Clear Time (g_c), s	16.0	0.0	8.0	0.0	9.6	0.0	5.2	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	185	0	187	0	127	0	168	0
V/C Ratio (X)	2.48	0.00	1.01	0.00	0.88	0.00	0.74	0.00
Avail Cap (c_a), veh/h	185	0	187	0	127	0	187	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	65.0	0.0	69.0	0.0	66.8	0.0	68.5	0.0
Incr Delay (d2), s/veh	680.4	0.0	69.0	0.0	45.4	0.0	12.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	745.4	0.0	138.1	0.0	112.2	0.0	81.2	0.0
1st-Term Q (Q1), veh/ln	7.5	0.0	3.8	0.0	4.5	0.0	2.5	0.0
2nd-Term Q (Q2), veh/ln	35.0	0.0	1.8	0.0	1.6	0.0	0.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	42.5	0.0	5.6	0.0	6.1	0.0	2.8	0.0
%ile Storage Ratio (RQ%)	4.49	0.00	1.05	0.00	0.75	0.00	0.43	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	68.4	0.0	0.6	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.6	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	1	0	1
Grp Vol (v), veh/h	0	1022	0	329	0	701	0	282
Grp Sat Flow (s), veh/h/ln	0	1616	0	1752	0	1687	0	1845
Q Serve Time (g_s), s	0.0	35.9	0.0	12.0	0.0	51.7	0.0	20.8
Cycle Q Clear Time (g_c), s	0.0	35.9	0.0	12.0	0.0	51.7	0.0	20.8
Lane Grp Cap (c), veh/h	0	1512	0	713	0	847	0	385
V/C Ratio (X)	0.00	0.68	0.00	0.46	0.00	0.83	0.00	0.73
Avail Cap (c_a), veh/h	0	1512	0	1248	0	847	0	657
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	30.2	0.0	51.1	0.0	31.0	0.0	54.0
Incr Delay (d2), s/veh	0.0	2.4	0.0	0.5	0.0	9.1	0.0	2.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	32.7	0.0	51.6	0.0	40.1	0.0	56.7
1st-Term Q (Q1), veh/ln	0.0	16.0	0.0	5.8	0.0	24.0	0.0	10.7

2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.0	0.0	2.1	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	16.6	0.0	5.9	0.0	26.1	0.0	10.9
%ile Storage Ratio (RQ%)	0.00	0.88	0.00	0.17	0.00	2.44	0.00	1.68
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	521	0	52	0	726	0	261
Grp Sat Flow (s), veh/h/ln	0	1646	0	1568	0	1739	0	1568
Q Serve Time (g_s), s	0.0	36.0	0.0	4.0	0.0	52.1	0.0	23.1
Cycle Q Clear Time (g_c), s	0.0	36.0	0.0	4.0	0.0	52.1	0.0	23.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.45	0.00	1.00	0.00	0.12	0.00	1.00
Lane Grp Cap (c), veh/h	0	770	0	319	0	873	0	327
V/C Ratio (X)	0.00	0.68	0.00	0.16	0.00	0.83	0.00	0.80
Avail Cap (c_a), veh/h	0	770	0	558	0	873	0	558
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	30.2	0.0	47.9	0.0	31.1	0.0	54.8
Incr Delay (d2), s/veh	0.0	4.7	0.0	0.2	0.0	9.1	0.0	4.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	35.0	0.0	48.2	0.0	40.1	0.0	59.3
1st-Term Q (Q1), veh/ln	0.0	16.3	0.0	1.7	0.0	25.0	0.0	10.0
2nd-Term Q (Q2), veh/ln	0.0	1.0	0.0	0.0	0.0	2.2	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	17.4	0.0	1.7	0.0	27.2	0.0	10.4
%ile Storage Ratio (RQ%)	0.00	0.93	0.00	0.30	0.00	2.55	0.00	1.59
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		115.2						
HCM 2010 LOS		F						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	162	285	127	159	374	231	131	1238	91	305	1527	127
Future Volume (veh/h)	162	285	127	159	374	231	131	1238	91	305	1527	127
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	172	303	135	169	398	246	139	1317	97	324	1624	135
Adj No. of Lanes	2	1	1	2	1	1	2	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	311	606	515	452	606	515	186	1448	106	217	1660	137
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	0.06	0.45	0.45	0.13	0.53	0.53
Ln Grp Delay, s/veh	64.7	41.6	37.8	54.6	46.1	41.3	76.5	55.0	55.3	297.0	47.3	50.7
Ln Grp LOS	E	D	D	D	D	D	E	E	E	F	D	D
Approach Vol, veh/h		610			813			1553			2083	
Approach Delay, s/veh		47.3			46.4			57.1			87.6	
Approach LOS		D			D			E			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Case No	2.0	4.0		5.0	2.0	4.0		5.0
Phs Duration (G+Y+Rc), s	24.0	73.6		54.4	13.1	84.4		54.4
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green (Gmax), s	19.5	67.5		51.5	19.5	67.5		51.5
Max Allow Headway (MAH), s	3.8	5.3		5.0	3.8	5.3		5.0
Max Q Clear (g_c+I1), s	21.5	60.7		46.9	8.3	79.8		34.6
Green Ext Time (g_e), s	0.0	6.6		3.1	0.3	0.0		7.8
Prob of Phs Call (p_c)	1.00	1.00		1.00	1.00	1.00		1.00
Prob of Max Out (p_x)	1.00	0.00		1.00	0.00	0.00		0.40

Left-Turn Movement Data								
Assigned Mvmt	1			7	5			3
Mvmt Sat Flow, veh/h	1691			1504	3281			1819

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3187		1845		3157		1845

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		234		1568		260		1568

Left Lane Group Data								
Assigned Mvmt	1	0	0	7	5	0	0	3
Lane Assignment	(Prot)				(Prot)			

Lanes in Grp	1	0	0	2	2	0	0	2
Grp Vol (v), veh/h	324	0	0	172	139	0	0	169
Grp Sat Flow (s), veh/h/ln	1691	0	0	752	1640	0	0	910
Q Serve Time (g_s), s	19.5	0.0	0.0	16.8	6.3	0.0	0.0	12.5
Cycle Q Clear Time (g_c), s	19.5	0.0	0.0	44.9	6.3	0.0	0.0	32.6
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	752	0	0	0	910
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	49.9	0.0	0.0	0.0	49.9
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	21.9	0.0	0.0	0.0	29.9
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	16.8	0.0	0.0	0.0	12.5
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	217	0	0	311	186	0	0	452
V/C Ratio (X)	1.49	0.00	0.00	0.55	0.75	0.00	0.00	0.37
Avail Cap (c_a), veh/h	217	0	0	326	421	0	0	471
Upstream Filter (I)	0.36	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	66.3	0.0	0.0	62.9	70.6	0.0	0.0	54.1
Incr Delay (d2), s/veh	230.7	0.0	0.0	1.8	5.9	0.0	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	297.0	0.0	0.0	64.7	76.5	0.0	0.0	54.6
1st-Term Q (Q1), veh/ln	9.1	0.0	0.0	3.5	2.9	0.0	0.0	3.1
2nd-Term Q (Q2), veh/ln	13.9	0.0	0.0	0.1	0.2	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	23.0	0.0	0.0	3.6	3.0	0.0	0.0	3.2
%ile Storage Ratio (RQ%)	2.25	0.00	0.00	0.54	0.41	0.00	0.00	0.44
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	26.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	695	0	303	0	861	0	398
Grp Sat Flow (s), veh/h/ln	0	1687	0	1845	0	1687	0	1845
Q Serve Time (g_s), s	0.0	58.2	0.0	20.1	0.0	75.1	0.0	28.1
Cycle Q Clear Time (g_c), s	0.0	58.2	0.0	20.1	0.0	75.1	0.0	28.1
Lane Grp Cap (c), veh/h	0	766	0	606	0	887	0	606
V/C Ratio (X)	0.00	0.91	0.00	0.50	0.00	0.97	0.00	0.66
Avail Cap (c_a), veh/h	0	766	0	625	0	887	0	625
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.36	0.00	1.00
Uniform Delay (d1), s/veh	0.0	38.5	0.0	41.0	0.0	34.9	0.0	43.7
Incr Delay (d2), s/veh	0.0	16.5	0.0	0.6	0.0	12.4	0.0	2.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	55.0	0.0	41.6	0.0	47.3	0.0	46.1
1st-Term Q (Q1), veh/ln	0.0	27.0	0.0	10.2	0.0	34.9	0.0	14.3

2nd-Term Q (Q2), veh/ln	0.0	3.5	0.0	0.1	0.0	3.1	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	30.6	0.0	10.3	0.0	38.0	0.0	14.7
%ile Storage Ratio (RQ%)	0.00	0.88	0.00	0.31	0.00	1.81	0.00	0.35
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	719	0	135	0	898	0	246
Grp Sat Flow (s), veh/h/ln	0	1734	0	1568	0	1730	0	1568
Q Serve Time (g_s), s	0.0	58.7	0.0	9.6	0.0	77.8	0.0	19.0
Cycle Q Clear Time (g_c), s	0.0	58.7	0.0	9.6	0.0	77.8	0.0	19.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.14	0.00	1.00	0.00	0.15	0.00	1.00
Lane Grp Cap (c), veh/h	0	788	0	515	0	910	0	515
V/C Ratio (X)	0.00	0.91	0.00	0.26	0.00	0.99	0.00	0.48
Avail Cap (c_a), veh/h	0	788	0	531	0	910	0	531
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.36	0.00	1.00
Uniform Delay (d1), s/veh	0.0	38.6	0.0	37.5	0.0	35.5	0.0	40.6
Incr Delay (d2), s/veh	0.0	16.6	0.0	0.3	0.0	15.1	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	55.3	0.0	37.8	0.0	50.7	0.0	41.3
1st-Term Q (Q1), veh/ln	0.0	27.9	0.0	4.2	0.0	36.9	0.0	8.2
2nd-Term Q (Q2), veh/ln	0.0	3.6	0.0	0.0	0.0	3.8	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	31.6	0.0	4.2	0.0	40.7	0.0	8.3
%ile Storage Ratio (RQ%)	0.00	0.91	0.00	0.74	0.00	1.94	0.00	1.18
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		66.7						
HCM 2010 LOS		E						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	56	48	140	47	669	52	1558	95	596	1828	108
Future Volume (veh/h)	80	56	48	140	47	669	52	1558	95	596	1828	108
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	85	60	51	149	50	712	55	1657	101	634	1945	115
Adj No. of Lanes	2	3	1	2	1	1	1	2	0	2	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	304	794	247	196	467	397	77	1473	89	581	2173	127
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.16	0.16	0.16	0.06	0.25	0.25	0.46	0.46	0.46	0.18	0.67	0.67
Ln Grp Delay, s/veh	60.3	56.8	58.4	79.3	45.4	426.1	88.5	102.7	108.5	108.8	22.2	23.0
Ln Grp LOS	E	E	E	E	D	F	F	F	F	F	C	C
Approach Vol, veh/h		196			911			1813			2694	
Approach Delay, s/veh		58.7			348.5			105.1			42.9	
Approach LOS		E			F			F			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4		6		8
Case No	2.0	6.0	2.0	5.0		4.0		3.0
Phs Duration (G+Y+Rc), s	34.0	78.0	15.1	30.9		112.0		46.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0		6.0		6.0
Max Green (Gmax), s	28.0	72.0	19.0	15.0		106.0		40.0
Max Allow Headway (MAH), s	3.8	5.4	3.8	4.4		5.4		4.4
Max Q Clear (g_c+I1), s	30.0	74.0	8.8	11.0		82.1		42.0
Green Ext Time (g_e), s	0.0	0.0	0.3	1.8		23.4		0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00		1.00		1.00
Prob of Max Out (p_x)	1.00	0.00	0.00	1.00		0.00		1.00

