3.0 MIAMI-DADE TRANSIT SYSTEM OVERVIEW

MDT operates the 15th largest transit system in the United States and the largest transit system in the State of Florida. MDT is one of the largest departments in Miami-Dade County government and responsible for planning and providing all public transit services in the County.

Miami-Dade Transit's service area covers approximately 306 square miles with an urbanized population of approximately 2.5 million. Miami-Dade County as a whole is composed of 34 individual municipalities. A trend persists in some areas throughout the county to incorporate, leaving a large portion of the county populated by disadvantaged individuals, in unincorporated areas that are totally dependent upon county services.

The transit agency is led by a Department Director that reports to the Deputy Mayor. The table of organization for MDT can be found in Appendix A.1.

Miami-Dade Transit Mission Statement

To meet the needs of the public for the highest quality of transit service: safe, reliable, efficient and courteous.

MDT operates four (4) modes of transit service: bus (Metrobus), heavy rail (Metrorail), automated people-mover (APM) (Metromover), and demand-response service (Special Transportation Services or STS). Together Metrobus, Metrorail and Metromover comprise an integrated multi-modal transit system throughout Miami-Dade County. More than 353,000 average weekday boardings occur on the MDT system while STS's average daily boardings is approximately 5,500. Table 3-13-1 presents MDT service characteristics by transit mode.

3.1 Metrobus

Metrobus is a fixed-route bus service that MDT operates seven (7) days a week, 24 hours per day. A total of ninety-three (93) routes comprise MDT's regular bus service structure as served by a total fleet of 824 buses and two (2) contracted routes with ten (10) buses.

Miami-Dade Transit's family of services for Metrobus is described below and includes local, feeder, circulator, limited-stop, express, and BRT (Arterial Busway) services. Figure 3-13-1 illustrates the MDT Metrobus system route map as of December 2013. A detailed service schedule for current MDT operated Metrobus routes, as of December 2013 is presented in Appendix A.2.

3.1.1 Local Service

The operation of local bus service throughout Miami-Dade County collects and distributes high-turnover ridership along arterials radiating to and from dense activity centers. This service type is characterized by frequent stops, short and moderate passenger trips, and slow average bus speeds over the course of an entire route.

Table 3-1: MDT Service Characteristics by Transit Mode, 2013

System Characteristics	Metrobus		Metrorail	Metromover	STS
	MDT Operated Routes	Contracted Routes			
Operating Hours	24 hours[1]	5:15am-1:10am	5:00am-12:48am	5:00am-12:00am	24 hours
Number of Routes	93	2	2	3	Demand Resp.
No. of Stations/Stops*	8,828	32[2]	23	21	N/A
Peak Headways*	7½-80 minutes	N/A	5-10 minutes**	1½ -5 minutes	(Pick up +/-30 minutes of scheduled time)
Midday Headways*	12 -60 minutes	N/A	15 minutes	1½ - 3 minutes	
Weekend Headways*	12 -60 minutes	N/A	30 minutes	3-6 minutes	
Routes Miles	2,582 (Round Trip Miles)	202.8 (Round Trip Miles)	24.8 miles	4.4 miles	N/A
Peak Vehicle Requirements	692	7	78	21	336
Total Fleet Size	824	10	136	46	380[3]
Annual Revenue Miles*	28,366,268	569,765	7,884,786	1,222,385	14,139,842
Annual Boardings*	78,500,785	392,192	21,198,687	9,643,713	1,711,693
Park-Ride Spaces	2,922	N/A	10,060	0	N/A
Annual Operating Expense*	$302,261,718	N/A	$77,684,301	$22,487,177	$45,742,809
Annual Operating Revenue*	$86,505,094	$577,733	$22,845,276	$0	$4,696,661
Annual Revenues (Other)*	$5,065,717[4]	$0	$0	$0	N/A
Base Fare	$2.25	$2.25	$2.25	Free	$3.50

*Source: National Transit Database, Miami-Dade Transit, 2nd Submission Close Out – 2013.

**5-minute combined headway (Orange Line and Green Line) during the peak AM and PM travel times from Dadeland South Station to the Earlington Heights Station. The Green Line Metrorail Service operates at 10-minute headways during the peak AM and PM travel times between the Palmetto Station and the Dadeland South Station.

3.1.2 Circulator Service

Circulator or shuttle bus service operates short route connections between activity centers, or as a feeder to provide a connection with another transit service. For MDT, these routes include the Tri-Rail commuter rail shuttles in Miami-Dade County, and short localized area-specific routes. Route 211, the Overtown Circulator, is an example of MDT's circulator service operating on weekdays.

[1] Seven (7) Metrobus routes (L, S, 3, 11, 27, 38/Busway MAX, 77) operate 24 hours per day. Two other routes, 246/Night Owl and 500/Midnight Owl, provide hourly bus service approximately between 12:00 am - 5:30 am.

[2] In addition to the 32 designated bus stops for the two routes, buses pick up passengers anywhere along the routes when hailed.

[3] STS fleet includes 179 sedans, 8 minivans, 66 standard vans and 127 lift equipped vans.

[4] Includes all modes.

3.1.3 Limited-Stop Service

Limited-stop service serves a limited number of designated bus stops along a route. With fewer stops, limited routes have significantly increased operating speeds when compared to local service. The MAX routes serve stops at major transfer points or approximately every one-half mile (in the Miami Central Business District (CBD)) to one mile (in suburban areas) along a route. The 7th Avenue MAX is an example of a limited-stop type of bus service that operates during the morning and evening rush hours.

3.1.4 Express Service

Express service is a type of service similar to limited-stop service that has fewer stops and operates at a higher speed than local service. Express routes serve outlying areas (serving designated park-and-ride lots or shopping centers), some with direct service to the Miami CBD. They usually operate along a freeway or major arterial road to increase the operating speed.

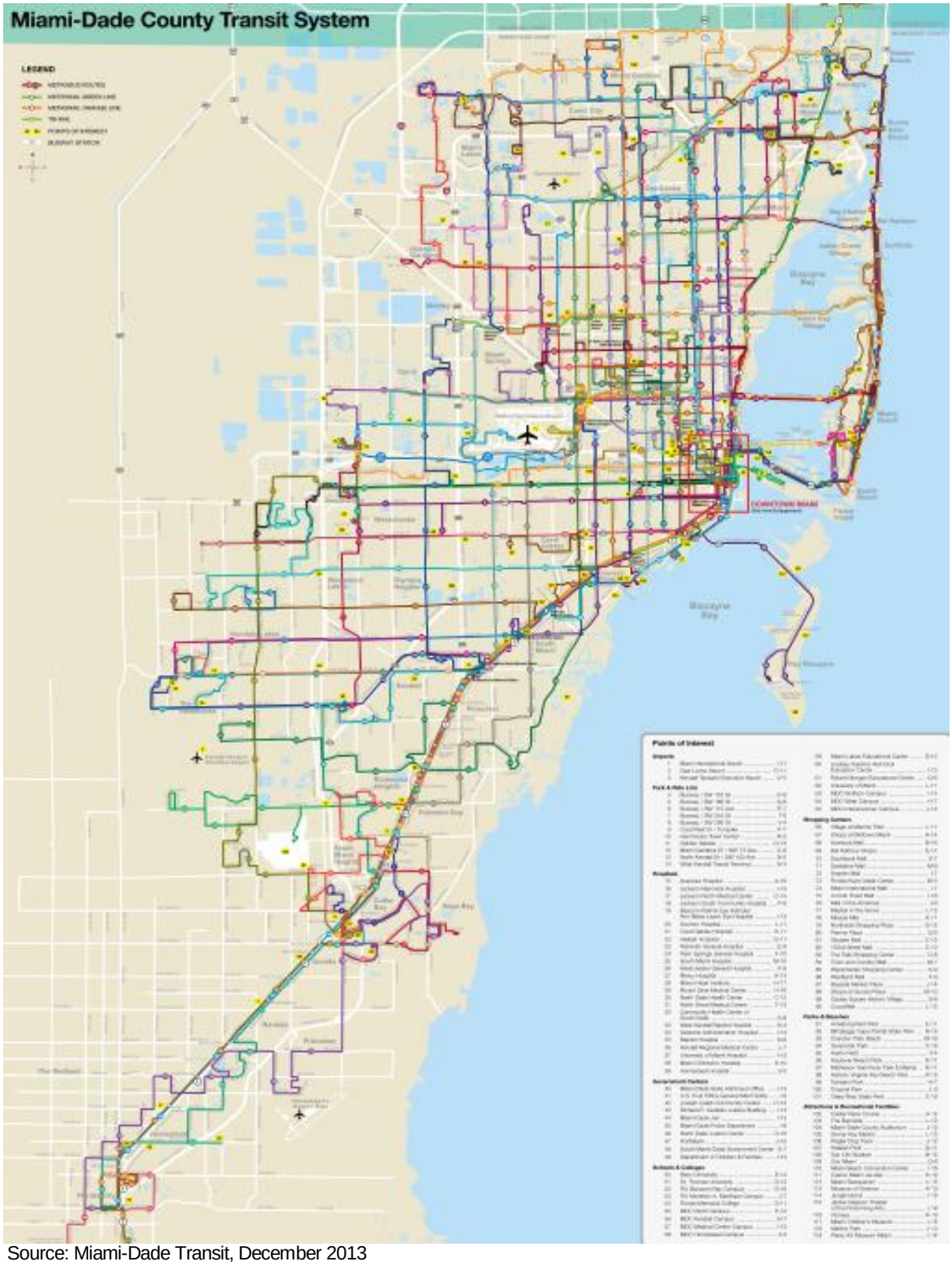
The 95 Dade-Broward Express that operates within the I-95 express lanes is an existing express service operated by MDT.

3.1.5 Bus Rapid Transit (Arterial Busway)

The South Miami-Dade Busway is a 19.8-mile exclusive, dedicated two-lane, at-grade busway corridor for MDT bus service along U.S. 1 from SW 344th Street in South Miami-Dade to the Dadeland South Metrorail Station. Full-size buses serve 29 bus stations and five park-and-ride areas along the Busway. Buses also operate within adjacent neighborhoods and enter the exclusive lanes at major intersections.

Most of the routes operating on the Busway provide limited-stop service, or have sections that offer limited stop service in order to maximize use of the busway and its travel time savings features such as exclusive ROW, fewer stops, and preferential signal phasing at intersections. Such routes include 31, 34, 38, 52, 252 and 287.

Figure 3-1: MDT Metrobus Route Map 2013



Source: Miami-Dade Transit, December 2013

3.2 Metrorail

Metrorail provides passenger service to 23 stations on a 24.8-mile heavy rail electrified line. The system operates primarily on an elevated guideway with transfer points to Tri-Rail passenger rail service and the MDT Metromover system. MDT maintains a total fleet of 136 Metrorail vehicles. Daily passenger service starts at 5:00 a.m. from the terminal stations and ends with the last train arriving at the terminal station at 12:48 a.m.

