

# The Northwest Transit Corridor Feasibility Study





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# Northwest Transit Corridor Feasibility Study

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Prepared For:



Prepared By:



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# 1. Introduction

The Northwest Transit Corridor Feasibility Study provides an assessment for the implementation of a premium transit corridor between the future Dolphin Park and Ride, at the NW 12<sup>th</sup> Street west of Homestead Extension of the Florida's Turnpike (HEFT) and the northwest area of Miami-Dade County at or near the Miami-Dade/Broward County line.

The study area is comprised of undeveloped land and land use types that create physical constraints. Therefore, the street network within the study area is non-contiguous, which complicates opportunities for establishing a transit corridor. No direct north-south arterials exist within the study corridor limits between Florida's Turnpike and SR 826 (Palmetto Expressway). Until recently, there has been little need for a comprehensive arterial network in this part of the County due to a lack of development that has necessitated a completed street grid. Moreover, connectivity challenges are compounded by the land uses and geographic character of the area – landfills and stone quarries which have limited opportunities for connectivity, while the Miami River Canal, Okeechobee Road, and the Florida East Coast (FEC) railroad tracks serve as physical impediments to the development of a contiguous road network. This is evident according to just three current locations to cross Okeechobee Road and the Miami River Canal, that provides throughput between the north and south sides of the study corridor. However, new development is emerging within the Northwest Corridor, commercial and entertainment complexes are receiving approval from the Board of County Commissioners, while new residential projects are arising in Doral and Hialeah. Meanwhile, new warehouse projects are emerging in the central and northern portions of the corridor. These new projects will place increasing demands on the local street grid.