Left-Turn Movement Data				
Assigned Mvmt	1	5	3	7
Mvmt Sat Flow, veh/h	3281	193	3408	1347

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	3232	5036	3239	1845

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	196	1568	190	1568

Left Lane Group Data								
Assigned Mvmt	1	5	3	7	0	0	0	0
Lane Assignment	(Prot)		(Prot)					

Lanes in Grp	2	1	2	2	0	0	0	0
Grp Vol (v), veh/h	634	55	149	85	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1640	193	1704	674	0	0	0	0
Q Serve Time (g_s), s	28.0	25.9	6.8	9.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	28.0	72.0	6.8	9.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	193	0	674	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	72.0	0.0	24.9	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	25.9	0.0	24.9	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	25.9	0.0	9.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	581	77	196	304	0	0	0	0
V/C Ratio (X)	1.09	0.71	0.76	0.28	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	581	77	410	304	0	0	0	0
Upstream Filter (I)	0.09	0.33	1.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	65.0	71.6	73.4	59.8	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	43.8	17.0	5.9	0.5	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	108.8	88.5	79.3	60.3	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	12.7	2.4	3.2	1.7	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	3.5	0.4	0.2	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	16.2	2.8	3.4	1.7	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	1.71	0.34	0.38	0.54	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	13.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	3	0	1	0	1
Grp Vol (v), veh/h	0	859	0	60	0	1004	0	50
Grp Sat Flow (s), veh/h/ln	0	1687	0	1679	0	1687	0	1845
Q Serve Time (g_s), s	0.0	72.0	0.0	1.6	0.0	76.4	0.0	3.3
Cycle Q Clear Time (g_c), s	0.0	72.0	0.0	1.6	0.0	76.4	0.0	3.3
Lane Grp Cap (c), veh/h	0	769	0	794	0	1132	0	467
V/C Ratio (X)	0.00	1.12	0.00	0.08	0.00	0.89	0.00	0.11
Avail Cap (c_a), veh/h	0	769	0	794	0	1132	0	467
Upstream Filter (I)	0.00	0.33	0.00	1.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	43.0	0.0	56.7	0.0	21.1	0.0	45.3
Incr Delay (d2), s/veh	0.0	59.7	0.0	0.0	0.0	1.1	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	102.7	0.0	56.8	0.0	22.2	0.0	45.4
1st-Term Q (Q1), veh/ln	0.0	33.5	0.0	0.7	0.0	35.1	0.0	1.7

2nd-Term Q (Q2), veh/ln	0.0	12.7	0.0	0.0	0.0	0.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	46.3	0.0	0.7	0.0	35.5	0.0	1.7
%ile Storage Ratio (RQ%)	0.00	2.20	0.00	0.10	0.00	1.93	0.00	0.19
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	22.7	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	899	0	51	0	1056	0	712
Grp Sat Flow (s), veh/h/ln	0	1741	0	1568	0	1742	0	1568
Q Serve Time (g_s), s	0.0	72.0	0.0	4.5	0.0	80.1	0.0	40.0
Cycle Q Clear Time (g_c), s	0.0	72.0	0.0	4.5	0.0	80.1	0.0	40.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.11	0.00	1.00	0.00	0.11	0.00	1.00
Lane Grp Cap (c), veh/h	0	793	0	247	0	1169	0	397
V/C Ratio (X)	0.00	1.13	0.00	0.21	0.00	0.90	0.00	1.79
Avail Cap (c_a), veh/h	0	793	0	247	0	1169	0	397
Upstream Filter (I)	0.00	0.33	0.00	1.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	43.0	0.0	57.9	0.0	21.7	0.0	59.0
Incr Delay (d2), s/veh	0.0	65.5	0.0	0.4	0.0	1.3	0.0	367.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	108.5	0.0	58.4	0.0	23.0	0.0	426.1
1st-Term Q (Q1), veh/ln	0.0	34.6	0.0	1.9	0.0	38.1	0.0	17.3
2nd-Term Q (Q2), veh/ln	0.0	14.4	0.0	0.0	0.0	0.4	0.0	40.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	49.0	0.0	2.0	0.0	38.6	0.0	57.8
%ile Storage Ratio (RQ%)	0.00	2.34	0.00	0.27	0.00	2.09	0.00	6.32
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	26.3	0.0	0.0	0.0	0.0	0.0	78.8
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	113.1
HCM 2010 LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	620	789	487	854	950	19	343	1293	3	9	1131	401
Future Volume (veh/h)	620	789	487	854	950	19	343	1293	3	9	1131	401
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1759	1759	1759	1900	1776	1776	1776	1900	1776	1776
Adj Flow Rate, veh/h	646	822	507	890	990	20	357	1347	0	9	1178	0
Adj No. of Lanes	2	3	1	2	3	0	2	2	1	0	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	8	8	8	8	8	8	7	7	7	7	7	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	710	654	204	855	877	18	259	1614	722	27	1159	543
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.22	0.14	0.14	0.26	0.18	0.18	0.08	0.48	0.00	0.36	0.36	0.00
Ln Grp Delay, s/veh	70.1	193.4	750.4	97.8	140.5	152.9	242.5	34.9	0.0	80.6	92.2	0.0
Ln Grp LOS	E	F	F	F	F	F	F	C		F	F	
Approach Vol, veh/h		1975			1900			1704			1187	
Approach Delay, s/veh		296.0			122.8			78.4			86.1	
Approach LOS		F			F			E			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Case No		3.0	2.0	3.0	2.0	7.0	2.0	4.0
Phs Duration (G+Y+Rc), s		79.0	46.0	27.0	18.0	61.0	39.2	33.8
Change Period (Y+Rc), s		6.3	6.0	6.3	6.0	6.3	6.0	6.3
Max Green (Gmax), s		72.7	40.0	20.7	12.0	54.7	40.0	20.7
Max Allow Headway (MAH), s		5.3	3.8	5.0	3.8	5.3	3.8	5.0
Max Q Clear (g_c+I1), s		54.7	42.0	22.7	14.0	56.7	31.5	29.5
Green Ext Time (g_e), s		15.2	0.0	0.0	0.0	0.0	1.7	0.0
Prob of Phs Call (p_c)		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)		0.00	1.00	1.00	1.00	0.00	0.16	1.00

Left-Turn Movement Data								
Assigned Mvmt			3		5	1	7	
Mvmt Sat Flow, veh/h			3250		3281	9	3250	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3374		4803		3221		4846

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1509		1495		1509		98

Left Lane Group Data								
Assigned Mvmt	0	0	3	0	5	1	7	0
Lane Assignment			(Prot)		(Prot)	L+T	(Prot)	

Lanes in Grp	0	0	2	0	2	1	2	0
Grp Vol (v), veh/h	0	0	890	0	357	623	646	0
Grp Sat Flow (s), veh/h/ln	0	0	1625	0	1640	1695	1625	0
Q Serve Time (g_s), s	0.0	0.0	40.0	0.0	12.0	20.0	29.5	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	40.0	0.0	12.0	54.7	29.5	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	412	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	54.7	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	20.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	20.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	33.2	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	33.2	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	1.00	0.01	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	855	0	259	634	710	0
V/C Ratio (X)	0.00	0.00	1.04	0.00	1.38	0.98	0.91	0.00
Avail Cap (c_a), veh/h	0	0	855	0	259	634	855	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.09	1.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	56.0	0.0	70.0	48.7	57.9	0.0
Incr Delay (d2), s/veh	0.0	0.0	41.8	0.0	172.5	31.9	12.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	97.8	0.0	242.5	80.6	70.1	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	17.9	0.0	5.4	26.1	13.3	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	5.0	0.0	6.2	5.6	1.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	22.9	0.0	11.6	31.8	14.5	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	1.52	0.00	1.31	1.08	1.38	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	8.7	0.0	24.5	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.3	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	3	0	1	0	2
Grp Vol (v), veh/h	0	1347	0	822	0	564	0	654
Grp Sat Flow (s), veh/h/ln	0	1687	0	1601	0	1535	0	1601
Q Serve Time (g_s), s	0.0	52.7	0.0	20.7	0.0	54.7	0.0	27.5
Cycle Q Clear Time (g_c), s	0.0	52.7	0.0	20.7	0.0	54.7	0.0	27.5
Lane Grp Cap (c), veh/h	0	1614	0	654	0	552	0	579
V/C Ratio (X)	0.00	0.83	0.00	1.26	0.00	1.02	0.00	1.13
Avail Cap (c_a), veh/h	0	1614	0	654	0	552	0	579
Upstream Filter (I)	0.00	0.09	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	34.4	0.0	65.6	0.0	48.7	0.0	62.3
Incr Delay (d2), s/veh	0.0	0.5	0.0	127.7	0.0	43.5	0.0	78.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	34.9	0.0	193.4	0.0	92.2	0.0	140.5
1st-Term Q (Q1), veh/ln	0.0	24.5	0.0	9.1	0.0	23.2	0.0	12.1

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	7.7	0.0	6.7	0.0	6.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	24.6	0.0	16.9	0.0	29.9	0.0	18.4
%ile Storage Ratio (RQ%)	0.00	1.34	0.00	0.59	0.00	1.01	0.00	1.18
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	42.0	0.0	2.8	0.0	18.7
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.3	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	507	0	0	0	356
Grp Sat Flow (s), veh/h/ln	0	1509	0	1495	0	1509	0	1742
Q Serve Time (g_s), s	0.0	0.0	0.0	20.7	0.0	0.0	0.0	27.5
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	20.7	0.0	0.0	0.0	27.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.06
Lane Grp Cap (c), veh/h	0	722	0	204	0	543	0	315
V/C Ratio (X)	0.00	0.00	0.00	2.49	0.00	0.00	0.00	1.13
Avail Cap (c_a), veh/h	0	722	0	204	0	543	0	315
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	65.7	0.0	0.0	0.0	62.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	684.8	0.0	0.0	0.0	90.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	750.4	0.0	0.0	0.0	152.9
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	8.6	0.0	0.0	0.0	13.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	38.7	0.0	0.0	0.0	7.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	47.3	0.0	0.0	0.0	21.1
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	1.64	0.00	0.00	0.00	1.35
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	75.8	0.0	0.0	0.0	10.3
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.3
Intersection Summary								
HCM 2010 Ctrl Delay		155.8						
HCM 2010 LOS		F						

