

INITIAL RECOMMENDATION

PARKLAND DRI APPLICATION TO AMEND THE COMPREHENSIVE DEVELOPMENT MASTER PLAN

Part 1

FOR MIAMI-DADE COUNTY, FLORIDA



October 20, 2008

(Updated November 7, 2008, November 19, 2008, and December 9, 2008)

Carlos Alvarez
Mayor

BOARD OF COUNTY COMMISSIONERS

Bruno A. Barreiro
Chairman

Barbara J. Jordan
Vice Chairwoman

Barbara Jordan
District 1

Dorrian D. Rolle
District 2

Audrey Edmonson
District 3

Sally A. Heyman
District 4

Bruno A. Barreiro
District 5

Rebeca Sosa
District 6

Carlos A. Gimenez
District 7

Katy Sorenson
District 8

Dennis C. Moss
District 9

Senator Javier D. Souto
District 10

Joe A. Martinez
District 11

José "Pepe" Diaz
District 12

Natacha Seijas
District 13

George M. Burgess
County Manager

R. A. Cuevas, Jr.
County Attorney

Harvey Ruvin
Clerk of the Courts

MIAMI-DADE COUNTY PLANNING ADVISORY BOARD

Georgina Santiago
Chair

Horacio Carlos Huembes
Vice Chair

Reginald J. Clyne
Antonio Fraga
Pamela Gray
Rolando Iglesias
Eddy Joachin

Daniel Kaplan
Douglas A. Krueger
Serafin Leal
Felipe Llanos
Al Maloof

Ralph Ramirez
William W. Riley
Wayne Rinehart
Christi Sherouse
Jay Sosna

Ivan Rodriguez
School Board Representative

Larry Ventura
Homestead Air Reserve Base Representative

Marc C. LaFerrier, AICP
Executive Secretary

Miami-Dade County provides equal access and equal opportunity in employment and services and does not discriminate on the basis of disability. "It is the policy of Miami-Dade County to comply with all of the requirements of the Americans with Disabilities Act."

INITIAL RECOMMENDATION

PARKLAND DRI APPLICATION TO AMEND THE MIAMI-DADE COUNTY COMPREHENSIVE DEVELOPMENT MASTER PLAN

October 20, 2008

(Updated November 7, 2008, November 19, 2008, and December 9, 2008)

Miami-Dade County Department of Planning and Zoning
1110 Stephen P. Clark Center
111 NW 1 Street
Miami, Florida 33128-1972
(305) 375-2835

(This page intentionally left blank.)

INTRODUCTION

This report contains an Application requesting an amendment to the Miami-Dade County Comprehensive Development Master Plan (CDMP). The Application was filed in association with an Application for Development Approval (ADA) for the Parkland Development of Regional Impact (DRI) (a.k.a. Parkland 2014) and is being processed under a special procedure established in Chapter 380.06, Florida Statutes (F.S.), and Section 2-116.1 of the Code of Miami-Dade County.

The report includes the analysis and initial recommendation for final action to be taken on the Application by the Board of County Commissioners. It also provides an assessment of the consistency of the proposed amendment with the CDMP, the fiscal impact of the proposed amendment on public facilities and services, and presents supporting data, maps and reports associated with the Application. The Department may issue revised recommendations after comments are returned by the State and regional review agencies and before the final public hearings and action.

Concurrent Process

The procedure for processing CDMP amendments concurrently with requests for approval or modification of a Development of Regional Impact (DRI) is established in the County Code, as noted above, and is patterned after the requirements contained in Chapter 163, Part 2, F.S. The concurrent process calls for substantially the same activities as that for standard amendments, except that this procedure: 1) relies largely on the DRI-ADA to provide the background data and analysis necessary to evaluate the proposal to amend the CDMP; 2) modifies the DRI adoption schedule to conform to the Chapter 163, F.S. schedule for adopting comprehensive plan amendments; 3) allows for CDMP amendments to be transmitted outside of the April and October Amendment Cycles; and 4) provides for adoption of the DRI and its associated Development Order (D.O.) Conditions to occur at the same public hearing as the CDMP amendment. The tentative schedule of activities for considering the adoption of the subject Application to amend the CDMP is presented on the following page.

Proposed CDMP Amendment and DRI Changes

The proposed CDMP amendment seeks to expand the Urban Development Boundary (UDB) and change the land use designation on a 961-acre site from “Agricultural” use to residential, commercial, industrial and institutional uses in order to allow the development of a planned community. The intent of the amendment is to allow the development of 6,941 residential units, 200,000 square feet of retail space, 100,000 square feet of medical offices, a 200-bed hospital, 550,000 square feet of industrial/flex space, three schools and various other institutional/civic uses, including a library, a fire station and a police station. The Parkland DRI application site is bounded by SW 136 Street on the north, theoretical SW 152 Street on the south, SW 162 Avenue on the east and SW 177 Avenue (Krome Avenue) on the west. The subject site is located outside of both the 2015 UDB and the 2025 Urban Expansion Area (UEA) boundary.

**Schedule of Activities
Parkland DRI/CDMP Amendment Process**

CDMP Amendment Application Filed	December 21, 2007
CDMP Amendment Application Found Complete	January 18, 2008
Applicant's First Request for Extension*	May 20, 2008
Applicant's Second Request for Extension*	July 1, 2008
West Kendall Community Council (11) Public Hearing to Formulate Recommendations Regarding Transmittal and Subsequent Final Action	October 27, 2008, 6:30 P.M. Jorge Mas Canosa Middle School Auditorium 15735 SW 144 Street
Hearing of the Planning Advisory Board (PAB), Acting as the Local Planning Agency (LPA), to Formulate Recommendations Regarding Transmittal and Subsequent Final Action	November 19, 2008, 9:30 A.M. County Commission Chamber 111 N.W. 1st Street
Board of County Commissioners Hearing and Action on Transmittal of Proposed Amendments to DCA and Review Agencies	December 18, 2008, 9:30 A.M. County Commission Chamber 111 N.W. 1 st Street
Transmittal of Proposed Amendment to DCA for Comment	January 5, 2009* (Approximately 10 working days after Commission Transmittal hearing)
Receipt of DCA Objections, Recommendations, and Comments (ORC) Report	March 20, 2009* (Approximately 60 days after transmittal and 10 working days for DCA to receive package and review it for completeness)*
Hearing of Planning Advisory Board (Local Planning Agency) and Final Recommendations	April 17, 2009* County Commission Chamber (within 30 days after DCA comments received)
Board of County Commissioners Public Hearing and Final Action	May 14, 2009* County Commission Chamber (Not later than 60 days after receipt of DCA comments)

*Dates are tentative and may be subject to extension requests from the Applicant, as permitted by Chapter 380, F.S. and Section 2-116.1 of the Code of Miami-Dade County.

TABLE OF CONTENTS

PART I

INTRODUCTION	i
Schedule of Activities	ii
CHAPTER 1 - RECOMMENDATION AND PRINCIPAL REASONS	1
Application Summary	1
Principal Reasons for Recommendations	4
CHAPTER 2 - PLANNING STAFF ANALYSIS	11
Land Use Considerations	11
Supply and Demand Analysis for Residential, Commercial and Industrial Land and Other Considerations	18
Environmental Conditions	26
Assessment of Impact on Public Facilities and Services	29
Sustainability Analysis	39
Transportation Analysis	46
Consistency Review with CDMP Goals, Objectives, Policies, Concepts and Guidelines	73

PART II

APPENDICES

Appendix A	Map Series	A
Appendix B	Amendment Application, dated December 2007	B
Appendix C	Consolidated Response to Department Issues, dated August 2008	C
Appendix D	Application for Development Approval, dated August 2006	D
Appendix E	South Florida Regional Planning Council Letter: Review of Response to Second Statement of Information Needed, dated April 2007	E
Appendix F	Response to Third Statement of Information Needed, dated September 2008 (includes Letter from Applicant and Revised General Project Description)	F
Appendix G	CDMP Amendment Transportation Analysis: Parkland 2014 DRI Executive Summary, dated October 2008, and Parkland DRI and CDMP Amendment Year 2018 Modeling Evaluation	G
Appendix H	Correspondence	H
Appendix I	Parkland DRI: Comments from the Department of Park & Recreation	I

(This page intentionally left blank.)

CHAPTER 1

RECOMMENDATION AND PRINCIPAL REASONS

Parkland DRI **Commission District 9 Community Council 11**

APPLICATION SUMMARY

Applicant/Representative:	<p>Applicants:</p> <p>Krome Groves Land Trust 10165 NW 19 Street Miami, FL 33172</p> <p>Guherqui International, S.A. 6100 Glades Road, Suite 213 Boca Raton, FL 33434</p> <p>Corsica West II Land Trust 4901 NW 17 Way, Suite 504 Ft. Lauderdale, FL 33309</p> <p>Representatives:</p> <p>Jeffrey Bercow, Esq. and Graham Penn, Esq. Bercow & Radell, P.A. 200 South Biscayne Boulevard, Suite 850 Miami, FL 33131</p>
Location:	Between SW 162 and SW 177 (Krome) Avenues, from SW 136 Street and theoretical SW 152 Street
Total Acreage:	961.15 Acres
Current Land Use Plan Map Designation:	Agriculture
Requested Land Use Plan Map Designation:	<p>Urban Development Boundary (UDB):</p> <p>1. Expand the 2015 UDB to include the application area</p> <p>Land Use Plan (LUP) Map amendments:</p> <p>2. Re-designate approximately 961.15 acres of “Agriculture” on the adopted 2015-2025 Land Use Plan (LUP) Map as follows:</p> <ul style="list-style-type: none">•438.55 acres to Low Density Residential (Parcels 1 and 7)•428.37 acres to Low-Medium Density (Parcels 2 and 5B)•37.24 acres to Business and Office (Parcels 3 and 5A)

- 17.99 acres to Office/Residential (Parcel 4)
 - 39.00 acres to Industrial and Office (Parcel 6)
3. Re-designate the following roadways on the LUP map as “Major Roadways”: SW 136 Street; SW 152 Street; SW 144 Street; SW 162 Avenue; SW 167 Avenue; and SW 172 Avenue.

Other Proposed Amendments:

Land Use Element:

4. Add Policy LU-8H to the Land Use Element requiring any application that seeks to expand the UDB west of SW 177 Avenue (Krome Avenue), between SW 8 Street (Tamiami Trail) and SW 288 Street, to have a total vote of the membership of the Board of County Commissioners for approval.

Transportation Element:

5. In the Traffic Circulation Subelement, change the following maps:
- Planned Year 2025 Roadway Network Map (Figure 1) to re-designate the number of roadway lanes for SW 136 Street, SW 152 Street, SW 144 Street, SW 162 Avenue, SW 167 Avenue, and SW 117 Avenue.
 - Roadway Functional Classification – 2025 Map (Figure 3) to re-designate the following roadways as “County Collector” or “County Minor Arterial:” SW 136 Street, SW 152 Street, SW 144 Street, SW 162 Avenue, and SW 167 Avenue.
 - Change the Planned Non-Motorized Network 2025 Map (Figure 6) to designate bicycle facilities within the application area and connectivity between bicycle facilities on SW 152 Street and SW 177 Avenue.
6. In the Mass Transit Subelement, revise the Future Mass Transit System 2015-2025 Metrobus Service Area and Rapid Transit Corridors Map (Figure 1) and the Future Mass Transit System 2025 Rapid Transit Corridors Map (Figures 2) to include a transit center within the Parkland application area.

Capital Improvements Element (CIE):

7. Revise the text of item 3d in the “Concurrency Management Program” to include “rail transit centers” as one of the transit facilities that exempts a development from transportation concurrency.

Amendment Type:

Concurrent DRI/CDMP Amendment (Standard)

Existing Zoning/Site Condition:

AU/Row Crops

PROPOSED DEVELOPMENT PROGRAM AND PROJECTED IMPACT

Development Program¹

Residential Dwelling Units (d.u.)	6,941 d.u.
Retail (A 2,000-seat, 28,311 sq.ft. cinema may be considered. The cinema would reduce the 200,000 sq.ft. of retail use to 171,689 sq.ft.)	200,000 sq. ft.
Medical Office	100,000 sq. ft.
Hospital	200 beds
Industrial Flex Space	550,000 sq. ft.
Schools	Two K-8 Schools One High School
Community Uses – Library, Police, Fire	50,000 sq. ft.
Parks	67.6 acres
Proposed ROW Dedications	104 acres
Water Retention	126.21 acres
Existing Railroad ROW	17 acres
Proposed Build Out Date	2018

Projected Impact

Population ²	18,232
Students ³	2,747
Jobs ⁴	2,500
PM Peak-hour Trips (If retail use is reduced to build a 2,000-seat cinema, the PM peak-hour trips would be 6,998) ⁵	7,110

RECOMMENDATIONS

Staff:	DENY AND DO NOT TRANSMIT (OCTOBER 20, 2008)
West Kendall Community Council (11):	ACCEPT AND TRANSMIT (NOVEMBER 3, 2008)
Planning Advisory Board (PAB) acting as Local Planning Agency:	ADOPT AND TRANSMIT (NOVEMBER 19, 2008)
Board of County Commissioners:	TO BE DETERMINED
Final Action of Planning Advisory Board acting as Local Planning Agency:	TO BE DETERMINED
Final Action of Board of County Commissioners:	TO BE DETERMINED

¹ Application for Development Approval, Parkland Development of Regional Impact, August 2006.

² IBID

³ Miami-Dade County Public School Memo, dated February 15, 2008.

⁴ Application for Development Approval, Parkland Development of Regional Impact, August 2006.

⁵ Parkland DRI: Revised Transportation Analysis, August 2008.

Principal Reasons for Recommendations:

1. **Policy for Expanding the UDB:** There is not a 15-year supply of residential land to consider expanding the UDB according to Policy LU-8F; however, the application does not meet the locational requirements as outlined in Policy LU-8G of the CDMP.
 - i. **Policy LU-8F:** *"The Urban Development Boundary (UDB) should contain developable land having capacity to sustain projected countywide residential demand for a period of 10 years after adoption of the most recent Evaluation and Appraisal Report (EAR) plus a 5-year surplus (a total 15-year Countywide supply beyond the date of EAR adoption)..."*

The most recent supply and demand analysis prepared by the Miami-Dade County Department of Planning and Zoning indicates that the addition of +961 acres of residential, commercial and industrial land outside of the Urban Development Boundary is not warranted for industrial or commercial development. Currently, Miami-Dade County has an adequate supply of commercial and industrial land at both the countywide and for the local geographic levels (tier and minor statistical area). However, additional land outside the UDB or land use changes inside the UDB may be necessary to accommodate the 15-year projected population (2018). As a result of information supplied by the applicant, the Department prepared a revised analysis of residential land capacity within the UDB and depletion rates. This analysis indicates that the County's residential land supply will be depleted in 2017, which is one year earlier than previously projected depletion year of 2018 or 14 years from the date of the 2003 Evaluation and Appraisal Report (EAR). The capacity within the UDB will generate approximately 116,671 residential units.

The analysis does result in a 14-year supply of residential land rather than the previously indicated 15-year supply. This policy and analysis is an important consideration in making decisions regarding the UDB. However, it is not the only consideration in reviewing amendment applications. The CDMP, as a whole, with all its goals, objectives and policies must be addressed for consistency. Other policy considerations, as described in the CDMP, include protection of agricultural resources, minimize urban sprawl, promote sustainability, adequacy of public facilities and services, compatibility with adjacent land uses, financial feasibility and urban growth patterns promoted by the CDMP are also important, as noted below in the remaining Principal Reasons.

The Planning and Zoning Department recommends that amendments of such magnitude, or policy changes, would be more appropriately considered through a more comprehensive process and not as an application for development. Such a process may include the Evaluation and Appraisal Report (EAR) of the CDMP, which is scheduled to begin in 2009. At that time, CDMP service plan elements and associated agency functional plans will be updated and advanced to accommodate extended planning horizons for the CDMP. The vicinity of this application area can be reviewed by staff during this update with appropriate modifications to land use plan designations, if necessary, recommended at that time.

- ii. **Policy LU-8G:** *"When considering land areas to add to the UDB, after demonstrating that a need exists, in accordance with foregoing Policy LU-8F:... ii) The following areas shall be avoided:... b) Land designated Agriculture on the Land Use Plan map..."*

Due to the locational criteria in LU-8G, the proposed amendment would be inconsistent because it impacts designated agricultural land that should be avoided. The Miami-Dade County Strategic Plan and Policies LU-1O, LU-1P, LU-1R, LU-1S, and LU-8C of the CDMP call for the protection of viable agriculture. The proposed project would take 961 acres of viable agricultural land outside the UDB out of agricultural production.

2. **Criteria for CDMP Land Use Plan Map Amendments:** Policy LU-8E of the Comprehensive Plan calls for amendments to the CDMP to be evaluated based on “the extent to which the proposal would...i) *Satisfy a deficiency in the Plan map to accommodate projected population or economic growth of the County;* ii) *Enhance or impede provision of services at or above adopted LOS Standards;* iii) *Be compatible with abutting and nearby land uses and protect the character of established neighborhoods;* and iv) *Enhance or degrade environmental or historical resources, features or systems of County significance;* v) *If located ... within 1/4 mile of ... [a] standard or express bus stop served by peak period headways of 20..., [the proposal] would be a use that promotes transit ridership and pedestrianism as indicated in the policies under Objective LU-7, herein”*
- i. **Satisfy a Plan Map Deficiency:** The proposed amendment does satisfy a deficiency in the Plan map to accommodate projected population growth. As stated previously, Miami-Dade County has sufficient commercial and industrial capacity available inside the UDB. Therefore, proposed amendment does not satisfy a deficiency in the Plan map to accommodate projected economic growth. *(See Supply and Demand Analysis)*
- ii. **Adequacy of Public Facilities and Services:** The proposed application would cause a significant impact to some public services and facilities and require substantial improvements, if feasible. Specific impacts of the proposed amendment application to the adopted public facilities level of service standards are provided below:
- a. **Public Schools:** There are not adequate public school facilities available to meet the projected school facility needs of the development. The proposed application is projected to cause the three public schools (elementary, middle and senior high) serving the area to significantly exceed the 115% FISH (Florida Inventory of School Houses) design capacity.⁶ In total, the proposed development is projected to increase the student population by 2,747 students. Although the Parkland application calls for a high school and two K-8 schools to be developed on the site, no mitigation agreement has been reached with the Miami-Dade County School Board regarding these facilities, therefore the School Board is recommending denial or deferral of application until the applicant addresses the impact of the development on public schools. *(See Assessment of Impact on Public Facilities.)*
- b. **Water and Sewer Capacity:** Sufficient water supply, water treatment facility and sewer treatment facility capacity are available to meet the projected potable water demand of 1.87 million gallons per day (mgd). However, pursuant to Section 32-85 of the Miami-Dade County Code, DRIs that have a projected potable water demand in excess of 1 mgd are required to undergo an evaluation by WASD to assess alternative water supply efforts. To aid the County in addressing its future water demands, WASD is recommending conservation and reuse efforts above what is currently required. This includes implementation of low impact development principles as per the University of Florida’s Program for Efficient Communities Low Impact Development Guidelines, provision of 100% wastewater reuse for irrigation, and implementation of the best water savings technology available for all new construction (by land use category) as per the Water Use Efficiency Standards Manual. The Applicant has agreed to these WASD recommendations.⁷ *(See Assessment of Impact on Public Facilities.)*
- c. **Stormwater Management:** According to the Department of Environmental Resources Management (DERM), adequate flood protection has been provided to retain stormwater from a 100-year, 3-day storm. A fill encroachment study provided by the applicant

⁶ Letter from Miami-Dade County Public Schools dated October 31, 2008.

⁷ Letter from the applicant dated November 17, 2008.

revealed that the proposed surface water management for the subject site complies with the requirements of Section 24-48 of the Miami-Dade County Code and the Permit Information Manual IV of the South Florida Water Management District (SFWMD). As such, DERM found the Cut and Fill criteria requirements for the retention of the 100-year, 3-day storm event for the subject site to be adequate for approval subject to the following conditions: 1) the development must provide 137.29 acres of lake area for surface water management, 258 acres of pervious area, and building areas shall not exceed 244 acres; 2) no encroachment by fill or any use in the surface water management area shall be allowed, and 3) a surface water management permit by the SFWMD for the drainage system associated with the proposed development will be required.⁸ (*See Assessment of Impact on Public Facilities.*)

- d. **Park and Recreation Service:** Adequate park acreage internal to the proposed development has been proposed to meet the current level of service standard of 2.75 acres per 1000 residents. However, not enough information has been provided to ascertain whether the size or configuration of the proposed 67.6 acres would provide meaningful park and recreation opportunities to serve resident's needs, nor is there enough information to determine full consistency with the County's Open Space System Master Plan. (*See Assessment of Impact on Public Facilities.*)
- e. **Roadways:** Approval of this application would significantly impact the roadways within the application study area and would require substantial roadway improvements. (*See Assessment of Impact on Public Facilities.*)

The County's short-term (3 years) LOS evaluation shows that the following roadways will run out of concurrency service capacity with the impacts of the application:

- Krome Avenue (SR 997) from SW 88 Street to SW 184 Street (LOS F)
- Krome Avenue (SR 997) from SW 184 Street to SW 216 Street (LOS F)
- SW 152 Street from SW 147 Avenue to SW 137 Avenue (LOS F)

The County's long-term 2018 traffic impact analysis shows that sufficient roadway capacities are not currently planned or proposed by the applicant to accommodate proposed development. The following roadways are projected to violate the adopted LOS standards with or without the impacts of the application:

- Krome Avenue between SW 8 Street and SW 88 Street; (LOS F; adopted LOS B standard)
- Krome Avenue between SW 184 Street and SW 200 Street; (LOS D; adopted LOS B standard)
- SW 157 Avenue between SW 120 Street and SW 136 Street; (LOS E; adopted LOS D standard)
- SW 137 Avenue between SW 184 Street and SW 200 Street; (LOS F; adopted LOS D standard)
- SW 120 Street between SW 137 Avenue and HEFT; (LOS E and LOS F; adopted LOS D standard)
- SW 152 Street between SW 127 Avenue and SW 117 Avenue; (LOS E+41%; adopted LOS E+20%)
- SW 152 Street between SW 102 Avenue and US 1; (LOS E+54%; adopted LOS E+20% standard)

⁸ Letter from DERM dated November 18, 2008 and letter from the applicant dated November 17, 2008.

The 2018 traffic impact analysis also indicates that the following roadway, even after the proposed widening by the applicant to 4 lanes, would still operate in violation of the adopted LOS standard:

- SW 136 Street between SW 162 Avenue and SW 157 Avenue; (LOS E; adopted LOS D standard)

f. Other Affected Services:

Miami-Dade Fire Rescue: (MDFR) found that the proposed development will generate an estimated 2,190 annual alarms. This will severely impact service delivery and response time to the application area. To mitigate the impact, MDRF will require the dedication of a 2-acre parcel of land for the construction of a new fire rescue station. The applicant has indicated that they would be willing to agree to a development order condition to provide the land and to construct a joint police and fire facility within the application site in order to address this issue. (See *Assessment of Impact on Public Facilities.*)

Police Service: The Miami-Dade Police Department (MDPD) indicated that public service in the vicinity of the application area is adequate. It is estimated that a total of 40 police patrol officers, plus support staff, would be needed to provide minimum staffing to the site. Though MDPD does not object to having a police facility within the development, they have determined that a police station on the site is needed and would require a financial commitment from the Police Department for operations and staff. However, MDPD is requesting a separate building from the Fire Rescue Station and on a separate 2-acre parcel.⁹ (See *Assessment of Impact on Public Facilities.*)

Library System: The proposed Parkland DRI calls for the development of a library within the application site. According to the Miami-Dade Public Library System, no funding has been allocated at this time for the design, construction, or operation of the new library in the application site. A minimum of two acres would be needed to build a 15,000 square foot library. To date, there is no commitment to donate the land or fund the construction of the library. In addition, there is no commitment for the Miami-Dade Public Library system to operate and maintain the facility. (See *Assessment of Impact on Public Facilities.*)

- iii. **Compatibility with Abutting Uses:** Policy LU-4B stipulates that, *"Uses designated on the LUP map and interpretive text, which generate or cause to generate significant noise, dust, odor, vibration, or truck or rail traffic shall be protected from damaging encroachment by future approval of new incompatible uses such as residential uses."* The proposed land use designations would allow residential, retail, and office uses that may be incompatible with existing agricultural activity abutting lands north, south and west of the application site. There are no commitments from the applicant at this time to provide sufficient buffering on the perimeter of the development to minimize the impact of noise, dust or fumigation from the agricultural activities on these urban uses. (See *Land Use Considerations.*)
- iv. **Protection of Environmental and Historic Resources:** No wellfield, wetlands, significant tree resources, or recorded archeological or historical resources are located on the application site. However, the agricultural use on the Parkland DRI site provides

⁹ Letter from Miami-Dade Police Department dated December 8, 2008.

an important foraging habitat to a variety of wildlife, including migratory bird species and species listed as threatened, endangered or protected at the state or federal level, including American Bald Eagles. The applicant has proposed to design lake edges and open spaces as environmental enhancement areas to encourage wildlife utilization. However, application still lacks specific information on the location, size or the composition of these environmental enhancement areas. (See *Environmental Considerations*.)

- v. **Transit Service:** Miami-Dade Transit (MDT) has indicated that currently there is no plan to extend service to the application site. MDT indicates that the annual operating cost (\$185,000) to extend the transit service into the proposed Parkland development would be prohibitive to MDT without a financial commitment from the applicant. The proposed Park & Ride facility would cost an additional \$60,000 annually to operate and maintain.¹⁰ (See *Transportation Analysis*.)
3. **Causes Urban Sprawl:** According to Policy LU-1S, *“The Comprehensive Development Master Plan (CDMP) shall be consistent with the Miami-Dade County Strategic Plan adopted by the County Commission on June 3, 2003 by Resolution R-664-03... Key outcomes of the Strategic Plan that are relevant to the Land Use element of the CDMP include increased urban infill development and decreased urban sprawl, protection of viable agriculture and environmentally-sensitive land, improved community design, reduced flooding, improved infrastructure and redevelopment to attract businesses to underserved and distressed areas, available and high quality green space throughout the County, and more integrated land-use development to decrease dependence on automobiles.”* In addition, Policy LU-1O states that, *“Miami-Dade County shall seek to prevent discontinuous, scattered development at the urban fringe particularly in the Agriculture Areas, through its CDMP amendment process, regulatory and capital improvements programs and intergovernmental coordination activities.”*

Rule 9J-5.006(5)(g) of the Florida Administrative Code (FAC) provides a list of 13 indicators used to evaluate whether an amendment causes urban sprawl. The proposed amendment meets 9 of the 13 sprawl indicators. Collectively, these indicators demonstrate that the location of the Parkland DRI CDMP amendment, the type of development being proposed and the associated need to expand public services to the application site, not only cause urban sprawl but are likely to inhibit the County’s infill development and redevelopment policies by serving as a catalyst for additional sprawl outside the UDB. (See *Sustainability Analysis*.)

4. **Loss of Agriculture:** The Miami-Dade County Strategic Plan and Policies LU-1R, LU-1S, LU-1O, LU-1P and LU-8C of the CDMP call for the protection of viable agriculture. To maintain a viable agricultural industry, a 2002 study conducted by Miami-Dade Department of Planning and Zoning¹¹ indicated that the County needs to maintain at least 52,000 acres of agricultural land through 2025. Since 1994, the total land available for agricultural use in Miami-Dade County has decreased from approximately 89,000 to 64,700 acres. Only 57,500 acres remain outside the UDB. The proposed project would take 961 acres of viable agricultural land outside the UDB out of agricultural production. The site for the Parkland development is one of only two remaining areas in the County with large contiguous tracts of land available for varied cost effective agricultural activities. Further, the Parkland project

¹⁰Development Order Condition Correspondence provided by Miami-Dade Transit dated December 5, 2008.