Two lines of service with four (4) and six (6) car trains are provided: the legacy Green Line from Palmetto to Dadeland South station and the new Orange Line from the Miami Intermodal Center (MIC) at Miami International Airport to Dadeland South station. The Orange Line provides direct service between the MIC and Dadeland South Station every 10 minutes during peak hours. The Green Line operates at 10-minute headways during the peak AM and PM travel times between the Palmetto Station and Dadeland Station.

Both lines provide premium transit service with a combined headway of five (5) minutes during the peak AM and PM travel times from Dadeland South Station to the Earlington Heights Station. Mid-day off-peak headways are 15 minutes. Weekend and holiday service operates with headways of 30 minutes. Figure 3-2 illustrates the MDT Metrorail system map as of December 2013.

Figure 3-2: MDT Metrorail System 2013

Source: Miami-Dade Transit, December 2013

3.3 Metromover

MDT's automated people mover (APM) or Metromover is an elevated system that serves 21 stations and is comprised of three loops: the Downtown Miami Central Business District (Inner/Downtown Loop); the Adrienne Arsht Center and Perez Arts Museum to the north (Outer/Omni Loop); and the Brickell area to the south (Outer/Brickell Loop).

MDT maintains a fleet of 46 Metromover vehicles and operates with a maximum of two (2) cars per train. Metromover operates free of charge and stops at 21 wheelchair-accessible stations from the School Board area to Brickell, serving major destinations throughout Downtown Miami. Metromover's Inner/ Downtown, Outer/Omni and Brickell loops operate from 5:00 a.m. to 12:00 a.m. During the AM/PM peak period, service frequency is every 90 seconds in the central business district and every three (3) minutes during weekends and holidays. On the Omni and Brickell Loops service frequency is five (5) minutes during peak periods and six (6) minutes during weekends and holidays. Figure 3-33-3 illustrates the MDT Metromover system map as of December 2013.

3.4 Special Transportation Services

MDT also operates a demand-response service known as Special Transportation Services (STS). STS is a shared-ride, door-to-door transportation service for qualified individuals with disabilities who are unable to utilize the accessible fixed-route transit system. Service is provided by sedans, vans and lift-equipped vehicles, seven (7) days a week, 24 hours per day. Presently, there are 380 vehicles available for ambulatory transportation. Currently, these vehicles are privately contracted. There are 34,891 eligible clients enrolled in the STS program including both ambulatory and non-ambulatory clients, as of December 2013.

3.5 Maintenance and Storage Facilities

Miami-Dade Transit currently operates three (3) maintenance bus garages to serve a fleet of 824 buses. The MDT garages are located in various areas throughout the County to provide efficient maintenance and storage services at the following locations:

- Central Facility: 3311 NW 31st Street, Miami, Florida 33142; serving 39 bus routes
- Coral Way Facility: 2775 SW 74th Avenue, Miami, Florida 33155; serving 31 bus routes and,
- Northeast Facility: 360 NE 185th Street, Miami, Florida 33179; serving 25 bus routes

The Metrorail fleet of 136 rail cars is maintained and stored at the William E. Lehman Center located at 6601 NW 72nd Avenue, Miami, Florida 33166. The Metromover fleet of 46 cars is supported by the maintenance facility located at 100 SW 1st Avenue in Downtown Miami.

Figure 3-3: MDT Metromover System 2013

Source: Miami-Dade Transit, December 2013

3.6 Park-and-Ride Facilities

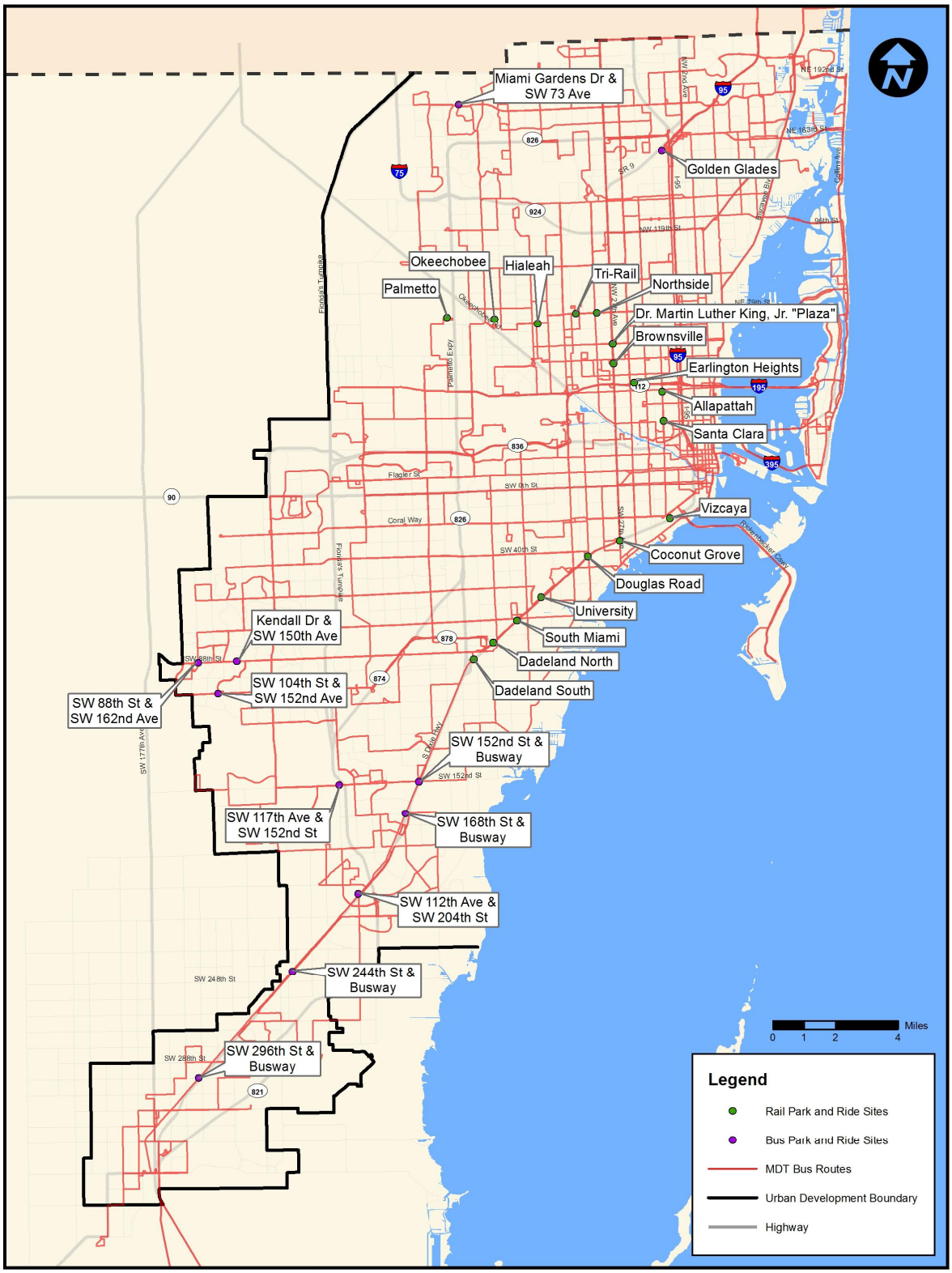
Miami-Dade Transit currently has more than 11,000 available parking spaces, including 28 park-and-ride lots all of which serve one or more Metrobus routes. Seventeen of those locations are located at Metrorail stops. On average about 71 percent (71%) of available parking spaces are utilized on any given weekday. However, actual parking usage is highest on the southern portion of the Metrorail line, and to the north at the Metrobus Golden Glades park-and-ride lot. Figure 3-43-4 identifies the location of existing park-and-ride sites that serve the MDT system.

3.7 Municipal Transit Services

Miami-Dade Transit continues to coordinate mass transit planning with the plans and programs of local municipalities in an effort to avoid duplication of transit services and allow for efficient transit operations that complement one another. There are currently 34 municipalities that are eligible to receive surtax funding with 33 participating in the program (Indian Creek is not participating). Of the 34 municipalities within the county, 26 have local transit circulators that supplement MDT bus routes. The City of Miami Gardens is expected to become the 27th municipality to offer transit services when they begin operating their routes in 2015. Figure 3-5 Figure 3-4 presents a draft of a map of MDT bus routes and the local circulators. The 26 municipalities listed below either operate a circulator, partner with another municipality or partner with MDT.