APPENDIX IV-D:
Year 2020 Zoning Intersection Combined Mitigation Summary

Appendix: Year 2020 Intersection Mitigation Summary

		Background Without Mitigation				Background With Mitigation					Year 2020 Combined ADM & Graham Without Mitigation				Year 2020 Combined ADM & Graham With Mitigation					Improvements	
Intersection ID	Movement	AM		PM		AM		Proposed Mitigation by 2020	PM		AM		PM		AM		Proposed Mitigation by 2020	PM		Imp (ADM)	Fair Share ADM
		Tot NL	LOS	Tot NL	LOS	Tot NL	LOS		Tot NL	LOS	Tot NL	LOS	Tot NL	LOS	Tot NL	LOS		Tot NL	LOS		
1 NW186th St/Miami Gardens Dr & NW 87th Ave	EBL	2	F	2	D	2	F		2	D	2	F	2	F	2	F		2	F		
	EBT	2		2		2			2		2		2		2			2			
	EBR	1		1		1			1		1		1		1			1			
	WBL	1	F	1	E	2	E	Add one left lane	1	E	1	F	1	E	2	E		1	E		
	WBT	3		3		3		Replaced shr thru & right to right	2		3		3		3			2			
	WBR	0		0		0			1		0		0		0			1			
	NBL	1	F	1	F	2	F	Add one left lane	2	F	1	F	1	F	2	F		2	F		
	NBT	2		2		2			2		2		2		2			2			
	NBR	0		0		0			0		0		0		0			0			
	SBL	1	F	1	F	2	F	Add one left lane	2	F	1	F	1	F	2	F		2	F		
	SBT	1		1		2		Add one thru lane	2		1		1		2			2			
	SBR	1		1		1			1		1		1		1			1			
2 NW 186th St/ Miami Garden Dr & NW 82nd Ave	EBL	1	D	1	E	2	C	Add one left lane	2	C	1	D	1	F	2	C		2	C		
	EBT	2		2		2			2		2		2		2		Add one Thru lane	3		Yes	10.95%
	EBR	0		0		0		Add one right lane	1		0		0		0			1			
	WBL	1	D	1	E	1	C	Add one left lane	2	C	1	E	1	E	1	C		2	C		
	WBT	2		2		2			2		2		2		2			2			
	WBR	0		0		1		Add one right lane	0		0		0		1			0			
	NBL	1	F	1	F	2	E	Add one left lane	2	E	1	F	1	F	2	E		2	E		
	NBT	1		1		1			1		1		1		1			1			
	NBR	0		0		1		Add one right lane	1		0		0		1			1			
	SBL	1	F	1	E	2	E	Add one left lane	2	E	1	F	1	E	2	E		2	E		
	SBT	1		1		1			1		1		1		1			1			
	SBR	1		1		1			1		1		1		1			1			
3 NW 186th ST/ Miami Garden Dr & NW 79th Ave	EBL	1	D	1	C	1	B	Add one left lane	2	B	1	E	1	D	1	B		2	D		
	EBT	2		2		2			2		2		2		2			2			
	EBR	0		0		0			0		0		0		0			0			
	WBL	0	F	0	C	0	D		0	C	0	F	0	C	0	D		0	C		
	WBT	2		2		2			2		2		2		2			2			
	WBR	0		0		1		Add one right lane	0		0		0		1			0			
	NBL	0	-	0	-	0	-		0	-	0	-	0	-	0	-		0	-		
	NBT	0		0		0			0		0		0		0			0			
	NBR	0		0		0			0		0		0		0			0			
	SBL	1	E	1	E	2	C	Add one left lane	1	E	1	E	1	E	2	C		1	E		
	SBT	0		0		0			0		0		0		0			0			
	SBR	1		1		1			1		1		1		1			1			

Appendix: Year 2020 Intersection Mitigation Summary

		Background Without Mitigation				Background With Mitigation					Year 2020 Combined ADM & Graham Without Mitigation				Year 2020 Combined ADM & Graham With Mitigation					Improvements	
Intersection ID	Movement	AM		PM		AM		Proposed Mitigation by 2020	PM		AM		PM		AM		Proposed Mitigation by 2020	PM		Imp (ADM)	Fair Share ADM
		Tot NL	LOS	Tot NL	LOS	Tot NL	LOS		Tot NL	LOS	Tot NL	LOS	Tot NL	LOS	Tot NL	LOS		Tot NL	LOS		
4 NW 186th ST/ Miami Garden Dr & W Oakmont Dr	EBL	1	A	1	B	1	A	Add one left lane	2	B	1	A	1	B	1	B		2	B		
	EBT	2		2		2			2		2		2		2			2			
	EBR	0		0		0			0		0		0		0			0			
	WBL	1	B	1	B	1	A	Add one left lane	2	B	1	B	1	B	1	A		2	B		
	WBT	2		2		3		Add one thru lane	2		2		2		3			2			
	WBR	0		0		0			0		0		0		0			0			
	NBL	0	F	0	F	0	F	Add two left lanes	2	F	0	F	0	F	0	F		2	F		
	NBT	1		1		1		Add one thru lane	2		1		1		1			2			
	NBR	1		1		1			1		1		1		1			1			
	SBL	0	D	0	F	0	D	Add two left lanes	2	F	0	D	0	F	0	D		2	F		
	SBT	1		1		1			1		1		1		1			1			
	SBR	1		1		1			1		1		1		1			1			
5 NW 175th PL & NW 186th ST/ Miami Garden Dr	EBL	0	C	0	C	0	C		0	B	0	C	0	D	0	C		0	B		
	EBT	2		2		2		Add one thru lane	3		2		2		2			3			
	EBR	0		0		0			0		0		0		0			0			
	WBL	1	F	1	D	2	E	Add one left lane	2	C	1	F	1	D	2	C		2	C		
	WBT	2		2		2			2		2		2		2			2			
	WBR	0		0		0			0		0		0		0			0			
	NBL	1	C	1	F	1	E	Add one left lane	2	F	1	C	1	F	1	C		2	F		
	NBT	0		0		0			0		0		0		0			0			
	NBR	1		1		1			1		1		1		1			1			
	SBL	0	-	0	-	0	-		0	-	0	-	0	-	0	-		0	-		
	SBT	0		0		0			0		0		0		0			0			
	SBR	0		0		0			0		0		0		0			0			
6 NW 73th Ave & NW 186th St/ Miami Garden Dr	EBL	1	B	1	B	1	B	Add one left lane	2	B	1	B	1	B	1	B		2	B		
	EBT	2		2		2			2		2		2		2			2			
	EBR	0		0		0			0		0		0		0			0			
	WBL	1	B	1	D	1	B	Add one left lane	2	B	1	B	1	D	1	B		2	B		
	WBT	2		2		2			2		2		2		2			2			
	WBR	0		0		0			0		0		0		0			0			
	NBL	1	C	1	E	1	C		1	E	1	C	1	E	1	C		1	E		
	NBT	1		1		1			1		1		1		1			1			
	NBR	0		0		0			0		0		0		0			0			
	SBL	0	B	0	D	0	B		0	D	0	B	0	D	0	B		0	D		
	SBT	1		1		1			1		1		1		1			1			
	SBR	0		0		0			0		0		0		0			0			

Appendix: Year 2020 Intersection Mitigation Summary

		Background Without Mitigation				Background With Mitigation					Year 2020 Combined ADM & Graham Without Mitigation				Year 2020 Combined ADM & Graham With Mitigation					Improvements	
Intersection ID	Movement	AM		PM		AM		Proposed Mitigation by 2020	PM		AM		PM		AM		Proposed Mitigation by 2020	PM		Imp (ADM)	Fair Share ADM
		Tot NL	LOS	Tot NL	LOS	Tot NL	LOS		Tot NL	LOS	Tot NL	LOS	Tot NL	LOS	Tot NL	LOS		Tot NL	LOS		
7 NW 186th St / Miami Gardens Dr & NW 68 Ave	EBL	1	C	1	B	1	C		1	B	1	C	1	C	1	D		1	C		
	EBT	2		2		2			2		2		2		2			2			
	EBR	0		0		0			0		0		0		0			0			
	WBL	1	C	1	B	1	C		1	B	1	C	1	B	1	B		1	B		
	WBT	2		2		2			2		2		2		2			2			
	WBR	0		0		0			0		0		0		0			0			
	NBL	1	C	1	F	1	C	Add one left lane	2	E	1	C	1	E	1	C		2	E		
	NBT	1		1		1			1		1		1		1			1			
	NBR	1		1		1			1		1		1		1			1			
	SBL	0	B	0	E	0	B		0	E	0	B	0	E	0	B		0	E		
	SBT	1		1		1			1		1		1		1			1			
	SBR	0		0		0			0		0		0		0			0			
8 NW 186th St / Miami Garden Dr & Bobolink Dr	EBL	1	F	1	F	1	F		1	F	1	F	1	E	1	F		1	F		
	EBT	2		2		2			2		2		2		2			2			
	EBR	0		0		0			0		0		0		0			0			
	WBL	1	F	1	F	1	F		1	C	1	F	1	F	1	F		1	C		
	WBT	2		2		2		Add one Thru lane	3		2		2		2			3			
	WBR	0		0		0		Add one right lane	1		0		0		0			1			
	NBL	0	B	0	B	0	B		0	B	0	B	0	B	0	B		0	B		
	NBT	1		1		1			1		1		1		1			1			
	NBR	0		0		0			0		0		0		0			0			
	SBL	1	B	1	B	1	B		1	B	1	B	1	B	1			1	B		
	SBT	1		1		1			1		1		1		1			1			
	SBR	0		0		0			0		0		0		0			0			
9 NW 186th St / Miami Gardens Dr & NW 67th Ave	EBL	2	D	2	E	2	D		2	E	2	D	2	E	2	D		2	E		
	EBT	3		3		3			3		3		3		3			3			
	EBR	0		0		0			0		0		0		0			0			
	WBL	2	D	2	D	2	D		2	D	2	D	2	E	2	D		2	E		
	WBT	3		3		3			3		3		3		3			3			
	WBR	0		0		0			0		0		0		0			0			
	NBL	2	D	2	E	2	D		2	E	2	D	2	E	2	D		2	E		
	NBT	3		3		3			3		3		3		3			3			
	NBR	0		0		0			0		0		0		0			0			
	SBL	2	E	2	F	2	E		2	E	2	E	2	F	2	E		2	F		
	SBT	3		3		3			3		3		3		3			3			
	SBR	0		0		0		Add one right lane	1		0		0		0			1			