¹¹ Urban and Agricultural Land Use Trends and Projections, Miami-Dade County, Florida. Miami-Dade County Department of Planning and Zoning, 2002.

would encourage development in the adjacent agricultural areas to the north and south of the application site by increasing property values and expanding urban services to the area. The proposed CDMP amendment has not identified the potential impact that the application would have on the agricultural industry nor an adequate plan for mitigating the loss of 961 acres of agricultural land. (See *Supply and Demand Analysis*.)

5. **Sustainability:** According to Section 163.3177, F.S., Land Use Plan (LUP) map amendments must be evaluated based how they discourage urban sprawl, promote energy-efficient land use patterns and reduce greenhouse gas emissions. To address this requirement, the proposed amendment was assessed by staff and the applicant on its potential for sustainability in terms of water and energy consumption, employment opportunities, proximity to employment centers and amenities, as well as propensity to discourage urban sprawl. As discussed previously, the application was found by staff to encourage inefficient land use patterns by creating urban sprawl. The CDMP amendment application was evaluated by a consultant for the applicant utilizing “Florida Green Building” Standards as a guide to assess effective conservation efforts and energy efficient land use, but the analysis was not supported by adequate data. Additional information is needed to adequately assess how the project will reduce green house gas emissions by measures such as vehicle miles traveled. Insufficient information was provided to substantiate the claim that the development is sustainable. (See *Sustainability Analysis*.)
6. **Adequacy of Capital Improvements:** Policy LU-8D stipulates that “...the LUP map shall not be amended to provide for additional urban expansion unless traffic circulation, mass transit, water sewer, solid waste, drainage and park and recreation facilities necessary to serve the area are included in the plan and the associated funding programs are demonstrated to be viable.” In addition to the policy cited above, the Capital Improvements Element (CIE) is required by Chapter 163, F.S. to be financially feasible. The schedule of improvements in the CIE is required to include publicly funded projects and may include privately funded projects for which the local government has no fiscal responsibility, necessary to ensure that the adopted LOS standards are achieved and maintained. In addition, for capital improvements that will be funded by developers, financial feasibility must be demonstrated by being guaranteed in an enforceable development agreement, interlocal agreement, or other enforceable agreement. At this time, the County has preliminary information regarding some of the capital improvements necessary to serve the proposed development.¹² Specific project descriptions, project costs, funding sources and years of completion are still pending.
7. **Growth Management:** Objective LU-1 states: “The location and configuration of Miami-Dade County's urban growth through the year 2025 shall emphasize concentration and intensification of development around centers of activity, development of well designed communities containing a variety of uses, housing types and public services, renewal and rehabilitation of blighted areas, and contiguous urban expansion when warranted, rather than sprawl”.

The proposed development does not meet the overarching intent of the above stated objective or its supporting policies. The pattern of land use and urban growth promoted since the 1975 CDMP has consistently articulated that the “intensification of physical development and expansion of the urban area should be managed to occur at a rate commensurate with projected population and economic growth; in a contiguous pattern

¹² Letters by applicant dated November 5, 2008 and November 17, 2008.

centered around a network of high-intensity urban centers well connected by multimodal transportation facilities; and in locations which optimize efficiency in public service delivery and conservation of valuable natural resources.”

In light of the above growth management considerations, requests to move the UDB need to be carefully considered. Indeed, the County has only adopted five applications to expand the UDB since 1990, and only two of these applications have had a residential component. For the most part, the County has been able to fulfill its development capacity through infill efforts and redevelopment.

In addition to not being in keeping with the policies to promote urban infill and redevelopment, it should be noted that the scale and magnitude of the proposed application is a departure from past practices in moving the UDB, particularly with respect to residential use. Although the private sector has been responsible for various large applications to expand the UDB, the majority of these have been for non-residential uses. At 961 acres (or approximately 1.5 square miles), the application calls for the development of a suburban community with 6,941 residential units and is expected to generate a population of approximately 18,232 residents. This type of suburban development outside the UDB is contrary to policies that have promoted the development of mixed-use, more intense transit-oriented activity centers, such as the Urban Centers, in the urbanized areas of the County. Accordingly, expansion of the UDB to allow additional residential development at the western fringe would be inconsistent with the foregoing policy commitment, would discourage development in other areas already planned for it, and would not foster infill or redevelopment of more central areas.

The Planning and Zoning Department recommends that amendments of such magnitude, or policy changes, would be more appropriately considered through a more comprehensive review process. Such a process may include the Evaluation and Appraisal Report (EAR) of the CDMP, which is scheduled to begin in 2009. At that time, CDMP service plan elements and associated agency functional plans will be updated and advanced to accommodate extended planning horizons for the CDMP. The vicinity of this application area can be reviewed by staff during this update with appropriate modifications to land use plan designations, if necessary, recommended at that time.

CHAPTER 2

PLANNING STAFF ANALYSIS

LAND USE CONSIDERATIONS

Application Site

The Parkland Development of Regional Impact (DRI) application site is comprised of approximately 961 acres bounded by SW 136 Street on the north, theoretical SW 152 Street on the south, SW 162 Avenue on the east and SW 177 Avenue (Krome Avenue) on the west. The subject site is located outside of the 2015 Urban Development Boundary (UDB) and the 2025 Urban Expansion Area (UEA) boundary.

Existing Land Use and Zoning

The application site is primarily used for producing a variety of row crops. The land is leased to farmers who grow boniato (tropical sweet potato), okra, and sugarcane on the property. Aerial photographs show that much of the property has been under active agricultural use since the 1960s. According to data from the Property Appraiser's Office, the parcels that comprise the application site currently qualify for an agricultural exemption. In addition to agricultural use, a CSX rail line runs along the northern portion of the property. The rail line serves the Krome Quarry of the Rinker Materials Corporation, located at 8800 SW 177 Avenue. A Florida Power and Light (FPL) easement with transmission lines also runs along the northern portion of the property, parallel to the CSX rail line. On the southern section of the application site, the South Florida Water Management District (SWFMD) designated a portion of land for a proposed canal easement.

The application site is currently zoned GU (Interim District), which could allow one dwelling unit per five acres if there is no trend of development. The northeastern portion of the application site has overlay zoning districts associated with Kendall-Tamiami Executive Airport (See Section on Aviation for more details), including a No School Zone and an Outer District requiring noise level reduction for new residential construction and educational facilities.

It is important note that the conceptual site plan for the proposed site shows that the FPL easement and the SFWMD easement will be utilized for development. However, the Department of Planning and Zoning has not received any written agreement from FPL or any of the affected property owners regarding the potential relocation of the easement and how and when this will be achieved. Written confirmation is also required from the SFWMD confirming that they do not need to retain the proposed canal easement on the southern portion of the Application site for future use.

Current Land Use Plan Map Designation

As stated previously, the subject property is designated "Agriculture" on the CDMP Land Use Plan map. The principal use under this designation is agriculture. Uses ancillary to and directly supportive of agriculture, such as packing houses and farm residences, are also permitted.

Proposed Land Use Plan Map Designation

The applicant proposes to change the Land Use Plan (LUP) map designation on the property from "Agriculture" to the following:

- Low Density Residential - 438.55-acres (Parcels 1 & 7): The "Low Density Residential" (2.5 to 6.0 DU/Gross Acre) designation is characterized by single-family detached, cluster homes, townhouses and low-rise apartments.
- Low-Medium Density Residential - 428.37-acres (Parcels 2 & 5B): The "Low-Medium Density Residential" (6 to 13 DU/Gross Acre) designation includes single-family homes, townhouses and low-rise apartments. Zero-lot-line single-family developments, at a maximum density of 7 units per gross acre, are also allowed.
- Business and Office - 37.24-acres (Parcels 3 & 5A): The "Business and Office" category accommodates the full range of sales and service activities, telecommunication facilities such as cell towers and satellite telecommunication facilities, and live-work and work-live developments. Under certain conditions, residential, and mixed-use residential may be allowed up to one density category higher than the LUP-designated density of the adjacent or adjoining residentially designated area.
- Office/Residential - 17.99-acres (Parcel 4): The "Office/Residential" designation includes professional and clerical offices, hotels, motels, and residential uses. Development within this category should be compatible with existing, zoned or Plan-designated adjoining or adjacent residential uses. Under certain conditions, residential development is allowed up to one density category higher than that allowed in the adjoining or adjacent residentially designated area.
- Industrial and Office - 39.00-acres (Parcel 6): The "Industrial and Office" designation allows manufacturing, maintenance and repair facilities, office buildings, distribution centers, public facilities, medical buildings and telecommunication facilities. Very limited commercial uses to serve the firms and workers are allowed. Hotels and motels are also authorized. Residential development is generally prohibited, with exceptions granted for: live-work or work-live buildings, the adaptive reuse of existing structures and Traditional Neighborhood Developments (TND).

Proposed Development Program

The Application for Development Approval calls for 6,941 residential units, 200,000 square feet of retail space, 100,000 square feet of medical offices, a 200 bed hospital, 550,000 square feet of industrial/flex space, three schools and various institutional/civic uses, including a library, a fire station and a police station. According to the applicant, the development is expected to generate a population of 18,232 and 2,500 jobs.

Residential Development Program	532.7 acres
Single Family Detached	1,257 d.u.
Single Family Attached Townhomes	2,436 d.u.
Multifamily Condominium / Apartment	3,248 d.u.
Total	6,941 d.u.

Residential Development Program	532.7 acres
Net Density	13 d.u. per acre
Gross Density	7.23 d.u. per acre
Non-Residential Development Program	78 acres
Retail	200,000 sq. ft. (21 acres)
Medical Office	100,000 sq. ft. (9 acres)
Hospital	200 beds (15 acres)
Industrial Flex Space	550,000 sq. ft (33 acres)
Schools	35 acres
Two K-8 Schools	3,200
One High School	1,600
Public Facilities	381.8 acres
Community Uses – Library, Police, Fire	50,000 sq. ft
Parks	67.6 acres
Proposed ROW Dedications	104 acres
Water Retention	126.21 acres
Existing Railroad ROW	17 acres
Proposed Build Out Date	2018

It should be noted that in the “Third Statement of Information Needed,” which was submitted to South Florida Regional Planning Council on September 24, 2008, the applicant called for modifications to the proposed DRI. The modifications included a possible 2,000 seat cinema that would be exchanged for 28,311 sq. ft. of retail use, and a change in the buildout date from 2015 to 2018. Though the change in the buildout date was accounted for in the CDMP impact analysis, no study was provided by the applicant during the CDMP amendment review describing how the exchange of uses could affect public services; therefore, the impact of this potential use has not been assessed.

Adjacent Land Use and Zoning

Except for land to the east, the adjacent lands are predominantly used for agricultural purposes. Based on the 2007 land use file, the area to the south and west has a few scattered dwellings (five units per acre) but is primarily used for agricultural production. The area to the north is primarily used for row and field cropland and contains an electrical transmission facility. The area to the east is comprised of single-family subdivisions, including Corsica Place, Corsica Estates, A.D.G., Shoreway, Roseway, Milton Venture, Paradise Reef, Kendall Reef and Fantasy Reef. The Kendall-Tamiami Executive Airport is located to the northeast of the site.

The LUP map of the CDMP designates the adjacent lands to the north, south and west of the application site as “Agriculture.” The land to the east is designated “Low Density Residential” (2.5 to 6 DU/Gross Acre). The Kendall-Tamiami Executive Airport to the northeast is designated as “Terminals.”

The predominant zoning district for land to the north, south and west is GU (Interim District), except for an 8.49-acre parcel—bounded by SW 152 and SW 154 Streets and SW 177 Avenue/Krome Avenue— which is designated as AU (Agricultural District). The zoning district to the east, between SW 138 Terrace and SW 152 Street, is RU-1 (Single-Family Residential

District). The area to the east between SW 136 Street and SW 138 Terrace is classified as RU-1MA (Single-family Modified Residential District).

Compatibility with Surrounding Uses

CDMP Policies LU4A, LU-4B, and LU-4C require compatibility with surrounding uses. Policy LU-4B of the CDMP stipulates that uses which generate or cause to generate significant noise, dust, odor, vibration, or truck or rail traffic shall be protected from damaging encroachment by future approval of new incompatible uses such as residential uses. The proposed land use designations would allow residential, retail, and office uses that may be incompatible with existing agricultural activity abutting the application site on three sides. Such activity includes fumigation, as well as noise during early morning hours and dust from the use of heavy farm equipment. In addition, Krome Avenue, which bounds the application site to the west, is heavily traveled by vehicles associated with farming and agricultural production, such as trucks and farm tractors, many of them towing trailers hauling agricultural products to locations throughout the County, State and nation. The heavy use of Krome Avenue as a route for agricultural vehicles makes it inconsistent with the types of traffic that would be created by a large-scale residential development. To date, the applicant has not provided any recommendations for mitigating the impact of noise, dust, fumigation or truck traffic on the proposed development. At a minimum, it may be necessary to require all potential property owners and leaseholders to sign an agricultural disclosure statement, pursuant to Section 33-284.1 of the Code of Miami-Dade County.

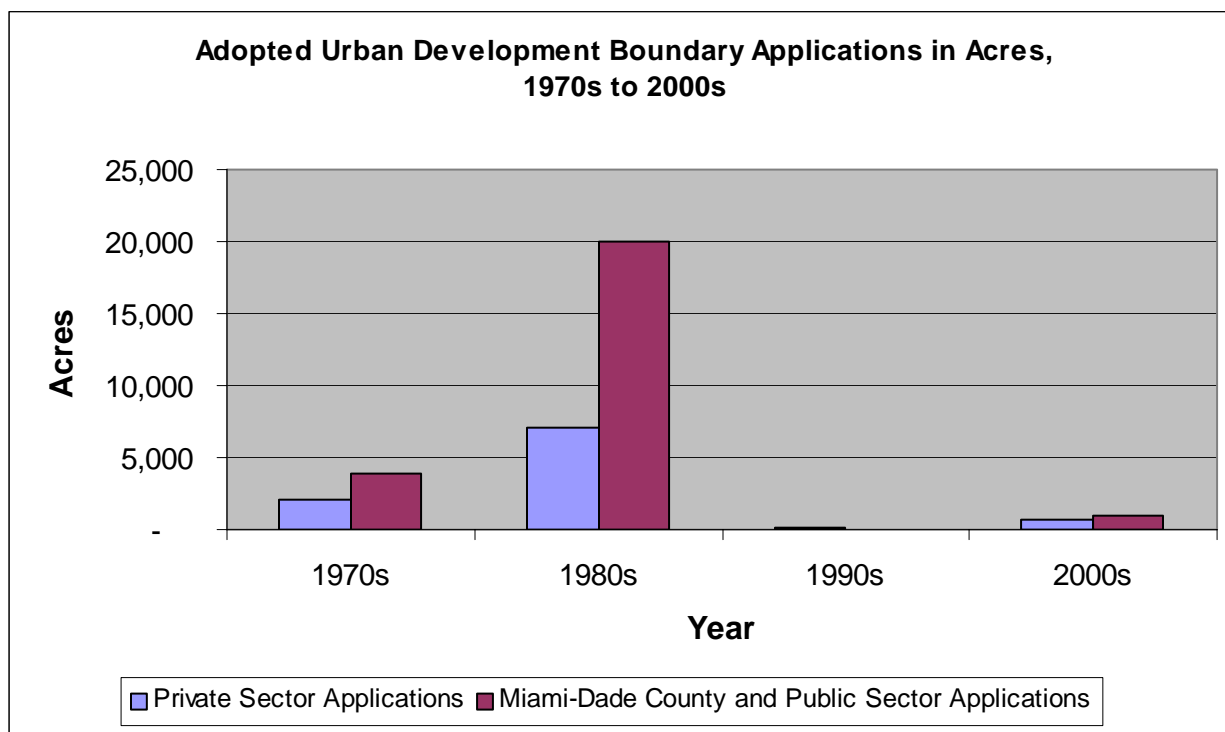
Land Use and Zoning History

To date, there has been no zoning activity on the application site since the property was zoned in 1938. However, a portion of the site was subject to an application to amend the LUP map. land use application. Application No. 13 of the November 1995 Cycle of Applications to amend the CDMP was located in the eastern portion of the Parkland application site. The application requested the expansion of the UDB and the redesignation of 320 acres from "Agriculture" to "Business and Office" (10 acres), "Industrial and Office" (40 acres), "Low Density Residential" (20 acres), "Estate Density Residential" (120 acres), and "Low-Medium Density Residential" (130 acres). The site was bounded by SW 136 Street, SW 167 Avenue, SW 152 Street and SW 162 Avenue. This application was withdrawn by the applicant on May 5, 1996. Tamiami 156 Acres, A Land Trust (c/o Edward W. Easton, Trustee) was the applicant. Edward W. Easton is a trustee for Krome Groves Land Trust, which is one of the current applicants for the Parkland DRI Application.

It should also be noted that the approval of the residential development to the east of the subject property was subject to a Settlement Agreement with the Florida Department of Community Affairs (DCA), after the amendment application for the site (Application No. 40 of the April 1989-1990 Amendment Cycle) was challenged by DCA for encouraging sprawl. Application 40 called to redesignate the application site from "Agriculture" to "Low Density Residential" and "Industrial and Office" on the LUP map. The same objections that were raised for application No. 40 are still relevant for the proposed Parkland DRI amendment site today.

History of Urban Development Boundary (UDB) Amendments:

An analysis of the CDMP amendments to expand the Urban Development Boundary since the 1970s revealed that the scale and magnitude of the proposed application is a departure from past practices and land use patterns, particularly within the last twenty years. Although Miami-Dade County did not officially adopt the UDB until 1983, the genesis of the present UDB policy was established in the 1970s. At that time, the County sought to control urban sprawl through a “Development Pattern” map, which identified the areas of the County designated for urbanization. Expansion of the urbanized area required amendments to the Development Pattern map. As can be seen by the graph below, most of the western expansion took place during the 1970s and 1980s, with the County responsible for filing the majority of the amendments to expand the UDB. These expansion efforts by the County were generally part of a comprehensive analysis undertaken during the updates to the CDMP, at which time the County assessed the need for future land capacity and the best areas in which to encourage growth. As development pressures placed greater burdens on public services and concerns increased over the protection of the County’s water supply system and natural resources, the County shifted its emphasis toward encouraging compact urban development, urban infill, and redevelopment. Since the 1990s, there have been five adopted private and County amendments to expand the UDB, with only one amendment adopted in the 1990s. Only two of these amendments had a residential component. (See Appendix A for map showing amendments to the UDB) Although the private sector has been responsible for various large UDB amendments, the majority of these have been for non-residential use.



Source: Miami-Dade County Department of Planning and Zoning.

At 961 acres (or approximately 1.5 square miles), the proposed amendment site is projected to have more population than almost half of the municipalities in Miami-Dade County.¹³ Expanding the UDB for such a large scale residential development could result in creating added pressures to the north and south of the application site for further urban expansion. The County will begin its EAR process in 2009 during which time the County capacity for future growth will be assessed and areas most suited for urban expansion will be identified.

Proposed Policy to the Future Land Use Element

In addition to the Land Use Plan map changes, the applicant has proposed the addition of a new policy to the CDMP Land Use Element that would include the following language:

“Policy LU-8H: Any application that seeks to expand the UDB west of SW 177 Avenue (Krome) Avenue) in the area between Tamiami Trail and SW 288 Street shall only be approved following an affirmative vote of the total membership of the Board of County Commissioners then in office.”

The proposed policy is not consistent with CDMP Land Use Element Policies LU-3F and LU-3G that requires a two-thirds majority vote by the BCC to approve applications that expand the UDB within one mile of Krome Avenue and is an area currently designated as “Agriculture” or “Open Land” on the LUP map. Such a policy change should be subject to a comprehensive analysis of the Urban Development Boundary and the areas that are most suitable for future expansion. Other proposed policies for utilizing the UDB as a growth management tool need to be evaluated, including a permanent UDB and other possible considerations. The Department of Planning and Zoning will be undergoing such an analysis in 2009 during the preparation of the Evaluation and Appraisal Report (EAR) of the CDMP. Until the result of the analysis is complete, the proposed policy is premature.

Proposed Transit Center Related Changes to the Transportation Element and the Capital Improvements Element

In addition to the Land Use Plan map and CDMP Land Use Element changes, the applicant has proposed the inclusion of a transit center on the CDMP Mass Transit Subelement Figure 1, Future Mass Transit System 2015-2025 and on Figure 2, Future Mass Transit System 2025. The applicant has also proposed a change to section 3(d) of the County’s Concurrency Management Program on pages IX-16 and IX-17 of the CDMP Capital Improvements Element, Programs to Implement. The proposed changes to the Concurrency Management Program are included in strikethrough and underline the following language:

- 3 A proposed development will not be denied a concurrency approval for transportation facilities provided that the development is otherwise consistent with the adopted Comprehensive Development Master Plan and it meets the following criteria pursuant to Section 163.3180, Florida Statutes...

¹³ According to the applicant, the Parkland DRI is estimated to have a population of 18,200. Based on the Miami-Dade County Planning and Zoning Department population estimates for 2005, the Parkland population would be larger than those of the following municipalities: Bal Harbor (3,185), Bay Harbor Islands (5,212), Biscayne Park (3,328), El Portal (2,539), Florida City (8,787), Golden Beach (963), Indian Creek Village (56), Islandia (6), Key Biscayne (11,425), Medley (1,132), Miami Shores (10,486), Miami Springs (13,824), North Bay Village (6,498), Opa-locka (15,439), South Miami (10,578), Sunny Isles Beach (16,703), Surfside (5,614), Sweetwater (14,373), Virginia Gardens (2,366), West Miami (5,844).

- d) The proposed development is located inside the UDB, and directly and significantly promotes public transportation by incorporating within the development a Metrorail, Metromover or TriRail Station or other rail transit center, or a Metrobus terminal¹⁴ for multiple Metrobus routes, or is an office, hotel or residential development located within one-quarter mile of a Metrorail, Metromover or TriRail station or other rail transit center, or a Metrobus terminal for multiple Metrobus routes¹⁵; and

The Concurrency Management Program as indicated in the language above provides that a proposed development, which meets the given conditions, may be exempt from transportation concurrency. The applicant's proposal to include a transit center onto the above-mentioned Future Mass Transit System Figures 1 and 2 together with the proposed change to the Concurrency Management Program raises questions about the applicant's intent to seek transportation concurrency exemption for the proposed development. Nevertheless, the proposed transit center is located along the CSX rail line that traverses the northern portion of the application site and is shown in the CDMP only on the Traffic Circulation Subelement Figure 8, Freight Rail Lines – 2025, as CSX transportation. The application does not propose to include the CSX freight rail line as a mass transit facility in the CDMP. The application does not recommend the inclusion of the CSX rail line on the CDMP Mass Transit Subelement Figure 1, Future Mass Transit System 2015-2025 or on Figure 2, Future Mass Transit System 2025. The application as filed, seemingly advocates for the CSX rail line as a transit facility without its designation as such, thereby proposing an internal inconsistency to the CDMP.

The application and subsequent information provided by the applicant refers to studies being conducted by the Miami-Dade County Metropolitan Planning Organization (MPO) that examine the CSX rail corridor as a possible commuter rail corridor, and suggests the future extension of rail transit service along the corridor to the application site. These studies include the Kendall Link Study and the SW 152 Street Corridor Study that are discussed in the Transit section of this report. Both studies are pending final action by the MPO Governing Board and the Kendall Link Study is pending two supplemental studies that are scheduled for completion by May 2009. The MPO Governing Board's final action on the recommendations of the aforementioned studies would determine which of the study recommendations would be included in the MPO's 2035 Long Range Transportation Plan update, and subsequently scheduled for implementation. Until the MPO Governing Board's final action on the studies, including the determination of whether or not the CSX rail corridor should be pursued as a commuter rail corridor, the proposed transit center is premature. Furthermore, this proposal should be further evaluated to justify the need for the transit center.

CDMP Mass Transit Subelement Objective MT-2 requires the County to coordinate the provision of efficient transit service and facilities with the location and intensity of designated future land use patterns as identified on the Land Use Plan Map, and the goal, objectives and policies of the Land Use Element. Pursuant to this objective the inclusion of an additional transit center into the CDMP would be more comprehensively and appropriately evaluated during the preparation of the Evaluation and Appraisal Report (EAR) of the CDMP.

¹⁴ Metrobus terminals for multiple routes are those non-rail transit centers as mapped in the CDMP Mass Transit Subelement, which contain dedicated parking facilities or significant transit patron structures and amenities.

¹⁵ Planned stations and terminals shall not serve as a basis to grant this concurrency exception if the station, associated rapid transit corridor segment, or terminal is identified in the Transportation Element as "not cost feasible".

SUPPLY AND DEMAND ANALYSIS FOR RESIDENTIAL, COMMERCIAL AND INDUSTRIAL LAND AND OTHER CONSIDERATIONS

The proposed Parkland development is slated to be located on 961 acres of agricultural land outside the UDB in Minor Statistical Area (MSA) 6.2. The analysis that follows provides an assessment of the supply and demand of land available for residential, commercial, and industrial development. An analysis on the potential loss of agricultural land, as well as employment and affordable housing opportunities for the residents of the proposed development is also provided.

Availability of Land for Residential Development

CDMP Policy LU-8F states that the UDB should contain a ten-year supply of developable land for residential development plus a five-year surplus from the date of adoption of the most recent EAR, which was adopted in 2003; therefore, the UDB should contain residential land capacity to the year 2018.

The initial analysis of the Department of Planning & Zoning (DP&Z) indicated that there was sufficient residential capacity within the UDB to the year 2018, which was questioned by the applicant. The DP&Z carefully reviewed the information supplied by the applicant for the Parkland DRI/CDMP amendment application concerning the residential capacity and its year of depletion. The review entailed analysis of Miami-Dade County records, correspondence among Miami-Dade County agencies, correspondence with municipalities, and was complemented by extensive fieldwork. As a result, modifications were made to the residential capacity figures, which decreased the residential capacity from 127,746 to 116,671 housing units. These modifications changed the residential capacity depletion year from 2018 to 2017. (See table below).

**Residential Land Supply/Demand Analysis
2008 to 2025: Countywide**

Analysis Done Separately For Each Type, i.e. No Shifting of Demand Between Single & Multi-Family Type			
	Structure Type		
	Single-Family	Multifamily	Both Types
Capacity in 2008	41,081	75,590	116,671
Demand 2008 2005-2010	6,899	7,256	14,155
Capacity in 2010	27,463	61,078	88,361
Demand 2010-2015	6,148	5,079	11,227
Capacity in 2015	0	35,683	27,226
Demand 2015-2020	6,400	5,421	11,821
Capacity in 2020	0	8,578	0
Demand 2020-2025	6,048	5,393	0
Capacity in 2025	0	0	0
Depletion Year	2014	2021	2017

Note: Residential capacity is expressed in terms of housing units.

Housing demand is an annual average figure based on population projections.

Source: Miami-Dade Department of Planning and Zoning, Planning Research Section, December, 2008.

Supply of Vacant Residential Units

In addition to the available supply of land for residential development, there is currently a surplus inventory of existing residences. The most recent data from the U.S. Census 2007 American Community Survey indicates that 14.2% of existing housing units are vacant. Of the total number of units, 49,074 units are available for rent or sale. In 2000, the corresponding figure was 31,494 units. Thus over the past seven years, there has been an increase of 18,584 in the inventory of available housing units. Given, an absorption rate of 14,155 units per year, this is equivalent to an additional supply of more than one and one-third years.