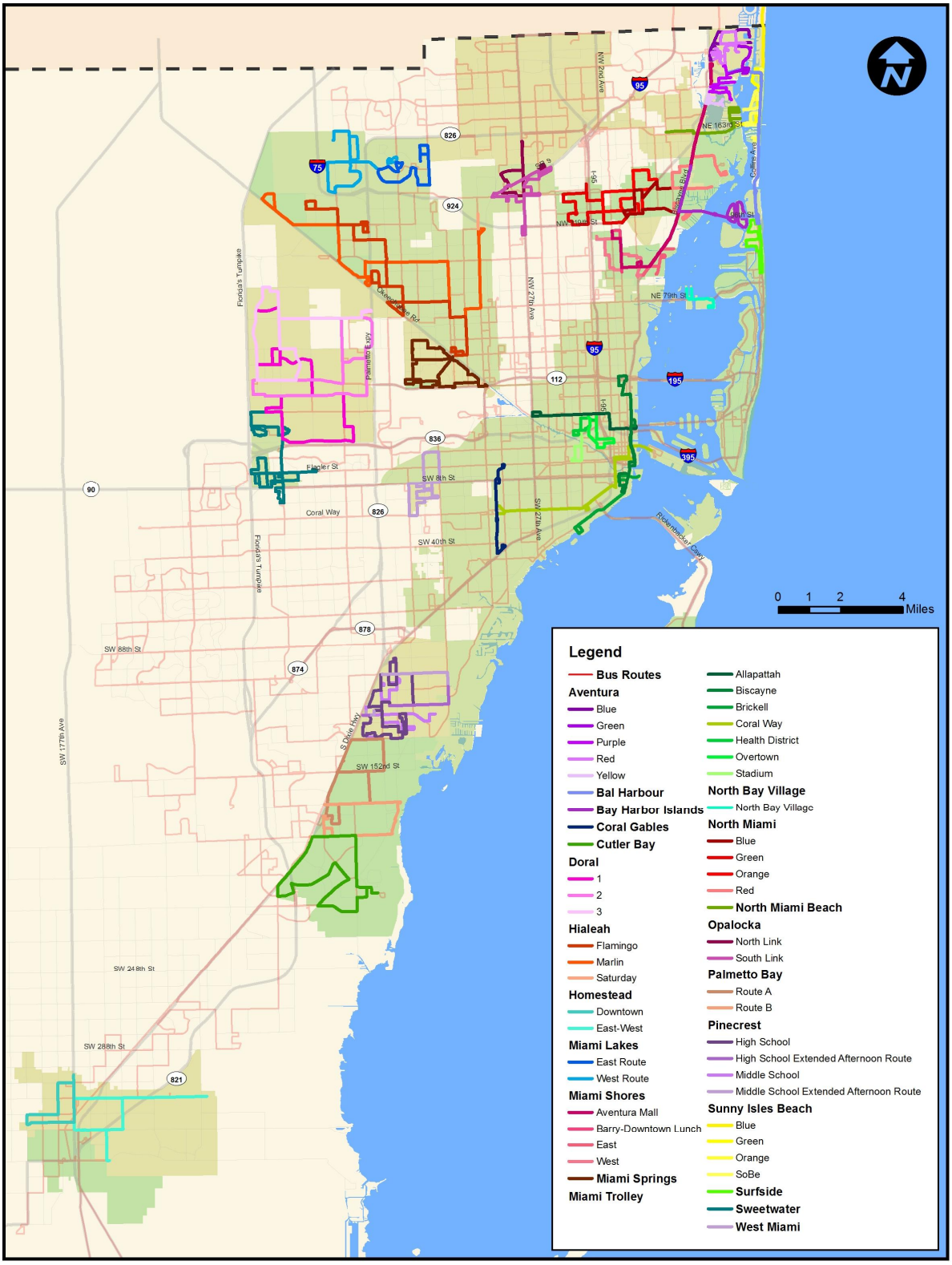
- City of Aventura
- Village of Bal Harbour
- Town of Bay Harbor Islands
- City of Coral Gables
- Town of Cutler Bay (Interlocal Agreement (ILA) with MDT)
- City of Doral
- City of Hialeah
- City of Hialeah Gardens (ILA with the City of Hialeah)
- City of Homestead
- City of Miami
- City of Miami Beach (ILA with MDT)
- Town of Miami Lakes
- Town of Medley (Monday/Thursday only service to various shopping plazas)
- Miami Shores Village
- City of Miami Springs
- City of North Bay Village
- City of North Miami
- City of North Miami Beach
- City of Opa-locka
- Village of Palmetto Bay
- Village of Pinecrest
- City of Sunny Isles Beach
- Town of Surfside
- City of Sweetwater
- Village of Virginia Gardens (ILA with the City of Miami Springs)
- City of West Miami

Figure 3-4: MDT Existing Park-and-Ride Sites 2013



Existing Park-and-Ride Sites. Source: Miami Dade Transit, 2013

Figure 3-5: Municipal Circulator Routes



Transit Circulators - Source: Municipality Websites

Ridership on these circulators now exceeds seven (7) million passenger trips annually overall. The annual ridership of the six (6) largest circulator systems – (1) City of Miami, (2) City of Miami Beach, (3) City of Coral Gables, (4) City of Hialeah, (5) City of North Miami, and (6) City of Doral - totaled 6,372,162 in 2013. It should be noted that many of the municipalities operating circulator systems exceed the 20% minimum surtax transit expenditure requirement. Appendix A.3 provides a listing of each municipality, respective service operator and website.

3.8 REGIONAL TRANSIT SERVICE CONNECTIONS

3.8.1 Broward County Transit (BCT)

The Broward County Office of Transportation operates BCT, fixed route bus service, which connects with MDT service. BCT operates 44 routes during weekdays, 31 routes on Saturday and 29 routes on Sundays, with varying service schedules spanning from before 4:00 AM to after midnight on weekdays. BCT also operates three (3) limited stop transit service called the Breeze. A regular one-way fare is $1.75 while a reduced one-way fare is $0.85, and an all day pass is $4.00. MDT to BCT will provide the BCT bus operator with the Inter-County Ticket and pay $0.50. Passengers transferring from BCT to MDT will provide the MDT bus operator with the BCT Transfer and pay $0.60 for a full-fare transfer, $0.30 for a discounted-fare transfer, $0.95 for an express-bus transfer or $0.45 for an express-bus discounted fare transfer. BCT and MDT have partnered to provide regional bus service between Broward and Miami-Dade Counties. Currently, MDT buses travel into Hallandale Beach (southern Broward), and BCT buses travel into Miami-Dade County in areas such as Aventura, North Miami, Miami Gardens, and the Golden Glades interchange. Additional bus service from both agencies operates within the express lanes on I-95 to connect northern and central Broward communities with downtown Miami. BCT operates the 595 Express which connects western Broward communities to the Civic Center and Downtown Miami. The following table lists those locations and BCT bus routes that provide connecting service to Metrobus routes:

Table 3-2: BCT Routes Serving Miami-Dade County

Bus Route	Service Connection Location
1	Aventura Mall, US 1
2	NW 207 Street, NW 27th Avenue, University Drive
18	Golden Glades, State Road 7
28	Aventura Mall, State Road 7
441 Breeze, University Breeze	Golden Glades, Miami Gardens Drive
US 1 Breeze	Aventura Mall, US 1
595 Express Miami/Brickell	Overtown Metrorail Station, Eighth Street, Metromover Station, Brickell Metrorail Station
95 Express Miramar, 95 Express Pembroke Pines	Miami VA Hospital, Jackson Memorial Hospital, Miami Civic Center, University of Miami Hospital
95 Express Hollywood	Miami VA Hospital, Jackson Memorial Hospital, Miami Civic Center, University of Miami Hospital, Overtown Metrorail Station, Downtown Miami Transit Terminal

Source: Broward County Transit, 2014.

3.8.2 South Florida Regional Transportation Authority

The South Florida Regional Transportation Authority (SFRTA) operates Tri-Rail a commuter rail service that operates along 72 miles of the South Florida Rail Corridor which spans Palm Beach County, Broward County, and Miami-Dade County. Tri-Rail primarily runs through the eastern urbanized areas of the three counties between the Mangonia Park station in Palm Beach County and the Miami International Airport (MIA) in Miami-Dade County. Tri-Rail serves 18 passenger stations and averages more than 14,000 boardings per weekday.

Weekday service spans from 4:00 AM to 11:35 PM, with operations of 20 minute headways in each direction during the morning peak, 10-20 minute headways in the northbound direction during the evening peak, and 20 minute headways in the southbound direction during the evening peak. Off-peak headways are 60 minutes in each direction. Weekend service spans from 5:20 AM to 11:45 PM with 60 minute headways. Tri-Rail operates a zonal fare system and is comprised of six (6) equidistant zones. Fares are determined by the sum of zones traveled; the regular base fare for one-way travel is $2.50, discounted one-way is $1.25, regular roundtrip is $4.40 and discounted roundtrip is $2.50. The cost for the Tri-Rail monthly pass is $145 ($72.50 discounted for children, seniors, and persons with disabilities).

Tri-Rail passengers transferring from Tri-Rail at a Tri-Rail transfer point to the MDT system are required to pay the following fares as presented in the following table.

Table 3-3: Tri-Rail-MDT Transfer Fares

Transferring from Tri-Rail	Full Fare	Discount Fare
Metrorail	$1.20	$0.60
Metrobus	$0.60	$0.30
Express Bus	$0.95	$0.45
Return Trip	**Full Fare**	**Discount Fare**
All Modes/Express Bus	$2.25/$2.65	$1.10/$1.30

Source: Miami-Dade Transit, 2014.

Tri-Rail has five (5) station locations in Miami-Dade County that connect with MDT services including both Metrobus and Metrorail. The five (5) Tri-Rail stations include Golden Glades (Metrobus routes 105 E, 22, 77, 246 Night Owl, 277 NW 27th Ave MAX), Opa-Locka (Metrobus routes 32, 42, 135), Tri-Rail/Metrorail Transfer (Metrobus routes 42, 112 L, Metrorail), Hialeah Market (Metrobus route 110 J, 36, 37, 57, 132, 133), and the Miami International Airport (MIA) Tri-Rail station (110 J, 36, 37, 57, 133, 42, 7, 150 Miami Beach Airport Flyer, 238 East-West Connector, 238 Weekend Express, 297 27th Avenue Orange Max). Since September 2011, the Hialeah Market Station has served as the southern terminus for Tri-Rail service due to the MIA Station is being rebuilt and will be connected to the airport via an escalator and people mover. It is expected to open to the public in 2014.

Table 3-4: Tri-Rail Stations and MDT Route Connections

Tri-Rail Station	MDT Route	Major Destinations
Broward County		
Fort Lauderdale	95 Dade-Broward Express	Downtown Miami, , Fort Lauderdale Tri-Rail Station
Sheridan St	95 Dade-Broward Express	Downtown Miami, Sheridan Street Tri-Rail Station
Miami-Dade County		
Golden Glades	105 E	Jackson North, The Mall at 163rd Street, City of North Miami Beach, Eastern Shores, Winston Towers, Aventura Mall, Turnberry Isle, Diplomat Mall/Hallandale
	22	City of North Miami Beach, The Mall at 163rd Street, Earlington Heights Metrorail station, Coconut Grove Metrorail station, Sunshine State Industrial Park
	77	SR 441, Liberty City, Culmer Metrorail station, Government Center Metrorail station, Main Library, Historical Museum of South Florida, Miami Art Museum, Downtown Miami Bus Terminal
	246 Night Owl	The Mall at 163rd Street, Downtown Miami, Government Center Metrorail station, Overtown, Civic Center Metrorail station, University of Miami/Jackson Memorial Hospitals and clinics, Allapattah Metrorail station
	277 NW 7th Ave MAX	Downtown Miami, Government Center Metrorail station, Culmer Metrorail station, Edison Center, North Miami, Biscayne Gardens
Opa Locka	32	Carol City, St. Thomas University, Florida Memorial College, City of Opa-locka, Opa-locka Tri-Rail station, Miami Dade College North Campus, Northside Metrorail station, Northside Shopping Center, Santa Clara Metrorail Station, Omni Bus Terminal
	42	Miami Springs, City of Opa-locka City Hall, Opa-locka Tri-Rail Station, City of Hialeah, Amtrak Passenger Terminal, Tri-Rail Metrorail station, Miami International Airport Metrorail station, City of Coral Gables, Douglas Road Metrorail station
	135	Hialeah Metrorail station, Miami Lakes, Opa Locka Tri-Rail, FIU Biscayne Bay
Tri-Rail/ Metrorail Transfer	112 L	Lincoln Road Mall, Miami Beach Convention Center, JFK Causeway, Northside Metrorail station, Amtrak Terminal, Hialeah Metrorail station
	42	Miami Springs, City of Opa-locka City Hall, Opa-locka Tri-Rail Station, City of Hialeah, Amtrak Passenger Terminal, Tri-Rail Metrorail station, Miami International Airport Metrorail station, City of Coral Gables, Douglas Road Metrorail station
Hialeah Market	110 J*****	Miami International Airport Metrorail station, Allapattah Metrorail station, City of Miami Beach
	37	City of Hialeah, Dept. of Children & Families, Hialeah Metrorail station, Tri-Rail Airport station, Miami International Airport Metrorail station, Douglas Road Metrorail station, City of South Miami, South Miami Metrorail station
	36*****	Dolphin Mall, Miami International Mall, Miami Dade College West Campus. Doral Center, City of Miami Springs , Miami Springs High School, Allapattah Metrorail station
	57	Tri-Rail Airport Station, Miami International Airport (MIA) Metrorail station, South Miami Metrorail station, Busway at SW 152 Street, SW 152 Street Park & Ride Lot, Jackson South Hospital