Appendix: Year 2020 Intersection Mitigation Summary

		Background Without Mitigation				Background With Mitigation					Year 2020 Combined ADM & Graham Without Mitigation				Year 2020 Combined ADM & Graham With Mitigation					Improvements	
Intersection ID	Movement	AM		PM		AM		Proposed Mitigation by 2020	PM		AM		PM		AM		Proposed Mitigation by 2020	PM		Imp (ADM)	Fair Share ADM
		Tot NL	LOS	Tot NL	LOS	Tot NL	LOS		Tot NL	LOS	Tot NL	LOS	Tot NL	LOS	Tot NL	LOS		Tot NL	LOS		
10 NW 186th St/ Miami Gardens Dr & NW 62th Ave	EBL	1	C	1	E	1	C	Add one left lane	2	C	1	C	1	E	1	C		2	C		
	EBT	2		2		2			2		2		2		2			2			
	EBR	0		0		0			0		0		0		0			0			
	WBL	0	B	0	C	0	B		0	C	0	B	0	C	0	B		0	C		
	WBT	2		2		2			2		2		2		2			2			
	WBR	0		0		0			0		0		0		0			0			
	NBL	1	F	1	F	1	F	Add one left lane	2	F	1	F	1	F	1	F		2	F		
	NBT	1		1		1			1		1		1		1			1			
	NBR	1		1		1			1		1		1		1			1			
	SBL	1	F	1	F	2	F	Add one left lane	2	F	1	F	1	F	2	F		2	F		
	SBT	1		1		1			1		1		1		1			1			
	SBR	1		1		1			1		1		1		1			1			
11 NW 186th St / Miami Gardens Dr & 823 St /Red road	EBL	2	F	2	F	2	F		2	F	2	F	2	F	2	F		2	F		
	EBT	3		3		3			3		3		3		3			3			
	EBR	0		0		1		Add one right lane	1		0		0		1			1			
	WBL	2	E	2	F	2	E		2	F	2	E	2	F	2	E		2	F		
	WBT	3		3		3			3		3		3		3			3			
	WBR	1		1		1			1		1		1		1			1			
	NBL	2	D	2	D	2	D		2	D	2	D	2	D	2	D		2	D		
	NBT	3		3		2		replaced the shr thru and right to right	3		3		3		2			3			
	NBR	0		0		1			1		0		0		1			1			
	SBL	2	D	2	D	2	D		2	D	2	D	2	D	2	D		2	D		
	SBT	3		3		3			3		3		3		3			3			
	SBR	0		0		1		Add one right lane	1		0		0		1			1			
12 NW 97th Ave/ W 36th Ave & NW 138 th St/ W 84th St	EBL	2	D	2	D	2	D		2	D	2	D	2	D	2	D		2	D		
	EBT	3		3		3			3		3		3		3			3			
	EBR	0		0		0			0		0		0		0			0			
	WBL	2	F	2	F	2	F		2	F	2	F	2	F	2	F		2	F		
	WBT	3		3		3			3		3		3		3			3			
	WBR	1		1		1			1		1		1		1			1			
	NBL	1	C	1	D	1	C		1	D	1	C	1	D	1	C		1	D		
	NBT	2		2		2			2		2		2		2			2			
	NBR	0		0		0			0		0		0		0			0			
	SBL	2	C	2	D	2	C		2	D	2	C	2	D	2	C		2	D		
	SBT	2		2		2			2		2		2		2			2			
	SBR	1		1		1			1		1		1		1			1			

Appendix: Year 2020 Intersection Mitigation Summary

		Background Without Mitigation				Background With Mitigation					Year 2020 Combined ADM & Graham Without Mitigation				Year 2020 Combined ADM & Graham With Mitigation					Improvements	
Intersection ID	Movement	AM		PM		AM		Proposed Mitigation by 2020	PM		AM		PM		AM		Proposed Mitigation by 2020	PM		Imp (ADM)	Fair Share ADM
		Tot NL	LOS	Tot NL	LOS	Tot NL	LOS		Tot NL	LOS	Tot NL	LOS	Tot NL	LOS	Tot NL	LOS		Tot NL	LOS		
13 NW 130th St & NW 97th Ave / W 36th Ave	EBL	0	B	0	B	0	B		0	B	0	B	0	B	0	B		0	B		
	EBT	1		1		1			1		1		1		1			1			
	EBR	0		0		0			0		0		0		0			0			
	WBL	0	B	0	B	0	B		0	B	0	B	0	B	0	B		0	B		
	WBT	1		1		1			1		1		1		1			1			
	WBR	1		1		1			1		1		1		1			1			
	NBL	1	A	1	A	1	A		1	A	1	A	1	A	1	A		1	A		
	NBT	1		1		1			1		1		1		1			1			
	NBR	0		0		0			0		0		0		0			0			
	SBL	1	A	1	A	1	A		1	A	1	A	1	A	1	A		1	A		
	SBT	1		1		1			1		1		1		1			1			
	SBR	0		0		0			0		0		0		0			0			
14 N Okeechobee Rd & Ronal Reagan Turnpike Ramp (S)	EBL	1	C	1	B	1	C		1	B	1	C	1	B	2	C	Add one Left lane	1	B		
	EBT	2		2		2			2		2		2		2			2			
	EBR	1		1		1			1		1		1		1			1			
	WBL	1	F	1	B	1	D		1	C	1	F	1	B	1	D		1	B		
	WBT	2		2		2			2		2		2		2			2			
	WBR	1		1		1			1		1		1		1			1			
	NBL	0	F	0	F	0	F	1 Right Thru Shr Ln and one Left Thru Shr lane	0	E	0	F	0	F	0	F		0	E		
	NBT	1		1		1			2		1		1		1			2			
	NBR	0		0		0			0		0		0		0			0			
	SBL	2	F	2	F	2	F		2	F	2	F	2	F	2	F		2	F		
	SBT	1		1		1			1		1		1		1			1			
	SBR	1		1		1			1		1		1		1			1			
15 N Okeechobee Rd & Ronal Reagan Turnpike Ramp (N)	EBL	1	D	1	B	1	B		1	B	1	D	1	B	1	D		1	B		
	EBT	2		2		2			2		2		2		2			2			
	EBR	0		0		0			0		0		0		0			0			
	WBL	0	C	0	F	0	C		0	C	0	D	0	F	0	C		0	C		
	WBT	2		2		3		Add one Thru lane	3		2		2		3			3			
	WBR	1		1		1			1		1		1		1			1			
	NBL	0	-	0	-	0	-		0	-	0	-	0		0	-		0	-		
	NBT	0		0		0			0		0		0		0			0			
	NBR	0		0		0			0		0		0		0			0			
	SBL	2	D	2	C	2	D		2	C	2	D	2	D	2	D		2	D		
	SBT	0		0		0			0		0		0		0			0			
	SBR	1		1		1			1		1		1		1			1			

Appendix: Year 2020 Intersection Mitigation Summary

		Background Without Mitigation				Background With Mitigation					Year 2020 Combined ADM & Graham Without Mitigation				Year 2020 Combined ADM & Graham With Mitigation					Improvements	
Intersection ID	Movement	AM		PM		AM		Proposed Mitigation by 2020	PM		AM		PM		AM		Proposed Mitigation by 2020	PM		Imp (ADM)	Fair Share ADM
		Tot NL	LOS	Tot NL	LOS	Tot NL	LOS		Tot NL	LOS	Tot NL	LOS	Tot NL	LOS	Tot NL	LOS		Tot NL	LOS		
16 Ronal Reagan Turnpike Ramp (E) & 823 St/ Red Road	EBL	2	E	2	E	2	E		2	E	2	E	2	E	2	E		2	E		
	EBT	0		0		0			0		0		0		0			0			
	EBR	1		1		1			1		1		1		1			1			
	WBL	0	-	0		0	-		0	-	0	-	0		0	-		0	-		
	WBT	0		0		0			0		0		0		0			0			
	WBR	0		0		0			0		0		0		0			0			
	NBL	2	B	2	B	2	B		2	B	2	B	2	B	2	B		2	B		
	NBT	3		3		3			3		3		3		3			3			
	NBR	0		0		0			0		0		0		0			0			
	SBL	0	C	0	B	0	C		0	B	0	C	0	B	0	C		0	B		
	SBT	3		3		3			3		3		3		3			3			
	SBR	1		1		1			1		1		1		1			1			
17 823 St/ Red road & Ronald Reagan Turnpike Ramp (W)	EBL	0	-	0	-	0	-		0	-	0		0	-	0	-		0	-		
	EBT	0		0		0			0		0		0		0			0			
	EBR	0		0		0			0		0		0		0			0			
	WBL	2	F	2	F	2	F		2	F	2	F	2	F	2	F		2	F		
	WBT	0		0		0			0		0		0		0			0			
	WBR	2		2		2			2		2		2		2			2			
	NBL	0	B	0	B	0	B		0	B	0	B	0	B	0	B		0	B		
	NBT	3		3		3			3		3		3		3			3			
	NBR	1		1		1			1		1		1		1			1			
	SBL	2	A	2	A	2	A		2	A	2	A	2	A	2	A		2	A		
	SBT	3		3		3			3		3		3		3			3			
	SBR	0		0		0			0		0		0		0			0			
20 N Okeechobee Rd / N Okeechobee Rd & NW 138 St	EBL	1	F	1	F	2	D	Add one left lane	2	D	1	F	1	F	2	D		2	D		
	EBT	3		3		3			3		3		3		3			3			
	EBR	1		1		1			1		1		1		1			1			
	WBL	1	D	1	E	1	D	Add one left lane	2	D	1	D	1	E	1	D		2	E		
	WBT	3		3		3			3		3		3		3			3			
	WBR	1		1		1			1		1		1		1			1			
	NBL	1	E	1	F	2	E	Add one left lane	2	E	1	E	1	F	2	E		2	F		
	NBT	2		2		2			2		2		2		2			2			
	NBR	0		0		0			0		0		0		0			0			
	SBL	0	F	0	F	0	F		0	F	0	F	0	F	1	F	Add one left lane	1	F		
	SBT	1		1		1			1		1		1		1			1			
	SBR	2		2		2			2		2		2		2			2			

Appendix: Year 2020 Intersection Mitigation Summary

		Background Without Mitigation				Background With Mitigation					Year 2020 Combined ADM & Graham Without Mitigation				Year 2020 Combined ADM & Graham With Mitigation					Improvements	
Intersection ID	Movement	AM		PM		AM		Proposed Mitigation by 2020	PM		AM		PM		AM		Proposed Mitigation by 2020	PM		Imp (ADM)	Fair Share ADM
		Tot NL	LOS	Tot NL	LOS	Tot NL	LOS		Tot NL	LOS	Tot NL	LOS	Tot NL	LOS	Tot NL	LOS		Tot NL	LOS		
23 N Okeechobee Rd & Hisleah Gardens Blvd	EBL	2	E	2	F	2	D		2	F	2	E	2	F	2	D		2	F		
	EBT	3		3		3			3		3		3		3			3			
	EBR	1		1		1			1		1		1		1			1			
	WBL	2	F	2	F	2	F		2	F	2	F	2	F	2	F		2	F		
	WBT	3		3		3			3		3		3		3			3			
	WBR	2		2		2			2		2		2		2			2			
	NBL	2	D	2	F	2	D		2	E	2	D	2	F	2	D		2	E		
	NBT	2		2		2		Add one thru lane	3		2		2		2			3			
	NBR	0		0		0		Add one Right lane	1		0		0		0			1			
	SBL	2	F	2	E	2	F		2	E	2	F	2	E	2	F		2	E		
	SBT	2		2		3		Add one thru lane	2		2		2		3			2			
	SBR	0		0		0			0		0		0		0			0			
36 I-75 Ramp(N) & Miramar Pkwy	EBL	2	C	2	B	2	C		2	B	2	C	2	C	2	C		2	C		
	EBT	3		3		3			3		3		3		3			3			
	EBR	0		0		0			0		0		0		0			0			
	WBL	0	A	0	A	0	A		0	A	0	A	0	B	0	A		0	B		
	WBT	3		3		3			3		3		3		3			3			
	WBR	1		1		1			1		1		1		1			1			
	NBL	0	A	0	A	0	A		0	A	0	A	0	A	0	A		0	A		
	NBT	0		0		0			0		0		0		0			0			
	NBR	2		2		2			2		2		2		2			2			
	SBL	0	-	0	-	0	-		0	-	0	-	0	-	0	-		0	-		
	SBT	0		0		0			0		0		0		0			0			
	SBR	0		0		0			0		0		0		0			0			
37 I-75 Ramp(S) & Miramar Pkwy	EBL	0	B	0	B	0	B		0	B	0	B	0	B	0	B		0	B		
	EBT	3		3		3			3		3		3		3			3			
	EBR	1		1		1			1		1		1		1			1			
	WBL	2	B	2	A	2	B		2	A	2	C	2	A	2	C		2	A		
	WBT	3		3		3			3		3		3		3			3			
	WBR	0		0		0			0		0		0		0			0			
	NBL	0	-	0	-	0	-		0	-	0	-	0	-	0	-		0	-		
	NBT	0		0		0			0		0		0		0			0			
	NBR	0		0		0			0		0		0		0			0			
	SBL	0	A	0	A	0	A		0	A	0	A	0	A	0	A		0	A		
	SBT	0		0		0			0		0		0		0			0			
	SBR	2		2		2			2		2		2		2			2			