Availability of Land for Commercial Development

The commercial component of the proposed Parkland development includes 200,000 square feet of retail and 100,000 square feet of medical office space that will require 30 acres of land. As can be seen in the table that follows, there is currently 207.6 acres of vacant commercial land in MSA 6.2. At the existing depletion rate, vacant commercial land will not be depleted until 2022 in this MSA. The commercial component of Parkland could be readily accommodated on vacant commercial land inside this MSA. Further, sufficient industrial land is available in the South Central Tier, with a depletion year of 2017¹⁶. This can also be seen in the table that follows.

Availability of Land for Industrial Development

The Parkland development calls for 550,000 square feet of flex industrial space. This translates into the need for approximately 33 acres of industrial land. As is readily seen in the table after that, currently there are over 200 acres of industrial land in MSA 6.2. Further, given the depletion rate of 15.5 acres per year, industrial land is not depleted in MSA 6.2 until 2021. Therefore, there is more than sufficient vacant industrial land within the UDB portion of MSA 6.2 to accommodate the proposed industrial development. In addition, the application site is located within the South Central Tier, which also has enough land to last until 2021.¹⁷

Projected Absorption of Commercial Land, Miami-Dade County, Florida 2008-2025

Tier and Minor Statistical Area	Vacant Commercial Land 2008 (Acres)	Commercial Land in Use 2008 (Acres)	Avg Annual Absorption Rate 2008-2025 (Acres)	Projected Year of Depletion	Commercial Acres Per Thousand Persons	
					2015	2025
					(Acres)	
North Tier						
1.1	2.3	67.8	0.56	2012	2.9	2.6
2.1	64.8	1078.8	2.52	2025+	6.5	6.2
2.2	29.7	259.1	1.61	2025+	5.2	4.7
2.3	175.4	639.7	3.05	2025+	9.3	8.9
2.4	39.0	500.1	0.72	2025+	6.4	6.1
3.1	273.0	1003.2	17.00	2025+	5.4	5.0
Total	584.2	3,548.7	25.46	2025+	6.3	5.9
North Central Tier						
1.3	6.1	248.5	1.09	2014	2.1	2.0
3.2	287.7	1,590.4	16.55	2025+	11.3	9.3
4.1	55.8	363.7	0.47	2025+	4.6	4.5
4.2	127.6	429.3	0.67	2025+	6.4	6.2
4.3	17.6	885.7	1.26	2022	7.4	7.1
4.4	3.2	68.3	0.08	2025+	4.3	4.2
4.5	26.3	214.9	1.07	2025+	6.5	5.9
4.6	33.8	312.8	0.58	2025+	6.9	6.8
4.7	109.7	310.9	5.51	2025+	6.0	4.3
5.1	23.4	513.6	1.73	2022	4.0	3.7
Total	691.2	4,938.1	29.01	2025+	6.5	5.9

¹⁶ Policy LU-8F. It requires us to use tiers or half tiers for industrial land or commercial land.

¹⁷ Ibid.

Tier and Minor Statistical Area	Vacant Commercial Land 2008 (Acres)	Commercial Land in Use 2008 (Acres)	Avg Annual Absorption Rate 2008-2025 (Acres)	Projected Year of Depletion	Commercial Acres Per Thousand Persons 2015	Commercial Acres Per Thousand Persons 2025
South-Central Tier						
1.2	0.0	90.8	0.04	2008	7.8	7.7
5.2	18.3	240.1	2.64	2015	3.3	2.8
5.3	23.8	601.6	0.54	2025+	4.9	4.7
5.4	3.2	582.0	1.61	2010	5.6	5.5
5.5	11.8	542.3	1.46	2016	6.3	5.8
5.6	3.2	229.8	0.29	2019	6.6	6.3
5.7	8.1	258.8	0.52	2024	9.5	8.9
5.8	15.7	113.5	2.74	2014	3.0	2.7
6.1	35.9	523.4	10.78	2011	2.8	2.6
6.2	207.6	609.3	14.47	2022	5.2	4.8
Total	327.6	3,791.6	35.09	2017	4.7	4.4
South Tier						
7.1	105.3	322.5	5.09	2025+	5.6	4.3
7.2	43.0	197.5	4.02	2019	4.1	3.3
7.3	202.1	207.2	1.52	2025+	9.5	8.0
7.4	245.4	387.9	14.68	2025+	6.1	4.3
7.5	365.0	452.1	9.65	2025+	22.7	16.3
7.6	0.0	1.3	2.58	2008	0.1	0.0
Total	960.8	1,568.5	37.54	2025+	7.7	5.6
Grand Total	2,563.8	13,846.9	127.10	2028	6.0	5.4

-- Insignificant population.

Source: Miami-Dade County Department of Planning & Zoning, Planning Division, Research Section, August 2008.

Projected Absorption of Industrial Land, Miami-Dade County, Florida 2008-2025

Tier and Minor Statistical Area	Vacant Industrial Land 2008 (Acres)	Industrial Land In Use 2008 (Acres)	Avg Annual Absorption Rate 2008-2025 (Acres)	Projected Year of Depletion
North Tier				
1.1	0.0	0.0	0.00	--
2.1	1.8	308.7	0.00	--
2.2	0.0	159.6	0.18	2008
2.3	99.2	46.1	0.00	--
2.4	71.2	1,489.9	7.55	2017
3.1	<u>1,262.1</u>	<u>1,083.6</u>	<u>13.45</u>	<u>2025+</u>
Total	1,434.3	3,087.9	21.15	2025+
North Central Tier				
1.3	0.4	10.3	0.10	2012
3.2	1,608.8	5,250.9	66.97	2025+
4.1	2.7	163.9	0.15	2025+
4.2	13.8	760.9	2.28	2014
4.3	2.2	512.5	0.00	--
4.4	0.0	4.8	0.02	2008
4.5	33.9	107.3	0.00	--

Tier and Minor Statistical Area	Vacant Industrial Land 2008 (Acres)	Industrial Land In Use 2008 (Acres)	Avg Annual Absorption Rate 2008-2025 (Acres)	Projected Year of Depletion
4.6	15.5	317.4	2.07	2015
4.7	18.3	157.0	0.00	--
5.1	1.4	51.7	0.00	--
Total	1,697.0	7,336.7	71.59	2025+
<u>South-Central Tier</u>				
1.2	0.0	0.0	0.00	--
5.2	0.0	5.9	0.00	--
5.3	26.1	64.6	0.00	--
5.4	0.9	140.7	0.00	--
5.5	0.0	102.7	1.21	2008
5.6	0.6	13.2	0.07	2017
5.7	0.0	2.1	0.13	2008
5.8	1.8	18.1	0.00	--
6.1	0.0	12.2	0.34	2008
6.2	200.5	558.2	15.45	2021
Total	269.9	917.7	17.20	2021
<u>South Tier</u>				
7.1	2.2	21.7	0.00	--
7.2	164.3	286.7	3.49	2025+
7.3	41.3	147.4	2.45	2025
7.4	24.9	24.9	0.00	--
7.5	294.2	119.3	1.22	2025+
7.6	0.0	0.0	0.00	--
Total	526.9	600.0	7.16	2025+
Grand Total	3888.1	11,942.3	117.10	2041

-- Insignificant Demand

Source: Miami-Dade County, Department of Planning and Zoning, Planning Research Section, August 2008.

Employment Centers in Miami-Dade County

The level of employment in Miami-Dade County is approximately 1,333,400, as of the most recent data from 2005. About one-half of the employment is concentrated in five centers, three with a level of employment over 100,000 and two with over 50,000. The rest is spread throughout the county. A three-mile radius was utilized to determine employment for the two largest centers, Downtown Miami, inclusive of Civic Center, and Doral. Downtown Miami area has approximately 245,000 employees, with over 88% in the service sector. Doral provides employment to over 194,000 workers. The type of employment is significantly more diversified, including a heavier concentration in the commercial and industrial sectors.

For the smaller employment centers, a two-mile radius was used to determine employment. Coral Gables has almost 113,000 employees with a sectoral pattern similar to that of Downtown Miami. Miami Lakes and Dadeland provide employment to 60,000 and 56,000 workers respectively. It is important to note that the Dadeland to Downtown Miami (including Civic Center) corridor has 412,000 employees or 31% of the employment in Miami-Dade County. (See Map of Employment Centers in Appendix A.)

Compatibility Between Proposed Employment and Affordability of Housing in the Parkland DRI

The DP&Z analysis of the employment potential of the Parkland DRI, given the proposed development program, incorporates U.S. Census, ITE ratios, and data provided by the applicant. Based on the estimates derived from these sources, the analysis indicates that the Parkland DRI project will create a total of 2,550 new jobs. The number of jobs provided is the same as that provided by the applicant, however with differences in the composition of these jobs. Based on the square footage of proposed land uses and other parameters in the development program, an analysis employing Bureau of Labor Statistics industry-occupation specific data indicates that 36 percent of these jobs will have an average wage of less than \$25,000 per year. The median wage rate for the proposed Parkland jobs is \$27,019, lower than the median wage in Miami-Dade County for 2007 of \$30,493. In order to determine household income, it is necessary to calculate the number of additional workers in the household. Based on Census 2000, there are 1.78 workers per household. Assuming that the additional workers earn the County annual median wage rate of \$30,493, we conclude that 36 percent of the employee's households earn less than the low/mod income that is 80 percent of County median family income. Therefore these employees could not afford to live in Parkland. This means that 918 of the proposed jobs will have to be filled by employees from outside the Parkland development. Thus only the remaining 1,632 proposed jobs provide wages high enough to afford the lowest priced condominium units. The proposed price range of condominiums is from \$150,000 to \$250,000. Should units not be available at the lower end of the price continuum many more Parkland workers would be priced out of Parkland.

In conclusion, at best only 24 percent of households will be able to find employment within the development. As a consequence the residents of Parkland will be forced to commute to other areas of the County.

Loss of Agricultural Land

In the post Hurricane Andrew period, there has been a rapid decrease in Miami-Dade County in the amount of land in agricultural use. From 1994 through 2008, acreage under cultivation or lying fallow went from about 89,000 acres to 64,700 acres today. However, it should be noted that only 57,500 acres are outside the UDB. This figure of 57,500 acres is disturbing as this represents 12,700 more acres than the required figure of 52,000 acres in 2025. (See Urban and Agricultural Land Use Trends and Projections, Miami-Dade County, Florida, Miami-Dade County, Department of Planning & Zoning, 2002.) There has been a loss of 24,300 acres of agricultural land over the past fifteen years. This loss has occurred primarily within the UDB, although some of the loss is attributable to the development of residences on parcels of at least five acres outside the UDB and purchases by the State of Florida for conservation purposes. Another important factor that has led to this loss is the weakened economic viability of some agricultural sectors due to canker and other infestations, as well as trade liberalization through the North American Free Trade Agreement (NAFTA). This has put downward pressure on the returns of some crops. Further, continued population growth and concomitant urban development pressure has put significant upward pressure on agricultural land values.

Despite the difficulties experienced by some sectors of the agricultural industry in Miami-Dade, the overall assessment is quite positive. The greater focus on nursery operations has led the way. Total acreage for nursery operations rose from 7,751 acres to 12,556 acres over the five-year period; whereas, acreage for row crop production decreased by 6,500 acres. As a result of

the increased importance of nurseries, employment increased from 8,700 to 11,430. This is not surprising as nursery operations are more labor intensive. Direct sales by nurseries amounted to 58.3 percent of the total agricultural sales in 1997. This figure rose to 75 percent in 2002. Finally, the total economic impact of agriculture in Miami-Dade County for the year 1997 was \$900 million. This figure rose to \$990 million in 2002, an increase of 10 percent. Clearly, the health of agriculture has shown marked improvement in terms of employment and total economic impact during the period examined.

Parkland alone would result in the loss of 961 acres of agricultural land or 55 percent of the annual loss. However, the Parkland DRI would not only result in the loss of 961 acres of agricultural land, but the farming area to the north will be effectively cut off from the agricultural land to the south. Approval would render this area to the north, approximately 4,930 acres, part of which is located in the UEA, of lesser value for agricultural production as the movement of shared agricultural equipment would become more difficult. In addition, the approval of the Parkland DRI application would set a precedent in regard to areas for expansion of the UDB. This action could affect the 6,160 acres of agricultural land to the south of Parkland and north of SW 184th Street. The result would be to compromise the agricultural viability of this area, as well as the one to the north. This effect on agricultural viability is due to the upward pressure on land values resulting from the residential and commercial development of Parkland, as well as the lower costs for infrastructure, i.e. roads, that would need to be extended for further development. Thus, about 11,000 acres of agricultural land adjacent to Parkland would be put into jeopardy. This could mean that agricultural land in the County would be barely above the required acreage of 52,000.

As can be seen in the map that shows five-acre parcel with residential units and parcels with agricultural exemptions outside the UDB in Appendix A, a large part of the agricultural area known as the Redland, below SW 184th Street and north of SW 272nd Street, is dotted by residential structures. This has created a patchwork quilt pattern, with almost 400 residences on five-acre parcels in this area, interspersed with small agricultural parcels. Effectively this has limited the potential for agricultural uses requiring large tracts of land in this area, as there remain few contiguous areas suitable for anything but very small-scale agriculture. Further, over time, it is highly likely that the number of these residential structures in the Redland will increase and lead to the displacement of existing agricultural activities due to lack of compatibility between residential and agricultural uses.

Again referencing the map in Appendix A, it is clear that there remain only two areas in the County with large contiguous areas appropriate for large-scale agriculture. The first is the area below SW 272nd Street and the second is the area that includes Parkland and the land to the north and south. Thus the Parkland development would likely result in the County having only one area that is exclusively used for agriculture.

Clarifications Regarding “No Net Loss of Agriculture”

The applicant makes several assertions relative to the “no net loss of agriculture” concept, in terms of policy, consistency and application considerations. While some of these remarks are essentially correct, others are in need of clarification.

Policy Considerations

The applicant correctly points out that CDMP Policy LU-1S requires the CDMP be consistent with the Miami-Dade Strategic Plan. Further, that a priority outcome of the plan, relevant to the application, includes the protection of viable agricultural and environmentally sensitive lands. However, the applicant takes exception to the interpretation of “no net loss of agricultural or environmentally sensitive lands.” They refer to this concept as only a “measuring stick”. Unfortunately, this deviates from what the Strategic Plan actually says. In fact, the “no net loss” concept is rather a “preliminary performance objective/key performance indicator” according to the Plan’s text. A performance objective is clearly more than a measuring tool; it is an objective of the priority outcome.

Consistency Considerations

The applicant further states that, even if, the Strategic Plan requires “no net loss of agricultural land”, the concept would be inconsistent with other Goals and Policies of the CDMP. To support this contention, they cite four CDMP policies, but only in part. This partial citation results in a misrepresentation of three policies. Specifically, the applicant indicates that Policy LU-1P “encourages non-agricultural commercial land uses in South Dade agricultural area outside the UDB.” The policy in fact states that the County shall explore and may authorize alternative land uses in the South Dade agricultural area that are compatible to agriculture and rural residential uses and would promote ecotourism. Second, the applicant states that Policy LU-2B “permits the development of governmental facilities such as fire and police stations in areas designated for Agricultural uses under the CDMP.” This is a distortion of the intent of the policy, which states that urban services and facilities that encourage urban development in agricultural lands shall be avoided, except for those improvements needed to protect public health and safety, and which serve the needs of non-urban areas. Finally, the applicant asserts that Policy LU-9L “requires adoption of zoning overlay for areas outside the UDB to permit non-agricultural business uses in areas designated for Agricultural use”. This is another misreading of the policy; rather the policy states that the County shall formulate these overlays or other regulations to those uses, which support the rural and agricultural economy. Thus the “no net loss” of agricultural lands policy is not inconsistent with other CDMP policies.

Application Considerations

The applicant argues that, while the County has used the “no net loss” of agricultural lands policy to recommend denial of applications seeking expansions to the UDB, at the same time it has continued to permit replacement of agricultural uses outside the UDB with other land uses. An analysis to support this contention based on the Redland area follows. While there are some significant discrepancies between the data the applicant used and the true figures, the fact that many residential units in this area are without agricultural exemptions (63 percent) is correct. In addition, for those units constructed after 1990, the corresponding figure rises to 66 percent. Thus, there has been a significant decrease in the issuance of agricultural exemptions. While the application of the policy appears inconsistent with the permitting process in this agricultural area, in reality it is not. The Redland area suffered extensive loss of residential structures after 1990 due to the devastation caused by Hurricane Andrew. Thus, in the post 1990 period there was a great deal of replacement of residential structures and, in this period, the Property Appraiser has greatly restricted the issuance of agricultural exemptions. Further, under existing regulations a property owner with a parcel of five acres or more may by right build a single family home on the site. County policy cannot, under any circumstances, override

existing legal rights. In sum, the use of the “no net loss” of agricultural lands concept is not inconsistent with other policies and application considerations.

Viability of Agricultural Lands

The applicant contends that the economic viability of agriculture in Miami-Dade is on weak footing. While this situation is not true for certain segments of the industry (i.e. nurseries and horticulture), it is unfortunately the case for existing row crop production. The costs of production and the return on crops have been squeezed, and unless a crop that yields acceptable profit rates becomes part of the crop mix, the future of row crops is uncertain. Some South Dade farmers suggest that boniato used as a biofuel might be a profitable crop. However, there is no quantitative evidence at this time.

As has been indicated previously, agriculture in Miami-Dade County has been and is undergoing a successful transformation from row crop production to more profitable nursery operations. Nurseries are in agricultural areas that are interspersed with other uses, in particular residential units that are found in the central part of the Redland area. This creates issues of incompatibility of adjacent uses. Over time, as more one in five acre resident units are built outside the UDB displacement of these agricultural activities will occur. Therefore, a need exists for large contiguous agricultural areas that do not have incompatible land uses. Further, what changes in agricultural uses in the mid and long term future will occur is unknown. Capacity for agriculture must be available for both of these reasons. Parkland is certainly one of those areas that provide capacity for agricultural activities without incompatible uses in the surrounding area.

Based on the above-mentioned factors, notwithstanding the weakness in row crops production, a residential development with a requested capacity over 6,900 units is not warranted at this time in this agricultural area.

ENVIRONMENTAL CONDITIONS

The following information pertains to the environmental conditions of the application site. All YES entries are further described below.

Flood Protection

County Flood Criteria (NGVD)	9.00 feet
Stormwater Management	Surface Water Management Permit
Drainage Basin	None
Federal Flood Zone	AH-9
Hurricane Evacuation Zone	None

Biological Conditions

Wetlands Permits Required	No
Native Wetland Communities	No
Specimen Trees	No
Natural Forest Communities	No
Endangered Species Habitat	Foraging Habitat for threatened and endangered species

Other Considerations

Within Wellfield Protection Area	No
Archaeological/Historical Resources	No

Stormwater Drainage

The subject property is located outside of the Urban Development Boundary (UDB) where flood protection is not available to support new development. This is largely due to the lack of canals that drain the area and keep the groundwater levels high, thereby reducing the efficiency of normal stormwater management systems such as french drains. As a result, the development criteria established for the western areas of the County requires that sites be designed to provide adequate flood protection for a 100-year, 3-day storm and that sufficient land be set aside stormwater retention. In the 2006 Sufficiency Review for the Application for Development Approval (ADA) of the Parkland DRI, the South Florida Water Management District (SFWMD) and the Miami-Dade County Department of Environmental Resources Management (DERM) estimated that the project would require 25% of the residential areas and 34% of commercial and institutional areas to be used for on-site flood mitigation. The applicant set aside 126.21 acres for water retention, or approximately 13%, for this purpose. Both SFWMD and DERM stated this acreage was insufficient for flood protection and must be increased in order to avoid any off-site discharge. Since that finding, DERM completed a review of a fill encroachment study for the referenced project, and pursuant to the information submitted, concluded that the proposed surface water management complies with the requirements of Section 24-48 of the Miami-Dade County Code and the Permit Information Manual IV of the South Florida Water Management District(SFWMD).¹⁸ According to DERM, approval of the Cut and Fill criteria requirements for the retention of the 100-year, 3-day storm event within the development, shall be subject to the following conditions:

1. The proposed development shall provide a minimum lake area of 137.29 acres designated as surface water management, and an additional minimum pervious area of 258 acres. Building areas shall not exceed 244 acres. Any deviation from these land uses will require re-review and re-approval of the Cut and Fill requirements by this office.
2. No encroachment by fill or any use other than intended is allowed in the surface watermanagement area.

¹⁸ Letter from DERM dated November 18, 2008 and letter from the applicant dated November 17, 2008.

3. A surface water management permit by the SFWMD shall be required for the construction of the drainage system associated with the proposed development.

Proper grading or a structural wall must be provided along the perimeter of the subject property to ensure full on-site containment of run-off from the development. Furthermore, other DERM permits may be required or combined with the aforementioned permit.

Natural Resources and Wildlife

During the 2006 sufficiency review for the Parkland DRI Application for Development Approval (ADA), DERM raised several concerns regarding natural resources and wildlife. DERM stated that the agricultural parcels with row crops in and around the Parkland DRI site are increasingly becoming an important foraging habitat to a variety of wildlife, including migratory bird species listed as threatened, endangered or protected at the state or federal level, including American Bald Eagles. Indeed, American Bald Eagles were detected in and around the general area of the site on two site visits.¹⁹ This occurrence is probably due to the fact that the project is located approximately 2.5 miles from the Everglades National Park and 1.1 miles from two Miami-Dade County-owned hardwood hammocks that serve as important bird roosting habitats for various species, including the American Kestrel, which is listed as a "threatened" species by the State of Florida. Since these hammocks have been completely surrounded by residential development, the agricultural lands provide a foraging habitat for certain wildlife.

The applicant provided a single visual wildlife survey during the ADA sufficiency review. At that time, DERM deemed the survey to be insufficient to determine the effects that the proposed mixed urban use would have on protected wildlife. To address this deficiency, the applicant was asked to submit comprehensive bird, mammal and herpetological surveys for the entire application site, using professionally accepted methodology for quantifying utilization. The applicant responded by stating that they had complied with the data and methodological standards established at the pre-application conference for the Parkland DRI, in which only a single visual survey was required. To address DERM's concern, however, the applicant has expressed willingness to accept a development order condition which would require lake edges and open spaces to be designed as environmental enhancement areas to encourage utilization by wildlife.

Historical and Archeological Resources

According to the Miami-Dade County Office of Historic Preservation and Archaeological Resources, there are no recorded archaeological resources within the application site. Due to the disturbed nature of the ground surface, there is a low probability for locating unrecorded archaeological sites on the subject property.

National Park Service

The National Park Service (NPS) submitted comments on April 1, 2008 in response to the Parkland DRI Application to amend the CDMP. The comments expressed concern over the potential impacts that the proposed development would have on the Everglades National Park and the Biscayne National Park. NPS questions the impact that the withdrawal of potable and non-potable water for the development would have on groundwater levels or potential seepage, particularly since the project is located approximately 1.5 miles east of L-31[canal]. They have requested a valid modeling analysis by the SFWMD or Miami-Dade County in order to determine the potential impact on the national parks. It should be noted that in the 2006 Second

¹⁹ On August 4, 2005 one (1) Bald Eagle was detected on the site as part of the applicant's visual wildlife survey (Application for Development Approval, Aug 2006). On July 21, 2008, during a midday site visit by staff, five (5) American Bald Eagles, including two immature eagles, were witnessed foraging within a quarter of a mile west of the Parkland DRI application site.

Statement of Information Needed (SIN2) for the Parkland DRI sufficiency review, the SFWMD also requested the applicant to provide a modeling analysis of the project's potential impact on groundwater levels and seepage.

Although a thorough modeling analysis has not been conducted, the applicant did submit a "simple ModFlow model" for the proposed withdrawal of potable water on August 2008 in response to the comments from NPS. According to the model, the expected 0.01 foot drawdown would not extend beyond the boundaries of the Parkland DRI site. Furthermore, since the project's proposed lakes are required to retain 100% of onsite stormwater for a 100-year, three-day storm event, the applicant asserts that the project will not impact the water levels within Everglades National Park or Biscayne National Park. (See Appendix C)

ASSESSMENT OF IMPACT ON PUBLIC FACILITIES AND SERVICES

Water and Sewer

Water Supply

The Biscayne Aquifer is the primary water supply source for the millions of people living in South Florida. Overuse of this aquifer has resulted in lowering water levels in the Everglades, which is inconsistent with the goals of the Comprehensive Everglades Restoration Plan (CERP). CERP is designed to restore and preserve the water resources of the South Florida ecosystem, including the Everglades. In 2005, the South Florida Water Management District (SFWMD) promulgated new rules that prohibited withdrawals from the Biscayne Aquifer to accommodate future development. The SFWMD requires that all future development be linked to new water supply sources, either through alternative water supply or reuse projects. On November 15, 2007, the Governing Board of the SFWMD approved Miami-Dade Water and Sewer Department's (WASD) 20-year water Consumptive Use Permit (CUP). WASD's implementation of a number of alternative water supply and reuse projects is an essential component of the CUP. As stated above, all future growth in the County must rely on water from alternative sources or Biscayne Aquifer, which has been replenished by reused or reclaimed water. In April 2007, the Board of County Commissioners (Board) adopted alternative water supply and reuse projects in the amount of \$1.6 billion dollars into the Capital Improvements Element of the CDMP. This commitment by the Board fully funds the projects which are outlined in SFWMD's Lower East Coast Regional Water Supply Plan and the County's CUP. A summary of these projects can be found under Objective WS-7 of the CDMP (Water Supply Facilities Work plan).

The assessment of available water supply, as it relates to comprehensive plan amendments, is difficult given that there is no specific timing of the development. Therefore, to determine if adequate water supply will be available for the proposed amendment, the year 2014 is used. Although the proposed buildout date of the project is 2018, the applicant projects to have the first certificates of occupancy issued for the project by 2014. This timeframe allows for rezoning of the property, platting of property, permitting and construction. Additionally, this is the timeframe for which concurrency is applied.

The applicant has estimated the existing groundwater withdrawals for agricultural irrigation on the property to be approximately 3.5 million gallons per day (mgd). Under the proposed amendment, the water demand is estimated at 1.87 mgd. Although the applicant argues that the proposed uses would result in a net decrease below the existing permitted agricultural use, the water demand for agricultural uses and urban uses are not comparable. The application site is located outside the Urban Development Boundary, which means that there is no public water and sewer infrastructure available to serve the site. Non-potable water from onsite wells is used for irrigation purposes under agricultural permits with approximately 70% being returned to the aquifer. However, the proposed residential, commercial, and industrial uses for the Parkland DRI will require an expansion of the potable water and sanitary sewer infrastructure. The water necessary for this development will be withdrawn from the West wellfield and these demands will be assessed against the County's permitted water uses. No credits will be given for a reduction in agricultural uses.

Table 5-1 (Alternative Water Supply and Wastewater Reuse Projects 2007-2030) of the Water and Sewer sub-element in the CDMP indicates that the Phase 1 of the South District Water Reclamation Plant (WRP) Groundwater Recharge will be completed in 2013. This project will

yield 18.6 million gallons per day and will ensure adequate water supply for the proposed development. Table 5-2 - Finished Water Demand by Source of the Water Supply Facilities Work Plan Support Document indicates that there will be no water deficit after the normal growth of the County is accommodated in the year 2012 or through the year 2030.