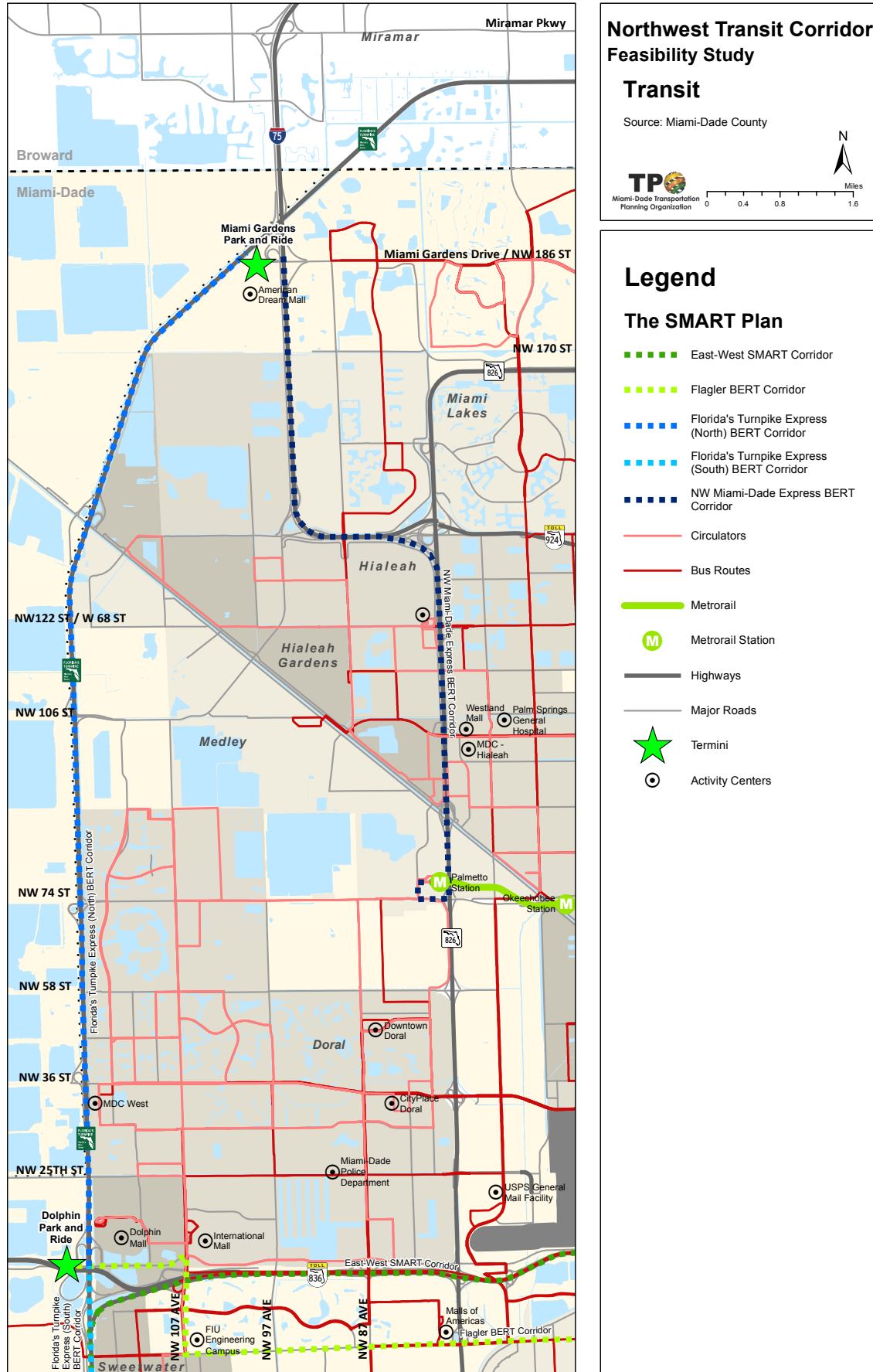
## Corridor Location

The Corridor is bounded by the Broward County line to the north, SR 836 (Dolphin Expressway) to the south, the Urban Development Boundary/Florida Turnpike Homestead Extension to the west, and NW 72<sup>nd</sup> Avenue to the east.

The Northwest Corridor, much like the rest of Miami-Dade County, is undergoing a significant transformation, as increasing population, employment, and development growth place pressure on previously undeveloped neighborhoods. With this pressure for additional development, traffic and roadway gridlock will follow. This in turn will necessitate the need for high-capacity, reliable transit corridors where presently limited transit services exist.

The study area is depicted in Map 1, which illustrates the existing transit service coverage as provided by Miami-Dade County and the municipalities located throughout. Existing Miami-Dade County Metrobus and municipal routes are depicted in dark red and light red, respectively. Proposed Strategic Miami Area Rapid Transit (SMART) Plan and Bus Express Rapid Transit (BERT) corridors are illustrated in dashed blue and green lines. The bus routes, and municipal circulators provide local service, albeit without any cross-corridor service. On the other hand, the only SMART Plan corridor within range of the study area is the East-West Corridor, which would provide access at the Dolphin Park-and-Ride facility. The remaining BERT corridors, except for the Flagler BERT, rely predominantly on limited access facilities (I-75, SR 826, and the HEFT) to provide transit service. The existing transit footprint within the study corridor suggests an opportunity for a new SMART Plan corridor operating north-south. This proposed corridor, the subject of this study, can connect to the existing BERT and SMART corridors at the Dolphin Park-and-Ride and provide limited stop, rapid transit service to the population, and employment centers within the corridor.

Map 1 - Northwest Transit Corridor Feasibility Study - Existing Conditions



# Study Advisory Committee

A Study Advisory Committee (SAC) was assembled to provide feedback and guidance throughout study. Members of the SAC consisted of county and municipal representatives.

The SAC met twice, the first meeting took place in October 2017, and the second meeting occurred in March 2018. In addition to the formally convened SACs, the project study team also conducted several meetings with municipal stakeholders. These meetings occurred both in person and via teleconference.

The following individuals participated in SAC meetings, teleconferences, or in-person meetings over the course of the study:

- Rita Carbonell, City of Doral
- Jorge Corzo, Town of Medley
- Wilson Fernandez, Miami-Dade Transportation Planning Organization
- Michelle Gonzalez, Town of Miami Lakes
- Mirtha Gonzalez, City of Hialeah Gardens
- Robert Herrada, City of Sweetwater
- Jose Lopez, City of Hialeah Gardens
- Jose Sanchez, City of Hialeah
- Vinod Sandanasamy, Miami-Dade County Department of Regulatory and Economic Resources

## First SAC Meeting

On October 25, 2017, the consultant team hosted a NW Corridor charrette with county and municipal representatives. Given the size of the study corridor, input from individuals representing the corridor municipalities with a working familiarity of the study area. Representatives from Doral, Medley, and Sweetwater attended the meeting, in addition to representatives from Miami-Dade County's Regulatory and Economic Resources Department (RER) and the Miami-Dade Transportation Planning Organization. The consultant team structured the discussion with a brief presentation about the corridor and a set of questions to initiate the conversation.