Table 3-4: Tri-Rail Stations and MDT Route Connections (Continued)

.	132 Doral/ Tri-Rail Shuttle	Doral Executive Center, Doral Country Club, Atrium Shopping Center, Miami Springs, Hialeah Market, Tri-Rail Station
	133 Airport/ Tri-Rail Shuttle**	Hialeah Market Tri-Rail Station, Miami International Airport, Tri-Rail Metrorail Station
	238 East-West Connection	Dolphin Mall, Miami International Mall, Airport Corporate Center, Airport Cargo City, Airport Hilton Hotel and Miami International Airport (MIA) Metrorail station.
Miami International Airport	238 Weekend Express	Dolphin Mall and Miami International Airport
	42	Miami Springs, City of Opa-locka City Hall, Opa-locka Tri-Rail Station, City of Hialeah, Amtrak Passenger Terminal, Tri-Rail Metrorail station, Miami International Airport Metrorail station, City of Coral Gables, Douglas Road Metrorail station
	297 27th Avenue Orange MAX	Miami International Airport (MIA) Metrorail station, Martin Luther King Jr. Metrorail station, Brownsville Transit Village, Brownsville Metrorail station, Miami Dade College North, City of Opa-locka, City of Miami Gardens, Dolphin Stadium
	150 Miami Beach Airport Flyer	Miami International Airport (MIA) Metrorail station, City of Miami Beach
	7	Miami International Airport (MIA) Metrorail station, City of Sweetwater, Dolphin Mall, Miami International Mall, Mall of the Americas, Downtown Bus Terminal, Main Library, Historical Museum of South Florida, Miami Art Museum, MDC Wolfson Campus, Historic Overtown/Lyric Theatre Metrorail station

Source: Miami-Dade Transit, June 2014, SFRTA, June 2104

*This routes do not enter the Tri-Rail station; passengers must access MDT Routes from 36th Street.
**This route will be in effect until the new Tri-Rail Station at the Miami International Airport opens.

3.9 Miami-Dade Transit Passenger Fare Structure

MDT's automated passenger fare collection system for Metrorail and Metrobus is known as the EASY Card. Cash fare payments are still accepted on Metrobus; however Metrobus passengers are encouraged to purchase the MDT EASY Card to take advantage of discounted transfer fees. Metrorail passengers are now required to purchase and load the contactless MDT EASY Card. These cards are purchased at a fee of $2.00 and loaded with appropriate fare amounts for passage. Table 3-5 presents the current fare structure.

Table 3-5: MDT Fare Structure Summary, December 2013

	Regular Fare	Discount Fare[4]
Metrobus	$2.25	$1.10
Express Bus	$2.65	$1.30
Shuttle Bus[5]	25¢	10¢
Metrorail	$2.25	$1.10
Metrorail daily parking fee	$4.50	Not Applicable
Metrorail monthly parking permit[6]	$11.25	Not Applicable
Metromover	Free	Free
Special Transportation Service (STS)	$3.50	Not applicable
Bus-to-Bus Transfer[7]	Free	Free
Bus-to-Express Bus Transfer[1]	50¢+45¢ upgrade=95¢	25¢+20¢ upgrade=45¢
Bus-to-Rail Transfer[1]	60¢	30¢
Rail-to-Bus Transfer[1]	60¢	30¢
Shuttle Bus-to-Bus or Rail Transfer[1, 4]	$2.00	$1.00
Shuttle Bus-to-Express Bus Transfer[1, 4]	$2.40	$1.20
1-Month Pass	$112.50	$56.25
1-Month Pass + Monthly Metrorail Parking Permit	$123.75	$67.50

[4] Discount fare is available for Medicare recipients, most people with disabilities, and students in grades K-12 when using an EASY Card for discount fare rides, which replaces all previous discount IDs and permits. Preschool children less than 42 inches in height can ride Metrobus and Metrorail free at all times with an accompanying adult. Parents or guardians of pre-schoolers are encouraged to present proof of age to bus operators and rail personnel to access the system. EASY Cards are not issued to pre-schoolers.

[5] Nine shuttles: 123/South Beach Local, 132/Doral-Tri-Rail Shuttle, 133/Airport-Tri-Rail Shuttle, 200/Cutler Bay Local, 211/Overtown Circulator, 212/Sweetwater Circulator, 249/Coconut Grove Circulator, 254/Brownsville Circulator, and 286/North Pointe Circulator. There is no fare for routes 132 (Doral-Tri-Rail Shuttle) and 133 (Airport-Tri-Rail Shuttle).

[6] Only available with the purchase of a monthly pass.

[7] Transfer fees are for passengers using an EASY Card or EASY Ticket only. Passengers paying with cash must pay the full fare each time they board a bus.

Table 3-5: MDT Fare Structure Summary, December 2013 (continued)

1-Month Pass - Group Discount 4-99 passes	$101.25	Not applicable
1-Month Pass - Group Discount 100 or more passes	$95.65	Not applicable
7-Day Pass	$29.25	$14.60
1-Day Pass	$5.65	$2.80
College/Adult Education Center Monthly Pass	$56.25	Not applicable
Golden Passport or Patriot Passport	Free	Free
EASY Card (cost of media)	$2.00	Not applicable
EASY Ticket (cost of media)	Free	Not applicable

Source: Miami-Dade Transit, December 2013.

3.9.1 Farebox Recovery Ratio

The farebox recovery ratio of a passenger transportation system is the fraction of operating expenses which are met by the fares paid by passengers. It is calculated by diving the system's total fare revenue by its total operating expenses. Most systems are not fully self-supporting, so advertising revenue, government subsidies, and other sources of funding are usually required to cover total costs. Table 3-6Table 3-5 illustrates MDT's farebox recovery ratio as reported to National Transit Database for each mode. Note that MDT's Metromover is a free fare service and therefore collects no farebox revenue.

Table 3-6: Farebox Recovery by MDT Mode

Mode	FY 2010	FY 2011	FY 2012
Metrobus	25.6%	27.0%	27.7%
Metrorail	23.4%	23.7%	27.8%

Source: National Transit Database - 2010, 2011, 2012.

3.10 Miami-Dade Transit's Special Programs

Section 427, Florida Statues and Rule 41-2 Florida Administrative Code, establishes and mandates the creation of the Commission for the Transportation Disadvantaged in the State of Florida. A Community Transportation Coordinator (CTC) in each county is appointed by the Commission for the Transportation Disadvantaged and is responsible for the coordination and provision of cost-efficient transportation services, and the elimination of duplication through a coordinated system. In Miami-Dade County, the County government is the local coordinator, and MDT is charged with the responsibility of creating programs, applying for the grants, and coordinating transportation services for the disadvantaged.

Programs such as the Section 5310, Medicaid Metropass, Golden Passport, Patriot Passport, STS, Lifeline Services and Medicaid Transportation are also included in the Coordinated Transportation System.

3.10.1 Transportation Disadvantaged Program

The Transportation Disadvantaged Program, through a State Funded Grant, provides transit passes on a monthly basis to social service agencies that service transportation disadvantaged (disabled, poor, homeless, children and adults at risk, unemployment training) residents of Miami-Dade County. The purpose of this program is to provide EASY Tickets to qualifying agencies to distribute to their clients for use on Miami-Dade County transit system. Currently there are 100 agencies enrolled in the program.

3.10.2 Section 5310 Program

MDT actively participates in the Federal Transit Administration (FTA) Section 5310 program by participating in the grant review, evaluation and award process. MDT in its role as the CTC is responsible for the program coordination with local non-profit agencies serving elderly and disabled residents in Miami Dade County.

3.10.3 Corporate Discount Program

Miami-Dade Transit's Corporate Discount Program (CDP) allows participants to save on commuting costs through group discounts and pre-tax savings, by purchasing public transportation through a tax deduction from their employer under IRS Code 132(f). It allows employees to pay for their public transit rides using pre-tax dollars, up to $245 month ($2,940/year) in 2013. The CDP provides monthly transit passes on Corporate EASY Cards, good for a month of unlimited rides on Metrobus and Metrorail, at a 10 percent (10%) discount for groups of 4-99 participants, and a 15 percent (15%) discount for groups of 100+ participants. In 2013, the CDP generated over $9.3 million in revenue. The program currently has over 205 participants.

3.10.4 College/Vocation School Discount Program

College, university, vocational/technical and adult education school students can purchase a one-month pass on an Orange EASY Ticket for $56.25, half the cost of a full price monthly pass. This program is offered to full-time students using MDT's public transportation system to get to school. There are over 45 active schools participating in the program generating over $4 million in annual sales.

3.10.5 K-12 Discount Program

Miami-Dade County students in grades K-12 can ride Metrobus and Metrorail at 50 percent (50%) off the regular fare. Eligible students need to obtain a specially encoded EASY Card at the Transit Service Center Kiosk located on the second floor of the Stephen P. Clark Center, at 111 NW 1st Street. The cost for the card is $2.00 and the student is required to fill out a registration form. The card is then assigned to the student. This program is open to any student attending public or private schools in Miami-Dade County. Currently, there are 28,176 K-12 customer accounts.

3.10.6 EASY Card Sales Outlets

EASY Card Sales Outlets are conveniently located throughout Miami-Dade County for transit customers to obtain or load cash value and/or passes onto the EASY Card or EASY Ticket. The Metrorail Monthly Parking Permits are also available at select outlets.

The Marketing Division within MDT is responsible for training new vendors and maintaining 125 EASY Card Sales Outlets providing MDT with an average of $8 million in revenue a year.