Estimated Water Demand by Land Use

PROPOSED USE			
	Program Development	Water Use Gpd/unit	Water Demand
Residential			
Single Family	1,257 d.u. SF, detached	350/unit	439,950
Townhouse	2,436 d.u. SF, attached	250/unit	609,000
Condominium	3,248 d.u. MF	200/unit	649,600
Business and Office			
Retail	200,000 sq. ft.	5 gpd/100 sq.ft	10,000
Office	100,000 sq. ft.	10 gpd/100 sq.ft.	10,000
Industrial	550,000 sq. ft.	20 gpd/1,000sq.ft.	11,000
Hospital	200 Beds	250 gpd/bed	50,000
Community Uses			
Library, Police, Fire	50,000 sq. ft.	10 gpd/100sq.ft.	5,000
Parks	67.6 acres	5 gpd/person	1,000
Schools			
Two (2) K-8	3,200	15 gpd/student	48,000
One (1) High School	1,600	20 gpd/student	32,000
Staff	360	15 gpd/staff	5,400
		Total (gpd)	1,870,950
		Total (mgd)	1.871 mgd

gdp: gallons per day

mgd: million gallons per day

Source: Miami-Dade County DERM, WASD and Miami-Dade County Planning and Zoning Department, 2008

To assure that adequate water supplies are maintained, WASD is developing an allocation system to track water demands from platted and permitted development. This system will correspond to the system used by DERM to track sewer flows to pump stations and wastewater treatment facilities. The water allocation system requires all development within the WASD utility service area to obtain a letter from WASD stating that adequate water supply capacity is available for the proposed project prior to approval of development orders. WASD's water allocation system is anticipated to be operational in 2009.

Potable Water Facilities

The County's adopted level of service (LOS) standard for water treatment requires that the regional treatment system operate with a rated maximum daily capacity of no less than 2 percent above the maximum daily flow for the preceding year, and an average daily capacity of 2 percent above the average daily system demand for the preceding 5 years. The WASD water treatment plant servicing this area is the Alexander Orr Water Treatment Plant. According to data provided by DERM, the plant has a rated treatment capacity of 214.7 million gallons/day (mgd) and a maximum plant production based upon the last 12 months of 196.20 mgd. Based

on these numbers, this treatment plant has 18.50 mgd or 8.62% of treatment plant capacity remaining.

WASD estimates that the water demand for the proposed amendment would be approximately 1.87 mgd should the Parkland DRI be developed to its maximum capacity. In the *Consolidated Response to Department Issues* dated August 2008, the applicant estimates that 0.98 mgd of the water demand will be from non-potable sources, including wastewater reuse. However, the maximum potable water demand for the project was based on the total 1.87 mgd, since the timing and specifications of the proposed wastewater reuse are still being reviewed.²⁰ Exact calculations for water demands will be made upon submittal of a final site plan. For purposes of this application, the maximum demand of 1.87 mgd would decrease the 18.50 mgd treatment plant capacity of the Alexander Orr Water Treatment Plant to 16.63 mgd or 7.75%; a remaining maximum capacity that is above the LOS standard of 2%. This estimated increase in water demand will not have a significant impact on the plant's design capacity and will not cause the adopted LOS standard to be exceeded.

Impact of the Parkland DRI on the Capacity of the Alexander Orr Treatment Plant

Estimated Annual Potable Water Demand for Parkland DRI: Alexander Orr Treatment Plant	Current Plant Capacity	Impact on Plant Based on Parkland DRI (mgd)
Estimated Demand from Parkland DRI (mgd)	---	1.87
Rated Plant Capacity	214.7	214.7
Maximum Plant Production (Based on 12 month mgd)	196.20	198.07
Plant Capacity Remaining (mgd)	18.50	16.63
% of Plant Capacity Remaining	8.62%	7.75%

mgd: million gallons per day

Source: Miami-Dade County DERM, WASD and Miami-Dade County Planning and Zoning Department, 2008

Since the subject site is outside the UDB, any connection to the public water and sewer system is subject to approval of the UDB expansion. To connect to the public water system, the subject site would need to connect to an existing 24-inch water main on SW 152 Street and an existing 12-inch water main on SW 162 Street. This development would require a new 16-inch water main extension along 177 Avenue, 136 Street and 162 Avenue and a 12-inch water main extension on SW 162 Avenue, SW 167 Avenue, 172 Avenue and SW 144 Street.

Wastewater

The County's adopted LOS standard for wastewater treatment and disposal requires that the regional wastewater treatment and disposal system operate with a capacity that is two percent above the average daily per capita flow for the preceding five years and a physical capacity of no less than the annual average daily sewer flow. The wastewater effluent must also meet all applicable federal, state, and county standards and all treatment plants must maintain the

²⁰ Letter from applicant dated November 17, 2007.

capacity to treat peak flows without overflow. Ultimate disposal for sewage flows from this site would be the South District Wastewater Treatment Facility. This facility has a design capacity of 112.5 mgd and has a 12-month average flow of 93.32 or 83% of the plant's design capacity.

Based upon the proposed development scenario for the Parkland DRI, it is estimated that the amendment site will generate sewage flows of 1.87 mgd. The applicant is proposing to reduce the wastewater treatment demand to 1.22 mgd with approximately 20% of this reduction achieved through conservation efforts and the balance through onsite treatment and irrigation reuse. (see further discussion in following section) As was discussed above, these reductions were not taken into account in the maximum wastewater treatment analysis since they are still under review. Hence, the estimated maximum flows of 1.87 mgd will increase the average treatment plant flows of the South District Wastewater Treatment Facility to 95.42 mgd or 84.2% of the design capacity. This will not exceed the established level of service.

Impact of the Parkland DRI on the Capacity of the South District Water Treatment Plant

Estimated Wastewater for Parkland DRI: South District Wastewater Treatment Facility	Current Facility Capacity	Impact on Facility (Based on Parkland DRI (mgd))
Estimated Wastewater from Parkland DRI (mgd)	---	1.87
Design capacity of the facility	112.5 mgd	112.5 mgd
12-month average flow	93.55 mgd	95.42
% of Facility's design capacity	83.16%	84.82%

mgd: million gallons per day

Source: Miami-Dade County DERM, WASD and Miami-Dade County Planning and Zoning Department, 2008.

As was the case with the potable water system, any connection to the public sewer system is subject to approval of the UDB expansion since the subject site is outside the UDB. This development will require a connection to the existing 24-inch force main located on SW 152 Street and the existing 12-inch water main on SW 162 Avenue, as well as extension of a new 16-inch and a 12-inch water main throughout the project site. Given the size of the proposed development, six pump stations will also be required to provide adequate service.

Water Conservation and Alternative Water Supply

Section 32-85 of the Miami-Dade County Code requires WASD to evaluate alternative water supply projects for any new DRIs that have a projected water demand in excess of 1 mgd. In addition, the proposed project must adhere to the water use efficiency standards for new development adopted by the Board of County Commissioners effective January 2009. WASD is requiring the applicant to address the following additional conditions:

- Implement Principles of Low Impact Development as per the University of Florida Program for Efficient Communities Low Impact Development Guidelines.

- Implement 100% reuse of the wastewater flows for irrigation.
- Implement at time of construction the best water savings technology available for all new construction by land use category as per the Water Use Efficiency Standards Manual.

After various discussions with WASD, the applicant has agreed to establish a system that will address all of the conditions listed above. To address these water efficiency requirements, the applicant is proposing to utilize a variety of water conservation techniques, including low-flow plumbing fixtures, cisterns, and xeriscape principles, moisture and rain sensor switches for irrigation, and design standards to avoid overthrow and overflow on to impervious surfaces. Furthermore, the project proposes not to use potable water for irrigation of single family and attached dwellings. The applicant also proposes the construction of an onsite satellite wastewater treatment plant, which is proposed to recapture the wastewater for treatment and irrigation. According to the applicant, this on-site satellite reuse facility will utilize membrane filtration technology and a purple pipe system to distribute the reuse water for irrigation to various areas throughout the project. WASD is requiring that 100% of the wastewater from this satellite treatment plant be used for irrigation. This is intended to reduce the potable water demands and wastewater flows to the WASD system.

The applicant has estimated that the daily wastewater flow for the Parkland project will be 0.844 mgd and the water irrigation will be 0.98 mgd. Although the intent is to use all the reclaimed wastewater flow for irrigation, the reclaimed water will not be sufficient to satisfy the total irrigation demand of the development. The additional 0.136 mgd required to meet the project's irrigation demand of 0.98 mgd will be from the project's lakes or from the WASD system, subject to the review and approval of WASD, the South Florida Water Management District and other appropriate government agencies.

Fire Rescue

According to the Miami-Dade County Fire Rescue Department (MDFR), there are five (5) Fire Rescue Stations that would respond to alarms from the subject property. Four of these stations have Advanced Life Support (ALS) equipment and a Rescue unit, and three of the stations are continuously staffed with seven firefighters/paramedics. Currently, there are no planned fire station facilities in the vicinity of the subject application site.

The average travel time to incidents in the vicinity of the application area is approximately 12:48 minutes.²¹ This average travel time does not comply with the National performance objectives, which requires the assembly of 15-17 firefighters on-scene within 8 minutes at 90% of all incidents. Increased response times may also result due to congestion on SW 152nd Street and SW 177th Avenue.

Station	Address	Equipment	Staff
43	13390 SW 152 Street	Rescue, ALS, 50' Aerial	7
36	10001 Hammocks Blvd	Rescue, ALS, 50' Aerial, Battalion	7

²¹ 2007 Miami-Dade County Fire Rescue Department (MDFR).

Station	Address	Equipment	Staff
56	16250 SW 72 Street	Rescue, ALS Engine	7
53	11600 SW Turnpike Hwy	Rescue	3
60	17605 SW 248 Street	ALS Tanker	4

Based on the requested CDMP designation, the potential development for the proposed site is anticipated to generate a total of 2,190 annual alarms. According to MDRR, this will result in a severe impact to existing fire rescue services. Under MDRR's evaluation system, 1 – 30 annual alarms would have minimal impact to Fire and Rescue services, 31 – 69 annual alarms would have a moderate impact, and 70+ annual alarms would have a severe impact.

The required fire flows for the proposed CDMP designation for Industrial and Business uses are 3,000 gallons per minute (gpm) at 20 pounds per square inch (psi) residual on the system. The required fire flows for Office and Low-Medium Density Residential are 1,500 gpm. Additionally, each fire hydrant shall deliver no less than 750 gpm. Fire flows in this area must meet the required pressures; however, testing of the water lines that will service this site will be performed at the development stage.

The number of alarms forecasted for this project, along with the congested roadways within the area, are expected to generate a severe impact to existing services. Since there are no plans for a new fire rescue facility in the vicinity of the site, MDRR will require the dedication of a 2-acre parcel of land for the construction of a fire rescue station to serve the Parkland DRI. At this time, the applicant has expressed willingness to “donate” two acres within the subject site and to construct a joint fire and police facility according to Green Development Standards. This condition must reflect that the land will be dedicated.

Police

The Miami-Dade Police Department (MDPD) indicated that police service in the vicinity of the application area is adequate. However, demands for police service are likely to increase as a result of the proposed development and the increase in population and traffic volume. It is estimated that 40 patrol officers and support staff will be needed to provide minimum staffing to serve the proposed development. MDPD does not object to the proposed project or to the concept of having a police presence within the development. Rather than a the joint police and fire facility proposed by the applicant, however, MDPD would prefer that the applicant provide a separate 2-acre parcel for a police station. Such a facility may be adjacent to the Fire Rescue Station in order to create a Public Safety Complex.²² Further discussions with the Police Department and the applicant are necessary to address the request from MDPD.

²² Letter from Miami-Dade County Police Department dated December 8, 2008.

Library System

There are two libraries within three miles of the application site. The first is located at Country Walk at 15433 SW 137 Avenue and the second is the West Kendall Regional Library located at 10201 Hammocks Blvd.

The proposed Parkland DRI calls for the development of a library within the development. According to the Miami-Dade Public Library System there is no funding allocated at this time for the design, construction, and operation of a new library in the application site. A new 15,000 square foot library would require a minimum of two acres. However, the Department believes that the land requirement could be reduced if a library facility were to be co-located with a school facility. To date, the applicant has not committed to donating the land or providing the funding for the construction of such a facility. The applicant should investigate the possibility of co-locating a library facility with the proposed schools in the development.

Parks

The LOS standard for the provision of recreation open space provides for 2.75 acres of local recreation open space per 1,000 permanent residents in unincorporated areas; and adds that the County must provide open space of five acres or larger within three miles from a residential area. This application is within Park Benefit District 2, which has current surplus of 555 acres of local recreation space. The closest County Park is West Kendall District Park, a 164-acre park that is currently undeveloped.

Based on the population estimate of 17,818 residents for the proposed development, 49 acres of local recreation space will be needed to meet the current level of service of 2.75 acres per 1000 residents. Although the applicant is planning to provide 67.6 acres of parks and open space within the application site, it is unknown whether the amount, size or configuration of the 67 acres would constitute meaningful recreation opportunities to serve resident's needs. If sufficient recreation space is not provided within the proposed development, it may be difficult for the County park system to absorb the demand for recreation services that a population of 17,818 would create. Meaningful recreation space would include athletic fields, indoor and outdoor neighborhood centers; children's play grounds, and tot lots. More information is needed to determine if the proposed application provides adequate recreation space.

The Park and Recreation Department has recently completed a new Park and Open Space System Master Plan. Though the plan does not directly address the location of the Urban Development Boundary or the retention of agricultural land, it is important for the proposed development to follow the principles of the plan by providing an adequate transition between the built environment and the agricultural and natural areas that surround the subject site. The Park and Open Space System Master Plan also calls for a connected system of parks, public places, natural and cultural areas, streets and greenways and water trails, as well as compact pedestrian friendly development. In the conceptual Master Plan for the Parkland DRI, the applicant agrees to create new parks, lakes, wildlife habitats, bikeways and pathways. Without a more detailed site plan of the proposed development, a meaningful evaluation of how the proposed open space comports with the principals and goals of the County's Park and Open Space System Master Plan cannot be performed.

Solid Waste

The application site is located outside the Department of Solid Waste Management (DSWM) waste service area for garbage and trash collections. The adopted LOS standard for the County Solid Waste Management System is to maintain sufficient waste disposal capacity to accommodate waste flows committed to the System through long-term contracts or interlocal agreements with municipalities and private waste haulers, and anticipated uncommitted waste flows, for a period of five years. The DSWM issues a periodic assessment of the County's status in terms of 'concurrency' that is, the ability to maintain a minimum of five (5) years of waste disposal capacity system-wide. Currently the County exceeds the minimum standard by two (2) years. A review of the application indicates that development of this site will not cause the LOS standard for solid waste to be exceeded if it were to be brought into the DSWM waste service area.

The closest DSWM facility to the application site is located at 8000 SW 107th Avenue, which is approximately 8 miles from the subject property. Under the DSWM's current policy, only residential customers paying the annual waste collection fee and/or the Trash and Recycling Center fee are allowed the use of this type of facility. The proposed project will have a minimal financial impact on DSWM collection services. The financial impact on the disposal and transfer facilities would be incremental with the cumulative cost of providing disposal capacity for DSWM collection operations, private haulers and municipalities paid for by the users. Therefore DSWM is capable of providing such disposal service.

Aviation

Miami-Dade County Aviation Department (MDAD) has determined that due to application site's proximity to the Kendall-Tamiami Executive Airport, the site is impacted by the following two land use restrictive zones:

Outer District (OLZ): New residential construction and educational facilities, excluding aviation, are required to incorporate at least a 25db Noise Level Reduction into the design/construction of the structure (Approximately 25% of the eastern portion of the project falls within this zone).

No School Zone (NSZ): New educational facilities, excluding aviation schools, are not permitted within this land use zone (Approximately 400 feet of the northern portion of the subject property, in a strip parallel to, and south of, SW 136 Street, is impacted by this zone).

The majority of the site is located inside the 35-foot Above Mean Sea Level Review Boundary as depicted in MDAD's proposed "Airspace Review Criteria for Kendall-Tamiami Executive Airport Map". As a result, any proposed structures, including construction cranes, reaching or exceeding 35 feet AMSL at this site are required to be reviewed by MDAD, and possibly by the Federal Aviation Administration (FAA).

Public Schools

At the time of review of this application, the new concurrency LOS standard for public schools was not in place for Miami-Dade County. While Miami-Dade County anticipates adopting the

new concurrency level of service (LOS) standard for public school facilities, it is unclear when this system will be in effect. Additionally, the buildout year for the proposed development is 2014, which is beyond the 5-year planning horizon of the District's Workplan. Therefore, the application was analyzed using the current methodology, pursuant to the existing adopted Interlocal Agreement for Public School Facility Planning between Miami-Dade County and Miami-Dade County School Board (Interlocal Agreement). This methodology requires collaboration with the Miami-Dade County School Board if the proposed development results in an increase of FISH utilization in excess of 115% at any of the schools of impact. The evaluation of this application on the schools impacted is presented below.

School	2008 Enrollment		FISH Capacity	% FISH Utilization	
	Current	With Application *		Current	With Application *
Norma Butler Bossard Elementary	1,300	2,619	1,032	126%	254%
Jorge Mas Canosa Middle	1,930	2,534	2,025	95%	125%
Miami Southridge Senior	3,062	3,886	2,769	111%	140%

* Student population increase as a result of the proposed development. The table reflects the population and facility capacity data as reported by the Office of Technology Services, as of October 2008.

Notes: 1) Figures above reflect the impact of the class size amendment.
2) Pursuant to the Interlocal Agreement, two of the impacted schools meet the review threshold.

Students generated by this application will attend those schools identified in the above Table. This Table also identifies the school's enrollment as of October 2008~~7~~, the school's Florida Inventory of School Houses (FISH) Capacity, which includes permanent and relocatable student stations, and the school's FISH utilization percentage.

This application, if approved, will increase the potential student population of the schools serving the application site by an additional 2,747 students. Approximately, 1,319 students will attend Norman Butler Bossard Elementary, increasing the FISH utilization from 126% to 254%; 604 students will attend Jorge Mas Canosa Middle, increasing the FISH from 95% to 125%; and 824 students will attend Miami Southridge Senior High, increasing the FISH utilization from 111% to 140%.²³ All three school(s) will exceed the 115% FISH design capacity threshold set by the Interlocal Agreement. Currently there is one senior high school "HHH-1" being planned, designed or under construction with a projected occupancy date of 2012 in the area of the application site. This Senior High is designed to accommodate 2000 new student stations.

Although the CDMP application calls for a high school and two K-8 schools to be developed on the application site, no agreement has been reached with the Miami-Dade County School Board regarding these facilities. Indeed, the applicant has not been able proffer a mitigation plan acceptable to the School Board. As such, the School Board is recommending denial or deferral of application until applicant is able to address the impact of the development on public schools. It is important to note that since this is a DRI, the proposed development's student station reservation will be made at time of adoption of a development order. Therefore all agreements with respect to schools must be reached prior to adoption of the development order.

The applicant has indicated that if they are not able to reach an agreement with Miami-Dade County Public Schools under the current mitigation procedure, they will mitigate the school impacts under the public school concurrency system currently being negotiated. Under the new concurrency management system, the applicant would consider development order conditions with any of the following as a possible combination for mitigation:

²³ Letter from Miami-Dade County Public Schools dated October 31, 2008.

- Construction of one or more Miami-Dade County Public school facilities;
- Construction of one or more charter schools; and/or – not currently allowed
- Monetary or land donations.

Regardless of whether the proposed schools are public facilities or charter schools, it is important to require the facilities to be constructed to SREF standards and be subject to co-location. To encourage a pedestrian oriented environment, the Department of Planning and Zoning also recommends that the high school be located toward the center of the development and be developed as a “no drive” facility. Rather than constructing three schools, it may be more energy efficient to develop one K-12 campus or a high school and one K-8 school with an early childhood center. Such options should be considered if mitigation discussions resume. It is also important that the schools be located within the proposed DRI. Currently, travel times to the schools could be an issue. For example, the high school is located in the South Miami Heights neighborhood, which is over 7 miles from Parkland. Although this is not the closest Senior High School, current attendance boundaries would place students within this school. Felix Varela is closer, however, this school is currently at 112% and would also be severely overcrowded without additional relief. The new HHH-1 school was designed to provide relief to both these high schools.

Hospital

The proposed development calls for a 200-bed hospital at the Parkland site. According to estimates from the State of Florida’s Agency for Healthcare Administration (AHCA) approximately 500,000 square feet is required for a 200-bed facility. Since the hospital is projected to be one of the major sources of employment in the proposed development, the Department of Planning and Zoning requested a needs assessment or a certificate of need (CON) for the proposed hospital.

In the August 2008 Consolidated Report, the applicant stated that they have confidential plans from an existing hospital to provide for a facility. They also stated that no certificate of need was required since the State of Florida was in the process of eliminating the CON process. According to AHCA, a CON is not needed only if the proposed hospital is a ‘replacement’ facility within one mile of the existing location. The nearest existing hospital is Jackson South Community Hospital at 9333 SW 152 Street, which is approximately seven miles to the east. The proposed West Kendal Baptist Hospital is scheduled to open in 2011 at SW 88 Street and SW 162 Avenue, approximately three miles to the north of Parkland. According to AHCA, all new hospitals require a CON. They also indicated that the CON processes are being streamlined, not eliminated.

SUSTAINABILITY ANALYSIS

Current changes enacted in 2008 by the Florida Legislature to Section 163.3177, F.S. require the future land use map and its related goals, policies, and objectives to discourage urban sprawl and promote energy-efficient land use patterns and the reduction of greenhouse gas emissions. According to the Florida Department of Community Affairs (DCA), all plan amendments must be evaluated based on these new provisions. In order to address the legislative mandate, the proposed CDMP application and related development was assessed on the following factors:

Energy Efficient Land Use Patterns and Reduction of Urban Sprawl

- Green Building Standards
 - Water and energy consumption and conservation
 - Preservation of environmentally protected lands and agricultural areas
 - Access to amenities
- Employment and Affordable Housing Opportunities within the Development
- Urban sprawl Indicators (Rule 9J-5.006(5)(b) of the Florida Administrative Code.

Reduction of Greenhouse Gas Emissions

- Travel Times to Employment Centers
- Pedestrian orientation

The above factors provide a means to quantify the sustainability of the development. It also provides a means to determine how the applicant proposes to minimize the impact of urban sprawl, promote energy-efficient land use patterns, and reduce greenhouse gas emissions.

Green Building Standards

According to the U.S. Environmental Protection Agency (EPA), green buildings are designed to decrease the impact of the built environment on the natural environment and human health by:

- Efficiently using energy, water, and other resources
- Protecting occupant health and improving employee productivity
- Reducing waste, pollution and environment degradation²⁴

The EPA defines green building as “the practice of creating and using healthier and more resource-efficient models of construction, renovation, operation, maintenance and demolition.”

Although the LEED (Leadership in Energy and Environmental Design) standard is recognized nationally as a way to certify green building, the Florida Green Building Coalition (FGBC) Certification program is also used throughout the State of Florida since it is more tailored to State’s specific climate and environment.

²⁴ U.S. Environmental Protection Agency – Green Buildings, <http://www.epa.gov/greenbuilding/>

Leadership in Energy and Environmental Design (LEED) Certification

As was discussed above, the U.S. Green Building Council LEED program is recognized as the national standard for establishing and certifying green buildings. LEED certification is available for all types of buildings, including new construction, existing construction, schools and homes. The LEED certification is a point-based system, where points are earned in each of six categories: Sustainable Sites, Water Efficiency, Energy & Atmosphere, Materials & Resources, Indoor Environmental Quality and Innovation in Design. Depending on the number of points earned, a project will be certified as one of four progressive levels: Certified, Silver, Gold or Platinum.²⁵

Florida Green Building Coalition (FGBC) Certification

The Florida Green Building Coalition (FGBC) is a nonprofit Florida corporation that has its own green development standards and certification programs, including standards for residential homes, development and commercial buildings. It is a voluntary, state-wide standard for Green Development Designation. The standards apply to mixed-use, commercial, residential, campus-type, or any other type of development that involves change of the Florida land area. The focus is on horizontal planning, design, and development of the land. Other green standards apply to individually permitted parcels and building construction.²⁶

The FGBC's Green Development Designation is based on points earned for six separate categories: Protection of Ecosystems and Conservation of Natural Resources; Creating a Green Circulation System; Green Utilities Practices; Amenities; Covenants and Deed Restrictions; and Providing Educational Information to Help Achieve and Promote Green Living Practices. Each category contains checklist items that are specific in their requirements and may require the submittal of supporting documents (surveys, photos, etc.) For each listed green feature incorporated into the development, points are awarded. Developments that acquire a minimum of 200 points, out of a possible 400 points, qualify to receive the green development designation. According to FGBC rules, if a project has been certified as Green Development and fails to adhere to the green development principles at any time, the FGBC may suspend or revoke the Green Development designation.

Parkland and FGBC Standards

In the August 2008 *Consolidated Response to Department Issues* (Appendix C), the applicant indicated that they were "willing to accept development order conditions" to implement the Florida Green Building Coalition's Green Development Standards (FGBC). In a separate document entitled *Parkland 2014: Florida Green Building Certification*, it was stated that the project would seek to obtain 210 points in order to achieve certification, with the possibility of obtaining an additional 48 points. As stated above, the minimum required for certification is 200 points out of a maximum of 400 points.

Although the applicant did indicate the number of points that they would target under the FGBC's Green Development Checklist, the points only provide a minimum indicator of how the project will comply with the FGBC standards. Some of the specific green building standards the applicant "expects" will be utilized for the Parkland DRI development include natural areas, areas for prime aquifer recharge, native shade trees along 70% of the roadways, green power

²⁵ U.S. Green Building Council, <http://www.usgbc.org/>

²⁶ Florida Green Building Coalition, <http://www.floridagreenbuilding.org/db/?q=node/5362>

for all common areas, sidewalks, and other pedestrian and bicycle facilities. Additional information is needed on the specific measures they will employ in order to adequately evaluate what is being proposed. This should include information that will help to assess how the project will conserve energy and help to reduce green house emissions.

Florida Green Building Coalition's Green Development Standards and
the Parkland DRI Target Points for Designation

Category	Maximum Points Required for Designation	Targeted Points by the Parkland DRI	Additional Possible Points for Parkland DRI
Protection of Ecosystems and Conservation of Natural Resources	125	49	32
Creating a Green Circulation System	75	34	16
Green Utilities Practices	50	18	0
Amenities	25	19	0
Covenants and Deed Restrictions	50	25	0
Promoting Education on Green Living Practices	75	65	0
Total	400	210	48
Minimum Points Required for Designation: 200			

Source: Parkland 2014: Florida Green Building Certification and Florida Green Building Coalition's Green Development Standards

In addition to the FGBC standards, the applicant provided the following list of possible development order conditions that the applicant expressed a willingness to accept in the August 2008 *Consolidated Response to Department Issues*:

- Create ecosystems and conserve natural resources
- Create green non-vehicular circulation system
- Employ green utilities practices
- Provide green community amenities
- Provide green building covenants for all homes
- Homes will be constructed using healthy home guidelines and will be energy efficient
- The building materials will feature green material choices
- Provide green education elements throughout community
- Employ wastewater reuse for irrigation of public ROW
- Provide 100 percent non-potable water for its irrigation needs
- Homes will be 10 – 15 percent more efficient than current Florida Energy Code requirements

As with the FGBC checklist, most of the possible development order conditions listed above are too general. More information is needed to determine the extent of what is being proposed.

Urban Sprawl Indicators

The Miami-Dade County Strategic Plan calls for increasing urban infill and decreasing urban sprawl. In addition, the Florida Administrative Code (F.A.C.), rule 9J-5, provides a methodology to analyze land use amendments with respect to whether or not the amendment discourages urban sprawl. According to Rule 9J-5.006(5)(b), the determination of whether a plan or plan amendment discourages the proliferation of urban sprawl shall be based upon the standards contained in the Rule.