Most of the recommendations made at the meeting were concentrated on the southern half of the study, because the meeting attendees represented the southern municipalities. Medley and Doral discussed potential opportunities for improving transit links between their cities, while Sweetwater expressed a desire to remain connected via transit access along NW 107<sup>th</sup> Avenue. A potential corridor emerged from the discussions – NW 82<sup>nd</sup> Avenue.

Figure 1 - Cover of First SAC Powerpoint Presentation



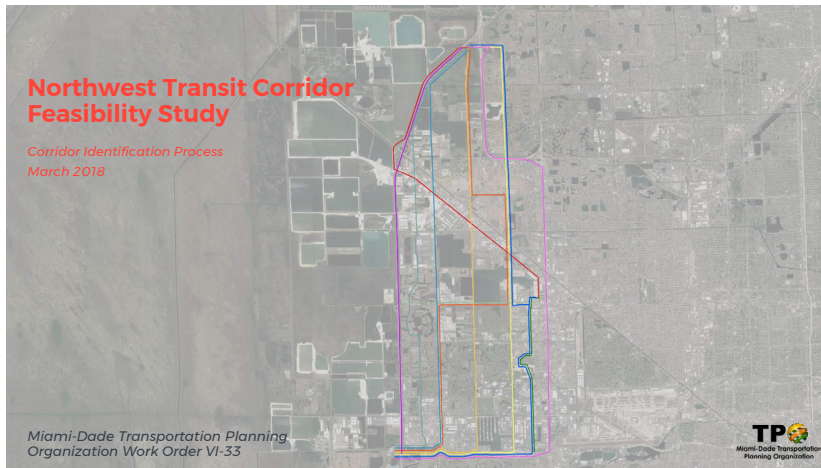
Figure 2 - The Charrette Map Used in First SAC



## Second SAC Meeting

A second SAC meeting was held on March 16, 2018. Participants from Hialeah and Doral attended. The discussion for the second SAC focused on the preliminary conclusions developed by the consultant team. Doral was receptive to recommendations of transit routes that focused on NW 82<sup>nd</sup>/87<sup>th</sup> Avenue. Hialeah advocated for an alignment further to the west, but was generally receptive to the concepts presented at the meeting.

Figure 3 - Cover of Second SAC Powerpoint Presentation



## Overview of Corridor Conditions

The following two sections provide an overview of current corridor conditions. These are assessed on two fronts - an evaluation of existing efforts by municipalities and other public agencies, including the Miami-Dade Expressway Authority

### Municipal Efforts

Six municipalities fall within the study area – Sweetwater, Doral, Medley, Hialeah, Hialeah Gardens, and Miami Lakes. Representatives from these municipalities met with the project team throughout the study to provide feedback and offer their insights, as shown in Figure 7. Based on this information, the study considers the planning initiatives that each of these is undertaking to identify a future baseline condition for the study corridor. The municipalities in the corridor offer transit services and have a variety of transportation and land use plans that are relevant to this analysis.

#### Medley

Despite its large size, Medley remains a predominantly commercial and industrial-focused municipality. With fewer than 1,000 residents, Medley contains small quantities of residential land use. The City has undertaken mobility studies to improve pedestrian and bicyclist connections, but has no current plans to expand its residential footprint, despite housing the Palmetto Metrorail Terminal, the northernmost station on the County's heavy rail line. Vacant land pockets exist within the City, including some opportunities adjacent to the Palmetto Metrorail Terminal. DTPW has plans to upgrade the Palmetto Station into a multimodal station, able to accommodate express bus services that are expected to operate on the Palmetto Expressway.



## Sweetwater

Sweetwater currently provides a free circulator transit service that operates throughout the week stopping at several destinations including the Dolphin Mall, local supermarkets, several other stores popular with residents, and FIU's Main and Engineering campuses (including a stop that connects residents to County transit). These changes are being made to meet anticipated demand from new development in and around Sweetwater.

Figure 4 - Municipal representatives and the project team working together at the October 25 Charrette



Sweetwater has many redevelopment opportunities, including several empty lots between NW 107<sup>th</sup> Ave and NW 112<sup>th</sup> Ave; and between NW 12<sup>th</sup> Street and NW 25<sup>th</sup> Street. Recent developments in this area include hotels and mixed-use commercial/office developments.