Appendix: Year 2020 Intersection Mitigation Summary

Intersection ID	Movement	Background Without Mitigation				Background With Mitigation					Year 2020 Combined ADM & Graham Without Mitigation				Year 2020 Combined ADM & Graham With Mitigation					Improvements	
		AM		PM		AM		Proposed Mitigation by 2020	PM		AM		PM		AM		Proposed Mitigation by 2020	PM		Imp (ADM)	Fair Share ADM
		Tot NL	LOS	Tot NL	LOS	Tot NL	LOS		Tot NL	LOS	Tot NL	LOS	Tot NL	LOS	Tot NL	LOS		Tot NL	LOS		
38 Pines Blvd & I-75 Ramp (N)	EBL	2	B	2	A	2	B		2	A	2	D	2	A	2	B		2	A		
	EBT	3		3		3			3		3		3		3			3			
	EBR	0		0		0			0		0		0		0			0			
	WBL	0	B	0	A	0	B		0	A	0	B	0	A	0	B		0	A		
	WBT	3		3		3			3		3		3		3			3			
	WBR	2		2		2			2		2		2		2			2			
	NBL	0	A	0	A	0	A		0	A	0	A	0	A	0	A		0	A		
	NBT	0		0		0			0		0		0		0			0			
	NBR	3		3		3			3		3		3		3			3			
	SBL	0	A	0	A	0	A		0	A	0	A	0	A	0	A		0	A		
	SBT	0		0		0			0		0		0		0			0			
	SBR	3		3		3			3		3		3		3			3			
39 I-75 Ramp(S) & Pines Blvd/ Pines Blvd	EBL	0	C	0	B	0	C		0	B	0	C	0	B	0	B		0	B		
	EBT	3		3		3			3		3		3		3			3			
	EBR	2		2		2			2		2		2		2			2			
	WBL	2	D	2	B	2	D		2	B	2	E	2	B	2	E		2	B		
	WBT	3		3		3			3		3		3		3			3			
	WBR	0		0		0			0		0		0		0			0			
	NBL	0	A	0	A	0	A		0	A	0	A	0	A	0	A		0	A		
	NBT	0		0		0			0		0		0		0			0			
	NBR	3		3		3			3		3		3		3			3			
	SBL	0	A	0	A	0	A		0	A	0	A	0	A	0	A		0	A		
	SBT	0		0		0			0		0		0		0			0			
	SBR	3		3		3			3		3		3		3			3			
44 W 68th St & Hialeah Gardens Blvd	EBL	1	D	1	F	1	D	Add one left lane	2	E	1	D	1	F	1	D		2	E		
	EBT	2		2		2		Add one Thru lane	3		2		2		2			3			
	EBR	0		0		0		Add one Right lane	1		0		0		0			1			
	WBL	1	F	1	F	2	F	Add one left lane	2	E	1	F	1	F	2	F		2	E		
	WBT	2		2		2			2		2		2		2			2			
	WBR	0		0		0		Add one Right lane	1		0		0		0			1			
	NBL	1	D	1	E	1	D	Add one left lane	2	D	1	D	1	F	1	D		2	D		
	NBT	2		2		2			2		2		2		2			2			
	NBR	0		0		0		Add one Right lane	1		0		0		0			1			
	SBL	1	F	1	D	1	F		1	C	1	F	1	D	1	F	Add one left lane	2	C		
	SBT	2		2		2			2		2		2		2			2			
	SBR	0		0		0			0		0		0		0			0			

Appendix: Year 2020 Intersection Mitigation Summary

Intersection ID	Movement	Background Without Mitigation				Background With Mitigation					Year 2020 Combined ADM & Graham Without Mitigation				Year 2020 Combined ADM & Graham With Mitigation					Improvements	
		AM		PM		AM		Proposed Mitigation by 2020	PM		AM		PM		AM		Proposed Mitigation by 2020	PM		Imp (ADM)	Fair Share ADM
		Tot NL	LOS	Tot NL	LOS	Tot NL	LOS		Tot NL	LOS	Tot NL	LOS	Tot NL	LOS	Tot NL	LOS		Tot NL	LOS		
50 NW 170th St & NW 87th Ave	EBL	1	F	1	D	1	F		1	D	1	F	1	D	1	F		1	D		
	EBT	1		1		1			1		1		1		1			1			
	EBR	0		0		0			0		0		0		0			0			
	WBL	1	F	1	D	2	F	Add one left lane	2	D	1	F	1	E	2	F		2	D		
	WBT	1		1		1			1		1		1		1			1			
	WBR	1		1		1			1		1		1		1			1			
	NBL	1	D	1	C	1	D		1	C	1	D	1	C	1	D		1	C		
	NBT	2		2		2			2		2		2		2			2			
	NBR	0		0		0			0		0		0		0			0			
	SBL	1	E	1	F	1	E	Add one left lane	2	D	1	F	1	F	1	F		2	F		
	SBT	2		2		2			2		2		2		2			2			
	SBR	0		0		0			0		0		0		0			0			
51 130th St & Hialeah Gardens Blvd	EBL	1	F	1	E	1	F	Add one left lane	2	E	1	F	1	F	1	F		2	E		
	EBT	1		1		1		Add one Thru lane	2		1		1		1			2			
	EBR	0		0		0		Add one Right lane	1		0		0		0			1			
	WBL	1	F	1	F	2	F	Add one left lane	2	E	1	F	1	F	2	F		2	E		
	WBT	1		1		1			1		1		1		1			1			
	WBR	1		1		1			1		1		1		1			1			
	NBL	1	E	1	D	1	E		1	C	1	E	1	D	1	E		1	C		
	NBT	2		2		2		Add one Thru lane	3		2		2		2			3			
	NBR	0		0		0			0		0		0		0			0			
	SBL	1	F	1	F	2	F	Add one left lane	1	F	1	F	1	F	2	F		1	F		
	SBT	2		2		2			2		2		2		2			2			
	SBR	0		0		0			0		0		0		0			0			
52 & Hialeah Gardens Blvd	EBL	1	C	1	D	1	C	Add one left lane	2	D	1	C	1	D	1	C		2	D		
	EBT	1		1		1			1		1		1		1			1			
	EBR	1		1		1			1		1		1		1			1			
	WBL	1	C	1	D	1	C	Add one left lane	2	D	1	C	1	D	1	C		2	D		
	WBT	1		1		1			1		1		1		1			1			
	WBR	1		1		1			1		1		1		1			1			
	NBL	1	C	1	D	1	C	Add one left lane	2	C	1	C	1	D	1	C		2	C		
	NBT	2		2		2		Add one Thru lane	2		2		2		2			2			
	NBR	0		0		0			0		0		0		0			0			
	SBL	1	D	1	E	1	D		1	D	1	D	1	E	1	D		1	D		
	SBT	2		2		2			2		2		2		2			2			
	SBR	0		0		0			0		0		0		0			0			

Appendix: Year 2020 Intersection Mitigation Summary

		Background Without Mitigation				Background With Mitigation					Year 2020 Combined ADM & Graham Without Mitigation				Year 2020 Combined ADM & Graham With Mitigation					Improvements	
Intersection ID	Movement	AM		PM		AM		Proposed Mitigation by 2020	PM		AM		PM		AM		Proposed Mitigation by 2020	PM		Imp (ADM)	Fair Share ADM
		Tot NL	LOS	Tot NL	LOS	Tot NL	LOS		Tot NL	LOS	Tot NL	LOS	Tot NL	LOS	Tot NL	LOS		Tot NL	LOS		
53 W 84th St & Hialeah Gardens Blvd	EBL	1	F	1	E	1	F	Add one left lane	2	E	1	F	1	F	1	F		2	E		
	EBT	1		1		1		Add Two Thru lanes	3		1		1		1			3			
	EBR	0		0		0		Add one Right lane	1		0		0		0			1			
	WBL	1	E	1	F	1	E	Add one left lane	2	F	1	E	1	F	1	E		2	F		
	WBT	1		1		1			1		1		1		1			1			
	WBR	0		0		0		Add one Right lane	1		0		0		0			1			
	NBL	1	F	1	D	1	F		1	D	1	F	1	D	1	F		1	D		
	NBT	2		2		2			2		2		2		2			2			
	NBR	0		0		0			0		0		0		0			0			
	SBL	1	F	1	F	1	F	Add one left lane	2	C	1	F	1	F	2	C	Add one left lane	2	C		
	SBT	2		2		2			2		2		2		2			2			
	SBR	0		0		0			0		0		0		0			0			
54 138th St/ I-75 Ramp(E) & Hialeah Gardens Blvd	EBL	2	F	2	F	2	F		2	F	2	F	2	F	2	F		2	F		
	EBT	2		2		2		Add Two Thru lanes	3		2		2		2			3			
	EBR	1		1		1			1		1		1		1			1			
	WBL	2	D	2	F	2	D		2	E	2	D	2	F	2	D		2	E		
	WBT	2		2		2		Add Two Thru lanes	3		2		2		2			3			
	WBR	0		0		0			0		0		0		0		Add one Right lane	1			
	NBL	1	D	1	F	1	D	Add one left lane	2	D	1	D	1	F	1	D		2	D		
	NBT	2		2		2			2		2		2		2			2			
	NBR	1		1		1			1		1		1		1			1			
	SBL	0	F	0	D	0	C		0	D	0	F	0	D	0	D		0	D		
	SBT	2		2		3		Add one Thru lane	2		2		2		3			2			
	SBR	1		1		1			1		1		1		1			1			

Legend

- Project trips are not significant on link
- Improvement required due to Background LOS analysis
- Improvement required due to ADM future LOS analysis
- Improvement required due to Graham future LOS analysis
- Improvement required due to Combined (ADM and Graham) future LOS analysis