Specifically, Rule 9J-5.006(5)(g) provides a list of 13 indicators of urban sprawl. When reviewing a plan amendment, an evaluation shall be made whether any of these indicators is present. If an indicator is present, the extent, amount or frequency of that indicator shall be considered. The presence and potential effects of multiple indicators shall be evaluated to determine whether they collectively reflect a failure to discourage urban sprawl. As can be seen below the proposed amendment meets 9 of the 13 indicators of sprawl, and collectively, these indicators demonstrate that the proposed amendment fails to discourage urban sprawl:

Rule 9J-5.006 (5) (g) Indicators of Urban Sprawl within the Proposed Amendment

1. *Promotes, allows or designates for development substantial areas of the jurisdiction to develop as low-intensity, low-density, or single-use development or uses in excess of demonstrated need:* The primary land use proposed for the Parkland application is residential with some supporting commercial, industrial, and civic/institutional uses. The DP&Z staff has demonstrated in the Supply and Demand analysis contained in Chapter 2, Planning Staff Analysis that there is no need at this time for residential, commercial, or industrial land uses. The proposed development approximately 6,900 residential units with an estimated population of approximately 18,000 persons.
2. *Promotes, allows or designates urban development in radial, strip, isolated or ribbon patterns generally emanating from existing urban developments:* The Parkland application proposes to create over a 1.5-mile ribbon pattern protrusion of urban development into one of the two remaining large contiguous agricultural tracts within the County.
3. *Fails adequately to protect adjacent agricultural areas and activities, including silviculture, and including active agricultural and silvicultural activities as well as passive agricultural activities and dormant, unique and prime farmlands and soils:* The Parkland application proposes a 'moderately dense community' that is bounded on its north and south by six lane arterial roadways (SW 136 and SW 152 Streets). The application does not provide for appropriate buffering of the agricultural activities, which utilizes pesticides and heavy farm equipment, from the proposed urban development. Additionally, the proposed six lane arterial roadways will have excess capacity, which may be a catalyst for further development within the agricultural lands.
4. *Fails to maximize use of existing public facilities and services:* The Parkland development is proposed to be built on active agricultural land outside the service area of most County services. The development will require new fire and police facilities, new and expanded roadway infrastructure, the expansion of existing water and sewer facilities, solid waste collection services, and transit service.

5. *Fails to maximize use of future public facilities and services:* With the exception of the planned and programmed widening of Krome Avenue, for primarily traffic safety issues, no public facilities and services are planned for the application area. (See the 'Roadways' section in this report.) The Parkland application requires the expansion of public facilities and services to serve the proposed development.
6. *Allows for land use patterns or timing which disproportionately increase the cost in time, money and energy, of providing and maintaining facilities and services, including roads, potable water, sanitary sewer, stormwater management, law enforcement, education, health care, fire and emergency response, and general government:* The proposed 1.5 square miles development includes 6,941 residential units with an estimated population of 18,232 persons, comparable to the City of Sunny Isles Beach (1.7 square miles population of 16,703) that is within the County's Urban Infill Area. The proposed development will require additional police, fire and rescue, solid waste collection services than what has been planned for the area.
7. *Discourages or inhibits infill development or the redevelopment of existing neighborhoods and communities:* The application's proposed extension of urban development and urban services into this agricultural area exerts development pressures on the abutting farmlands. The Agricultural properties immediately south and north of the application site would consequently be adjacent to residential on two sides (the east and south, and the east and north respectively). This would encourage future expansion of urban development into these agricultural areas to the net effect of discouraging urban infill and redevelopment opportunities within the Urban Development Boundary (UDB).
8. *Fails to provide a clear separation between rural and urban uses:* The application site is part of an active agricultural area, and if developed, would be separated from the abutting farms by only the roadways that borders the site. The site is not buffered from the adjacent agricultural uses and may be impacted by the ongoing farming activities, such as during periods of pesticide application.
9. *Results in poor accessibility among linked or related land uses:* Although the proposed development would create a ribbon pattern protrusion of urban extension into the agricultural area, it has access to related land uses through SW 136 Street, SW 152 Street and Krome Avenue/SW 177 Avenue. However, linked or related land uses should include a discussion on where the residents of the proposed development would work, shop, and play. As discussed below in the 'Travel Time to Employment Centers' section, there is a concern regarding the commutation of the residents to places of work. The estimated commutation times of residents to the employment areas brings into question the accessibility of the Parkland development in relation to the said employment areas.

The following are the remaining 4 urban sprawl indicators, which do not apply to the proposed amendment:

1. *Promotes, allows or designates significant amounts of urban development to occur in rural areas at substantial distances from existing urban areas while leaping over undeveloped lands which are available and suitable for development:* The proposed site is bounded to the east by urban uses and does not leap over undeveloped lands.
2. *As a result of premature or poorly planned conversion of rural land to other uses, fails adequately to protect and conserve natural resources, such as wetlands, floodplains,*

native vegetation, environmentally sensitive areas, natural groundwater aquifer recharge areas, lakes, rivers, shorelines, beaches, bays, estuarine systems, and other significant natural systems: There are no significant natural systems detected on the application site; however, the development of the site may affect important foraging habitat for wildlife.

3. *Results in the loss of significant amounts of functional open space:* The application does not affect functional open space.
4. *Fails to encourage an attractive and functional mix of uses:* The application proposes a planned community with a mix of residential, commercial, industrial and civic uses.

The applicant has addressed the urban sprawl criteria in the third Statement of Information Needed (SIN3) for the associated Parkland DRI Application for Development Approval (ADA). The SIN3 is available for review at the offices of the DP&Z upon request.

Travel Time to Employment Centers

The applicant prepared a "Commutation - Travel Time Analysis to Employment Areas" which analyzed the travel times from the proposed Parkland application site to the employment areas within the County. The commutation analysis is included in Appendix C: *Consolidated Response to Department Issues*, August 2008. The applicant's commutation analysis references a July 2006 Edwards and Kelcey study, and highlights the statement made by the July 2006 study that approximately 30% of the Kendall area population work in the Kendall area and the remaining 70% of the population work in other parts of the County. The major employment centers outside the Kendall area provide for over 53% of the Kendall area employment needs and are identified as the Central Area (inclusive of Coconut Grove, Coral Gables, South Miami, and Palmetto Bay), Airport West/Doral, and Downtown Miami. The remaining 17% of the population were employed in the southern and northern areas of the County.

The applicant's commutation analysis evaluated the estimated travel times from the proposed Parkland development to the major employment areas by utilizing transit service, and private automobile. The analysis utilized information from Miami-Dade Transit and automobile travel time surveys. The analysis indicates that the automobile travel time surveys included trips that all commenced between 7:10 Am and 7:20 AM. It should be noted that the analysis does not state the date or the day of the week the automobile travel time surveys were conducted. The analysis also acknowledges that the surveys were performed in a period with lighter travel than other periods of the year.

The transit travel times range from 74 minutes (1 hour 14 minutes) for travel between Parkland and Downtown Miami to 146 minutes (2 hours 26 minutes) for travel between Parkland and Airport West/Doral. The automobile travel times range from 34 minutes for travel between Parkland and Airport West/Doral to 48 minutes for travel between Parkland and Downtown Miami. The DP&Z staff generally agrees with the estimated transit travel times presented in the analysis. However, staff has significant concerns with the automobile travel times and requires additional information to validate the automobile travel times presented.

As indicated by the applicant's commutation analysis, the proposed development would not encourage transit use by reason of the significant differences in transit and automobile travel times, as transit trips generally takes more than twice the time of automobile trips. This raises

questions about the developments sustainability and efficiency of land use particularly with regards to green house gas emission. Additionally, the automobile travel times from the Parkland application site to the major employment centers exceed the national and County averages established in the 2007 America Community Survey. The 2007 survey shows the average travel time to work for Miami-Dade County residents as 30.12 minutes and the national average as 25 minutes.

It should be noted that the July 2006 Edwards and Kelcey study referenced in the applicant's commutation analysis indicates that the 30% of workers, which would remain in the Kendall area for employment, represents a lower percentage than any other region in Miami-Dade County. Between 37% and 44% of persons within the other areas of the County work within the area they reside. Page 14 of the Miami-Dade County Kendall Corridor Alternatives Analysis: Purpose, Need, Goals and Objectives, Final, prepared by Edwards and Kelcey, dated July 2006 states:

"Only 30 percent of workers from the Kendall study area remain in the Kendall area for employment (Table 10). This is a smaller percentage than any other region in Miami-Dade County; other areas range between 37 percent and 44 percent of workers remaining in the same area for employment. This means that 70 percent of the Kendall area workforce (154,000) is commuting to another area for employment."

According to staff analysis in the Supply and Demand section of this report, only 24 percent of workers in households within the proposed Parkland development would be able to procure employment within the development, the remaining 76% of workers would travel to different areas of the County for employment. This level of employment would be far below any other region of the County, as indicated above.

In September 2008, the applicant submitted the Third Statement of Information Needed (SIN3) to the South Florida Regional Planning Council (SFRPC) in support of the associated Parkland Development of Regional Impact (DRI) Application for Development Approval (ADA). The applicant explains, on page 24-5 (R) of the SIN3, in the Housing Supply Area analysis that housing be 'reasonably accessible' to the place of employment. In this case, the applicant defined 'reasonably accessible' as "a commute distance of no greater than 10 miles or a commute time of no more than 20 minutes at peak travel times, whichever is less." The commute time from Parkland to the Central Area, Airport West/Doral, and Downtown Miami employment areas far exceeds 20 minutes and the distance of Parkland from these employment areas also exceed the stated 10 miles, with the exception of Palmetto Bay. Palmetto Bay is a part of the Central Area and is within 10 miles of the Parkland site.

The applicant's commutation analysis, and determination of relevant housing when viewed in light of the major employment centers, identified above, demonstrate that the application site is not the most appropriate for sustainable and energy conserving development. Additionally, the proposed development does not demonstrate efficiency of land use particularly with regards to travel time/distance to work, estimated levels of employment within the development, and green house gas emission.

TRANSPORTATION ANALYSIS

Roadways

This section contains two separate traffic impact evaluations of existing and future conditions. The first evaluation was prepared by Miami-Dade County staff and addresses near-term (Concurrency Evaluation) and long-term (Year 2018) conditions, with and without the impacts of the Parkland DRI Application to amend the Comprehensive Development Master Plan (CDMP). This evaluation was prepared by Miami-Dade County Department of Planning and Zoning in cooperation with Miami-Dade County Public Works Department and the Metropolitan Planning Organization (MPO). The other traffic impact evaluation was prepared by the applicant's transportation consultant, Cathy Sweetapple & Associates, and was presented in the 'Parkland DRI CDMP Amendment Transportation Analysis (Revised August 2008)', report. A summary of this report is attached in Appendix G. The complete 'CDMP Transportation Analysis' report is available for review at the Miami-Dade County Department of Planning and Zoning located at 111 NW 1st Street, 12th Floor, Miami, Florida, 33128.

Analysis Method and Assumptions

The Concurrency Evaluation is a traffic evaluation performed for the PM peak-hour conditions, which considers existing traffic volumes, reserved trips from approved development not yet constructed, programmed roadway capacity improvements funded in the first three years of the MPO's adopted Transportation Improvement Program (TIP), and the application's traffic impacts. The analysis considers the total PM peak-hour trips estimated to be generated by the subject application.

The land use designations requested in the CDMP Amendment Application and the scale and intensity of the proposed development are the basis for estimating the number of peak-hour trips that would be generated by the proposed development. This is then compared to the number of peak-hour trips projected to be generated by the most probable use that could occur on the application site consistent with the current CDMP land use designation of the subject property. The particular use chosen is based on the most intense use allowed under the current CDMP land use designation. The trips generated by the proposed amendment application are estimated using the trip generation rates or the equations published in the Institute of Transportation Engineers' Trips Generation, 7th edition (2003).

Even though the trip generation is calculated for single-uses, the development of mixed uses or multi-use sites provide the potential for interaction among those uses within the multi-use sites, particularly where the trips can be made by walking or bicycling. As a result, the total generation of vehicle trips entering and exiting the multi-use site may be reduced from the individual, discrete trips generated by each land use. An internal capture rate¹ was applied to the trip generation estimates for individual land uses to account for trips internal to the site. It should be pointed out that the trip reduction for internally captured trips is separate from the reduction for pass-by trips. These are two distinct phenomena and both could be applicable for a proposed development. Sites having residential and nonresidential components have the highest potential for internal capture trips. A trip reduction rate of approximately 23 percent was calculated and applied by Public Works Department in this analysis. The rate was applied to the total external trips.

¹ Internal capture rate is defined as a percentage reduction that is applied to the trip generation estimates for individual land uses to account for trips internal to the site.

The Miami-Dade County Public Works Department prepared the near-term trip traffic concurrency impact analysis. The analysis, which reveals the potential impacts the application may have on near-term traffic conditions in the vicinity of the application site, accounts for current traffic conditions, programmed near-term roadway improvements, the calculated impact of other pending developments in the vicinity for which development orders have been issued, and the impacts of the application. In some instances, satisfactory near-term conditions are projected to deteriorate without regard for the requested CDMP amendment, or an anticipated near-term concurrency problem could be solved by Long Range Transportation Plan (LRTP) improvements.

The county's adopted Roadway LOS Standards require that the roadway LOS conditions be measured during the Peak-period². Current peak-period LOS conditions were determined using the Florida Department of Transportation's (FDOT) ARTPLAN model, which is designed to replicate the procedures of the 2000 Highway Capacity Manual prepared by the Federal Highway Administration. Many different roadway and traffic characteristics are taken into consideration when using this model in order to produce roadway link specific measures of LOS. The adopted LOS standards for roadways in Miami-Dade County shown in Policy TC-1B in the CDMP Traffic Circulation Subelement are the standards used to assess the county's roadway conditions.

The traffic impact assessment methodology used to analyze proposed CDMP Land Use Plan amendments filed in association with proposed Development of Regional Impacts (DRIs), differs from the analysis methodology and assumptions used for regular CDMP amendment cycles. Typically, the DRI traffic impact assessment is used to estimate the impacts anticipated from the proposed land use change(s). The data and analysis usually include, but is not limited to, a description of the DRI study area, existing traffic conditions, future background and committed development traffic conditions, project trip assignment and distribution, future overall traffic conditions with project traffic included, trip generation assumptions, and needed improvements to mitigate the anticipated impacts of the proposed development.

The DRI process requires impact assessment of the project by its build out date. The Parkland DRI Application has a ten-year (2018) timeframe. When considering an amendment to the CDMP, a longer-term impact assessment is appropriate. However, the county's as well as the applicant's long-term impact assessments of 2018 traffic conditions, with and without the proposed impacts of the amendment, provide the long-term impact assessment. Both traffic impact analyses are based on the 2015 highway network of the MPO's Year 2030 Long Range Transportation Cost Feasible Plan.

The long-term (Year 2018) evaluation was performed using a standard transportation analysis method. The Year 2015 roadway network, which includes proposed highway capacity improvements listed in the Priority I (Year 2009) and Priority II (2010-2015) projects for both State and County roadways, was used in the analyses. The county used the Florida Standard Urban Transportation Modeling Structure (FSUTMS) model for the Year 2018 traffic impact analysis. The FSUTMS model is the best tool available for conducting these types of impact assessments. However, it should be pointed out that the FSUTMS model was designed for large-area analyses; it uses traffic analysis zones (TAZs) as the smallest geographic units; and it uses a schematic roadway network in the analysis when evaluating specific development proposals.

² Peak-period means the average of the two highest consecutive hours of traffic volume during a weekday.

Development Proposal

The Parkland DRI/CDMP Amendment Application site is comprised of approximately 961 gross acres located outside both the 2015 Urban Development Boundary (UDB)³ and the 2025 Urban Expansion Area (UEA)⁴. Theoretical SW 136 Street on the north, theoretical SW 152 Street on the south, SW 162 Avenue on the east, and SW 177 (Krome) Avenue on the west bound the subject application site. Krome Avenue (SR 997) on the west and SW 162 Avenue on the east currently serve the application site.

The application seeks to amend the Adopted 2015 and 2025 Land Use Plan map of the CDMP to change the application site designation from "Agriculture" to "Low-Density Residential (2.5 to 6 Dwelling units per gross acre)", "Low-Medium Density Residential (6 to 13 dwelling units per gross acre)", "Office/Residential", "Business and Office", and "Industrial and Office." The Parkland DRI is proposed for development over a ten-year phase with build out planned in the year 2018. The land use and scale of development proposed in presented in the table below.

Parkland Development of Regional Impact Proposed Development Program	
Land Use	Scale of Development
Single Family Detached	1,257 dwelling units
Single Family Attached (Townhomes)	2,436 dwelling units
Multifamily Condominium (Apartments)	3,248 dwelling units
Retail	200,000 square feet
Medical Offices	100,000 square feet
Hospital	200 beds
Industrial (Industrial Park)	550,000 square feet
Two K-8 Schools	3,200 students
One High School	3,200 students
Community Uses (Library, Police, Fire, etc.)	50,000 square feet
Parks	67.6 acres

Source: Parkland DRI Application to Amend the Comprehensive Development Master Plan, December 2007.

Study Area

The Study Area for this CDMP amendment transportation analysis examines the arterial and collector roadway network serving the amendment site, extending as far north as SW 72 Street (Sunset Drive), the Palmetto Expressway (SR 826) and South Dixie Highway (US-1) to the east, SW 216 Street to the south, and Krome Avenue/SW 177 Avenue (SR 997) to the west.

Existing conditions

The operating condition, level of service (LOS), of a roadway segment is represented by one of the letters "A" through "F," with "A" generally representing the most favorable driving conditions and "F" representing the least favorable.

³ Urban Development Boundary is the area where urban development may occur through the year 2015.

⁴ Urban Expansion Area is the area located between the 2015 UDB and 2025 UEA where current projections indicate that further development beyond the 2015 UDB is likely to be warranted some time between 2015 and 2025.

Primary access to the application site will be from Krome Avenue/SW 177 Avenue, currently a two-lane section-line Rural Principal Arterial, which abuts the western boundary of the application site and provides direct north-south access to the rest of the county. SW 162 Avenue is a two-lane half-section line collector roadway that abuts the eastern boundary of the application site between SW 136 Street and SW 152 Street. Other north-south expressway and arterial include the Homestead Extension of the Florida Turnpike (HEFT/SR 821), the Don Shula Expressway (SR 874), SW 157 Avenue, SW 137 Avenue, SW 117 Avenue, and US 1. East-west arterials include SW 88 Street, SW 104 Street, SW 120 Street, SW 136 Street, SW 152 Street, SW 184 Street, and SW 200 Street. All these expressways and roadways provide accessibility to other parts of the county. The HEFT (SR 821), SR 874 and Krome Avenue (SR 997) form part of both Florida's Strategic Intermodal System (SIS) and the Florida Intrastate Highway System (FIHS).

SW 152 Street (Coral Reef Drive) is an east-west section-line arterial that is currently two lanes from SW 162 Avenue to SW 147 Avenue, four lanes between SW 147 Avenue and SW 137 Avenue and from the HEFT to US 1, and six lanes from SW 137 Avenue to the HEFT/SW 117 Avenue. SW 136 Street, from SW 157 Avenue and SW 137 Avenue, is a two-lane section-line arterial; this roadway segment is currently being widened to four lanes. The segment of SW 136 Street between SW 162 Avenue and SW 157 Avenue is planned for construction as a two-lane facility by the private developers of two residential projects; when completed, this roadway would provide east-west access to the northeast corner of the application site. SW 157 Avenue, a future four-lane arterial, will provide another north-south access to the proposed Parkland DRI site. This new four-lane corridor, when completed, will run from SW 184 Street (Eureka Drive) to SW 56 Street (Miller Drive).

Extremely congested (LOS F) conditions exist on three roadway segments: SW 177 Avenue between SW 184 and SW 216 Streets, SW 104 Street between SW 87 Avenue and US 1, and SW 112 Street between SW 117 and 107 Avenues. SW 200 Street/Quail Roost Drive (SR 994) between SW 147 Avenue and SW 127 Avenue is operating at LOS E, in violation of its adopted LOS D standard. SW 137 Avenue between SW 8 and SW 26 Streets is operating at E+5%, SW 42 Street between SW 127 Avenue and the HEFT at E+14%, SW 104 Street between SW 127 and SW 117 Avenues at E+13%, and SW 152 Street between SW 107 Avenue and US 1 at E+8%, but still operating within their adopted LOS E+20% standard. Seventeen roadway segments are operating at their adopted LOS D standard. All other roadways within the Study Area that are currently monitored show acceptable peak-period LOS conditions. See 'Existing Traffic Conditions' Table below.

Existing Traffic Conditions Roadway Lanes and Peak Period Level of Service (LOS)				
Roadway	Location/Link	Lanes	LOS Std.	LOS
SW 177 (Krome) Ave./SR 997	SW 8 Street to SW 88 Street	2 UD	C	C (07)
	SW 88 Street to SW 184 Street	2 UD	C	C (07)
	SW 184 Street to SW 216 Street	2 UD	C	F (07)
SW 157 Avenue	SW 72 Street to SW 88 Street	4 DV	E+20%	B (07)
	SW 88 Street to SW 112 Street	4 DV	E	C (07)
	SW 152 Street to SW 184 Street	4 DV	D	B (07)
SW 152 Avenue	SW 88 Street to SW 96 Street	2 UD	D	D (07)

Existing Traffic Conditions				
Roadway Lanes and Peak Period Level of Service (LOS)				
Roadway	Location/Link	Lanes	LOS Std.	LOS
SW 147 Avenue	SW 42 Street to SW 56 Street	4 DV	E+20%	D (07)
	SW 56 Street to SW 72 Street	4 DV	D	C (07)
	SW 72 Street to SW 88 Street	4 DV	D	C (07)
	SW 88 Street to SW 104 Street	4 DV	D	D (07)
	SW 104 Street to SW 120 Street	4 DV	D	C (07)
	SW 152 Street to SW 184 Street	2 UD	D	C (07)
	SW 184 Street to SW 216 Street	2 UD	C	C (07)
SW 137 Avenue	SW 8 Street to SW 26 Street	4 DV	E+20%	E+5% (07)
	SW 26 Street to SW 42 Street	6 DV	D	C (07)
	SW 42 Street to SW 56 Street	6 DV	E+20%	D (07)
	SW 56 Street to SW 72 Street	4 DV	D	D (07)
	SW 72 Street to SW 88 Street	4 DV	D	C (07)
SW 137 Avenue (SR 925)	SW 88 Street to SW 128 Street	6 DV	D	B (07)
SW 137 Avenue (SR 925)	SW 128 Street to SW 136 Street	6 DV	E	D (07)
SW 137 Avenue	SW 136 Street to SW 152 Street	6 DV	E	D (07)
	SW 152 Street to SW 184 Street	6 DV	D	C (07)
	SW 184 Street to SW 216 Street	2 UD	D	C (07)
	SW 8 Street to SW 26 Street	4 DV	E+20%	C (07)
SW 127 Avenue	SW 26 Street to SW 42 Street	2 UD	D	D (07)
	SW 42 Street to SW 56 Street	4 DV	D	D (07)
	SW 56 Street to SW 72 Street	4 DV	D	B (07)
	SW 72 Street to SW 88 Street	4 DV	D	D (07)
	SW 88 Street to SW 104 Street	2 UD	D	D (07)
	SW 104 Street to SW 120 Street	2 UD	D	D (07)
	SW 184 Street to SW 200 Street	2 UD	D	B (07)
HEFT (SR 821)	Okeechobee Road to SR 836	6 LA	D	A (07)
	SR 836 to SW 8 Street	8 LA	D	B (07)
	SW 8 Street to SW 40 Street	6 LA	D	B (07)
	SW 40 Street to SW 88 Street	6 LA	D	B (07)
	SW 88 Street to SW 874 Street	6 LA	D	B (07)
Dolphin Expwy. (SR 836)	HEFT (SR 821) to NW 107 Avenue	6 LA	D	B (07)
	NW 107 Avenue to NW 87 Avenue	6 LA	D	C (07)
	NW 87 Avenue to SR 826	6 LA	D	C (07)
West Flagler Street	SW 117 Ave. to SW 107 Ave.	6 DV	E+20%	D (07)
	SW 107 Avenue to SW 97 Avenue	6 DV	E+20%	C (07)
	SW 97 Avenue to SW 87 Avenue	6 DV	E+20%	D (07)
W. Flagler Street (SR 968)	SW 87 Avenue to SR 826	6 DV	E+20%	D (07)
SW 8 Street (SR 90)	SW 147 Ave. to SW 137 Ave.	6 DV	D	D (07)
	SW 137 Ave. to SW 127 Ave.	6 DV	D	C (07)
	SW 127 Ave. to SW 122 Ave.	6 DV	E	D (07)
	SW 122 Avenue to HEFT	8 DV	E	D (07)
	HEFT to SW 107 Avenue	6 DV	E+20%	D (07)
	SW 107 Avenue to SW 87 Avenue	8 DV	E+20%	B (07)
	SW 87 Avenue to SR 826	6 DV	E+20%	C (07)
SW 26 Street/Coral Way	SW 147 Avenue to SW 137 Ave.	4 DV	E+20%	D (07)
	SW 137 Avenue to SW 127 Ave.	4 DV	E+20%	C (07)

Existing Traffic Conditions				
Roadway Lanes and Peak Period Level of Service (LOS)				
Roadway	Location/Link	Lanes	LOS Std.	LOS
SW 24 Street/Coral Way	SW 127 Avenue to SW 117 Ave.	4 DV	E+20%	D (07)
	SW 117 Avenue to SW 107 Ave.	4 DV	E+20%	C (07)
	SW 107 Avenue to SW 97 Avenue	4 DV	E+20%	C (07)
	SW 97 Avenue to SW 87 Avenue	4 DV	E+20%	C (07)
	SW 87 Avenue to SR 826	6 DV	E+20%	C (07)
SW 42 Street/Bird Road	SW 147 Avenue to SW 137 Ave.	4 DV	E+20%	E (07)
	SW 137 Avenue to SW 127 Ave.	4 DV	E+20%	C (07)
	SW 127 Avenue to HEFT	4 DV	E+20%	E+ 14% (07)
SW 40 Street (SR 976)	HEFT to SW 107 Avenue	6 DV	E+20%	D (07)
	SW 107 Avenue to SW 97 Avenue	6 DV	E+20%	C (07)
	SW 97 Avenue to SW 87 Avenue	6 DV	E+20%	C (07)
	SW 87 Avenue to SR 826	6 DV	E+20%	E (07)
SW 56 Street/Miller Drive	SW 147 Avenue to SW 137 Ave.	4 DV	D	C (07)
	SW 137 Avenue to SW 127 Ave.	4 DV	D	C (07)
	SW 127 Avenue to SW 117 Ave.	4 DV	D	D (07)
	SW 117 Avenue to SW 107 Ave.	4 DV	D	D (07)
	SW 107 Avenue to SW 97 Avenue	4 DV	D	C (07)
	SW 97 Avenue to SW 87 Avenue	4 DV	D	D (07)
	SW 87 Avenue to SR 826	4 DV	D	D (07)
SW 72 Street/Sunset Drive	SW 147 Avenue to SW 137 Ave.	4 DV	E+20%	C (07)
	SW 137 Avenue to SW 117 Ave.	4 DV	E+20%	C (07)
SW 72 St./Sunset Dr. (SR 986)	SW 117 Avenue to SW 107 Ave.	4 DV	E+20%	D (07)
	SW 107 Avenue to SW 87 Avenue	4 DV	E+20%	D (07)
	SW 87 Avenue to SR 826	4 DV	E+20%	C (07)
Kendall Drive (SR 90)	SW 177 Ave. to SW 167 Ave.	4 DV	D	B (07)
	SW 167 Ave. to SW 152 Ave.	4 DV	E+20%	C (07)
	SW 152 Ave. to SW 137 Ave.	6 DV	E+20%	C (07)
	SW 137 Ave. to SW 127 Ave.	6 DV	E+20%	C (07)
	SW 127 Ave. to SW 117 Ave.	8 DV	E+20%	D (07)
	SW 117 Avenue to SW 107 Ave.	6 DV	E+20%	C (07)
	SW 107 Ave. to SW 97 Ave.	6 DV	E+20%	E (07)
	SW 97 Ave. to SW 87 Ave.	6 DV	E+20%	C (07)
	SW 87 Avenue to SR 826	6 DV	E+20%	C (07)
SW 104 Street/Killian Dr.	SW 157 Ave. to SW 147 Ave.	4 DV	E+20%	D (07)
	SW 147 Ave. to SW 137 Ave.	4 DV	E+20%	C (07)
	SW 137 Ave. to SW 127 Ave.	6 DV	E+20%	D (07)
	SW 127 Ave. to SW 117 Ave.	6 DV	E+20%	E+13% (07)
	SW 117 Ave. to SW 107 Ave.	6 DV	E+20%	E (07)
SW 104 Street Killian Parkway (SR 985)	SW 87 Avenue to US 1	2 UD	D	F (07)
	SW 107 Ave. to SW 97 Ave.	4 DV	E	B (07)
	SW 97 Ave. to US 1	2 UD	E	C (07)
SW 112 Street	SW 117 Ave to SW 107 Ave	2 UD	E+20%	F (07)
SW 120 Street	SW 147 Ave. to SW 137 Ave.	4 DV	D	C (07)
	SW 137 Ave. to SW 117 Ave.	4 DV	D	C (07)

Existing Traffic Conditions				
Roadway Lanes and Peak Period Level of Service (LOS)				
Roadway	Location/Link	Lanes	LOS Std.	LOS
SW 152 Street/Coral Reef Dr.	SW 142 Ave to SW 137 Ave	4 DV	E+20%	D (07)
	SW 137 Ave to SW 127 Ave	6 DV	E+20%	D (07)
	SW 127 Ave to SW 117 Ave/HEFT	6 DV	E+20%	D (07)
SW 152 Street (SR 992)	HEFT to SW 107 Ave	4 DV	E+20%	D (07)
	SW 107 Avenue to US 1	4 DV	E+20%	E+8% (07)
SW 168 Street	SW 117 Ave to US-1	2 UD	D	B (07)
SW 184 Street/Eureka Drive	SW 177 Ave to SW 157 Ave	2 UD	D	D (07)
	SW 157 Ave to SW 147 Ave	2 UD	D	D (07)
	SW 147 Ave to SW 137 Ave	2 UD	D	D (07)
	SW 137 Ave to HEFT	4 DV	D	C (07)
	HEFT to US-1	4 DV	D	C (07)
SW 200 St./Quail Roost Dr. (SR 994)	SW 177 Ave to SW 147 Ave	2 UD	C	C (07)
	SW 147 Ave to SW 127 Ave	2 UD	D	E (07)
	SW 127 Ave to HEFT	2 UD	E	C (07)
	HEFT to US-1	2 UD	E	C (07)

Source: Miami-Dade County Department of Planning and Zoning; Miami-Dade Public Works Department; and Florida Department of Transportation, August 2008.