Potential feeder locations are slated to be developed around the city: one of them being the Dolphin Mall park-and-ride and FIU's PG-6 Panther Bus Station. Sweetwater intends to tackle first/last mile issues through connecting in transit to destinations around the city.

Sweetwater is also undergoing large-scale redevelopment efforts in its southern end geared towards University students and staff. The city is incorporating various facets of new urbanism, transit-oriented development and smart growth within these areas. This includes multimodal changes such as transit and pedestrian-friendly complete streets. In anticipation of these upcoming projects, Sweetwater is making a concerted effort to connecting these developments to other transit systems, allowing for improved access to the regional transit network.

## Hialeah

Hialeah, Miami-Dade's second largest city by population, is comprised of a mix of commercial corridors and concentrated single-family neighborhoods. Much of the City is built out, but the northwest corner, which falls within the study area, remains undeveloped, albeit planned. East of NW 97<sup>th</sup> Avenue is master planned by the Lennar Corporation to include a combination of townhomes and single family residences. West of NW 97<sup>th</sup> Avenue, a large-scale warehouse development is presently under construction.

Discussions with City of Hialeah transportation staff indicate that the city would be interested in developing the FEC railroad that runs south of Okeechobee Road (the City has no jurisdictional authority over the tracks, which operate entirely outside Hialeah's city limits). The tracks could be connected to serve the Palmetto Terminal on the south, and could be extended parallel to the HEFT to connect to the American Dream Terminal.

Map 2 - Hialeah Planned Project Location



## Doral

Doral completed a transportation master plan in 2017 that, if executed, could provide viable options for different mode of transportation, increasingly shifting travelers from automobiles to walking, bicycling and transit usage. The 2017 master plan is an update to the 2010 master plan, which seeks to provide a way forward for Doral. The master plan includes a prioritized project list which includes proposals for 22 multimodal projects, 45 roadway improvements, and an additional 13 transit projects. Noteworthy Master Plan Transit projects are identified in Table 1.

In addition to the above listed transit projects, the master plan proposes an assortment of transit hubs throughout the City. These are:

Table 1 - Summary of Transit Projects in Doral Master Plan

Doral Transit Master Plan		
Transit Projects	Cost	Notes
Extend Metrorail from Palmetto Metrorail to Downtown Doral	\$2.8 billion	
Signal Priority for Buses and Trolleys	TBD	Various intersections at NW 97 <sup>th</sup> and 87 <sup>th</sup> and 107 <sup>th</sup> Avenue
City-Edge Park-and-Ride Facilities	TBD	Various sites including Dolphin and International Mall, Palmetto Metrorail
Redevelop Palmetto Metrorail Station into Intermodal Facility	TBD	Lend support to DTPW to enhance Metrorail link

- NW 107<sup>th</sup> Avenue & NW 14<sup>th</sup> Street
- NW 87<sup>th</sup> Avenue & NW 36<sup>th</sup> Street
- NW 53<sup>rd</sup> Street & NW 53<sup>rd</sup> Terrace (Downtown Doral)
- NW 8300 Block & NW 35<sup>th</sup> Street (Doral CityPlace)
- NW 82nd Avenue & NW 12<sup>th</sup> Street
- NW 97<sup>th</sup> Avenue & NW 41<sup>st</sup> Street
- NW 41<sup>st</sup> Street & NW 114<sup>th</sup> Avenue
- NW 114<sup>th</sup> Avenue & NW 58<sup>th</sup> Street
- NW 114<sup>th</sup> Avenue & NW 82<sup>nd</sup> Street



## Hialeah Gardens

Hialeah Gardens is poised to be a central hub within the study corridor. Construction on FDOT's project to connect NW 87<sup>th</sup> Avenue across Okeechobee Road will provide a new north-south axis through the middle of the City of Hialeah Gardens.

The City has worked in concert with developers to secure land to establish new street grid connections. Right of way is being acquired by Hialeah Gardens along the proposed alignment for the northern extension of NW 107<sup>th</sup> Avenue from its current dead-end at NW 146<sup>th</sup> Street to a future connection with NW 107<sup>th</sup> Avenue. This project is under development in partnership with MDX and the Florida Turnpike Enterprise.