3.10.7 Golden Passport Office

The Golden Passport EASY Card provides free transportation to senior citizens 65 years and over, or a Social Security beneficiary who is a permanent Miami-Dade County resident. A Patriot Passport provides free transportation to disabled veterans who are a permanent Miami-Dade County resident. Currently, there are 231,894 certified Golden Passport/Patriot Passport customer accounts; this includes 162,045 Golden Passport over 65 years of age, 61,260 Golden Passport under 65 years of age and 8,589 Patriot Passport customers.

3.10.8 Medicaid Metropass Program

Under federal law, Medicaid recipients are entitled to transportation to and from covered medical services. Miami-Dade County does not have a mandate to provide Medicaid Non-Emergency Transportation (NET) services. That onus, by federal law is on the Agency for Health Care Administration (AHCA). Until the mid-1980's, the State's Medicaid Office provided individual taxi transportation for NET services. In the mid to late 1980's, Miami-Dade County and AHCA entered into an arrangement wherein Medicaid recipients would be transported under a County paratransit contract. As a result, the County acted as the designated Subcontracted Transportation Provider under an agreement with the Florida Commission for the Transportation Disadvantaged (CTD). The Florida CTD serves as the statewide managing entity for AHCA, the state-agency legally charged with the provision of Medicaid and Medicaid-related services.

In November 2007, MDT issued a notice of non-renewal of the subcontracted transportation provider agreement to the Florida CTD. Subsequently, on December 31, 2007, MDT's agreement with the Florida CTD expired and there were no County commitments beyond December 31, 2007 to the Florida CTD. Though MDT's contractual obligation to the Florida CTD for the provision of Medicaid Transportation ended on December 31, 2007, MDT staff assisted the CTD's new provider in the training and implementation of gatekeeping procedures and accuracy of ridership data to ensure Miami-Dade residents would continue to receive uninterrupted service. On January 1, 2008, LogistiCare began operating the Medicaid transportation service under direct contract with the Florida CTD. As such, the Medicaid Metropass Program is no longer under MDT's purview.

3.10.9 Services Provided by Private Contractors

Complimentary paratransit service, locally known as the Special Transportation Service is provided throughout Miami-Dade County as mandated by the Americans with Disabilities Act (ADA) and is contracted through Transportation America. The state has several contractors that provide for the provision of Medicaid Transportation Services.

The paratransit contract provides demand-responsive service in ambulatory and non-ambulatory transportation modes using sedans, vans and lift-equipped vans. Medicaid service contractors provide stretcher and ambulance transportation in addition to lift van service transportation. American Transportation provides fixed route bus service up to

Mile Marker 50 into Monroe County. The private sector is also involved in the provision of several transit support services, such as:

- Security at Metrorail/Metromover stations, as well as other MDT facilities;
- Maintenance-type service, such as tires, janitorial, elevators/escalators, etc;
- Marketing and other similar contracts;
- Planning and technical support;
- Maintenance of bus benches/shelters at no cost to the County; and,
- Bus/rail advertising services.

3.11 Customer Information/Convenience

The Marketing Division is recognized as one of the top Marketing groups in Florida. In 2012, they were the recipients of the Florida Public Transportation Association (FPTA) Best In Class award for Sustaining Campaigns, Special Events and Communications & Website for the Save at the Pump Campaign.

3.11.1 Smartphone Mobile Application (iPhone and Android)

Miami-Dade Transit has deployed real-time iPhone and Android applications for Metrorail/Metrobus/Metromover arrival/departure, route and schedule information. These mobile applications provide MDT passengers with everything that is currently present on the MDT mobile web site as well as additional smartphone-specific features in the form of an app to include: rider alerts; Train Tracker; Bus Tracker; service updates; elevator/escalator operational status; Metrobus schedules and routes; Metrorail station information; Metromover station information; fare information; rider alerts registration; contact numbers; feedback zone; Where Am I?; and Live Mapping. By developing these apps, MDT ensures that riders have the most up-to-date and accurate transit service information free of charge.

3.11.2 Electronic Transit Rider Alert System / Train Tracker / Mover Tracker

Miami-Dade Transit continues to implement customer convenience enhancements to their Rider Alert system that notifies passengers about transit service delays. Registered users receive electronic alerts on detours, route changes, and updates for Metrobus as well as service interruptions for Metrorail, Metromover, Metrobus and Special Transportation Services. The Rider Alert system also provides the operational status of Metrorail or Metromover station elevators and escalators. Customers must sign-up to receive these electronic alerts to their cellular phones, email addresses, text pagers, and Blackberry devices or smart phones. There are currently 1,622 customers who are signed up to receive these electronic alerts. Train Tracker service allows users to see, via the web and on mobile devices, the estimated time of arrival of the next Metrorail train.

MDT has a real-time Metromover Tracker System, “Mover Tracker” using the web-based technology and is available via computer desktops, cell phones/smartphones, personal digital assistants (PDAs) and tablets. These software applications also provide other

useful transit information such as service alerts, rail and mover station information and elevator/escalator status.

3.12 Past Year's Accomplishments (2013)

This fiscal year (FY) 2015 – 2024 TDP Major Update, reports project data as of December 2013. Throughout 2013, MDT achieved a number of notable accomplishments that improved customer convenience while also assuring the operation of an efficient, responsive, and financially sustainable transit system. These achievements are categorized as part of this TDP Major Update according to the type of improvement related to service operations, capital investment, and passenger information/convenience.

3.13 Service Operations

3.13.1 New Bus Service Routes

MDT did not implement any new bus service routes in 2013.

3.13.2 Bus Service Adjustments

A major initiative being undertaken by MDT is to improve Metrobus service efficiency through a restructuring of the Metrobus route system while minimizing the impact to customers. In December 2009, MDT implemented service route adjustments to improve overall service performance while maintaining existing service area coverage. The estimated transit operating cost savings as a result of this effort was approximately $12.3 million.

In 2012, this effort continued with additional route improvements made in the July and December 2012 line-ups. The new modified grid system was based upon ridership data obtained from the Automated Passenger Counter (APC), Easy Card as well as coordination with local municipal transit services and the Miami-Dade Metropolitan Planning Organization (MPO) to maximize interconnectivity and efficiency.

In November 2012, MDT issued notice-to-proceed to a consultant to begin work on the Transit Service Evaluation Study – Phase 2. The purpose of this project was to evaluate the current bus system of MDT, identify service efficiencies and design a grid-oriented route network. The study will identify a service plan that maximizes the efficiency and effectiveness of the system. The final product is a schedule-ready detailed plan which includes estimated impact on ridership, resources, and operating cost. The study is expected to be completed by mid/late 2013.

3.13.3 Miami-Dade Transit Service Standards

Miami-Dade Transit established specific transit service standards for bus service to assess annual operational performance. Revised service standards were adopted by the Miami-Dade Board of County Commissioners in November 2009. MDT continues to implement route changes in accordance with the adopted service standards resulting in more efficiencies and lower operating costs.

MDT is updating its service standards to define service types, create service families, and create a framework to support the development of a Rapid Transit Network. As part of this project, MDT is also developing design guidelines for bus stops, stations, terminals, and transit centers specific to each service type. The new service types and service families, along with the service standards and performance measures, will guide MDT decisions regarding service function, expansion, modification, reduction or elimination of transit service. Classification of service types will reduce service overlap and improve service performance evaluations. Well defined service types will ensure that performance comparisons are based on the performance of that specific service type. This project is expected to begin in the spring of 2014 and be complete by the winter of 2015.

3.14 Capital Improvements

3.14.1 AirportLink Metrorail Extension

Miami-Dade Transit's AirportLink Project, the 2.4-mile Metrorail extension (Orange Line) that provides a fast, reliable connection to Miami International Airport (MIA) and the newly constructed MIA Metrorail station, was awarded the Local and State Collaboration Award by the Florida Association of County Engineers and Road Superintendents (FACERS) on June 28, 2013.

Only those construction projects that are held in high professional regard and have made significant contributions to their local departments and communities are chosen for this statewide honor. The AirportLink Project was selected due to the fact that it was completed on-time and under-budget, as well as its vital importance as an alternative method of transportation to and from the community's central economic engine, Miami International Airport.

More than 750,000 people have passed through the MIA Metrorail Station since its inauguration on July 28, 2012. Metrorail's yearly ridership has increased by nearly 13% over the previous year since the implementation of the Orange Line and increased service frequencies between the Dadeland South and Earlington Heights stations. This increase exceeds the 12 percent increase in ridership that had been projected for the first year of Metrorail service to MIA. Construction of the 2.4-mile extension and MIA Station was funded with $404.7 million from the People's Transportation Plan (PTP) surtax, which is overseen by the 15-member Citizens' Independent Transportation Trust (CITT). The remainder of the project cost – $101.3 million – came from the Florida Department of Transportation (FDOT).

3.14.2 Metrobus New Vehicle Replacement

Miami-Dade Transit continues to implement its bus replacement program. Funding for this

program was provided through various sources including the PTP, FDOT and Federal funding sources. In August 2010, MDT took delivery of 13 40-foot diesel/electric hybrid buses for fleet replacement which were put into service in the fall of 2010. In addition, 25 60-foot diesel/electric hybrid buses have been in service since the summer 2010 – 16 are being used on the inter-county 95 Dade-Broward Express bus route and nine on the Kendall Cruiser bus route. MDT also took delivery of five 40-foot diesel/electric hybrids which were put into service in early 2011. Table 3-7 provides the Bus Replacement/Enhancement Schedule in accordance with the FTA bus retirement criteria (500,000 miles/12 years of service life).

Table 3-7: MDT Bus Replacement/Enhancement Schedule

Year	Total Replacement/Enhancements	
	40 ft	60 ft
2015	**103**	**44**
2016	**110**	**10**
2017	**108**	**10**
2018	**76**	**0**
2019	**0**	**0**

Source: Miami-Dade Transit, 2013 .

The procurement of alternative fuel buses for replacements and enhancements would not only be an improvement to transit but also promote the county's long-term initiative towards state of good repair, economic competitiveness, livability, sustainability, safety, job creation, and economic stimulus. Table 3-83-7 provides MDT's diesel/electric hybrid bus procurement scheduled for 2015.

Table 3-8: MDT Diesel/Electric Hybrid Bus Procurement Schedule

Project	Bus Type	Bus Size	No. of buses to be procured	Scheduled Completion
South Miami-Dade Busway	Low floor Hybrid BRT	60 ft	2	September 2015
Biscayne Enhanced Bus Service	Low floor Hybrid BRT	60 ft	18	September 2015
Kendall Enhanced Bus Service	Low floor Hybrid BRT	40 ft	3	January 2015
South Miami-Dade Busway	Low floor Hybrid BRT	60 ft	12	April 2015
FTA funded project	Low floor diesel BRT	40 ft	32	January 2015

Source: Miami-Dade Transit, 2013.