APPENDIX IV-E:
Year 2040 Zoning Intersection Combined Mitigation Summary

Appendix: Year 2040 Intersection Mitigation Summary

		Background WithOut Mitigation				Background With Mitigation					Year 2040 Combined ADM & Graham Without Mitigation				Year 2040 Combined ADM & Graham With Mitigation					Improvements			
Intersection ID	Movement	AM		PM		AM		Proposed Mitigation by 2040	PM		AM		PM		AM		Proposed Mitigation by 2040	PM		Imp (ADM)	Fair Share ADM	Imp (Graham)	Fair Share of Graham
		Tot NL	LOS	Tot NL	LOS	Tot NL	LOS		Tot NL	LOS	Tot NL	LOS	Tot NL	LOS	Tot NL	LOS		Tot NL	LOS				
1 NW186th St/Miami Gardens Dr & NW 87th Ave	EBL	2	F	2	E	2	F		2	E	2	F	2	F	2	F		2	E				
	EBT	2		2		3		Add one Thru lane	2		2		2		3			2					
	EBR	1		1		1			1		1		1		1			1					
	WBL	1	F	1	0	2	F		2	D	1	F	1	F	2	F		2	E				
	WBT	3		3		3			3		3		3		3			3					
	WBR	0		0		1			1		0		0		1			1					
	NBL	1	F	1	F	2	F		2	F	1	F	1	F	2	F		2	F				
	NBT	2		2		3			3		2		2		3			3					
	NBR	0		0		1			1		0		0		1			1					
	SBL	1	F	1	F	1	F		2	F	1	F	1	F	1	F		2	F				
	SBT	1		1		3			3		1		1		3			3					
	SBR	1		1		1			1		1		1		1			1					
2 NW 186th St/ Miami Garden Dr & NW 82nd Ave	EBL	1	D	1	F	1	D	Add one left lane	2	D	1	E	1	F	1	D		2	D				
	EBT	2		2		2			2		2		2		2		Add one thru lane	3		Yes	8.59%	Yes	11.02%
	EBR	0		0		1		Add one right lane	1		0		0		1			1					
	WBL	1	F	1	F	1	D	Add one left lane	2	C	1	F	1	F	1	D		2	D				
	WBT	2		2		2			2		2		2		3		Add one thru lane	2		Yes	7.46%	Yes	14.18%
	WBR	0		0		1		Add one right lane	0		0		0		1			0					
	NBL	1	F	1	F	2	E	Add one left lane	2	E	1	F	1	F	2	E		2	E				
	NBT	1		1		1			1		1		1		1			1					
	NBR	0		0		1		Add one right lane	1		0		0		1			1					
	SBL	1	F	1	E	2	E	Add one left lane	2	E	1	F	1	E	2	F		2	E				
	SBT	1		1		2		Add one thru lane	1		1		1		2			1					
	SBR	1		1		1			1		1		1		1			1					
3 NW 186th ST/ Miami Garden Dr & NW 79th Ave	EBL	1	D	1	D	1	E		2	C	1	E	1	F	1	F		2	C				
	EBT	2		2		2			2		2		2		2			2					
	EBR	0		0		0			0		0		0		0			0					
	WBL	0	F	0	C	0	B		0	C	0	F	0	D	0	B		0	D				
	WBT	2		2		3		Add one thru lane	2		2		2		3			2					
	WBR	0		0		1		Add one right lane	0		0		0		1			0					
	NBL	0	-	0	-	0	-		0	-	0	-	0	-	0	-		0	-				
	NBT	0		0		0			0		0		0		0			0					
	NBR	0		0		0			0		0		0		0			0					
	SBL	1	F	1	F	2	D		1	F	1	E	1	E	2	D		1	E				
	SBT	0		0		0			0		0		0		0			0					
	SBR	1		1		1			1		1		1		1			1					

Appendix: Year 2040 Intersection Mitigation Summary

		Background WithOut Mitigation				Background With Mitigation					Year 2040 Combined ADM & Graham Without Mitigation				Year 2040 Combined ADM & Graham With Mitigation					Improvements			
Intersection ID	Movement	AM		PM		AM		Proposed Mitigation by 2040	PM		AM		PM		AM		Proposed Mitigation by 2040	PM		Imp (ADM)	Fair Share ADM	Imp (Graham)	Fair Share of Graham
		Tot NL	LOS	Tot NL	LOS	Tot NL	LOS		Tot NL	LOS	Tot NL	LOS	Tot NL	LOS	Tot NL	LOS		Tot NL	LOS				
4 NW 186th ST/ Miami Garden Dr & W Oakmont Dr	EBL	1	A	1	B	1	A	Add one left lane	2	B	1	B	1	C	1	B		2	C				
	EBT	2		2		2			2		2		2		2			2					
	EBR	0		0		1		Add one right lane	0		0		0		1			0					
	WBL	1	B	1	C	1	A	Add one left lane	2	B	1	C	1	C	1	A		2	B				
	WBT	2		2		3		Add one thru lane	2		2		2		3			2					
	WBR	0		0		1		Add one right lane	0		0		0		1			0					
	NBL	0	F	0	F	2	D	Add one left lane	2	F	0	F	0	F	2	D		2	F				
	NBT	1		1		1			1		1		1		1		Add one thru lane	2					
	NBR	1		1		1			1		1		1		1			1					
	SBL	0	E	0	F	1	E		2	F	0	F	0	F	1	F		2	F				
	SBT	1		1		1			1		1		1		1			1					
	SBR	1		1		1			1		1		1		1			1					
5 NW 175th PL & NW 186th ST/ Miami Garden Dr	EBL	0	D	0	D	0	C		0	C	0	E	0	F	0	C		0	C				
	EBT	2		2		3		Add one thru lane	3		2		2		3			3					
	EBR	0		0		0			0		0		0		0			0					
	WBL	1	F	1	E	2	E	Add one left lane	2	C	1	F	1	E	2	E		2	C				
	WBT	2		2		2			2		2		2		2			2					
	WBR	0		0		0			0		0		0		0			0					
	NBL	1	E	1	F	1	E	Add one left lane	2	F	1	C	1	F	1	D		2	F				
	NBT	0		0		0			0		0		0		0			0					
	NBR	1		1		1			1		1		1		1			1					
	SBL	0	-	0	-	0	-		0	-	0	-	0	-	0	-		0	-				
	SBT	0		0		0			0		0		0		0			0					
	SBR	0		0		0			0		0		0		0			0					
6 NW 73th Ave & NW 186th St/ Miami Garden Dr	EBL	1	B	1	B	1	B	Add one left lane	2	C	1	B	1	C	1	B		2	C				
	EBT	2		2		2			2		2		2		2			2					
	EBR	0		0		0			0		0		0		0			0					
	WBL	1	C	1	D	1	B	Add one left lane	2	C	1	C	1	D	1	B		2	C				
	WBT	2		2		3		Add one thru lane	2		2		2		3			2					
	WBR	0		0		0			0		0		0		0			0					
	NBL	1	C	1	E	1	C		1	E	1	C	1	E	1	C		1	E				
	NBT	1		1		1			1		1		1		1			1					
	NBR	0		0		0			0		0		0		0			0					
	SBL	0	B	0	D	0	B		0	D	0	B	0	D	0	B		0	D				
	SBT	1		1		1			1		1		1		1			1					
	SBR	0		0		0			0		0		0		0			0					

Appendix: Year 2040 Intersection Mitigation Summary

		Background WithOut Mitigation				Background With Mitigation					Year 2040 Combined ADM & Graham Without Mitigation				Year 2040 Combined ADM & Graham With Mitigation					Improvements			
Intersection ID	Movement	AM		PM		AM		Proposed Mitigation by 2040	PM		AM		PM		AM		Proposed Mitigation by 2040	PM		Imp (ADM)	Fair Share ADM	Imp (Graham)	Fair Share of Graham
		Tot NL	LOS	Tot NL	LOS	Tot NL	LOS		Tot NL	LOS	Tot NL	LOS	Tot NL	LOS	Tot NL	LOS		Tot NL	LOS				
7 NW 186th St / Miami Gardens Dr & NW 68 Ave	EBL	1	C	1	C	1	E		1	C	1	E	1	D	1	F		1	D				
	EBT	2		2		2			2		2		2		2			2					
	EBR	0		0		1		Add one right lane	0		0		0		1			0					
	WBL	1	E	1	C	1	B		1	C	1	E	1	D	1	C		1	D				
	WBT	2		2		2			2		2		2		2			2					
	WBR	0		0		0			0		0		0		0			0					
	NBL	1	D	1	F	1	D	Add one left lane	2	F	1	C	1	F	1	C		2	F				
	NBT	1		1		1			1		1		1		1			1					
	NBR	1		1		1			1		1		1		1			1					
	SBL	0	B	0	E	0	B		0	E	0	B	0	E	0	B		0	E				
	SBT	1		1		1			1		1		1		1			1					
	SBR	0		0		0			0		0		0		0			0					
8 NW 186th St / Miami Garden Dr & Bobolink Dr	EBL	1	F	1	F	1	F		1	F	1	F	1	F	1	F		1	F				
	EBT	2		2		2			2		2		2		2			2					
	EBR	0		0		0			0		0		0		0			0					
	WBL	1	F	1	F	1	F		1	E	1	F	1	F	1	F		1	F				
	WBT	2		2		2		Add one thru lane	3		2		2		2			3					
	WBR	0		0		0		Add one right lane	1		0		0		0			1					
	NBL	0	B	0	B	0	B		0	B	0	B	0	B	0	B		0	B				
	NBT	1		1		1			1		1		1		1			1					
	NBR	0		0		0			0		0		0		0			0					
	SBL	1	B	1	B	1	B		1	B	1	B	1	B	1	B		1	B				
	SBT	1		1		1			1		1		1		1			1					
	SBR	0		0		0			0		0		0		0			0					
9 NW 186th St / Miami Gardens Dr & NW 67th Ave	EBL	2	E	2	F	2	E		2	F	2	F	2	F	2	E		2	F				
	EBT	3		3		3			3		3		3		3			3					
	EBR	0		0		1		Add one right lane	0		0		0		1			0					
	WBL	2	D	2	E	2	D		2	E	2	E	2	F	2	D		2	F				
	WBT	3		3		3			3		3		3		3			3					
	WBR	0		0		1		Add one right lane	0		0		0		1			0					
	NBL	2	E	2	F	2	D		2	F	2	E	2	F	2	D		2	F				
	NBT	3		3		3			3		3		3		3			3					
	NBR	0		0		1		Add one right lane	0		0		0		1			0					
	SBL	2	F	2	F	2	E		2	F	2	F	2	F	2	E		2	F				
	SBT	3		3		3			3		3		3		3			3					
	SBR	0		0		1		Add one right lane	1		0		0		1			1					