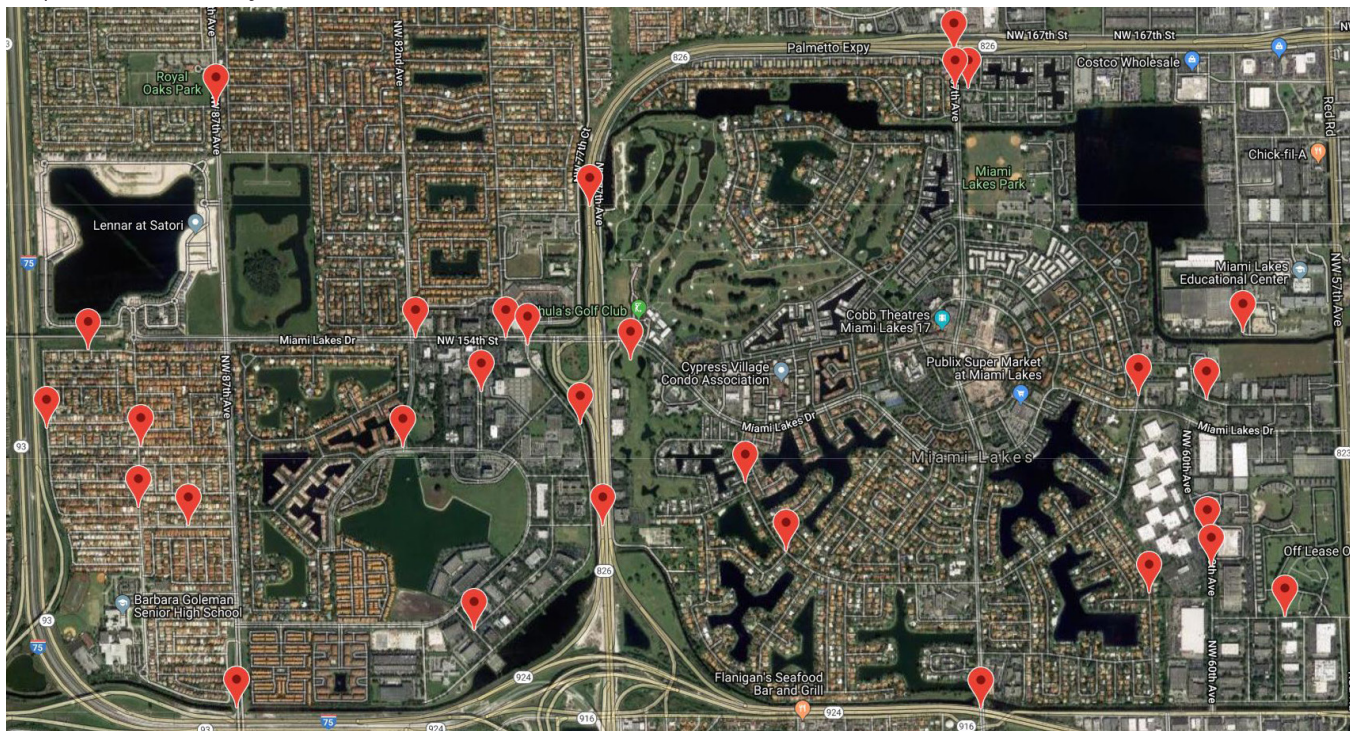
Hialeah Gardens is anticipating new development within its city limits. In addition to a large-scale warehouse development project within city limits north of NW 138<sup>th</sup> Street, Hialeah Gardens is the anticipated future site of a new Bay of Pigs Memorial Museum Site on NW 107<sup>th</sup> Avenue and NW 138<sup>th</sup> Street. Construction is also planned in the vicinity for a new facility for the Hialeah Gardens of the library.

## Miami Lakes

Miami Lakes has undertaken a comprehensive analysis of the mobility deficiencies within its city limits. Located on the northeast end of the study area, Miami Lakes is home to over 30,000 residents. The City's roadway connections are limited by the expressways that form its boundaries, including the Palmetto Expressway, the Turnpike, and I-75. To alleviate increasing traffic congestion, the City has proposed to implement a network of park-and-ride facilities that interoperate with transit circulators that are envisioned to provide users with service to the Palmetto Metrorail Station. Additionally, the City is funding new roadway connections across some of the expressways. Map 27 shows the locations of planned projects in Miami Lakes.

Miami Lakes is opposed to the opening of two bridges across I-75 at NW 154<sup>th</sup> Street, and NW 170<sup>th</sup> Street, which were built as a part of I-75's expansion in to Miami-Dade County. As development expands west of this area, pressure is likely to mount on the County to open these corridors.