Note: () in LOS column identifies year traffic count was taken or LOS updated

DV= Divided Roadway, UD= Undivided Roadway, LA= Limited Access

LOS Std. means the adopted minimum acceptable peak period Level of Service standard for all State and County roadways.

E+20% means 120% of roadway capacity (LOS E) on roadways serviced with transit with 20 or less minutes peak- period headway.

Trip Generation for the Amendment

The 'Estimated PM Peak Hour Trip Generation' Table below shows the total number of PM peak-hour trips estimated to be generated by the proposed development under the requested CDMP amendment application. The trip generation was estimated using the rates and equations published in the Institute of Transportation Engineers' (ITE) Trip Generation, 7th Edition (2003). The applicant's proposed development program is estimated to generate approximately 7,110 PM peak-hour vehicular trips. The PM Peak-hour trip generation is summarized in the table below.

The applicant's transportation consultant submitted, along with the transportation analysis, trip generation and internal capture calculations that were reviewed by staff of the Public Works Department and Planning and Zoning Department. County staff agrees with the gross PM peak hour trip generation (7,110 trips) and the trip internalization (23 percent) calculated by the transportation consultant. The net external PM peak-hour trips that will be generated by the Parkland DRI were estimated at 5,475 vehicle trips.

**Estimated PM Peak Hour Trip Generation
By Current and Requested CDMP Use Designations**

Application	Assumed Use for Current CDMP Land Use Designation/ Estimated No. Of Trips	Assumed Use for Requested CDMP Land Use Designation/ Estimated No. Of Trips	Trip Difference Between Current and Requested CDMP Use Designation
Parkland DRI	Agriculture – Single-Family Detached (192 units) ¹	Low Density Resid. (438.55 acres); Low-Medium Density Residential (428.41 acres); Office/Residential (17.99 acres); Business & Office (37.24 acres); and Industrial & Office (39.00 acres) – Applicant's development Program ² :	
	194	7, 110 ³	+6,916

Source: Institute of Transportation Engineers, Trip Generation, and 7th Edition, 2003; Miami-Dade County Public Works Department, August 2008.

Notes: ¹ This development scenario assumes the application site developed with single-family detached units under the current "Agriculture" land use designation at a density of 1 dwelling unit per five acres. The application site is approximately 960 acres of land.

² The Parkland DRI is a proposed mixed-use development planned to occur over a ten year phase with build out in the year 2018. The land use and scale of development proposed is presented in the 'Proposed Development Program' Table above.

³ Total PM Peak-Hour trips. These trips do not consider trip reduction for internalization for mixed uses and pass-by trips.

Traffic Concurrency Evaluation

Other imminent congestion problems have been identified as a result of a recent evaluation (August 28, 2008) of traffic concurrency conditions in the vicinity of the Application site. The evaluation, which considers reserved trips from approved development not yet constructed, programmed roadway capacity improvements, and trips generated by the application shows that the following road segments will run out of concurrency service capacity with the impacts of this application:

- Krome Avenue (SR 997) from SW 88 Street to SW 184 Street
- Krome Avenue (SR 997) from SW 184 Street to SW 216 Street
- SW 152 Street from SW 147 Avenue to SW 137 Avenue

A summary of the traffic concurrency analysis performed by Public Works Department is shown in the 'Traffic Concurrency Analysis' Table below.

It should be noted that none of these roadway segments identified as failing concurrency have capacity improvement projects programmed for the next five years. However, it should be pointed out the county's 2030 Long Range Transportation Plan (LRTP) lists the widening from 2 to 4 lanes of Krome Avenue, between Tamiami Trail (SW 8 Street) and SW 296 Street, as Priority II projects (2010 to 2015). SW 152 Street between SW 147 Avenue and SW 137 Avenue is currently a four-lane facility, and no additional capacity improvement is programmed or planned for this roadway segment. The applicant of the Parkland DRI is proposing to widen SW 152 Street from SW 157 Avenue to SW 137 Avenue to 5 lanes (3 WB lanes and 2 EB

lanes) and the construction of Krome Avenue, between SW 136 Street and SW 152 Street, as a four-lane facility. For this application to meet concurrency, these roadway improvements must be in place at the time of development construction.

However, it should be pointed out that no construction associated with the four-laning or other capacity improvement of Krome Avenue outside the Urban Development Boundary (UBD) shall occur until the Florida Department of Transportation (FDOT) has prepared, and the Board of County Commissioners has adopted, a detailed binding access control plan for the Krome Avenue corridor. This plan should emphasize access to properties fronting Krome Avenue primarily through alternative street locations. See CDMP Traffic Circulation Subelement Policy TC-4E.

Future Conditions

As mentioned above, of the roadways previously identified as violating the concurrency LOS standards, none has capacity improvement programmed for construction in the next five years. Congestion levels within the Study Area are expected to further deteriorate in the short-term, particularly the east west travel pattern, due primarily to the lack of continuous north-south roadway network. Over the next five fiscal years one new north-south arterial, SW 157 Avenue between SW 112 and SW 136 Streets, is programmed for construction as a new 4-lane facility in 2010. Other significant projects include: the 4-laning of SW 137 Avenue from the HEFT to US 1, the extension of SW 137 Avenue as 2-lane roadway from SW 200 Street to US 1, the widening (6 to 12 lanes) of the HEFT between SW 88 Street and SW 117 Avenue, the 6-laning of SW 120 Street between SW 137 Avenue and SW 117 Avenue, the 4-laning of SW 136 Street from 157 Avenue to the HEFT, and 4-laning of SW 184 Street between SW 147 Avenue and SW 137 Avenue. Various significant projects are already under construction in the Study Area, including the four-laning of segments of SW 42 Street, SW 184 Street, SW 117 Avenue, SW 127 Avenue, and SW 167 Avenue. Other significant roadway improvements programmed within the study area are listed in the 'Programmed Roadway Capacity Improvements' Table below.

Traffic Concurrency Analysis
Roadway Lanes, Existing and Concurrency Peak Period Operating Level of Service (LOS)

Sta. No. / Roadway	Location/Link	Number Lanes	Adopted LOS Std. ¹	Peak Hour Capacity	Peak Hour Volume	Approved D.O's Trips	Trip Distribution Percent	Project Peak Hour Trips	Total Trips With Project	Concurrency LOS with Amend.
682 - SW 177 Avenue (SR 997)	SW 88 Street to SW 184 Street	2 UD	C	1480	1146	66	14.00%	767	1,979	F (07)
9208 - SW 177 Avenue (SR 997)	SW 184 Street to SW 216 Street	2 UD	C	2060	2043	81	22.00%	1205	3329	F (07)
9857 - SW 157 Avenue	SW 88 Street to SW 112 Street	4 DV	E	3540	1219	0	5.0%	274	1493	C (07)
9859 - SW 157 Avenue	SW 152 Street to SW 184 Street	2UD/4DV ²	D	2750	600	571	4.00%	219	1390	B (07)
9832 - SW 147 Avenue	SW 104 Street to SW 120 Street	4 DV	D	2320	1451	277	5.00%	274	2002	D (07)
9834- SW 147 Avenue	SW 152 Street to SW 184 Street	2 UD	D	910	325	347	5.00%	274	946	C (07)
9814 - SW 137 Avenue	SW 120 Street to SW 136 Street	6 DV	E	6870	4502	1285	5.00%	274	6061	D (07)
9816 - SW 137 Avenue	SW 136 Street to SW 152 Street	6 DV	E	6630	4213	1143	0.00%	0	5356	D (07)
9784 - SW 127 Avenue	SW 104 Street to SW 120 Street	2DV/4DV ³	D	2550	1129	892	2.00%	110	2131	D (07)
1080 - SW 88 Street (SR 90)	SW 152 Avenue to SW 127 Ave.	6 DV	E+20%	5904	3181	806	2.00%	110	4097	D (07)
9724 – SW 104 Street	SW 157 Avenue to SW 147 Ave.	4 DV	E+20%	3696	2812	109	5.00%	274	3195	E+4% (07)
9762 – SW 120 Street	SW 147 Avenue to SW 137 Ave.	4 DV	D	3360	1178	601	4.00%	219	3002	C (07)
9760 – SW 120 Street	SW 137 Avenue to SW 117 Ave.	4 DV	D	3870	3212	495	1.00%	55	3762	D (07)
9854 – SW 152 Street	SW 147 Avenue to SW 137Ave.	4 DV	E+20%	3264	3593	938	23.00	1259	5790	E+113% (07)
9880 – SW 184 Street	SW 177 Avenue to SW 157 Ave.	2 UD	C	1240	807	115	3.00%	164	1086	B (07)

Source: Miami-Dade County Department of Planning and Zoning; Miami-Dade Public Works Department and Florida Department of Transportation, October 10, 2008.

Notes: DV= Divided Roadway, UD= Undivided Roadway, LA Limited Access

¹ County adopted roadway level of service standard applicable to the roadway segment

² Roadway segment is currently 2 lanes undivided but will be widened to 4 lanes divided, funded for construction in FY 2010-2011 (2009 Transportation Improvement Program).

³ Roadway segment is currently under construction, 2009 TIP.

(i) Year traffic count was updated or LOS Revised

**Programmed Roadway Capacity Improvements
Fiscal Years 2008/2009 – 2012/2013**

Roadway	From	To	Type of Improvement	Fiscal Year
SR 826/SR 836			Interchange improvements	2012-2013
SR 836	NW 107 Avenue		Const. Access Ramp	2010-2011
SR 836	HEFT	NW 107 Avenue	Reconst and add lanes	Under const.
SR 874	Killian Parkway		Interchange, toll plaza, ramp plaza	2010-2011
SR 874	Kendall Drive		Const. new on-ramp	2008-2009
SR 874/SR 826	N/O SR 874/SR 826 interchange	S/O SR 874/SR 826 interchange	Interchange improvements	2009-2010
SW 42 Street	SW 150 Avenue	SW 149 Avenue	Widen 2 to 4 lanes	Under const.
SW 120 Street	SW 137 Avenue	SW 117 Avenue	Widen 4 to 6 lanes	2012 - 2013
SW 136 Street	SW 127 Avenue	HEFT	Widen 2 to 4 lanes	2012 – 2013
SW 136 Street	SW 149 Avenue	SW 139 Court	Widen 2 to 4 lanes	2008 – 2009
SW 160 Street	SW 147 Avenue	SW 137 Avenue	Widen 2 to 4 lanes	2009-2010
SW 184 Street	SW 137 Avenue	SW 127 Avenue	Widen 2 to 4 lanes	Under Const.
SW 184 Street	SW 147 Avenue	SW 137 Avenue	Widen 2 to 4 lanes	2012-2013
HEFT (SR 821)	Kendall Dr (SR 94)	SW 117 Avenue	Widen 6 to 12 lanes	2009 - 2010
SW 117 Avenue	SW 152 Street	SW 184 Street	Widen 2 to 4 lanes	Under const.
SW 127 Avenue	SW 88 Street	SW 120 Street	Widen 2 to 4 lanes	Under const.
SW 137 Avenue	SW 200 Street	US 1	New 2 lanes	2012-2013
SW 137 Avenue	US 1	HEFT	Widen 2 to 4 lanes	2011-2012
SW 142 Avenue	SW 26 Street	SW 42 Street	Re-align road, intersection improvement	2010-2011
SW 157 Avenue	SW 52 Street	SW 54 Terrace	Widen 2 to 4 lanes	Prior funding
SW 157 Avenue	SW 112 Street	SW 120 Street	New 4 lanes	2009 – 2010
SW 157 Avenue	SW 120 Street	SW 136 Street	New 4 lanes	2009 – 2010
SW 157 Avenue	SW 152 Street	SW 184 Street	Widen 2 to 4 lanes	2010 – 2011
Krome Ave/SR 997	SW 8 Street/SR 90	SW 88 Street	Widen 2 to 4 lanes	2012– 2013
Krome Ave/SR 997	MP 2.754	SW 8 Street	Widen 2 to 4 lanes	2009– 2010
SW 42 Street	SW 162 Avenue	SW 157 Avenue	New const. 2 lanes	Private Sector
SW 88 St. (SR 94)	SW 167 Avenue	SW 162 Avenue	Widen 4 to 6 lanes	Private Sector
SW 88 St. (SR 94)	SW 162 Avenue	SW 157 Avenue	Widen 4 to 6 lanes	Private Sector
SW 88 St. (SR 94)	SW 157 Avenue	SW 150 Avenue	Widen 4 to 6 lanes	Private Sector
SW 96 Street	SW 162 Avenue	SW 157 Avenue	New construction: 4 lanes	Private Sector
SW 96 Street	SW 172 Avenue	SW 167 Avenue	2 lanes and ½ of turn lane (south side)	Private Sector
SW 120 Street	SW 157 Avenue	SW 152 Avenue	2 lanes of 4 lanes divided	Private Sector
SW 136 Street	SW 162 Avenue	SW 157 Avenue	½ of 4-lane divided (south side)	Private Sector
SW 136 Street	SW 153 Avenue	SW 152 Avenue	½ of 4-lane divided	Private Sector
SW 127 Avenue	SW 128 Street	SW 132 Street	½ of 4 future lanes	Private Sector
SW 137 Avenue	SW 72 Street	SW 88 Street	Widen 4 to 6 lanes	Private Sector
SW 147 Avenue	N/O SW 16 Street	S/O SW 16 Street	½ of 4-lane divided	Private Sector
SW 147 Avenue	S/O SW 18 Street	SW 20 Street	½ of 4-lane divided	Private Sector

**Programmed Roadway Capacity Improvements
Fiscal Years 2008/2009 – 2012/2013**

Roadway	From	To	Type of Improvement	Fiscal Year
SW 147 Avenue	SW 21 Street	SW 22 Street	½ of 4-lane divided	Private Sector
SW 152 Avenue	SW 173 Street	SW 178 Street	2 lanes	Private Sector
SW 152 Avenue	SW 182 Street	SW 184 Street	Widen 2 to 4	Private Sector
SW 157 Avenue	SW 94 Street	SW 96 Street	New construction: SB lane	Private Sector
SW 157 Avenue	SW 69 Terrace	SW 72 Street	4-lane divided	Private Sector
SW 157 Avenue	SW 152 Street		Intersection improvements	Private Sector
SW 162 Avenue	SW 88 Street	SW 96 Street	New construction: 4 lanes	Under Const.
SW 162 Avenue	SW 136 Street	RR Right-of-way	½ of 2 lanes	Private Sector
SW 167 Avenue	SW 42 Street	SW 43 Street	2 lanes of 4 lanes divided	Under const.
SW 167 Avenue	SW 43 Street	SW 44 Street	2 lanes of 4 lanes divided	Under const.
SW 167 Avenue	N/O SW 96 Street		Matching existing to the north	Private Sector
SW 172 Avenue	SW 96 Street	SW 88 Street	2 lanes and ½ of turn lane	Private Sector

Source: 2009 Transportation Improvement Program, Metropolitan Planning Organization for the Miami Urbanized Area, May 2008.

Notes: Private Sector: Project to be constructed by a developer to help mitigate the traffic impact of a specific development project.

The construction of improvements are normally linked to specific dates, but instead are usually dependent upon the construction schedule of a specific development project, which can vary considerably according to the market and other conditions.

A number of additional roadway improvements are planned in this Study Area by the Year 2015, as shown in the 'Planned Roadway Capacity Improvements' Table below. These are improvements listed as Priority I and Priority II projects in the Miami-Dade Transportation Plan (LRTP) to the Year 2030, Cost Feasible Plan, with construction planned between 2008 and 2015.

Planned Roadway Capacity Improvements

Roadway	From	To	Type of Improvement	Priority
SW 42 Street	SW 167 Avenue	SW 157 Avenue	New 2 lane	I
SW 42 Street	SW 162 Avenue	SW 157 Avenue	Widen 2 to 4 lanes	I
SW 42 Street	SW 150 Avenue	SW 149 Avenue	Widen 2 to 4 lanes	I
SW 56 Street	SW 167 Avenue	SW 158 Avenue	New 2-lane road	I
SW 56 Street	SW 158 Avenue	SW 152 Avenue	Widen 2 to 4 lanes	I
SW 88 St./SR 94	SW 167 Avenue	SW 162 Avenue	Widen 4 to 6 lanes	I
SW 88 St./SR 94	SW Mills Dr.	SW 102 Avenue	Add turn lanes	I
SW 136 Street	HEFT	SW 157 Avenue	Widen 2 to 4 lanes	I
SW 142 Avenue	SW 8 Street	SW 42 Street	New 2-lane road	I
SR 836	HEFT	SR 826	4-lane divided express lanes in median	I
SR 836	SR 826	NW 57 Ave.	WB Auxiliary lanes	I
SR 836	E/O NW 57 Ave.	W/O NW 57 Ave.	Interchange improvement and WB exit ramp	I
SR 836	NW 87 Avenue	NW 57 Avenue	Interchange improvement and widen to 10 lanes	I
Krome Ave/SR 997	US 27 Avenue	SW 8 Street	Access Mgt./Safety /Trail	I
Krome Ave/SR 997			Add turn lanes at SW 136 Street	I
HEFT	SW 8 Street		Interchange modification	I
SW 137 Avenue	SW 8 Street	SW 26 Street	Widen 4 to 6 lanes	I

Planned Roadway Capacity Improvements

Roadway	From	To	Type of Improvement	Priority
SW 72 Street	SW 157 Avenue	SW 117 Avenue	New 2-lane road	II
SW 88 St. (SR 94)	SW 177 Avenue	SW 167 Avenue	Widen 4 to 6 lanes	II
Krome Ave (SR 997)	SW 8 Street	SW 136 Street	Widen 2 to 4 lanes	II
Krome Ave(SR 997)	SW 136 Street	SW 296 Street	Widen 2 to 4 lanes	II
Krome Ave(SR 997)	US 1	SW 296 Street	Widen 2 to 4 lanes/Truck by-pass	II
SW 167 Avenue	SW 56 Street	SW 88 Street	New 2-lane road	II
HEFT (SR 821)	SW 88 Street	SW 117 Avenue	12 lanes + 3 lane CD/ 8 lanes	II
HEFT (SR 821)	SW 184 Street	SW 117 Avenue	12 lanes + 3 lane CD/ 8 lanes	II
SW 117 Avenue	SW 8 Street	SW 40 Street	Widen 2 to 4 lanes	II
SW 107 Avenue	Flagler Street	SW 8 Street	Widen 4 to 6 lanes	II
SR 826	SW 32 Street	SW 72 Street	Add new lane in each direction	II
SR 874	Kendall Drive	SR 826	Interchange improvement – new bridge over SR 874 from SR 878	III
HEFT	SW 184 Street	US 1/S Dixie Hwy.	Widen to 10 lanes	III
HEFT	US 1	SW 216 Street	Widen to 6 lanes	III
SR 874	SW 120 Street	SW 117 Avenue	SB off-ramp, NB on-ramp	III
SW 107 Avenue	Quail Roost Dr.	SW 160 Street	Widen 2 to 4 lanes	III
SW 147 Avenue	SW 152 Street	SW 184 Street	Widen 2 to 4 lanes	III
SW 152 Street	SW 157 Avenue	SW 147 Avenue	Widen 2 to 4 lanes	III
SW 152 Street	HEFT	US 1	Widen 4 to 6 lanes	III
SW 157 Avenue	SW 184 Street	SW 216 Street	New 2 lane	III
SW 184 Street	SW 157 Avenue	SW 147 Avenue	Widen 2 to 4 lanes	III
SW 200 Street	Quail Roost Drive	US 1/S Dixie Hwy.	Widen 2 to 4 lanes	III
HEFT	Kendall Drive	SW 8 Street	Widen to 8 lanes	III
SW 104 Street	SW 167 Avenue	SW 162 Avenue	Widen 2 to 4 lanes	III
SW 127 Avenue	SW 120 Street	SW 144 Street	Widen and new 4 lanes	III
SW 157 Avenue	SW 8 Street	SW 42 Street	New 4 lanes	III
SW 167 Avenue	SW 40 Street	SW 56 Street	New 2 lanes	III
SW 24 Street	SW 107 Avenue	SW 87 Avenue	Widen 4 to 6 lanes	III
HEFT	SW 216 Street	US 1	Widen 4 to 6 lanes	IV
SR 874	SW 136 Street	HEFT	Provide access ramps	IV
SW 104 Street	SW 177 Avenue	SW 167 Avenue	New 2 lanes	IV
SW 120 Street	SW 147 Avenue	SW 137 Avenue	Widen 4 to 6 lanes	IV
SW 24 Street	SW 117 Avenue	SW 104 Street	Widen 4 to 6 lanes	IV
SW 26 Street	SW 157 Avenue	SW 147 Avenue	New 4 lanes	IV

Source: Miami-Dade Transportation Plan to the Year 2030, Metropolitan Planning Organization for the Miami Urbanized Area, December 2004.

Notes: Priority I - Project improvement to be funded by 2009
Priority II - Project improvements planned to be funded between 2010 and 2015
Priority III - Project improvement planned to be funded between 2016 and 2020
Priority IV – Project improvement planned to be funded between 2021 and 2030

Year 2018 Traffic Conditions with the Amendment

As discussed above, the DP&Z conducted with assistance from the Miami-Dade County Metropolitan Planning Organization (MPO) a Year 2018 traffic impact analysis of the DRI-CDMP

Amendment Application. This analysis was also utilized to review, assess and compare the applicant's 2018 traffic impact analysis. The county's 2018 analysis considers three scenarios. The first scenario (Base Scenario) considers the funded 2009 TIP roadway capacity improvement projects and the planned Priority I and Priority II improvement projects from the Miami-Dade Transportation Plan to the Year 2030, and the future traffic conditions based on the planned future growth as included in the FSUTMS model. The Second scenario (Scenario 2) considers the 2009 TIP, the 2030 LRTP Priority I and Priority II roadway improvements, the future traffic conditions based on the planned future growth with the changes proposed to the Future Land Use Plan map by the applicant. The third scenario (Scenario 3) considers the traffic impact of the proposed Amendment application with the applicant's proposed roadway improvements in addition to the 2009 TIP and 2030 LRTP Priority I and Priority II roadway improvements.

Projected levels of service for the year 2018 were produced using the FSUTMS model and are expressed as daily volume-to-capacity (v/c) ratio, which is the ratio of the number of vehicles using the road to the capacity of the road. Roadways for the 2015 highway network are rated as follows:

<u>V/C Ratio</u>	<u>Level of Service</u>
0.70 or less	LOS B or better
0.71 to 0.80	LOS C
0.81 to 0.90	LOS D
0.91 to 1.00	LOS E
1.00 or greater	LOS F

The projected 2018 levels of service for roadways in the Study Area are shown in the '2018 Volume to Capacity (V/C) Ratios' Table below. The County's analysis indicates that most of the surface arterial grid network east of the HEFT between SR 836 and SW 200 Street are forecast to not meet the applicable LOS standards. Also, portions of SW 72 Street, SW 88 Street, SW 104 Street, SW 120 Street, SW 152 Street, SW 184 Street, SW 200 Street, SW 127 Avenue, and SW 137 Avenue, west of the HEFT, are projected to deteriorate to LOS F, without the impacts of the proposed CDMP Amendment application.

In addition, the following roadway segments were determined to consume 5 percent or more of the adopted maximum service volumes of the State and regionally significant roadways analyzed:

- Krome Avenue between SW 8 Street and SW 88 Street;
- Krome Avenue between SW 184 Street and SW 200 Street;
- SW 157 Avenue between SW 120 Street and SW 136 Street;
- SW 137 Avenue between SW 184 Street and SW 200 Street;
- SW 120 Street between SW 137 Avenue and HEFT;
- SW 136 Street between SW 162 Avenue and SW 157 Avenue;
- SW 152 Street between SW 127 Avenue and SW 117 Avenue; and
- SW 152 Street between SW 102 Street and US 1.