Appendix: Year 2040 Intersection Mitigation Summary

		Background WithOut Mitigation				Background With Mitigation					Year 2040 Combined ADM & Graham Without Mitigation				Year 2040 Combined ADM & Graham With Mitigation					Improvements			
Intersection ID	Movement	AM		PM		AM		Proposed Mitigation by 2040	PM		AM		PM		AM		Proposed Mitigation by 2040	PM		Imp (ADM)	Fair Share ADM	Imp (Graham)	Fair Share of Graham
		Tot NL	LOS	Tot NL	LOS	Tot NL	LOS		Tot NL	LOS	Tot NL	LOS	Tot NL	LOS	Tot NL	LOS		Tot NL	LOS				
10 NW 186th St/ Miami Gardens Dr & NW 62th Ave	EBL	1	F	1	F	1	C	Add one left lane	2	D	1	D	1	E	1	C		2	D				
	EBT	2		2		3		Add one thru lane	2		2		2		3			2					
	EBR	0		0		0			0		0		0		0			0					
	WBL	0	B	0	C	0	B		0	C	0	B	0	D	0	B		0	D				
	WBT	2		2		2			2		2		2		2			2					
	WBR	0		0		0			0		0		0		0			0					
	NBL	1	F	1	F	1	F		2	F	1	F	1	F	1	F		2	F				
	NBT	1		1		1			1		1		1		1			1					
	NBR	1		1		1			1		1		1		1			1					
	SBL	1	F	1	F	2	F	Add one left lane	2	F	1	F	1	F	2	F		2	F				
	SBT	1		1		1			1		1		1		1			1					
	SBR	1		1		1			1		1		1		1			1					
11 NW 186th St / Miami Gardens Dr & 823 St /Red road	EBL	2	F	2	F	2	F		2	F	2	F	2	F	2	F		2	F				
	EBT	3		3		3			3		3		3		3			3					
	EBR	0		0		1		Add one right lane	1		0		0		1			1					
	WBL	2	E	2	F	2	E		2	F	2	E	2	F	2	E		2	F				
	WBT	3		3		3			3		3		3		3			3					
	WBR	1		1		1			1		1		1		1			1					
	NBL	2	D	2	E	2	D		2	E	2	D	2	E	2	D		2	E				
	NBT	3		3		3			3		3		3		3			3					
	NBR	0		0		1		Add one right lane	0		0		0		1			0					
	SBL	2	E	2	D	2	E		2	D	2	E	2	D	2	E		2	D				
	SBT	3		3		3			3		3		3		3			3					
	SBR	0		0		1		Add one right lane	0		0		0		1			0					
12 NW 97th Ave/ W 36th Ave & NW 138 th St/ W 84th St	EBL	2	E	2	E	2	E		2	E	2	E	2	E	2	E		2	E				
	EBT	3		3		3			3		3		3		3			3					
	EBR	0		0		0			0		0		0		0			0					
	WBL	2	F	2	F	2	F		2	F	2	F	2	F	2	F		2	F				
	WBT	3		3		3			3		3		3		3			3					
	WBR	1		1		1			1		1		1		1			1					
	NBL	1	C	1	D	1	C		1	D	1	C	1	D	1	C		1	D				
	NBT	2		2		2			2		2		2		2			2					
	NBR	0		0		0			0		0		0		0			0					
	SBL	2	C	2	D	2	C		2	D	2	C	2	D	2	C		2	D				
	SBT	2		2		2			2		2		2		2			2					
	SBR	1		1		1			1		1		1		1			1					

Appendix: Year 2040 Intersection Mitigation Summary

		Background WithOut Mitigation				Background With Mitigation					Year 2040 Combined ADM & Graham Without Mitigation				Year 2040 Combined ADM & Graham With Mitigation					Improvements			
Intersection ID	Movement	AM		PM		AM		Proposed Mitigation by 2040	PM		AM		PM		AM		Proposed Mitigation by 2040	PM		Imp (ADM)	Fair Share ADM	Imp (Graham)	Fair Share of Graham
		Tot NL	LOS	Tot NL	LOS	Tot NL	LOS		Tot NL	LOS	Tot NL	LOS	Tot NL	LOS	Tot NL	LOS		Tot NL	LOS				
13 NW 130th St & NW 97th Ave / W 36th Ave	EBL	0	B	0	D	0	B		0	D	0	B	0	E	0	B		0	E				
	EBT	1		1		1			1		1		1		1			1					
	EBR	0		0		0			0		0		0		0			0					
	WBL	0	B	0	B	0	B		0	B	0	B	0	B	0	B		0	B				
	WBT	1		1		1			1		1		1		1			1					
	WBR	1		1		1			1		1		1		1			1					
	NBL	1	A	1	A	1	A		1	A	1	A	1	B	1	A		1	B				
	NBT	1		1		1			1		1		1		1			1					
	NBR	0		0		0			0		0		0		0			0					
	SBL	1	A	1	B	1	A		1	B	1	A	1	B	1	A		1	B				
	SBT	1		1		1			1		1		1		1			1					
	SBR	0		0		0			0		0		0		0			0					
14 N Okeechobee Rd & Ronal Reagan Turnpike Ramp (S)	EBL	1	E	1	B	2	D	Add one left lane	1	B	1	E	1	B	2	D		1	B				
	EBT	2		2		2		Add one thru lane	2		2		2		2			2					
	EBR	1		1		1			1		1		1		1			1					
	WBL	1	F	1	C	1	D		1	C	1	F	1	C	1	D		1	C				
	WBT	2		2		2			2		2		2		2			2					
	WBR	1		1		1			1		1		1		1			1					
	NBL	0	F	0	F	0	F		0	E	0	F	0	F	0	F		0	E				
	NBT	1		1		1		Add one thru lane	2		1		1		1			2					
	NBR	0		0		1		Add one right lane	0		0		0		1			0					
	SBL	2	F	2	F	2	F		2	F	2	F	2	F	2	F		2	F				
	SBT	1		1		1			1		1		1		1			1					
	SBR	1		1		1			1		1		0		1			1					
15 N Okeechobee Rd & Ronal Reagan Turnpike Ramp (N)	EBL	1	F	1	B	1	F		1	B	1	F	1	B	1	F		1	B				
	EBT	2		2		2			2		2		2		2			2					
	EBR	0		0		0			0		0		0		0			0					
	WBL	0	F	0	F	0	F		0	F	0	F	0	F	0	F		0	F				
	WBT	2		2		2		Add one thru lane	3		2		2		2			3					
	WBR	1		1		1			1		1		1		1			1					
	NBL	0	-	0	-	0	-		0	-	0	-	0	-	0	-		0	-				
	NBT	0		0		0			0		0		0		0			0					
	NBR	0		0		0			0		0		0		0			0					
	SBL	2	D	2	D	2	D		2	D	2	D	2	D	2	D		2	D				
	SBT	0		0		0			0		0		0		0			0					
	SBR	1		1		1			1		1		1		1			1					

Appendix: Year 2040 Intersection Mitigation Summary

		Background WithOut Mitigation				Background With Mitigation					Year 2040 Combined ADM & Graham Without Mitigation				Year 2040 Combined ADM & Graham With Mitigation					Improvements			
Intersection ID	Movement	AM		PM		AM		Proposed Mitigation by 2040	PM		AM		PM		AM		Proposed Mitigation by 2040	PM		Imp (ADM)	Fair Share ADM	Imp (Graham)	Fair Share of Graham
		Tot NL	LOS	Tot NL	LOS	Tot NL	LOS		Tot NL	LOS	Tot NL	LOS	Tot NL	LOS	Tot NL	LOS		Tot NL	LOS				
16 Ronal Reagan Turnpike Ramp (E) & 823 St/ Red Road	EBL	2	E	2	F	2	E		2	F	2	E	2	F	2	E		2	F				
	EBT	0		0		0			0		0		0		0			0					
	EBR	1		1		1			1		1		1		1			1					
	WBL	0	C	0	-	0	-		0	-	0	-	0	-	0	-		0	-				
	WBT	0		0		0			0		0		0		0			0					
	WBR	0		0		0			0		0		0		0			0					
	NBL	2	-	2	B	2	C		2	B	2	C	2	B	2	C		2	B				
	NBT	3		3		3			3		3		3		3			3					
	NBR	0		0		0			0		0		0		0			0					
	SBL	0	F	0	C	0	F		0	C	0	F	0	D	0	F		0	D				
	SBT	3		3		3			3		3		3		3			3					
	SBR	1		1		1			1		1		1		1			1					
17 823 St/ Red road & Ronald Reagan Turnpike Ramp (W)	EBL	0	-	0	-	0	-		0	-	0	-	0	-	0	-		0	-				
	EBT	0		0		0			0		0		0		0			0					
	EBR	0		0		0			0		0		0		0			0					
	WBL	2	F	2	F	2	F		2	F	2	F	2	F	2	F		2	F				
	WBT	0		0		0			0		0		0		0			0					
	WBR	2		2		3		Add one right lane	2		2		2		2			2					
	NBL	0	C	0	C	0	C		0	C	0	C	0	C	0	C		0	C				
	NBT	3		3		3			3		3		3		3			3					
	NBR	1		1		1			1		1		1		1			1					
	SBL	2	B	2	B	2	B		2	B	2	B	2	B	2	B		2	B				
	SBT	3		3		3			3		3		3		3			3					
	SBR	0		0		0			0		0		0		0			0					
20 N Okeechobee Rd / N Okeechobee Rd & NW 138 St	EBL	1	F	1	F	1	F	Add one left lane	2	D	1	F	1	F	1	F		2	D				
	EBT	3		3		3			3		3		3		3			3					
	EBR	1		1		1			1		1		1		1			1					
	WBL	1	D	1	E	1	D	Add one left lane	2	E	1	D	1	F	1	D		2	F				
	WBT	3		3		3			3		3		3		3			3					
	WBR	1		1		1			1		1		1		1			1					
	NBL	1	E	1	F	1	F	Add one left lane	2	F	1	E	1	F	1	F		2	F				
	NBT	2		2		2			2		2		2		2			2					
	NBR	0		0		0			0		0		0		0			0					
	SBL	0	F	0	F	1	F	Add one left lane	1	F	0	F	0	F	1	F	Prot LF Ln	1	F				
	SBT	1		1		1			1		1		1		1			1					
	SBR	2		2		2			2		2		2		2			2					

Appendix: Year 2040 Intersection Mitigation Summary

		Background WithOut Mitigation				Background With Mitigation					Year 2040 Combined ADM & Graham Without Mitigation				Year 2040 Combined ADM & Graham With Mitigation					Improvements			
Intersection ID	Movement	AM		PM		AM		Proposed Mitigation by 2040	PM		AM		PM		AM		Proposed Mitigation by 2040	PM		Imp (ADM)	Fair Share ADM	Imp (Graham)	Fair Share of Graham
		Tot NL	LOS	Tot NL	LOS	Tot NL	LOS		Tot NL	LOS	Tot NL	LOS	Tot NL	LOS	Tot NL	LOS		Tot NL	LOS				
23 N Okeechobee Rd & Hisleah Gardens Blvd	EBL	2	E	2	F	2	E		2	F	2	E	2	F	2	E		2	F				
	EBT	3		3		3			3		3		3		3			3					
	EBR	1		1		1			1		1		1		1			1					
	WBL	2	F	2	E	2	F		2	E	2	F	2	F	2	F		2	F				
	WBT	3		3		3			3		3		3		3			3					
	WBR	2		2		2			2		2		2		2			2					
	NBL	2	D	2	F	2	D		2	F	2	D	2	F	2	D		2	F				
	NBT	2		2		3		Add one thru lane	3		2		2		3			3					
	NBR	0		0		1		Add one right lane	1		0		0		1			1					
	SBL	2	F	2	F	2	F		2	F	2	F	2	F	2	F		2	F				
	SBT	2		2		3		Add one thru lane	2		2		2		3			2					
	SBR	0		0		1		Add one right lane	0		0		0		1			0					
36 I-75 Ramp(N) & Miramar Pkwy	EBL	2	D	2	C	2	D		2	C	2	E	0	C	2	E		2	C				
	EBT	3		3		3			3		3		3		3			3					
	EBR	0		0		0			0		0		1		0			0					
	WBL	0	B	0	B	0	B		0	B	0	B	2	B	0	B		0	B				
	WBT	3		3		3			3		3		3		3			3					
	WBR	1		1		1			1		1		0		1			1					
	NBL	0	A	0	A	0	A		0	A	0	A	0	A	0	A		0	A				
	NBT	0		0		0			0		0		0		0			0					
	NBR	2		2		2			2		2		0		2			2					
	SBL	0	-	0	-	0	-		0	-	0	-	0	-	0	-		0	-				
	SBT	0		0		0			0		0		0		0			0					
	SBR	0		0		0			0		0		2		0			0					
37 I-75 Ramp(S) & Miramar Pkwy	EBL	0	B	0	B	0	B		0	B	0	B	0	B	0	B		0	B				
	EBT	3		3		3			3		3		3		3			3					
	EBR	1		1		1			1		1		1		1			1					
	WBL	2	D	2	A	2	D		2	A	2	E	2	B	2	E		2	B				
	WBT	3		3		3			3		3		3		3			3					
	WBR	0		0		0			0		0		0		0			0					
	NBL	0	-	0	-	0	-		0	-	0	-	0	-	0	-		0	-				
	NBT	0		0		0			0		0		0		0			0					
	NBR	0		0		0			0		0		0		0			0					
	SBL	0	A	0	A	0	A		0	A	0	A	0	A	0	A		0	A				
	SBT	0		0		0			0		0		0		0			0					
	SBR	2		2		2			2		2		2		2			2					