*Map 3 - Planned Project Locations in Miami Lakes*



## Other Corridor Development Efforts

### American Dream Miami and Graham Properties

The proposed development in the northwest quadrant of the study area is dominated by two main actors—the American Dream Miami project, which seeks to bring a shopping mall and entertainment complex to Miami, and the Graham Companies, developers of Miami Lakes, who are seeking to introduce commercial and residential developments on their land. These two applications are going through the permitting stages with Miami-Dade County. Combined, they will bring significant development to vacant tracts that can transform the northwest corner of the County and serve as an anchor for a northern terminal for the proposed transit service.

The American Dream Miami project is envisioned as a hotel and retail and entertainment complex. The developers anticipate build out with 2,000 hotel rooms and 6.2 million square feet of retail shopping and entertainment facilities. A breakdown of this development is summarized in Table 2. The proposed development occupies a triangle bordered by the Turnpike to the Northwest, I-75 to the east, and an imaginary line at NW 178<sup>th</sup> Street to the south.

The Graham Property calls for the construction of 1 million square feet of commercial square footage, 3 million square feet of business park projects, and 2,000 proposed residential units. This project is situated immediately to the south of the American Dream site, between the Turnpike to the northwest, NW 178<sup>th</sup> Street to the north, and NW 170<sup>th</sup> Street to the south.

Both developments received Miami-Dade County Board of County Commission approval to rezone their designated parcels at a meeting in May 2018. Further permitting work is necessary, however, including further environmental mitigation and roadway expansions.

Figure 5 - American Dream Miami Master Development Plan

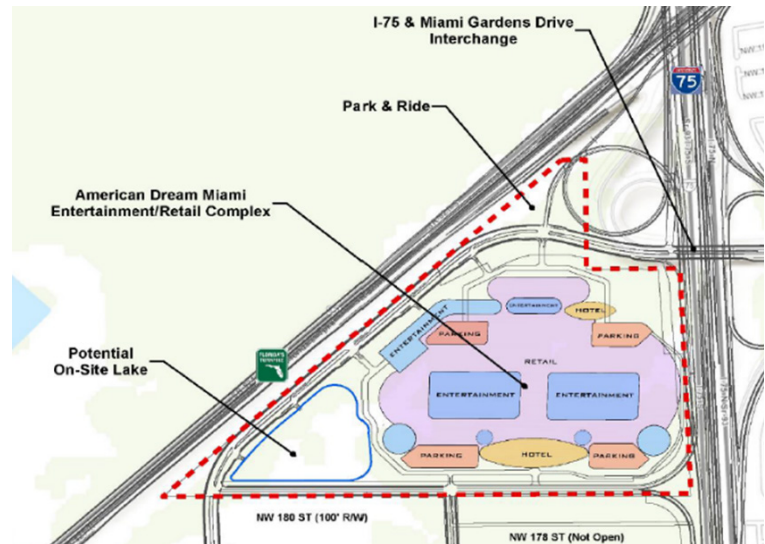


Table 2 - American Dream Miami Proposed Development

American Dream Miami	
Hotel (rooms)	2,000
Retail/Entertainment	6,200,000

Figure 6 - Graham Properties Master Development Plan



Table 3 - Graham Properties Proposed Development

Graham Properties	
Multi-Family Residential (units)	2,000
Commercial (SqFt)	1,000,000
Business Park (SqFt)	3,000,000



# Miami-Dade Expressway Authority and Florida Turnpike Enterprise (FTE)

MDX and FTE have projects within the study area that are intended to improve access to their facilities. MDX operates the Gratigny Parkway (State Road 924), an 8.5-mile facility that runs from NW 27<sup>th</sup> Avenue to I-75. The FTE operates the Turnpike and its extension from Broward County to Homestead (the Homestead Extension to the Florida Turnpike, HEFT). Together, these two agencies are in the process of developing two interrelated projects to improve access to their facilities.

Figure 7 - MDX Proposed Enhancement to Gratigny Parkway and Access to HEFT



## NW 107<sup>th</sup> Avenue

MDX, in partnership with Hialeah Gardens and the FTE are working on a northern expansion of NW 107<sup>th</sup> Avenue, extending the avenue from NW 138<sup>th</sup> Street to NW 170<sup>th</sup> Street. The proposed plan, depicted in Figure 10, will entail the construction of a four-lane facility with a center turn lane, and provide access to the American Dream Mall site, the Graham site, and the proposed Countyline Corporate Park, which is a master planned business park with more than 2.4 million square feet of warehouse space. At the northern end of NW 107<sup>th</sup> Avenue, the facility will provide northbound turnpike travelers with an exit to travel southbound on NW 107<sup>th</sup> Avenue, improving access to this portion of the county.