After examining various alternative fuels, Miami Dade Transit decided to migrate its bus fleet to clean-burning, compressed natural gas (CNG). A Request for Proposal for a Public Private Partnership (P3) was released.

MDT expects to select an experienced CNG developer to enter into a Master Developer Agreement which will be dedicated to the conversion of Miami-Dade Transit heavy fleet vehicles to CNG.

Specifically, through the Master Developer Agreements, MDT intends to form a public partnership with the selected Proposer(s) that allows the MDT to take advantage of the savings associated with the use of CNG for its fleet. The Program objectives to be achieved by the selected Proposer(s) include the following:

1. Design, build, finance, operate and maintain CNG fuel service stations;
2. Upgrade existing County infrastructure including upgrading and/or converting MDT maintenance facilities and existing fuel stations to provide CNG;
3. Purchase and/or lease CNG powered buses;
4. Supply CNG ; and
5. Generate revenues for the County through the sale of CNG to third parties

3.14.3 Metrorail New Vehicle Replacement

The Miami-Dade BCC and the CITT in March 2008 approved the $401 million procurement of 136 new rail vehicles for replacing the existing fleet. The existing vehicles will reach the end of their useful life of 30 years in 2014 before delivery of the new vehicles currently projected to commence in 2015.

A Request for Proposals (RFP No. 654) was issued March 31, 2009. The new vehicles will feature the latest technologies applicable to rapid transit heavy rail vehicles including electric AC traction motors and inverter drives, roof mounted HVAC, bike racks, Wi-Fi, digital Passenger Information System (PIS) and many other technological advances which will significantly improve passenger comfort, efficient maintenance and operations. Car manufacturers Alstom, AnsaldoBreda, and CAF submitted proposals on September 25, 2009.

A memorandum from the Mayor recommending award to the selected car builder was filed with the Clerk of the Board in September 2012. The award recommendation was approved by the CITT in October 2012 and by the Board of County Commissioners in November 2012.

Notice to Proceed was issued December 2012 with delivery of Pilot Rail vehicles to commence in July 2015. The Contractor is working on the first phase of vehicle design. This project is scheduled for completion in March 2018.

3.14.4 Metromover New Vehicle Replacement

Miami-Dade Transit has completed the replacement of its original 12 Metromover cars. This has contributed to improved Metromover reliability and passenger comfort. Since implementation, Metromover cars now travel on average about 17.5 percent further

before experiencing any mechanical failures. There has also been a decrease in the percentage of Metromover vehicles that are inoperable at any given time. In addition, another 17 vehicles were ordered for Phase II of procurement for a total of 29 new vehicles. All 29 replacement vehicles have been accepted; 3 vehicles remain under warranty. This project is scheduled for completion on January 2014.

3.14.5 ADA Pedestrian Improvements along the Busway

Miami-Dade Transit plans to implement ADA pedestrian improvements within a quarter (1/4) mile radius of bus stations along the South Miami-Dade Busway Phase I alignment from Dadeland South Metrorail Station to SW 200th Street Station to provide better accessibility. Infrastructure improvements include the construction of sidewalks, ramps and crosswalks. The ADA Pedestrian Improvement project along the Busway is scheduled for completion in June 2016.

3.14.6 Lehman Yard Rehabilitation – Expansion Phase I

Miami-Dade Transit has proposed to construct five (5) storage tracks and two (2) Maintenance of Way (MOW) tracks at the existing Metrorail Lehman Center Facility. This expansion is necessary to provide the required storage and transition facility in support of the new 136 Metrorail vehicles scheduled for delivery in 2015. This project is scheduled for completion in September 2015.

3.14.7 Lehman Center Test Track

Miami-Dade Transit has proposed to construct a new test track (2,500 feet) at the existing Metrorail Lehman Center Facility. The test track will provide the necessary support for the existing and new Metrorail fleet of 136 vehicles to be delivered beginning in 2015. This project is scheduled for completion in September 2015.

3.14.8 Metrorail Central Control Upgrade

This project will update the existing Metrorail portion of the MDT Control Center replacing the existing 25-year-old system and expanding it to handle the new Orange Line Metrorail Extension.

This upgrade and expansion will ensure that switches and communications are automatically executed by the train control system for safe and reliable service operations for the Metrorail system. This project is scheduled for completion by July 2014.

3.14.9 Northeast Transit Hub Enhancements

Since determining that the Northeast Passenger Activity Center (NEPAC) project was no longer feasible, MDT identified an alternative project which includes transit hub improvements at NE 163rd Street. This transit hub serves the northeast portion of the County and major destinations with important bus connections, but each has multiple deficiencies. The Northeast Transit Hub Enhancements (NETHE) will upgrade the transit hub sites to improve bus and passenger access as well as upgrade area drainage, lighting, signage, shelters and other station area amenities. The completion date for NETHE – 163rd Mall is estimated for October 2015 (NETHE – Aventura Mall project has

been cancelled as an MDT project and will be included as part of the Aventura Mall master plan expansion project).

3.14.10 Pedestrian Overpass at University Metrorail Station

This project encompasses the construction of a Pedestrian Overpass over US-1/South Dixie Highway to serve the University Metrorail Station. This overpass is a low-profile pedestrian bridge structure comprised of two vertical circulation towers providing access/egress to the pedestrian bridge that spans across US-1/South Dixie Highway. The project is located at the intersection of Mariposa Court and US-1/South Dixie Highway. This project is scheduled for completion by March 2016.

3.14.11 Systemwide Safety and Security Upgrades

Miami-Dade Transit has programmed funding to purchase security equipment to upgrade and install closed circuit camera television (CCTV) system and its respective software components, and to continue the replacement of fire detection and reporting systems. MDT's commitment to the safety and security of the MDT system, patrons, and employees is of the highest of priorities. In an effort to further complement its existing security infrastructure, MDT continues to aggressively add state-of-the art technology to both reduce crime and to aid law enforcement in proactively securing and safeguarding the transit system. FDOT Rule 14-15.017(2.2.1), however, prevents MDT from disclosing these improvements/installations in greater detail.

3.14.12 Park-and-Ride Facilities

Parking Space Counters and Real-Time Dynamic Message signs at Metrorail Station Park-and-Ride Facilities: MDT proposes to provide real-time parking space counters and dynamic message signs at all Metrorail Station Park-and-Ride Facilities. MDT will implement this project incrementally starting with the larger and higher demand Metrorail parking facilities. This project will allow Metrorail customers to check real-time parking availability along with the estimated time of arrival of the next train approaching a particular station via the Internet, smartphones, Personal Digital Assistants (PDAs), tablets, and electronic signs. The following park-and-ride facilities have been selected for phase I implementation:

- Dadeland South;
- Dadeland North;
- South Miami;
- Earlington Heights; and
- Okeechobee.

The completion date for phase I implementation is December 2017.

NW 27th Avenue and NW 215th Street: A 14-acre vacant parcel adjacent to the intersection of the Turnpike and NW 27th Avenue has been identified as a strategic park-and-ride location for the NW 27th Avenue Enhanced Bus Service project. Up to 350 parking spaces are proposed for this facility which would serve the northern most station for new enhanced bus or BRT service in the corridor. This park-and-ride lot also provides strategic transit oriented development (TOD) opportunities. This facility is anticipated to open in late 2018.

SW 127th Avenue/SW 88th Street/Kendall Drive: MDT is planning to construct a 180-space park-and-ride lot on approximately 2.8 acres at the southeast corner of SW 88th Street and SW 127th Avenue. This park-and-ride facility will serve the Kendall Cruiser which began service in June 2010. The County is currently in negotiations with Florida Power and Light to lease the land. The completion date for this facility is estimated for February 2017.

SW 88th Street/Kendall Drive and SW 149th Avenue: On June 28, 2010, MDT opened a new 109-space park-and-ride lot to provide free, convenient parking for customers who commute using the Kendall Cruiser bus route. MDT is now pursuing the right-of-way acquisition, design, and construction of a park-and-ride directly adjacent to this location. The proposed park-and-ride facility will accommodate approximately 100 parking spaces, bus bays and bicycle racks. This project is the first step in the evolution of the Kendall Corridor toward BRT service and it establishes a model for premium transit corridor services. The completion date for this facility is estimated for December 2016.

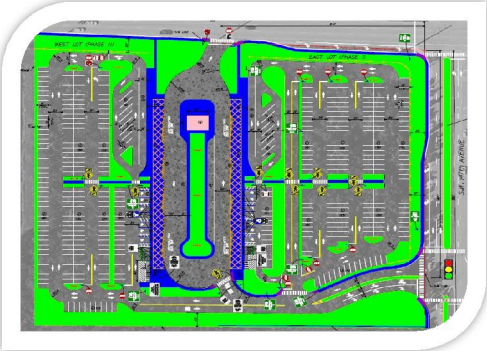
Busway and Quail Roost Drive/(Busway and SW 184th Street: MDT is pursuing the purchase of approximately three (3) acres of vacant property located adjacent to the Busway (between SW 184th Street and SW 186th Street) on which a park-and-ride facility is planned to be constructed. The proposed park-and-ride facility will accommodate approximately 279 parking spaces and six (6) kiss-and-ride spaces. The facility will also include fencing, landscaping and lighting improvements. It is anticipated that this facility will be completed in May 2017.

Busway and SW 344th Street (Florida City): Miami-Dade Transit is planning to build a 266-space parking lot with bus bays and shelters, to be located west of the southern end of the Busway between NW 2nd Avenue and NW 3rd Avenue at SW 344th Street (Palm Drive) in Florida City. Design and relocations are complete. Demolition of existing structures is in progress. The project's estimated completion date is February 2015.

Dolphin Station (HEFT and NW 12th Street): Property owned by FDOT located adjacent to the intersection of the Homestead Extension of the Florida Turnpike (HEFT), SR 836 and NW 12th Street has been identified as a strategic location for a Transit Hub

with a park-and-ride facility. This transit hub would support the SR 836 Express Enhanced Bus Service project and provide a potential terminus or stop for several local bus routes serving the Dolphin Mall and nearby cities of Sweetwater and Doral.

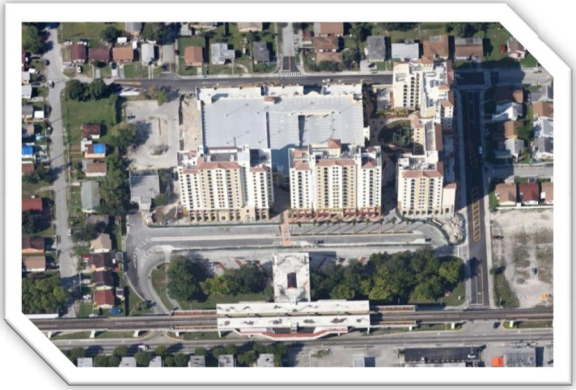
SW 8th Street and SW 147th Avenue: An 8-acre vacant parcel of land on the SW corner of the intersection at SW 8th Street and SW 147th Avenue has been identified as a strategic park-and-ride location for the SR 836 Express Bus Service project. The proposed park-and-ride facility will accommodate approximately 500 parking spaces, which would serve as the western most station for the new premium bus service in the corridor.