Appendix: Year 2040 Intersection Mitigation Summary

		Background WithOut Mitigation				Background With Mitigation					Year 2040 Combined ADM & Graham Without Mitigation				Year 2040 Combined ADM & Graham With Mitigation					Improvements			
Intersection ID	Movement	AM		PM		AM		Proposed Mitigation by 2040	PM		AM		PM		AM		Proposed Mitigation by 2040	PM		Imp (ADM)	Fair Share ADM	Imp (Graham)	Fair Share of Graham
		Tot NL	LOS	Tot NL	LOS	Tot NL	LOS		Tot NL	LOS	Tot NL	LOS	Tot NL	LOS	Tot NL	LOS		Tot NL	LOS				
38 Pines Blvd & I-75 Ramp (N)	EBL	2	D	2	A	2	D		2	A	2	D	2	A	2	D		2	A				
	EBT	3		3		3			3		3		3		3			3					
	EBR	0		0		0			0		0		0		0			0					
	WBL	0	C	0	B	0	C		0	B	0	C	0	B	0	C		0	B				
	WBT	3		3		3			3		3		3		3			3					
	WBR	2		2		2			2		2		2		2			2					
	NBL	0	A	0	A	0	A		0	A	0	A	0	A	0	A		0	A				
	NBT	0		0		0			0		0		0		0			0					
	NBR	3		3		3			3		3		3		3			3					
	SBL	0	A	0	A	0	A		0	A	0	A	0	A	0	A		0	A				
	SBT	0		0		0			0		0		0		0			0					
	SBR	3		3		3			3		3		3		3			3					
39 I-75 Ramp(S) & Pines Blvd/ Pines Blvd	EBL	0	D	0	B	0	D		0	B	0	C	0	C	0	C		0	C				
	EBT	3		3		3			3		3		3		3			3					
	EBR	2		2		2			2		2		2		2			2					
	WBL	2	E	2	B	2	E		2	B	2	F	2	B	2	F		2	B				
	WBT	3		3		3			3		3		3		3			3					
	WBR	0		0		0			0		0		0		0			0					
	NBL	0	A	0	A	0	A		0	A	0	A	0	A	0	A		0	A				
	NBT	0		0		0			0		0		0		0			0					
	NBR	3		3		3			3		3		3		3			3					
	SBL	0	A	0	A	0	A		0	A	0	A	0	A	0	A		0	A				
	SBT	0		0		0			0		0		0		0			0					
	SBR	3		3		3			3		3		3		3			3					
44 W 68th St & Hialeah Gardens Blvd	EBL	1	E	1	F	1	D	Add one left lane	2	E	1	E	1	F	1	D		2	F				
	EBT	2		2		2		Add one thru lane	3		2		2		2			3					
	EBR	0		0		1		Add one right lane	1		0		0		1			1					
	WBL	1	F	1	F	2	F	Add one left lane	2	E	1	F	1	F	2	F		2	F				
	WBT	2		2		2			2		2		2		2			2					
	WBR	0		0		0		Add one right lane	1		0		0		0			1					
	NBL	1	E	1	F	1	E	Add one left lane	2	D	1	E	1	F	1	E		2	E				
	NBT	2		2		2			2		2		2		2			2					
	NBR	0		0		0		Add one right lane	1		0		0		0			1					
	SBL	1	F	1	E	1	F	Add one left lane	2	C	1	F	1	F	1	F		2	D				
	SBT	2		2		2			2		2		2		2			2					
	SBR	0		0		0			0		0		0		0			0					

Appendix: Year 2040 Intersection Mitigation Summary

		Background WithOut Mitigation				Background With Mitigation					Year 2040 Combined ADM & Graham Without Mitigation				Year 2040 Combined ADM & Graham With Mitigation					Improvements			
Intersection ID	Movement	AM		PM		AM		Proposed Mitigation by 2040	PM		AM		PM		AM		Proposed Mitigation by 2040	PM		Imp (ADM)	Fair Share ADM	Imp (Graham)	Fair Share of Graham
		Tot NL	LOS	Tot NL	LOS	Tot NL	LOS		Tot NL	LOS	Tot NL	LOS	Tot NL	LOS	Tot NL	LOS		Tot NL	LOS				
50 NW 170th St & NW 87th Ave	EBL	1	F	1	D	1	D		1	D	1	F	1	D	1	E		1	D				
	EBT	1		1		1			1		1		1		1			1					
	EBR	0		0		1		Add one right lane	0		0		0		1			0					
	WBL	1	F	1	E	2	F	Add one left lane	2	D	1	F	1	E	2	F		2	D				
	WBT	1		1		1			1		1		1		1			1					
	WBR	1		1		1			1		1		1		1			1					
	NBL	1	D	1	D	1	D		1	D	1	D	1	D	1	D		1	D				
	NBT	2		2		2			2		2		2		2			2					
	NBR	0		0		0			0		0		0		0			0					
	SBL	1	F	1	F	1	F		1	F	1	F	1	F	1	F		1	F				
	SBT	2		2		2			2		2		2		2			2					
	SBR	0		0		0			0		0		0		0			0					
51 130th St & Hialeah Gardens Blvd	EBL	1	F	1	F	1	F	Add one left lane	2	E	1	F	1	F	1	F		2	E				
	EBT	1		1		2		Add one thru lane	2		1		1		2			2					
	EBR	0		0		0		Add one right lane	1		0		0		0			1					
	WBL	1	F	1	F	2	F	Add one left lane	2	E	1	F	1	F	2	F		2	E				
	WBT	1		1		1			1		1		1		1			1					
	WBR	1		1		1			1		1		1		1			1					
	NBL	1	E	1	F	1	E		1	C	1	F	1	F	1	F		1	D				
	NBT	2		2		2		Add one thru lane	3		2		2		2			3					
	NBR	0		0		0			0		0		0		0			0					
	SBL	1	F	1	F	2	F	Add one left lane	1	F	1	F	1	F	2	F		1	F				
	SBT	2		2		2			2		2		2		2			2					
	SBR	0		0		0			0		0		0		0			0					
52 & Hialeah Gardens Blvd	EBL	1	C	1	E	1	C	Add one left lane	2	D	1	C	1	E	1	C		2	D				
	EBT	1		1		1			1		1		1		1			1					
	EBR	1		1		1			1		1		1		1			1					
	WBL	1	C	1	D	1	C	Add one left lane	2	D	1	C	1	D	1	C		2	D				
	WBT	1		1		1			1		1		1		1			1					
	WBR	1		1		1			1		1		1		1			1					
	NBL	1	C	1	D	1	C	Add one left lane	2	D	1	C	1	D	1	C		2	D				
	NBT	2		2		2			2		2		2		2			2					
	NBR	0		0		0			0		0		0		0			0					
	SBL	1	E	1	F	2	C	Add one left lane	1	F	1	E	1	F	2	C		1	F				
	SBT	2		2		2			2		2		2		2		a Thru Ln	2					
	SBR	0		0		0			0		0		0		0			0					

Appendix: Year 2040 Intersection Mitigation Summary

Intersection ID	Movement	Background WithOut Mitigation				Background With Mitigation					Year 2040 Combined ADM & Graham Without Mitigation				Year 2040 Combined ADM & Graham With Mitigation					Improvements			
		AM		PM		AM		Proposed Mitigation by 2040	PM		AM		PM		AM		Proposed Mitigation by 2040	PM		Imp (ADM)	Fair Share ADM	Imp (Graham)	Fair Share of Graham
		Tot NL	LOS	Tot NL	LOS	Tot NL	LOS		Tot NL	LOS	Tot NL	LOS	Tot NL	LOS	Tot NL	LOS		Tot NL	LOS				
53 W 84th St & Hialeah Gardens Blvd	EBL	1	F	1	F	1	D	Add one left lane	2	E	1	F	1	F	1	D		2	E				
	EBT	1		1		1		Add one thru lane	3		1		1		1			3					
	EBR	0		0		0		Add one right lane	1		0		0		0			1					
	WBL	1	F	1	F	1	F	Add one left lane	2	F	1	F	1	F	1	F		2	F				
	WBT	1		1		1			1		1		1		1		Thru Ln	1					
	WBR	0		0		1		Add one right lane	1		0		0		1			1					
	NBL	1	F	1	E	1	E		1	E	1	F	1	F	1	F		1	F				
	NBT	2		2		3		Add one thru lane	2		2		2		3			2					
	NBR	0		0		0			0		0		0		0			0					
	SBL	1	F	1	F	2	E	Add one left lane	2	C	1	F	1	F	2	E		2	D				
	SBT	2		2		2			2		2		2		2			2					
	SBR	0		0		0			0		0		0		0			0					
54 138th St/ I-75 Ramp(E) & Hialeah Gardens Blvd	EBL	2	F	2	F	2	F		2	F	2	F	2	F	2	F		2	F				
	EBT	2		2		3		Add one thru lane	3		2		2		3			3					
	EBR	1		1		1			1		1		1		1			1					
	WBL	2	E	2	F	2	D		2	F	2	E	2	F	2	E		2	F				
	WBT	2		2		3		Add one thru lane	3		2		2		3			3					
	WBR	0		0		0			0		0		0		0			0					
	NBL	1	E	1	F	2	C	Add one left lane	2	E	1	E	1	F	2	C		2	E				
	NBT	2		2		2			2		2		2		2			2					
	NBR	1		1		1			1		1		1		1			1					
	SBL	0	F	0	D	1	F	Add one left lane	0	D	0	F	0	F	1	F		0	F				
	SBT	2		2		3		Add one thru lane	2		2		2		3			2					
	SBR	1		1		1			1		1		1		1			1					

Legend

- Project trips are not significant on link
- Improvement required due to Background LOS analysis
- Improvement required due to ADM future LOS analysis
- Improvement required due to Graham future LOS analysis
- Improvement required due to Combined (ADM and Graham) future LOS analysis