Parkland DRI/CDMP Amendment
2018 Volume to Capacity (V/C) Ratios

Roadway and Segments	Adopted LOS Std ¹	Scenario 1 (Base Scenario)			Scenario 2 - With Application			Scenario 3 - With Application and Proposed Roadway Improvements		
		No. Of Lanes	V/C Ratios ²	Projected LOS	No. Of Lanes	V/C Ratios ²	Projected LOS	No. Of Lanes	V/C Ratios ²	Projected LOS
Krome Avenue/SR 997										
SW 8 St. to SW 88 Street	B ³	4	0.92	E	4	1.10	F	4	1.14	F ⁴
SW 88 St. to SW 136 Street	B	4	0.53 - 0.57	B	4	0.68 - 0.72	B/C	4	0.67 - 0.71	B/C
SW 136 St. to SW 152 Street	B	4	0.76	C	4	0.70	B	4	0.70	B
SW 136 St. to SW 184 Street	B	4	0.75 – 0.76	C	4	0.75 - 0.78	C	4	0.75 – 0.78	C
SW 184 St. to SW 200 Street	B	4	0.83	D	4	0.86	D	4	0.88	D ⁴
SW 157 Avenue										
SW 72 St. to SW 88 Street	D	4	0.58 – 0.61	B	4	0.63 - 0.73	C	4	0.65 – 0.74	B/C
SW 88 St. to SW 96 Street	D	4	0.53	B	4	0.79	C	4	0.81	D
SW 96 St. to SW 104 Street	D	4	0.63 - 0.74	B/C	4	0.74 - 0.94	C/E	4	0.78 – 0.99	C/E
SW 104 St. to SW 112 Street	D	4	0.37	A	4	0.81	D	4	0.83	D
SW 112 St. to SW 120 Street	D	4	0.01 - 0.02	A	4	0.77 - 0.79	C	4	0.80 – 0.82	C/D
SW 120 St. to SW 136 Street	D	4	0.00	A	4	0.98	E	4	0.91	E ⁴
SW 136 St. to SW 152 Street	D	4	0.29	A	4	0.65 - 0.66	B	4	0.80	C
SW 152 St. to SW 168 Street	D	4	0.38 – 0.40	A	4	0.83 - .087	D	4	0.86 - 0.89	D
SW 168 St. to SW 184 Street	D	4	0.26 – 0.33	A	4	0.53 - 0.64	B	4	0.56 - 0.68	B
SW 137 Avenue										
SW 72 St. to SW 88 Street	D	6	0.77 – 0.91	C/E	6	0.78-0.91	C/E	6	0.78 – 0.91	C/E
SW 88 St. to SW 104 Street	D	6	0.70 - 0.90	D	6	0.75 - 0.89	D	6	0.75 - 0.89	D
SW 104 St. to SW 120 Street	D	6	0.83 - 0.87	D	6	0.80 - 0.84	D	6	0.79 - 0.83	D
SW120 St. to SW 128 Street	E	6	1.01 - 1.13	F	6	0.93 - 1.08	E/F	6	0.96 - 1.12	E/F
SW 128 St. to SW 136 Street	E	6	1.02	F	6	0.95	E	6	0.98	E
SW 136 St. to SW 152 Street	E	6	1.07 - 1.21	F	6	1.08 - 1.22	F	6	1.02 - 1.18	F
SW 152 St. to SW 168 Street	D	6	0.74 - 0.95	B/E	6	0.80 - 0.97	C/E	6	0.79 - 0.93	C/E
SW 168 St. to SW 184 Street	D	6	0.62 - 0.74	B/C	6	0.62 - 0.80	B/C	6	0.62 - 0.79	B/C
SW 184 St. to SW 200 Street	D	2	1.09 - 1.13	F	2	1.17 - 1.21	F	2	1.18 - 1.22	F ⁴
SW 127 Avenue										
SW 120 St. to SW 136 Street	D	4	1.05 - 1.08	F	4	1.0 – 1.02	F	4	1.05 - 1.06	F
HEFT/SR 821										
SW 88 St. to SW 120 Street	D	12	0.77 - 0.84	C/	12	0.82 - 0.86	D	12	0.82 - 0.86	D
SW 120 St. to SR 874	D	12	0.55 - 0.73	B/C	12	0.58 - 0.70	B	12	0.56 - 0.89	B/D

Parkland DRI/CDMP Amendment
2018 Volume to Capacity (V/C) Ratios

Roadway and Segments	Adopted LOS Std ¹	Scenario 1 (Base Scenario) Without Application			Scenario 2 - With Application			Scenario 3 - With Application and Proposed Roadway Improvements		
		No. Of Lanes	V/C Ratios ²	Projected LOS	No. Of Lanes	V/C Ratios ²	Projected LOS	No. Of Lanes	V/C Ratios ²	Projected LOS
SR 874 to SW 117 Avenue	D	12	0.85 - 0.89	D	12	0.85 - 0.87	D	12	0.84 - 0.87	D
SW 152 St. to SW 184 Street	D	12	0.91- 0.96	E	12	0.91 - 0.95	E	12	0.91 - 0.95	E
SW 184 St. to SW 186 Street	D	12	1.07-1.11	F	12	1.08 - 1.11	F	12	1.07 - 1.12	F
SW 117 Avenue										
SW 88 St. to SW 104 Street	D	4	0.84- 0.93	D/E	4	0.87 - 0.96	D/E	4	0.83 - 0.92	D/E
SW 104 St. to SW 120 Street	D	4	1.07- 1.13	F	4	1.05 - 1.10	F	4	1.01 - 1.09	F
SW120 St. to SW 136 Street	D	4	1.09- 1.11	F	4	1.08 - 1.13	F	4	1.06 - 1.11	F
SW 136 St. to HEFT	D	4	0.88- 0.89	D	4	0.87 - 0.92	D/E	4	0.87 - 0.91	D/E
HEFT to SW 152 Street	D	4	1.03	F	4	1.06	F	4	1.04	F
SW 152 St. to SW 168 Street	D	4	0.80- 0.82	C/D	4	0.83 - 0.85	D	4	0.83 - 0.85	D
SW 169 St. to SW 184 Street	D	4	0.52- 0.63	B	4	0.52 - 0.62	B	4	0.52 - 0.63	B
SW 184 St. to SW 200 Street	D	2	1.20- 1.36	F	2	1.22 - 1.38	F	2	1.21 - 1.31	F
Don Shula Expwy/SR 874										
SW 104 St. to HEFT	D	10	1.02-1.09	F	10	0.97– 1.07	E/F	10	0.99 - 1.07	E/F
SW 112 Avenue/Lincoln Blvd.										
SW 117 Ave. to SW 152 Street	D	2	0.93- 1.07	E/F	2	1.05– 1.14	F	2	0.86 - 0.91	D/E
SW 152 St. to SW 160 Street	D	2	1.06- 1.13	F	2	1.10– 1.18	F	2	0.90 - 1.15	D/F
SW 107 Avenue										
SW 88 St. to SW 104 Street	E	4	0.85- 1.02	D/F	4	0.88– 1.04	D/F	4	0.87 - 1.04	D/F
SW 112 St. to SW 120 Street	D	2	1.21-1.22	F	2	1.26 –1.27	F	2	1.30	F
SW120 St. to SW 136 Street	D	2	1.42-1.50	F	2	1.37 –1.44	F	2	1.45 - 1.53	F
SW 160 St. to SW 168 Street	D	2	1.41	F	2	1.44	F	2	1.41	F
SW 168 St. to SW 184 Street	D	2	1.08-1.23	F	2	1.09– 1.24	F	2	1.09 - 1.22	F
SW 184 St. to US 1	D	2	0.90- 1.03	F	2	0.91– 1.04	F	2	0.92 - 1.05	F
US-1/South Dixie Highway										
SR 826 to SW 104 Street	E+50%	6	1.82	E+82%	6	1.82	E+82%	6	1.79	E+79%
SW 104 St. to SW 112 Street	E+50%	6	1.26- 1.82	E+82%	6	1.26– 1.82	E+82%	6	1.20 - 1.25	E+25%
SW 112 St. to SW 120 Street	E+50%	6	1.16- 1.20	E+20%	6	1.16– 1.21	E+21%	6	1.17 - 1.21	E+21%
SW 120 St. to SW 136 Street	E+50%	6	1.06-1.18	E+18%	6	1.07 –1.18	E+18%	6	1.07 - 1.17	E+17%
SW 136 St. to SW 152 Street	E+50%	6	1.30- 1.33	E+33%	6	1.29– 1.32	E+32%	6	1.32 - 1.35	E+35%
SW 152 St. to SW 168 Street	E+50%	6	1.39- 1.43	E+43%	6	1.39– 1.45	E+45%	6	1.38 - 1.45	E+45%

Parkland DRI/CDMP Amendment
2018 Volume to Capacity (V/C) Ratios

Roadway and Segments	Adopted LOS Std ¹	Scenario 1 (Base Scenario) Without Application			Scenario 2 - With Application			Scenario 3 - With Application and Proposed Roadway Improvements		
		No. Of Lanes	V/C Ratios ²	Projected LOS	No. Of Lanes	V/C Ratios ²	Projected LOS	No. Of Lanes	V/C Ratios ²	Projected LOS
SW 168 St. to SW 184 Street	E+50%	6	0.98- 1.20	E+20%	6	1.0 - 1.21	E+21%	6	1.02 - 1.20	E+20%
SW 184 St. to SW 107 Avenue	E+50%	6	0.87	D	6	0.87 – 1.0	E	6	0.88	D
SW 107 Ave. to HEFT	E+50%	6	1.03	E+3%	6	1.04	E+4%	6	1.03 - 1.05	E+5%
SW 88 St./Kendall Drive										
SW 177 Ave. to SW 167 Ave.	E+20%	6	0.49-0.54	B	6	0.43-0.48	B	6	0.43 -.48	B
SW 167 Ave. to SW 157 Ave.	E+20%	6	0.33 – 0.76	B/C	6	0.30 –0.63	B	6	0.30-0.64	B
SW 157 Ave. to SW 147 Ave.	E+20%	6	0.45 – 0.60	B	6	0.46 –0.51	B	6	0.45-0.61	B
SW 147 Ave. to SW 137 Ave.	E+20%	6	0.72 – 0.92	C/E	6	0.75 –0.97	C/E	6	0.76-0.97	C/E
SW 137 Ave. to SW 127 Ave.	E+20%	6	0.84 – 1.13	D/E+13%	6	0.88 –1.15	D/E+15%	6	0.90-1.17	E/E+17%
SW 127 Ave. to SW 117 Ave.	E+20%	6	1.00 – 1.30	E/E+30%	6	1.04 –1.30	E+30%	6	1.07-1.30	E+30%
SW 117 Ave. to SW 107 Ave.	E+20%	6	1.10 – 1.12	E12%	6	1.13-1.14	E+14%	6	1.16-1.17	E+17%
SW 107 Ave. to SR 874	E+20%	6	1.25 - 1.41	E+41%	6	1.25– 1.39	E+39%	6	1.29 - 1.43	E+43%
SR 874 to SW 87 Ave.	E+20%	6	1.04 -1.06	E+6%	6	1.07 - 1.12	E+12%	6	1.08 - 1.12	E+12%
SW 87 Ave. to SR 826	E+20%	6	1.05 - 1.27	E+27%	6	1.07– 1.28	E+28%	6	1.07 - 1.27	E+27%
SW 96 Street										
SW 142 Ave. to SW 137 Ave.	D	4	1.17	F	4	1.16	F	4	1.13	F
SW 104 St./Killian Parkway										
SW 122 Ave. to SW 117 Ave.	E+20%	6	1.31	E+31%	6	1.33	E+33%	6-10	1.31	E+31%
SW 117 Ave. to SW 107 Ave.	E+20%	6	1.26 - 1.43	E+43%	6	1.29– 1.47	E+47%	6-10	1.27 - 1.45	E+45%
SW 107 Ave. to SW 97 Ave.	E	4	1.10-1.12	F	4	1.11-1.15	F	4	1.12-1.16	F
SW 97 Ave. to SW 87 Ave.	E	2	1.40 - 1.41	F	2	1.46– 1.48	F	2	1.42 - 1.43	F
SW 104 Street										
Killian Dr. to SW 97 Ave.	D	2	1.01 - 1.35	F	2	1.08 –1.41	F	2	1.34	F
SW 97 Ave. to SW 87 Ave.	D	2	1.16 - 1.21	F	2	1.25 –1.28	F	2	1.17 - 1.21	F
SW 97 Ave. to SW 87 Ave.	D	2	1.25	F	2	1.33	F	2	1.28	F
SW 112 Street										
SW 117 Ave. to SW 107 Ave.	D	2	1.36 - 1.52	F	2	1.31– 1.56	F	2	1.39 - 1.54	F
SW 107 Ave. to SW 102 Ave.	D	2	1.74 - 1.77	F	2	1.74– 1.77	F	2	1.70 - 1.81	F
SW 120 Street										
SW 137 Ave. to SW 127 Ave.	D	6	0.74 - 0.92	E	6	0.80– 0.97	E	6	0.79 - 0.95	E ⁴
SW 127 Ave. to HEFT	D	6	0.98 - 1.29	F	6	0.99– 1.32	F	6	1.0 - 1.31	F ⁴

Parkland DRI/CDMP Amendment
2018 Volume to Capacity (V/C) Ratios

Roadway and Segments	Adopted LOS Std ¹	Scenario 1 (Base Scenario) Without Application			Scenario 2 - With Application			Scenario 3 - With Application and Proposed Roadway Improvements		
		No. Of Lanes	V/C Ratios ²	Projected LOS	No. Of Lanes	V/C Ratios ²	Projected LOS	No. Of Lanes	V/C Ratios ²	Projected LOS
SW 128 Street										
SW 137 Ave. to SW 127 Ave.	D	2	0.91 - 1.13	F	2	0.92– 1.15	F	2	0.93 - 1.18	F
SW 127 Ave. to SW 122 Ave.	D	2	0.97	E	2	1.07	F	2	1.03	F
SW 117 Ave. to SW 107 Ave.	D	2	1.28 - 1.54	F	2	1.46– 1.75	F	2	1.35 - 1.64	F
SW 107 Ave. to SW 102 Ave.	D	2	1.18 - 1.21	F	2	1.40– 1.42	F	2	1.27 - 1.29	F
SW 136 Street										
SW 177 Ave. to SW 162 Ave.	D	0	0.0	NA	4	0.25– .44	B	4	0.23-0.49	B
SW 162 Ave. to SW 157 Ave.	D	0	0.0	NA	4	0.54-1.06	B/F	4	0.71-0.99	C/E ⁴
SW 157 Ave. to SW 147 Ave.	D	4	0.28	A	4	0.32	B	4	0.50	B
SW 147 Ave. to SW 137 Ave.	D	4	0.38-0.94	A/E	4	0.42-0.76	B/C	4	0.49-0.66	B
SW 137 Ave. to SW 127 Ave.	D	4	0.77	C	4	0.76	C	4	0.81	D
SW 127 Ave. to SW 122 Ave.	D	4	0.07	A	4	0.08	B	4	0.088	B
SW 152 Street										
SW 177 Ave. to SW 162 Ave.	D	NA	0.0	NA	6	0.13-0.39	B	6	0.14 - 0.39	B
SW 162 Ave. to SW 157 Ave.	E+20%	2	0.36	B	6	0.60	B	6	0.61	B
SW 157 Ave. to SW 147 Ave.	E+20%	2	0.28 - 0.74	B/C	4	0.70– 0.76	B/C	5	0.59 – 0.62	B
SW 147 Ave. to SW 137 Ave.	E+20%	4	0.44 - 0.78	B/C	4	0.63– 0.87	B/D	5	0.51 – 0.72	B/C
SW 137 Ave. to SW 127 Ave.	E+20%	6	0.93 - 0.96	E	6	0.93– 0.96	E	6	0.94 - 0.97	E
SW 127 Ave. to SW 117 Ave.	E+20%	6	0.93 - 1.28	E+28%	6	1.0 - 1.40	E+40%	6	1.09 - 1.41	E+41% ⁴
SW 117 Ave. to SW 112 Ave.	E+20%	4	0.74 - 1.24	E+24%	4	1.09– 1.29	E+29%	4	0.85 - 1.00	E
SW 112 Ave. to SW 102 Ave.	E+20%	4	1.04	E+4%	4	1.09– 1.10	E+10%	4	1.12 - 1.14	E+14%
SW 102 Ave. to US 1	E+20%	4	1.32 - 1.37	E+37%	4	1.33– 1.39	E+39%	4	1.40 - 1.54	E+54% ⁴
SW 168 Street										
SW 117 Ave. to SW 107 Ave.	D	2	1.10- 1.25	F	2	1.11– 1.34	F	2	1.13 - 1.27	F
SW 184 St./Eureka Drive										
SW 177 Ave. to SW 157 Ave.	C	2	0.56 – 0.57	B	2	0.56– 0.58	B	2	0.58 – 0.60	B
SW 157 Ave. to SW 147 Ave.	D	2	0.38 – 0.63	B	2	0.75– 1.00	C/E	4	0.42 - 0.58	B
SW 147 Ave. to SW 137 Ave.	D	4	0.58 – 0.80	B/C	4	0.64– 0.85	B/D	4	0.60 - 0.82	B/D
SW 137 Ave. to SW 127 Ave.	D	4	1.02 - 1.05	F	4	1.12– 1.18	F	4	1.10 - 1.16	F
SW 127 Ave. to SW 122 Ave.	D	4	1.12 - 1.13	F	4	1.21– 1.22	F	4	1.19 - 1.20	F
SW 122 Ave. to SW 117 Ave.	D	4	0.85 - 0.95	D/E	4	0.88 –	D/E	4	0.88 - .098	D/E

Parkland DRI/CDMP Amendment
2018 Volume to Capacity (V/C) Ratios

Roadway and Segments	Adopted LOS Std ¹	Scenario 1 (Base Scenario) Without Application			Scenario 2 - With Application			Scenario 3 - With Application and Proposed Roadway Improvements		
		No. Of Lanes	V/C Ratios ²	Projected LOS	No. Of Lanes	V/C Ratios ²	Projected LOS	No. Of Lanes	V/C Ratios ²	Projected LOS
						0.97				
SW 117 Ave. to HEFT	D	4	1.14	F	4	1.18	F	4	1.16	F
HEFT to SW 107 Ave.	D	4	1.07 - 1.08	F	4	1.09- 1.10	F	4	1.10 – 1.11	F
SW 107 Ave. to US1	D	4	0.88 - 0.89	D	4	0.90- 0.91	D/E	4	0.89 - 0.90	D
SW 200 St./Quail Roost Dr.										
SW 177 Ave. to SW 147 Ave.	C	2	0.32 – 0.54	B	2	0.32 –0.52	B	2	0.32 – 0.54	B
SW 147 Ave. to SW 137 Ave.	C	2	0.79 - 1.21	C/F	2	0.81– 1.25	D/F	2	0.80 - 1.23	C/F
SW 137 Ave. to SW 127 Ave.	D	2	1.23 - 1.30	F	2	1.11– 1.28	F	2	1.21 - 1.37	F
SW 127 Ave. to Quail Roost Dr.	D	4	0.77	C	4	0.74	C	4	0.76	C
SW 200 Street to SW 117 Ave.	D	4	0.65 – 0.77	B/C	4	0.63– 0.74	B/C	4	0.63 – 0.73	B/C
SW 117 Ave. to HEFT	D	4	0.75 – 1.16	C/F	4	0.74– 1.14	C/F	4	0.74 – 1.15	C/F
HEFT Ave. to US-1	D	4	1.15	F	4	1.21	F	4	1.17	F

Source: Florida Standard Urban Transportation Modeling Structure (FSUTMS), Gannett Fleming Inc., Metropolitan Planning Organization and Miami-Dade County Department of Planning and Zoning, July 2008.

Notes: ¹ Minimum Peak-period operating Level of Service Standard for State and County roads.

² Volume-to-Capacity (v/c) ratio, which is the ratio of the number of vehicles using the road to the road capacity. The v/c model output is expressed using daily volumes.

³ B Indicates that the LOS standard changes from C to B when Krome Avenue is widened from 2 to 4 lanes.

⁴ Roadway segment projected to operate in violation of their minimum adopted LOS standard, and further impacted by the traffic that will be generated by the proposed Parkland DRI development equivalent to more than 5 percent of the maximum service volume at the adopted LOS standard for the facility.

DP&Z staff learned, after the Metropolitan Planning Organization and Public Works Department had performed the traffic impact analyses, about the Applicant's intention of exchanging up to 2,000 cinema seats for 28,311 sq. ft. of retail use. The applicant's traffic consultant performed a PM peak-hour trip generation analysis for the exchange and concluded that the gross PM peak hour trips estimated to be generated by the 28,311 sq. ft. of retail is equivalent to the number of PM peak hour trips to be generated by the 2000-seat cinema (approximately 140 PM peak hour trips). Miami-Dade County Public Works Department staff also performed a trip generation analysis and indicated that the 28,311 sq. ft. of retail will generate approximately 272 PM peak- hour trips and the multiple movie theater will generate approximately 160 PM peak hour trips.

Application Impact

The Trip Generation Analysis indicates that the proposed application will generate approximately 7,110 PM peak-hour trips, 6,916 more PM peak-hour trips than the current 'Agriculture' land use designation. With the trip internalization, the net external PM peak-hour trips are estimated at 5,475 vehicle trips. With the 2000-seat cinemas, the application is estimated to generate 6,998 gross external PM peak-hour trips, if the proposed retail space is reduced by 28,311 sq. ft.

The Traffic Concurrency Analysis performed by Miami-Dade County Public Works Department indicates that the addition of trips generated by the proposed Application will significantly impact the level of service of Krome Avenue, between SW 88 Street and SW 184 Street and from SW 184 Street to SW 216 Street, which is projected to operate at LOS F, in violation of the adopted LOS C standard. Also, SW 152 Street, between SW 147 Avenue and SW 137 Avenue, is projected to operate at LOS E+113%, in violation of its adopted LOS E+20% standard.

By 2018, the County's FSUTMS Modeling results indicate that a number of roadways, east of the HEFT, are forecast to not meet the adopted minimum LOS standards. Also, portions of the following roadways, west of the HEFT, are projected to exceed their adopted LOS standards: SW 72 Street, SW 88 Street, SW 104 Street, SW 120 Street, SW 152 Street, SW 200 Street, SW 137 Avenue, SW 157 Avenue and SW 177 Avenue. These roadways are projected to exceed, without the Application's impacts, their adopted LOS standards.

In addition, the following roadway segments are projected to further deteriorated with the impacts of the proposed Parkland DRI Application: Krome Avenue between SW 8 Street and SW 200 Street; SW 157 Avenue between SW 120 Street and SW 136 Street; SW 137 Avenue between SW 184 Street and SW 200 Street; SW 120 Street between SW 137 Avenue and SW 127 Avenue; SW 136 Street between SW 162 Avenue and SW 157 Avenue; and SW 152 Street between SW 127 Avenue and SW 117 Avenue and from SW 102 Avenue to US-1.

Applicant's Transportation Analysis

The Applicant submitted a Transportation Analysis report, "CDMP Amendment Application Analysis Parkland DRI Revised August 2008' Report, in support of the Application. The report, prepared by Cathy Sweetapple & Associates, evaluates the transportation impacts resulting from the proposed CDMP amendment and the adequacy of the existing, committed and planned public facilities to support the infrastructure demand by the proposed DRI. The analysis considers the funded transportation improvements from the 2009 Transportation Improvement Program (TIP), the planned transportation improvements from Priority I and Priority II of the Year 2030 Long Range Transportation Plan (LRTP), the application's traffic impact, and the roadway improvements proposed by the applicant to mitigate the impacts of the application.

The traffic concurrency analysis examined the concurrency status of the surrounding roadways. The analysis indicates that there is available capacity to handle the additional traffic to be generated by the proposed amendment application.

The future traffic conditions analysis performed for the year 2018 provides a significance determination analysis that evaluates whether regional impacts would exist during the 2018-planning horizon for the CDMP amendment application. The analysis found that the impacts of the Amendment trips would exceed 5.0 percent of the adopted LOS maximum service volumes for the roadway segments listed below:

- Krome Avenue between SW 8 Street and SW 216 Street;

- SW 157 Avenue between SW 88 Street and SW 184 Street;
- SW 137 Avenue between SW 88 Street and SW 120 Street and from SW 152 Street and SW 184 Street;
- SW 127 Avenue between SW 104 Street and SW 136 Street;
- Tamiami Trail between Krome Avenue and SW 137 Avenue;
- SW 120 Street between SW 157 Avenue and SW 137 Avenue;
- SW 136 Street between SW 157 Avenue and the HEFT;
- SW 152 Street between SW 162 Avenue and SW 117 Avenue; and
- SW 184 Street between SW 157 Avenue and SW 117 Avenue.

The applicant is proposing the following roadway improvements to mitigate the impacts of the Parkland DRI Application:

- Krome Avenue between SW 136 Street and SW 152 Street, widen to four lane and reconstruct;
- SW 172 Avenue between SW 136 Street and SW 152 Street, new 4-lane divide roadway;
- SW 167 Avenue between SW 136 Street and SW 152 Street, new 4-lane divided roadway;
- SW 162 Avenue between SW 136 Street and SW 144 Street, new 4-lane divided roadway;
- SW 162 Avenue between SW 144 Street and SW 152 Street, widen to 4-lane divided;
- SW 136 Street between SW 177 Avenue and SW 162 Avenue, new 4-lane divided roadway;
- SW 136 Street between SW 162 Avenue to SW 157 Avenue, new 4-lane divided roadway;
- SW 136 Street between SW 157 Avenue to SW 137 Avenue, widen to 5 lanes (3 WB lanes and 2 WB lanes);
- SW 144 Street between SW 177 Avenue and SW 162 Avenue, new 4-lane divided roadway;
- SW 152 Street between SW 177 Avenue and SW 162 Avenue, a new 6-lane divided roadway;
- SW 152 Street between SW 162 Avenue and SW 157 Avenue, widen from 2 to 6 lanes;
- SW 152 Street between SW 157 Avenue and SW 147 Avenue, widen from 2 to 5 lanes;
- SW 152 Street between SW 147 Avenue to SW 137 Avenue, widen from 4 to 5 lanes (3 EB lanes and 2 WB lanes);
- SW 184 Street between SW 157 Avenue and SW 147 Avenue, widen from 2 to 4 lanes;
- SW 117 Avenue from the HEFT to SW 152 Street, SB free flow right turn lane.

The transportation consultant concludes that with all these proposed roadway capacity improvements, there will be available capacity and that acceptable levels of service will be maintained for the adjacent roadways and within the Study Area roadway network. County staff reviewed the transportation analysis and agrees with most of the assumptions, findings and conclusions in the report. County staff has some comments regarding the trip distribution used in the concurrency analysis and the long-term impacts on SW 177 Avenue and SW 152 Street. However, county staff is willing to meet and work with the applicant and the transportation consultant in order to discuss the trip distribution used in the concurrency analysis and the discrepancies in the findings between the transportation consultant's and the county's traffic impact analyses.

According to an estimate provided by the applicant, the cost of constructing the new roadways and widening existing roadways will be approximately \$51,212,629. This estimate does not include land acquisition costs for the rights-of-way required for the new roadways and existing roadways. The PWD staff reviewed this construction cost estimate using their historical conceptual cost data and the information provided by the applicant and estimated the construction costs to be at least twice and, in some instances, three times as much as the applicant's estimates. PWD indicates that a better estimate could be provided if a more defined/detail improvement scope is provided.

An Executive Summary of the 'CDMP Amendment Transportation Analysis for the Parkland DRI Revised August 2008' report is included in Exhibit E. The complete Transportation Analysis report is available for review at the Miami-Dade County Department of Planning and Zoning located at 111 NW 1st Street, 12th Floor, Miami, FL 33128.