## NW 138<sup>th</sup> Street/Gratigny West Extension

MDX's second project with the FTE entails an improved connection between the Gratigny Parkway and the Turnpike. Currently, the Gratigny Parkway becomes NW 138<sup>th</sup> Street on its western end. MDX is proposing enhancements at this point, and then a new set of ramps to establish a connection to the HEFT. This facility will provide northbound traffic on the HEFT with an exit opportunity directly to NW 138<sup>th</sup> Street, and will provide westbound NW 138<sup>th</sup> Street drivers with direct southbound access to the HEFT.

MDX anticipates construction will commence in mid-2019. Combined, these two projects provide improved access to the northwest corner of the study area. The NW 107<sup>th</sup> Avenue connection provides an important link that brings the study a step closer to having a new continuous north-south arterial.



Figure 8 - MDX - NW 107<sup>th</sup> Avenue Improvements

The south end of the corridor contains the southern terminus for the proposed express bus service – the Dolphin Station Park-and-Ride facility. The park-and-ride terminal transit facility supports the DTPW’s SR 836/Dolphin Expressway Bus Service, several local bus routes serving the Dolphin Mall and the cities of Sweetwater and Doral, as well as a potential multimodal connection point for proposed future east-west commuter rail service on the CSX railroad. The Dolphin Station is critical in enhancing mobility and supporting multi-modal modes of transportation.

Trolley Circulator Table			
City	Route Name	Operational Limits	Notes
Doral	Route 1	NW 82nd Avenue and NW 12 <sup>th</sup> Street to NW 114 <sup>th</sup> Avenue and NW 50 <sup>th</sup> Street	Route 1 interlinks Doral's residential district to the warehouse and commercial districts on the southeast end of town
	Route 2	Palmetto Metrorail Station to Miami Dade College West Campus	Routes 2 and 3 provide transit access between Doral's residential district and the Palmetto Metrorail Station
	Route 3	Palmetto Metrorail Station to NW 114 <sup>th</sup> Avenue and NW 90 <sup>th</sup> Street	
Hialeah/ Hialeah Gardens	Flamingo	NW 97 <sup>th</sup> Avenue and NW 134 <sup>th</sup> Street to Hialeah City Hall	Hialeah's routes serve the City of Hialeah Gardens as well
	Marlin	NW 107 <sup>th</sup> Avenue and NW 138 <sup>th</sup> Street to NW 42 <sup>nd</sup> Avenue and NW 116 <sup>th</sup> Street	
Miami Lakes	Miami Lakes Moover	NW 87 <sup>th</sup> Avenue and NW 170 <sup>th</sup> Street to NW 57 <sup>th</sup> Avenue and NW 142nd Street	
Sweetwater	Sweetwater Circulator	From Dolphin Mall to Florida International University	