The estimated completion date is 2019.

3.14.13 Current Joint Development and Transit Oriented Development Projects

Brownsville Metrorail Station: On June 23, 2010, MDT broke ground for the construction of the Brownsville Transit Village, a 5.8-acre, joint-development project next to the Brownsville Metrorail station. The project is being built in five phases, each geared toward providing housing for workforce families, the elderly and the entire Brownsville community. The project will include approximately 401 workforce housing units, with five (5) mid-rise apartment buildings, townhomes and a 706-space parking garage with 100 spaces reserved for transit patrons and the balance reserved for residents and retail customers. Ground-floor commercial space and Metrorail station improvements, such as an additional passenger drop-off lane and attractive landscaping are also planned.



Brownsville Transit Village residents will benefit from immediate access to Metrorail and amenities such as a community center, a computer lab and an exercise room. In addition, onsite community programs will offer literacy training, health and nutrition classes, and first-time homebuyer seminars.

NW 7th Avenue Transit Village (NW 7th Avenue and NW 62nd Street): This proposed MDT joint development project is expected to provide opportunities for an enhanced transit facility within the context of an active, mixed-use development including space for housing, community-serving activities and functions in addition to retail use. This project includes 25 park-and-ride spaces. MDT has completed the right-of-way acquisition and the relocation process is nearly complete. The project is scheduled for completion in September 2015.

Brickell Citicentre: Brickell Citicentre is a 4.7 million square foot, 10 acre, $1.1 billion commercial mixed-use project being developed by Swire Properties in the Brickell area along South Miami Avenue between SE 6th Street and SE 8th Street. As a result of the agreements awarded to the developer, a portion of a multi-level condominium parking garage will be constructed on a small vacant parcel of transit property and the development will be totally integrated into the Eighth Street Metromover Station.

The developer is planning to provide direct access to the station at the ground level and to construct a third level "sky lobby" over the station which will also provide direct access from the development into the station. The developer will also construct enhanced and additional elevator and escalator access into the station and provide enhanced landscaping on Metromover property within the development. All of these improvements will also be maintained by the developer.

Palmer Lake: On June 2, 2009 the Board of County Commissioners passed Resolution 728-09 requesting a charrette area plan study for the area bounded by the Miami River on the north and east, NW 37th Avenue on the west and the Tamiami Canal on the south. The area is immediately east of the new MIC and in close proximity to MIA. As a result of the charrette process a plan containing recommendations for the future development of this area has been developed. The Board of County Commissioners adopted these recommendations on May 1, 2012 which will form the basis of future land use policy development for the area.

MDT acquired approximately three (3) acres of property within the study area for the construction of the AirportLink, the extension of Metrorail connecting the Earlington Heights Station to the MIC. Only a small portion of the property was needed for the placement of Metrorail columns. Recommended uses for the remaining MDT property include a water taxi terminal, police station, a cargo shipping facility and/or use as public waterfront access and park area.

Okeechobee Metrorail Station: Approximately four (4) acres of MDT property immediately adjacent to the Okeechobee Metrorail Station has been transferred to the Public Housing and Community Development Department (PHCD). That department is in the process of negotiating a 99-year ground lease with the City of Hialeah. The City is planning to construct an affordable senior housing development on the property containing approximately 100 units of affordable senior housing with some incidental retail space.

Northside Metrorail Station: MDT property adjacent to the Northside Metrorail Station containing approximately 3.3 acres was also transferred to the PHCD. A developer has been selected for a joint development project as a result of an Invitation to Negotiate process. The proposed development will be carried out in four phases with two family and two senior developments consisting of approximately 438 total units of one bedroom up to four bedroom units and approximately 20,000 square feet of retail/commercial space with a total estimated development cost of $88.1 million. The development will contain a total of 598 parking spaces of which 250 will be dedicated for the exclusive use of transit patrons.

Senator Villas: The County is in the process of issuing a Request for Proposals (RFP) for the long-term lease and development this site located on SW 40th Street between SW 89th Avenue and SW 89th Court. The RFP anticipates the development of a 23-unit affordable senior housing apartment building with a small transit park-and-ride lot reserved for transit patrons.

NW 215th Street Project: A 14-acre parcel of land located at the southwest quadrant of the intersection of NW 27th Avenue and NW 215th Street was purchased by Miami-Dade County. The County has completed a study to cultivate recommendations for the development of this property. The recommendations include development of a transit terminal adjacent to NW 27th Avenue. Enhanced bus service along the NW 27th Avenue corridor is planned to be implemented in conjunction with the construction of the terminal which will include bus bays with passenger shelters and a park-and-ride lot.

The study recommends that the remaining property be designated as a Community Urban Center (CUC) which calls for moderate to high-intensity, mixed use development. Such development may contain institutional, office and retail in an environment that encourages pedestrian activity with a defined, transit oriented center.

Caribbean Boulevard: MDT property located on Caribbean Boulevard and US-1 adjacent to the Busway was transferred to the Public Housing and Community Development Department. As a result of an Invitation to Negotiate process a developer has been selected for this property. The developer has proposed a multi-phase, mixed-use high-rise and mid-rise development of approximately 170 affordable housing units with approximately 12,500 square feet of retail/commercial space.

The development will also include a parking garage with 150 spaces dedicated to the Busway patrons. The total estimated development cost is $46.1 million.

3.14.14 South Miami-Dade Busway and SW 296th Street:

The County will be issuing an RFP for a long-term lease for development of this site as a TOD. The northernmost portion of the site is improved with an existing park-and-ride facility that contains 140 parking spaces to serve Busway patrons.

The proposed development of this site will not affect the existing park-and-ride use already established on the property. Rather, the proposed joint development project is expected to enhance the Busway and existing park-and-ride facility by introducing a commercial component to this site which will provide amenities for transit patrons and focus density around the station.

3.14.15 Future Joint Development and Transit Oriented Development Projects

It is anticipated that Miami-Dade County will pursue joint development opportunities at Douglas Road, Palmetto, Coconut Grove South Miami Metrorail Stations and the park-and-ride located along the Busway at Quail Roost Drive, Omni Bus Terminal as well as at other locations in the future (Figure 3-63-6).

Douglas Road Metrorail Project: The County will issue an RFP in 2014 for a long-term lease for the joint development of this site which will produce a significant long-term source of revenue for MDT which would help to offset expenses, focus density around the station and promote increased patronage of the Metrorail System.

3.14.16 Infrastructure Renewal Projects (IRP)

Dadeland South Intermodal Station: The Dadeland South Intermodal Station project includes facility improvements to the parking garage, roadways, signage, fencing, painting, landscaping, canopy, escalators, and lighting up-grades. The project is in final design. The estimated completion date is February 2015.

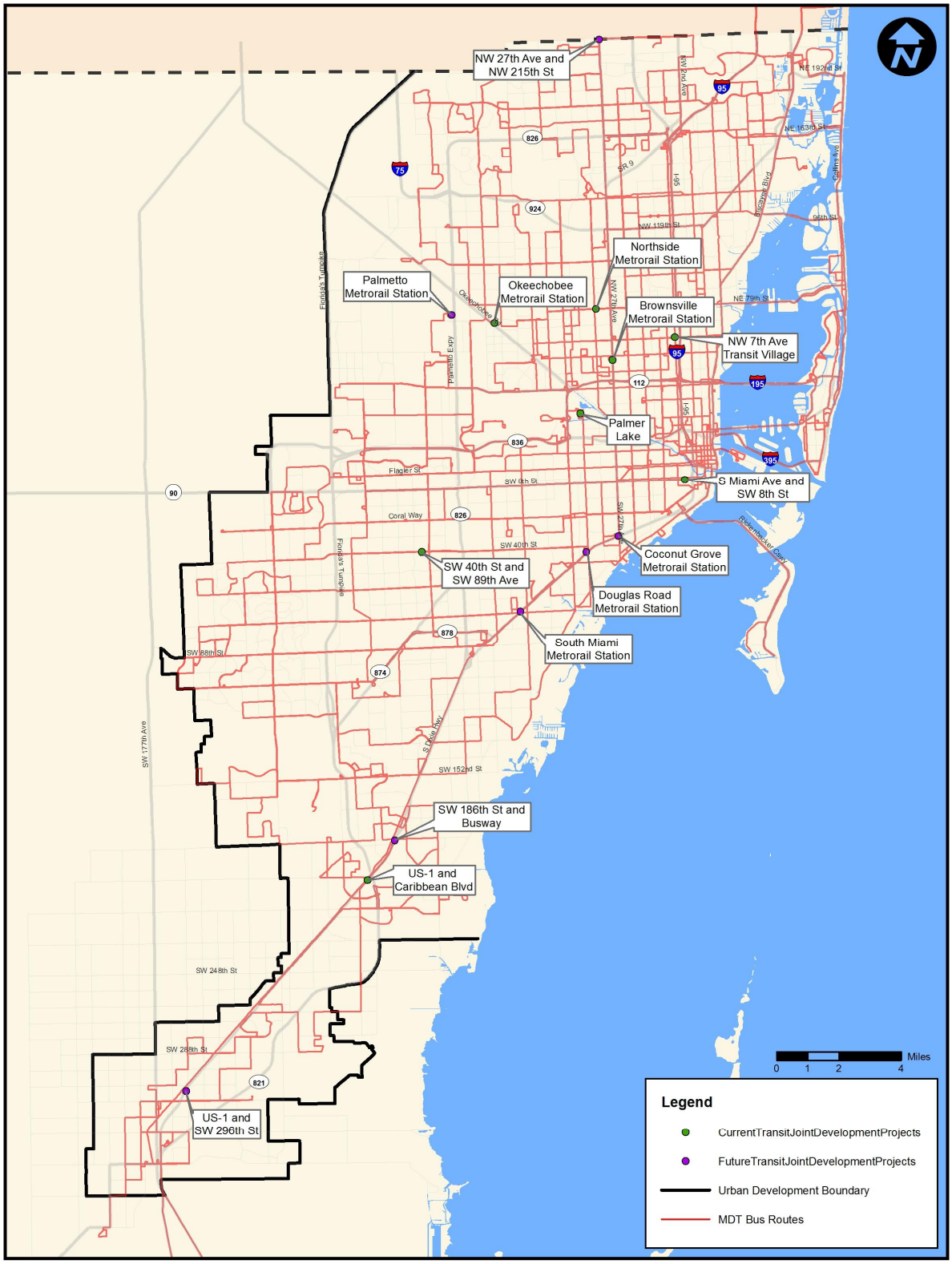
Replace Pool Vehicles: This project will replace 15 light fleet vehicles that have been retired or have over 100,000 miles. This project was completed in September 2013.