It should be pointed out that the applicant's transportation consultant reviewed the county's Year 2018 Modeling evaluation and offered the following comments:

- The roadway capacity, level of service and significant impact analysis for those roadway segments either identified by Miami-Dade County as failing, or identified by the Applicant as necessary for providing more comprehensive understanding of the project assignment and project impact require additional review;
- Corrections were noted on lane geometry and roadway capacity based upon existing conditions or funded improvements;
- An additional evaluation of project distribution as determined by the 2018 Model under Scenario 3.

Staff of Miami-Dade Department of Planning and Zoning reviewed the comments of the traffic consultant and made adjustment to the 2018 Modeling evaluation. A complete list of the traffic consultant's comments is attached in Appendix E.

As indicated above, the Miami-Dade County Department of Planning and Zoning (DP&Z) and Public Works Department (PWD) staff reviewed the concurrency evaluation of the December 2007 Transportation Analysis report and submitted comments to the applicant's transportation consultant. The transportation analysis report was subsequently revised and resubmitted in September 2008. PWD's review of the revised concurrency evaluation and identified several discrepancies in the analysis. The PWD staff still has concerns regarding the trip distribution and assignment used in the concurrency evaluation. A summary of the PWD's comments are listed below:

- The Peak Hour Volumes (PHV) for traffic count station Nos. 9208 and 0682 shown in Table 4A differ significantly from those provided in the County's database.
- The capacity calculation for station No. 9854 on SW 152 Street between SW 147 Avenue and SW 137 Avenue must be analyzed as a four-lane facility; there is no programmed improvement to widen this facility to six lanes.
- Trip distribution (Figure 3C) on page 32 does not reflect the distribution percentages recommended by PWD staff in previous comments. The following trip distribution percentages should be used:
 - a. Station 0682. It is recommended to assign 15 percent, whereas originally it was assigned 11 percent and then further reduced to 9 percent.
 - b. Station 9208. The 3 percent trip assignment to this station is very low. It is recommended that at least 15.62 percent of the SSW direction be charged to this station together with a significant portion of the SSE direction. This will result in about 24 percent which was the trip distribution percentage originally recommended.
 - c. Station 9854. The December 2007 Transportation Analysis report showed that 15.62 percent of the development trips were assigned to this station; however, it was recommended to reduce this percentage to 10 percent. The currently proposed 23 percent distribution is significantly high and should be reduced as recommended.

Conclusions

1. The Parkland DRI is a proposed mixed-use development combining residential, retail services, schools, a hospital, medical offices, and industrial space. The applicant's proposed development program includes 1,257 single-family detached dwelling units, 2,436 single-family attached (town homes) dwelling units, 3,248 multifamily dwelling units, 200,000 gross sq. ft. of retail/service use, 100,000 sq. ft. of medical offices, a 200-bed hospital, 550,000 gross sq. ft. of industrial space, two K-8 schools for 3,200 students, one High school for 1,600 students, and 50,000 gross sq. ft. of community uses (library, police, fire, etc.). This development program was the base for county staff's assessment of the impact of this application on roadways. The Metropolitan Organization and the Public Works Department assisted the Department of Planning and Zoning with the traffic impact analyses.
2. The trip generation analysis of the proposed development indicates that the proposed application will generate approximately 7,110 PM peak-hour trips, 6,916 more PM peak hour trips than the current 'Agriculture' land use designations. With the 2000-seat cinemas, the application is estimated to generate 6,998 PM peak-hour trips, if the proposed retail space is reduced by 28,311 sq. ft.
3. Currently, most of the roadway in the Study Area are operating at acceptable levels of service, except for the following roadways which are operating at LOS F: Krome Avenue between SW 184 Street and SW 216 Street; SW 104 Street from SW 87 Avenue to US 1, and SW 112 Street between SW 117 Avenue and SW 107 Avenue. SW 137 Avenue between SW 8 Street and SW 26 Street is currently operating at LOS E+5%, SW 42 Street between SW 127 Avenue and the HEFT is operating at LOS E+14%, SW 104 Street from SW 127 Avenue to SW 117 Avenue is operating at LOS E+13%, and SW 152 Street between SW 107 Avenue and US 1 is operating at LOS E+8%; but all these roadway segments are still operating above their adopted LOS E+20% standard. Other roadway segments are operating at capacity (LOS E) or at their adopted LOS standards. All other roadways within the Study Area that are currently monitored show acceptable peak-period LOS conditions.
4. The county's concurrency LOS evaluation, which considers reserved trips from approved development not yet constructed, programmed roadway capacity improvements and trips generated by the application, shows that the following roads will run out of concurrency service capacity with the impacts of the application:
 - Krome Avenue (SR 997) from SW 88 Street to SW 184 Street
 - Krome Avenue (SR 997) from SW 184 Street to SW 216 Street
 - SW 152 Street from SW 147 Avenue to SW 137 Avenue
5. The county's Future 2018 traffic impact analysis indicates that most of the surface arterial grid network east of the HEFT between SR 836 and SW 200 Street are forecast to not meet the applicable LOS standards. Also, portions of SW 72 Street, SW 88 Street, SW 104 Street, SW 120 Street, SW 152 Street, SW 184 Street, SW 200 Street; SW 127 Avenue, and SW 137 Avenue, west of the HEFT, are projected to deteriorate to LOS F, without the impacts of the proposed CDMP Amendment application.
6. The County's Future 2018 traffic impact analysis determined that the following roadway segments will consume 5 percent or more of the adopted maximum service volumes of the following State and regionally significant roadways:
 - Krome Avenue between SW 8 Street and SW 88 Street;
 - Krome Avenue between SW 88 Street and SW 136 Street;

- Krome Avenue between SW 184 Street and SW 200 Street;
 - SW 157 Avenue between SW 120 Street and SW 136 Street;
 - SW 137 Avenue between SW 184 Street and SW 200 Street;
 - SW 117 Avenue between the HEFT and SW 152 Street;
 - SW 120 Street between SW 137 Avenue and HEFT;
 - SW 136 Street between SW 162 Avenue and SW 157 Avenue;
 - SW 152 Street between SW 127 Avenue and SW 117 Avenue; and
 - SW 152 Street between SW 102 Avenue and US 1.
7. The applicant is proposing the following roadway improvements to mitigate the impacts of the Parkland DRI Application:
- Krome Ave. between SW 136 and SW 152 Streets, widen to four lane and reconstruct;
 - SW 172 Ave. between SW 136 and SW 152 Streets, new 4-lane divide roadway;
 - SW 167 Ave. between SW 136 and SW 152 Streets, new 4-lane divided roadway;
 - SW 162 Ave. between SW 136 and SW 144 Streets, new 4-lane divided roadway;
 - SW 162 Ave. between SW 144 and SW 152 Streets, widen to 4-lane divided;
 - SW 136 Street between SW 177 and SW 162 Avenues, new 4-lane divided roadway;
 - SW 136 Street between SW 162 and SW 157 Avenues, new 4-lane divided roadway;
 - SW 136 Street between SW 157 and SW 137 Avenues, widen to 5 lanes (3 EB lanes and 2 WB lanes);
 - SW 144 Street between SW 177 and SW 162 Avenues, new 4-lane divided roadway;
 - SW 152 Street between SW 177 and SW 162 Avenues, a new-lane divided roadway;
 - SW 152 Street between SW 162 and SW 157 Avenues, widen from 2 to 6 lanes;
 - SW 152 Street between SW 157 and SW 147 Avenues, widen from 2 to 5 lanes (3 EB and 2 WB lanes);
 - SW 152 Street between SW 147 Avenue to SW 137 Avenue, widen from 4 to 5 lanes (3 EB lanes and 2 WB lanes);
 - SW 184 Street between SW 157 and SW 147 Avenues, widen from 2 to 4 lanes;
 - SW 117 Avenue from the HEFT to SW 152 Street, a SB free flow right-turn lane.⁵
8. Even with all the roadway improvements planned by the applicant to mitigate the impacts of the Parkland DRI, the following roadway segments were determined to continue to violate their adopted LOS standards:
- Krome Avenue between SW 8 Street and SW 88 Street;
 - Krome Avenue between SW 184 Street and SW 200 Street;
 - SW 157 Avenue between SW 120 Street and SW 136 Street;
 - SW 137 Avenue between SW 184 Street and SW 200 Street;
 - SW 120 Street between SW 137 Avenue and HEFT;
 - SW 136 Street between SW 162 Avenue and SW 157 Avenue;
 - SW 152 Street between SW 127 Avenue and SW 117 Avenue; and
 - SW 152 Street between SW 102 Avenue and US 1.

⁵ The Miami-Dade County Public Works Department will add as part of the widening of SW 117 Avenue between SW 152 and SW 184 Streets, the exclusive SB right-turn lane between the HEFT and SW 152 Street.

Transit Service

This analysis evaluates the impact of the proposed Parkland Development of Regional Impact application to amend the Miami-Dade County Comprehensive Master Plan (CDMP), as they apply to transit services. Data and information were updated as of June 2008 and is current to fiscal year 2008-2009, as presented in the Miami-Dade Transit's (MDT) draft 2008 Transit Development Program (TDP).

Existing Service

The nearest Metrobus service to the Parkland application site is provided by Route 252/Coral Reef MAX, which operates on SW 152 Street to SW 162 Avenue (east of the application site's southeastern boundary), where the closest bus stop to the application site is located. Metrobus Route 136 serves the general environs of the application site with the closest bus stop located approximately 3 miles from the site. The existing service frequencies for the Metrobus routes operating in proximity to the application site are shown in the 'Metrobus Route Service Summary' table below.

Metrobus Route Service Summary Parkland DRI/CDMP Application Site								
Route(s)	Service Headways (in minutes)						Proximity to Bus Route (miles)	Type of Service
	Peak (AM/PM)	Off-Peak (midday)	Evenings (after 8pm)	Overnight	Saturday	Sunday		
252/Coral Reef MAX	30*	30	45	N/A	40	60	0.0	F
136	30	N/A	N/A	N/A	N/A	N/A	3.0	F

Notes: * AM/PM peak Headway is a combination of 20 and 40 minutes, thereby producing an average peak period frequency of 30 minutes
F means Metrobus feeder service to Metrorail

Future Conditions

Due to the County's current budgetary constraints, MDT undertook a countywide service adjustment on June 15, 2008, which negatively impacted transit service to the surrounding area. Specifically Route 147 was discontinued while weekday peak and Saturday headway reductions on the Route 252/Coral Reef MAX were implemented.

The draft 2008 Transit Development Plan (TDP) that currently is in the review/approval phase, before adoption by the Board of County Commissioners, shows evening service span expansion planned for Route 252/Coral Reef MAX to serve the Miami Metrozoo Entertainment Area upon its development. Other alignment adjustments are programmed for this route, but do not include any extension westward beyond SW 162 Avenue to serve the Parkland application site. No planned improvements are programmed for the Route 136.

The general Kendall Area, including the SW 152 Street corridor, is the subject of transportation studies such as the Kendall Link Study and the SW 152 Street Corridor Study that are aimed at identifying warranted and appropriate mobility improvements within the area. The mobility improvements are necessary to satisfy existing travel demand as well as support the rapid

population, employment and commercial growth occurring in the Kendall area. The Kendall Link Study final report was completed in September 2007, but final action by the Miami-Dade Metropolitan Planning Organization (MPO) Governing Board on the recommendations of this study was deferred pending supplemental studies that are scheduled for completion by May 2009. The SW 152 Street Corridor Study is also complete but not yet scheduled to be heard by the MPO Governing Board. These studies include short-term, mid-term, and long-term rapid transit and other transportation solutions and strategies to address the transportation needs/deficiencies of the existing development and the anticipated growth of the Kendall Area, including the SW 152 Street corridor. The pending MPO Governing Board actions will determine what recommendations/strategies will be implemented along with the implementation timeframes. The selected recommendations/strategies would be included in the MPO's 2035 Long Range Transportation Plan update.

Application's Impacts

The Parkland application proposes 6,941 residential dwelling units and an estimated population of 18,232 persons, in addition to over 78 acres of non-residential development that would generate an estimated 2,550 jobs. According to CDMP Mass Transit Subelement Policy MT-1A, the proposed Parkland DRI development, if approved, built, and occupied, would meet the minimum threshold of 10,000 persons per square mile and should be provided with transit service if the following conditions are met:

- The average combined population and employment density along the corridor between the existing transit network and the area of expansion exceeds 4,000 per square mile, and the corridor is 0.5 miles on either side of any necessary new routes or route extensions;
- It is estimated that there is sufficient demand to warrant service;
- The service is economically feasible; and
- The expansion of transit service into new areas is not provided at the detriment of existing or planned services in higher density areas with greater need.

While the proposed development could meet the above population density requirement for transit service the economic feasibility of providing such service was not demonstrated. Furthermore, the June 2008 service reductions, mentioned above, were the result of budgetary constraints. Accordingly, MDT acknowledges that the estimated annual operational cost for the Route 252/Coral Reef MAX extension to the proposed Parkland DRI development would be prohibitive to MDT without a financial commitment from the applicant. This also brings into question whether or not the service could be provided to the proposed development without compromising existing or planned services in higher density areas with greater need.

Providing Metrobus service into the application site would require an extension of existing service, specifically Route 252/Coral Reef MAX from the site's southeastern boundary. The extension of Route 252/Coral Reef MAX would be the most operationally feasible option because the additional cost for the service expansion would be less than extending any other route that currently operates in proximity to the site. Extending Route 252/Coral Reef MAX would increase the route's operation by approximately 22,000 annual revenue miles and 1,000 annual revenue hours at a cost of \$185,000 per year. An extension of Route 252/Coral Reef MAX, from its current alignment into the application site, would add approximately two miles to each one-way trip and add up to four or five minutes of running time in each direction to the current headway frequency. Maintenance of the current headway frequency would require that one additional bus be added to the current Route 252/Coral Reef MAX lineup.

To facilitate the provision of transit service to the proposed Parkland Development, MDT would require the applicant to construct a park/ride facility within the development and convey the ownership of the facility to MDT. MDT would then be responsible for the operation and maintenance of the facility. The park/ride facility should include at a minimum, 4 bus bays, parking for 4200 passenger vehicles, bathroom facilities, and availability for vending machines. Transit use and alternative modes of transportation must be encouraged within the proposed development. If approved, MDT would therefore require coordination for the provision of the park/ride facility with amenities, bus shelters, turnout lanes, pedestrian and bicycle facilities. The annual cost to operate and maintain the park/ride facility is estimated at \$60,000.²⁷

Applicant's Proposed Transit Center

The applicant proposes to include a transit center within the application site, adjacent to the CSX rail line. However, as discussed above, only Metrobus Route 252/Coral Reef MAX would be extended to serve the application site. The future need for a transit center within the proposed development has not been demonstrated.

The CDMP Mass Transit Subelement, Future Mass Transit Map Series text on page II-34 explains that transit centers are locations where several transit routes or lines, or different transit modes converge. Transit centers are designed to handle the movement of transit vehicles and the boarding, alighting and transferring of passengers between transit routes, lines or transit modes.

As noted above, the transportation studies are to examine rapid transit and other transportation strategies to address the existing and future transportation demands of the Kendall area, and do not contemplate the extension of rail transit service to the Parkland application site. Furthermore, CDMP Mass Transit Subelement Objective MT-2 requires the County to coordinate the provision of efficient transit service and facilities with the location and intensity of designated future land use patterns. The transit center proposal is made without a demonstrated need for the facility and is based on a possibility that the CSX rail corridor may be utilized as a commuter rail corridor. The Kendall Link study that is evaluating this possibility is awaiting supplemental studies to be completed in May 2009, therefore, the proposal is premature.

²⁷ Development Order Condition Correspondence provided by Miami-Dade Transit dated December 5, 2008.

CONSISTENCY REVIEW WITH CDMP GOALS, OBJECTIVES, POLICIES, CONCEPTS AND GUIDELINES

The following CDMP goals, objectives, policies, concepts, and guidelines will be impeded if the proposed designation is approved. Not all text from the policies is included. Pertinent sections are quoted or paraphrased for clarity and brevity.

- Policy LU-1B: Major centers of activity, industrial complexes, regional shopping centers, large-scale office centers and other concentrations of significant employment [...] shall be sited on the basis of metropolitan scale considerations at locations with good countywide, multi-modal accessibility.
- Policy LU-1C: Miami-Dade County shall give priority to infill development on vacant sites in currently urbanized areas, and redevelopment of substandard or underdeveloped environmentally suitable urban areas contiguous to existing urban development where all necessary urban services and facilities are projected to have capacity to accommodate additional demand.
- LU-1O: Miami-Dade County shall seek to prevent discontinuous, scattered development at the urban fringe particularly in the Agriculture Areas, through its CDMP amendment process, regulatory and capital improvements programs and intergovernmental coordination activities.
- Policy LU-1P: While continuing to protect and promote agriculture as a viable economic activity in the County, Miami-Dade County shall explore and may authorize alternative land uses in the South Dade agricultural area which would be compatible with agricultural activities and associated rural residential uses, and which would promote ecotourism related to the area's agricultural and natural resource base including Everglades and Biscayne National Parks.
- Policy LU-1R: Miami-Dade County shall take steps to reserve the amount of land necessary to maintain an economically viable agricultural industry. Miami-Dade County shall adopt and develop a transfer of developments rights (TDR) program to preserve agricultural land that will be supplemented by a purchase of development rights program to preserve agricultural land and environmentally sensitive property. The density cap of the land use category in the receiving area established by the TDR program may be exceeded. Land development regulations shall be developed to determine the extent that the density cap may be exceeded based on parcel size but in no case shall it exceed 20 percent.
- Policy LU-1S: The Comprehensive Development Master Plan (CDMP) shall be consistent with the Miami-Dade County Strategic Plan adopted by the County Commission on June 3, 2003 by Resolution R-664-03. The Miami-Dade County Strategic Plan includes countywide community goals, strategies and key outcomes for Miami-Dade County government. Key outcomes of the Strategic Plan that are relevant to the Land Use element of the CDMP include increased urban infill development and decreased urban sprawl, protection of viable agriculture and environmentally sensitive land, improved community design, reduced flooding, improved infrastructure and redevelopment to attract businesses to underserved and distressed areas, available and high quality green space throughout the County, and more integrated land-use development to decrease dependence on automobiles.

- Policy LU-2B: Priority in the provision of services and facilities and the allocation of financial resources for services and facilities in Miami-Dade County shall be given first to serve the area within the Urban Development Boundary (UDB) of the Land Use Plan (LUP) map. Second priority shall support the staged development of the Urban Expansion Area (UEA). Urban services and facilities which support or encourage urban development in Agriculture and Open Land areas shall be avoided, except for those improvements necessary to protect public health and safety and which service the localized needs of these non-urban areas.
- Policy LU-3F: Any zoning action or amendment to the CDMP that would approve any use other than direct production and permitted residential uses of property, in an area designated as Agriculture, whether as a primary use or as an accessory or subordinated use to an agricultural use, or action that would liberalize standards or allowances governing such other uses on land that is, a) outside the Urban Development Boundary (UDB), and b) within one mile of the right-of-way line of any portions of Krome Avenue designated in this Plan for improvement to 4 lanes, shall require an affirmative vote of not less than five members of the affected Community Zoning Appeals Board and two-thirds of the total membership of the Board of County Commissioners then in office, where such Community Zoning Appeals Board or Board of County Commissioners issues a decision. The term "direct agricultural production" includes crops, livestock, nurseries, groves, packing houses, and barns but not uses such as houses of worship, schools, sale of produce and other items, and outdoor storage vehicles. This policy is not intended to permit any use not otherwise permitted by the CDMP. Any modification to this section to allow additional uses within the one mile distance from Krome Avenue shall require an affirmative vote of not less than two-thirds of the Board of County Commissioners then in office.
- Policy LU-3G: Any zoning action, or amendment to the Land Use plan map that would approve a use of property other than limestone quarrying, seasonal agriculture or permitted residential use in an area designated as Open Land on land that is, a) outside the Urban Development Boundary (UDB), and b) within one mile of the right-of-way line of any portions of Krome Avenue designated in this Plan for improvement to 4-lanes, shall require an affirmative vote of not less than five members of the affected Community Zoning Appeals Board and two-thirds of the total membership of the Board of County Commissioners then in office, where such Community Zoning Appeals Board or Board of County Commissioners issues a decision. This policy is not intended to permit any use not otherwise permitted by the CDMP. Any modification to this section to allow additional uses within the one mile distance from Krome Avenue shall require an affirmative vote of not less than two-thirds of the Board of County Commissioners then in office.
- Policy LU-3H: Any zoning action, or amendment to the Land Use plan map that would approve a use of property other than seasonal agricultural use in the Dade-Broward Levee Basin or permitted residential use in an area designated as Environmental Protection, on land that is, a) outside the Urban Development Boundary (UDB), and b) within one mile of the right-of-way line of any portions of Krome Avenue designated in this Plan for improvement to 4 lanes, shall require an affirmative vote of not less than five members of the affected Community Zoning Appeals Board and two-thirds of the total membership of the Board of County Commissioners then in office, where such Community Zoning Appeals Board or Board of County Commissioners issues a decision. This policy is not intended to permit any use not otherwise permitted by the CDMP. Any modification to1 this section to allow additional uses within the one mile distance from Krome Avenue shall

require an affirmative vote of not less than two-thirds of the Board of County Commissioners then in office.

- Policy LU-4B: Uses designated on the LUP map that generate or cause to generate significant noise, dust, odor, vibration or truck traffic shall be protected from damaging encroachment by incompatible uses such as residential.
- Policy LU-8A: Miami-Dade County shall strive to accommodate residential development in suitable locations and densities which reflect such factors as recent trends in location and design of residential units; projected availability of service and infrastructure capacity; proximity and accessibility to employment, commercial and cultural centers; character of existing adjacent or surrounding neighborhoods; avoidance of natural resource degradation; maintenance of quality of life and creation of amenities. Density patterns should reflect the Guidelines for Urban Form contained in this Element.
- Policy LU-8C: Through its planning, capital improvements, cooperative extension, economic development, regulatory and intergovernmental coordination activities, Miami-Dade County shall continue to protect and promote agriculture as a viable economic use of land in Miami-Dade County.
- Policy LU-8D: The maintenance of internal consistency among all Elements of the CDMP shall be a prime consideration in evaluating all requests for amendment to any Element of the Plan. Among other considerations, the LUP map shall not be amended to provide for additional urban expansion unless traffic circulation, mass transit, water sewer, solid waste, drainage and park and recreation facilities necessary to serve the area are included in the plan and the associated funding programs are demonstrated to be viable.
- Policy LU-8E: Applications requesting amendments to the CDMP Land Use Plan map shall be evaluated to consider consistency with the Goals, Objectives and Policies of all Elements, other timely issues, and in particular the extent to which the proposal, if approved, would:
 - i) Satisfy a deficiency in the Plan map to accommodate projected population or economic growth of the County
 - ii) Enhance or impede provision of services at or above adopted LOS Standards
 - iii) Be compatible with abutting and nearby land uses and protect the character of established neighborhoods; and
 - iv) Enhance or degrade environmental or historical resources, features or systems of County significance; and
 - v) If located in a planned Urban Center, or within 1/4 mile of an existing or planned transit station, exclusive busway stop, transit center, or standard or express bus stop served by peak period headways of 20 or fewer minutes, would be a use that promotes transit ridership and pedestrianism as indicated in the policies under Objective LU-7, herein.
- Policy LU-8F: The Urban Development Boundary (UDB) should contain developable land having capacity to sustain projected countywide residential demand for a period of 10 years after adoption of the most recent Evaluation and Appraisal Report (EAR) plus a 5-year surplus (a total 15-year Countywide supply beyond the date of EAR adoption). The estimation of this capacity shall include the capacity to develop and redevelop around transit stations at the densities recommended in policy LU-7F. The adequacy of non-residential land supplies shall be determined on the basis of land supplies in subareas of the County appropriate to the type of use, as well as the Countywide supply within the

UDB. The adequacy of land supplies for neighborhood- and community-oriented business and office uses shall be determined on the basis of localized subarea geography such as Census Tracts, Minor Statistical Areas (MSAs) and combinations thereof. Tiers, Half-Tiers and combinations thereof shall be considered along with the Countywide supply when evaluating the adequacy of land supplies for regional commercial and industrial activities.

- Policy LU-8G: When considering land areas to add to the UDB, after demonstrating that a need exists, in accordance with foregoing Policy LU-8F:
 - i) The following areas shall not be considered:
 - a) The Northwest Wellfield Protection Area located west of the Turnpike Extension between Okeechobee Road and NW 25 Street and the West Wellfield Protection Area west of SW 157 Avenue between SW 8 Street and SW 42 Street;
 - b) Water Conservation Areas, Biscayne Aquifer Recharge Areas, and Everglades Buffer Areas designated by the South Florida Water Management District;
 - c) The Redland area south of Eureka Drive; and
 - ii) The following areas shall be avoided:
 - a) Future Wetlands delineated in the Conservation and Land Use Element;
 - b) Land designated Agriculture on the Land Use Plan map;
 - c) Category 1 hurricane evacuation areas east of the Atlantic Coastal Ridge;
 - d) Comprehensive Everglades Restoration Plan project footprints delineated in Tentatively Selected Plans and/or Project Implementation Reports; and
 - iii) The following areas shall be given priority for inclusion, subject to conformance with Policy LU-8F and the foregoing provision of this policy:
 - a) Land within Planning Analysis Tiers having the earliest projected supply depletion year;
 - b) Land contiguous to the UDB;
 - c) Locations within one mile of a planned urban center or extraordinary transit service; and
 - d) Locations having projected surplus service capacity where necessary facilities and services can be readily extended.
- Policy TC-6E: The County shall pursue and support transportation programs (e.g., rapid transit, express buses, high occupancy vehicles [HOV], bikeways) that will help to maintain or provide necessary improvement in air quality and which help conserve energy.
- Objective MT-2: Coordinate the provision of efficient transit service and facilities with the location and intensity of designated future land use patterns as identified on the Land Use Plan Map, and the goal, objectives and policies of the Land Use Element.
- Policy MT-2A: Transit system improvements shall be coordinated with, and support the staging and shaping of development as planned in the Land Use Element, through Miami-Dade County's transportation planning process.
- Objective CON-5: Miami-Dade County shall continue to develop and implement the Stormwater Master Plans comprised of basin plans for each of the twelve primary

hydrologic basins being addressed by the County, and cut and fill criteria as necessary to: provide adequate flood protection; correct system deficiencies in County maintained drainage facilities; coordinate the extension of facilities to meet future demands throughout the unincorporated area; and maintain and improve water quality. The Stormwater Master Plan is projected to be completed in 2005, and implementing actions recommended in each basin plan shall continue to commence immediately after the applicable plan is approved. Outside of the Urban Development Boundary the County shall not provide, or approve, additional drainage facilities that would impair flood protection to easterly developed areas of the County, exacerbate urban sprawl or reduce water storage.

- Objective CIE-3: CDMP land use decisions will be made in the context of available fiscal resources such that scheduling and providing capital facilities for new development will not degrade adopted service levels.
- CIE-3A: The capital facilities and infrastructure implications of land use and development plans and implementation will be analyzed and set forth with attention to the following:
 1. Safety improvements and elimination of hazard.
 2. Providing the necessary capacity to maintain and/or improve levels of service and quality of life in areas designated for redevelopment, infill development, and/or higher residential densities in accordance with transit oriented development plans, smart growth initiatives, and other strategies to accommodate population growth in existing communities,
 3. Elimination of below-standard conditions and capacity deficits,
 4. Demonstrated linkage between projected growth and facility service area,
 5. Financial feasibility, including operating costs,
 6. Coordination with the capital programming of other public agencies,
 7. Contractual and/or mandated obligations.