Electric Engine Cooling Fan System: Existing conventional hydraulic cooling system will be retrofitted with an electric engine cooling fan system on an estimated 100 MDT buses. This project is scheduled for completion in March 2015.

Metrorail Floor Replacement: This project identified railcars having deteriorated sub-flooring and installed Nora Flooring in 60 railcars. The work also included the removal and replacement of interior seating, panels and stanchions. This project was completed in December 2013. Additional flooring in railcars to be replaced as funding becomes available.

Metrorail Local/Supervisor Control Panels: This project includes replacement of local/supervisor control panels at 21 Metrorail stations. Local control panels for the Martin Luther King Station have been ordered from the manufacturer and are pending installation. This project was completed in October 2013.

Figure 3-6: Current and Future Transit Joint Development Projects



Current and Future Joint Development Projects. Source: Miami-Dade Transit, December 2013

Metrorail Acoustical Barrier Replacement: Metrorail guideway has approximately 12,000 feet of metal acoustic barrier panels. Rusting of the metal connections escalated safety concerns and MDT decided to replace these panels and purchased acoustical barriers and hardware for an additional 8,000 feet; in-house forces will install the replacement barriers as well as the additional 8,000 feet in specific areas identified by the Project Development and Environment (PD&E) noise study.

Coverboard Replacement for Metrorail: This project includes the procurement and installation of 53.3 miles of coverboard and brackets, 28,150 insulators and 800 hurricane anchors, Installation will be completed by an in-house crew. The project is anticipated to be completed in December 2016.

Rail Fastener Replacement: MDT will replace 50,000 rail fasteners and shims in mainline curves, the work includes core drilling and replacing anchor bolt inserts. This replacement project helps in meeting the mandated track standards issued by FTA and MDT. This project is scheduled for completion in September 2014.

Metrorail and Metromover Girder and Pier Coating: This project will protect the girders and piers from weathering and provide an aesthetic appeal by concealing all the construction joints and repairs that have been done over past 25 years. Also included is the clearing of drains that are causing stains on piers. This project is scheduled to be completed in December 2017.

Parking Garage Fire Suppression: Miami-Dade Transit will perform repairs to the fire protection systems for parking garages at Dadeland South, Dadeland North, Earlington Heights and Okeechobee Metrorail stations. These repairs include the replacement of all sprinkler heads, flow switches, tamper switches, gate valves, inspector test flow valve assemblies, and various sections of sprinkler piping. The project is scheduled for completion in March 2014.

Roof Repair for Bus Garages: Miami-Dade Transit plans to install new roofing at the Central Bus Garages and Offices. The scope of work is in the process of being revised to match allocated funds. The project is scheduled for completion in April 2015.

Bus Garage Plumbing Improvements: The original scope of work for the project includes renovation of existing bathrooms at the Central Bus Facility, Procurement Office, Materials Management, Fuel Island and Warranty Administration. The project scope is being revised to match available funding. Currently, the focus of this project is the renovation of the existing bathrooms at the Central Bus Facility OEI Building 2nd Floor. The project is scheduled for completion in July 2014.

Replace Air Compressors at Bus Locations: Miami-Dade Transit is planning to replace air compressors at all bus garages through the purchase, removal, and installation of new air compressors, air dryers, receiver tanks and necessary piping at Central, Coral Way and Northeast Bus Garage Facilities. Due to funding constraints only the Central Bus Garage was completed. The project was completed in January 2013.

3.14.17 ARRA Funded Projects

Palmetto Station Traction Power Sub Station: This will be a Design/Build procurement to install a new Traction Power Sub Station at the existing Palmetto Metrorail station. Completion of this project is necessary to provide the required minimum higher 600 Volts Direct Current (VDC) for the 136 new Metrorail vehicles starting delivery in 2015. The present system provides lesser voltage at the Palmetto station and will not be able to operate new vehicles. The project was completed in January 2014.

Metromover Inner/Downtown Loop Stations Escalator Replacement and New Canopies: The scope of work consists of the preparation of a complete set of biddable documents and construction work required for the installation of canopy covers over the existing escalators/stairs at the following seven (7) Metromover stations: Government Center Station, Miami Avenue Station, Bayfront Park Station, First Street Station, College Bayside Station, College North Station and Wilkie D. Ferguson Jr. Station. The scope of work also includes replacement of the existing escalators at the aforementioned locations. The primary function of these canopies is to provide passengers weather protection on stairs and escalators at Metromover stations. The project was completed in August 2013.

Metromover Bicentennial Park Station Rehabilitation: The construction of the new Perez Art Museum facility adjacent to this station will foster the reopening of the station for service. The scope of work to reopen this station includes: the rehabilitation of the elevator and escalators, replacement of lamps throughout the station, replacement of aluminum ceiling slats with new support system at ground level, repair of the communication system, replacement of stair metal plates, testing of electrical circuits to assure proper function, new fire cabinets and ancillary devices, replacement of floor tiles, repair of cracks at exterior walls, painting and landscaping. Construction was completed in November 2013.

Transit Operations System Replacement Project: The Transit Operations System (TOS) is over 20 years old and at the end of its life cycle with numerous software limitations. This project replaces the current manual processes of Miami-Dade Transit's mission-critical Operator Workforce Management System, with state-of-the-art technology, automating critical operational functions: operator bidding, dispatching, work assignment, bus availability, time keeping and operator performance management.

The new system will interface with other MDT systems including: fixed-route scheduling system, Automated Fare Collection-Smart card system, Miami-Dade County Payroll System, Computer-Aided Dispatch/Automated Vehicle Location System (CAD/AVL), Enterprise Asset Management System (EAMS), Random Drug and Alcohol Substance Abuse System, Disciplinary Action Reporting System and the Automatic Passenger Counter (APC) system.

This new system will greatly improve line-up timing and process as well as significantly improve bus and rail operational effectiveness and efficiencies by reducing labor costs and increasing data accuracy. The Notice to Proceed was issued on March 25, 2013, with anticipated completion in June 2015.

Metromover Fiber Optic Cable Replacement: The replacement of fiber optic cable equipment throughout the Metromover system at all stations and at Central Control has been scheduled for implementation in September 2013. The installation of Giga-Bit Ethernet and wireless networking capability at all stations is also included in the scope of work. The scope of work was modified based on a revised estimate for the Programmable Logic Controller (PLC) replacement portion of the project. The objective is to include the cost of the PLC within the available ARRA Grant allocation. The project is scheduled for completion in December 2014.

Metromover Closed Circuit Television Camera Replacement and Installation: MDT has set forth the installation of new digital cameras at all Metromover Station platforms with Network Video Recorders (NVR) for independent 24/7 recording. The new recorders will be networked into the MDT Video System and new digital displays will be installed at the Mover Central Control. The project is scheduled for completion in December 2014.

Existing Metrorail Stations (Part 2A) Graphics and Signage Retrofit: The project requires the selected Design-Build firm to furnish, install and test a complete way finding signage and graphics system for ten (10) existing Metrorail Stations and the new Metrorail station at the MIC, in accordance with contract documents and industry standards. Also, included are all required materials to furnish signage, all equipment, labor, services, and all incidental items required to complete the work, as per the contract documents. Part 1 of this project was completed under a separate contract. The construction completion date is scheduled for June 2014.

Existing Metrorail Stations (Part 2B) Graphics and Signage Retrofit: The project requires the selected contractor firm, ABC Construction Inc., to furnish, install signage and graphics system for fifteen (15) Metrorail Stations in accordance with the Contract Documents and industry standards. The project includes supplementing the completed way finding signage and graphics system created to provide information about the location of Metrorail stations, parking garages and parking surface lots serving Metrorail Stations.

The work includes permitting, installation, changing refurbishments and removal of signage in fifteen (15) stations. Also included are all required materials to furnish signage, all equipment, labor, services and incidental items required to complete the work as per the contract documents. This project is scheduled for completion in June 2014.

3.14.18 Wireless Service on Rail/Bus Vehicles/Electronic Signage Information

In February 2011, MDT implemented free wireless services in all Metrorail and Metromover vehicles, plus 133 buses on Express Routes (as of June 2011, 100% implemented). The rest of the bus fleet will be equipped with WiFi devices as funding becomes available.

As a complement to this initiative, free public Wi-Fi is also being phased in at all Metrorail Stations through the Electronic Signage Information System (ESIS) project. Electronic signs installed on the Metrorail station platforms provide passengers with real-

time arrival times, emergency information, elevator/escalator status, route detours, special events and other important announcements in an ADA-compliant format so that all transit passengers are kept informed of changes to their daily commutes and schedules.

The first electronic signs were installed at the MIA and Earlington Heights stations and became operational in July 2012, along with the opening of the Orange Line. All 23 Metrorail station signs were installed by September 2013. There are also electronic kiosks located at the Hialeah, Northside, Allapattah, Civic Center, Brickell and Douglas Road stations providing real time information and other passenger amenities like trip planning.

3.14.19 CAD/AVL System Replacement

MDT plans full implementation of the Bus Tracker System / Computer Aided Dispatch/Automated Vehicle Locator (CAD/AVL) technology project by replacing the infrastructure, on-board equipment, back-office and communications hardware and software – the systems currently used to manage and monitor the transit fleet. The project will facilitate delivery of real time bus predictive arrival/departure via the Internet, to mobile devices and electronic signs, using the County's satellite/radio technologies.

Upgrading and replacing this infrastructure will greatly improve managing and dispatching the transit fleet by providing real time Bus Bunching, Service performance, Vehicle diagnosis, on demand or subscription alerts; enabling remote video look in and on-board PA announcements; and centralized incident management. Full implementation is targeted to be completed by December 2015.

3.14.20 Real-Time Analytics and Reporting for Operational Efficiencies

MDT is actively seeking funding for projects that will enhance operational efficiencies by developing public/private partnerships to interface with external data sources such as traffic management data, video feeds, and major detours/incidents affecting transit service delivery.

3.14.21 Transit Signal Priority (TSP)

Through integration with the County's Advanced Traffic Management System (ATMS), major corridors and vehicles will be equipped with Transit Signal Prioritization (TSP) technology which enables communication with each of the traffic signal controllers along major corridors. TSP facilitates improved on-time performance in bus services. Kendall Drive/SW 88th Street will be the first major corridor to feature TSP technology. Implementation along Kendall Drive/SW 88th Street will be completed by March 2015.