Map 5 - Existing and Proposed Transit Services

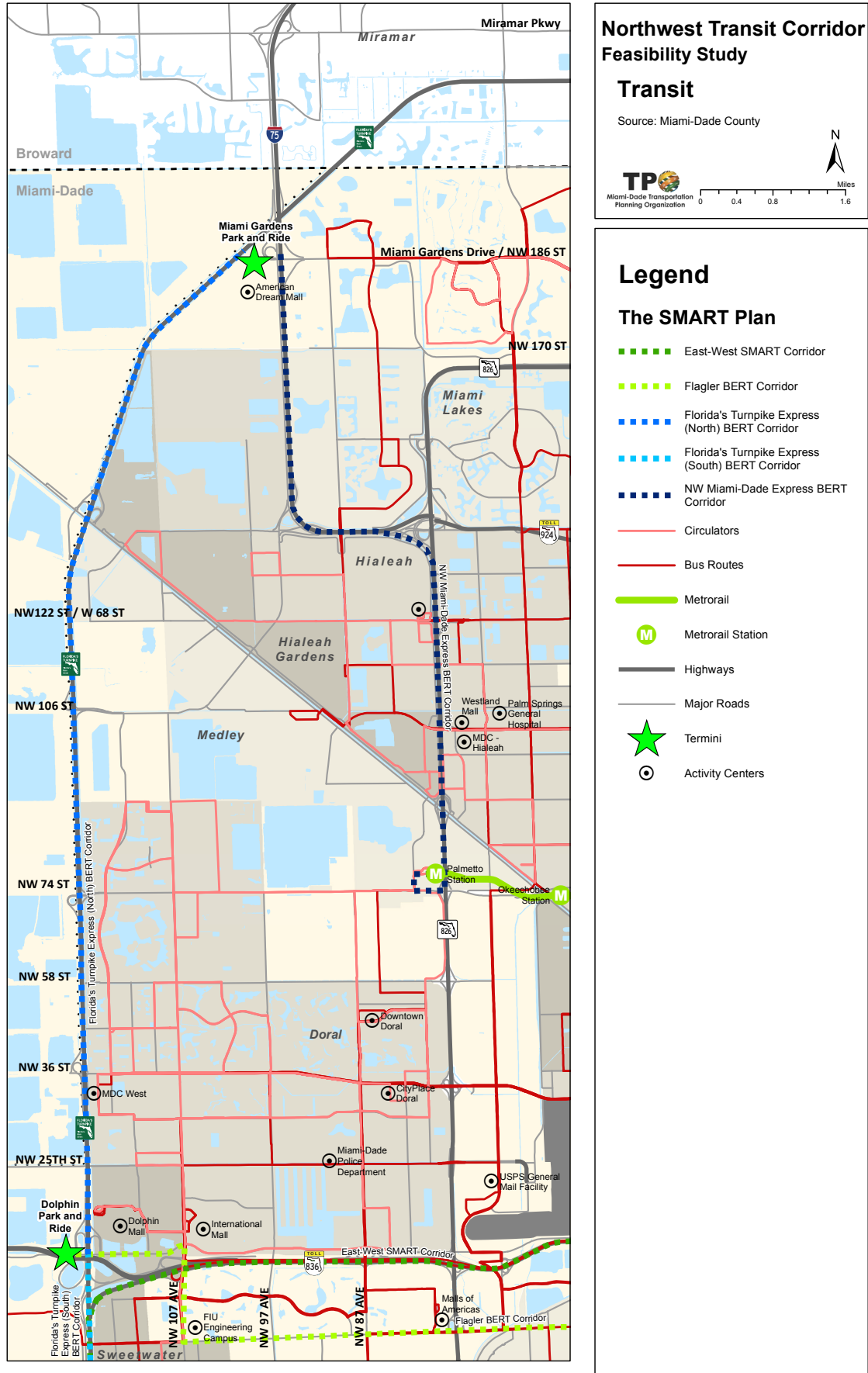


Table 5 - Existing DTPW Transit Services

DTPW Routes	Route Termini	Frequency (mins)		Average Weekday Ridership (Oct. 2017)
		Peak	Off-Peak	
7	Dolphin Mall to Downtown Miami	30	40	3,472
29	Miami Lakes to Hialeah Metrorail	50	50	522
33	NW 87 <sup>th</sup> Ave and NW 103 <sup>rd</sup> St to Biscayne Blvd & NE 79 <sup>th</sup> St	30	30	1,760
36	Dolphin Mall* and MDC West Campus to Biscayne Blvd & NE 36 <sup>th</sup> St	60	60	2,328
54	NW 87 <sup>th</sup> Ave & NW 192 <sup>nd</sup> St* and Westland Mall to Biscayne Blvd & NE 54 <sup>th</sup> St	40	45	3,024
71	Dolphin Mall to Miami Dade College Kendall	30	60	886
73	NW 186 <sup>th</sup> Street and NW 73 <sup>rd</sup> Ave to Dadeland South Metrorail	30	40	2,307
87	Palmetto Metrorail to Dadeland North Metrorail	30	45	1,538
95	Miami Gardens Dr P&R to Downtown Miami	35	n/a	2,056
132	NW 87 <sup>th</sup> Avenue and NW 36 <sup>th</sup> Street to Hialeah Market Tri-Rail	65	n/a	20
137	Dolphin Mall to South Dade Government Center	30	45	1,653
267	Miami Gardens Dr P&R to Okeechobee Metrorail	25	n/a	33
286	NW 186 <sup>th</sup> St and NW 75 <sup>th</sup> Pl to NW 176 <sup>th</sup> St and NW 57 <sup>th</sup> Ave	48	48	62
338**	Dolphin Mall to Miami Intermodal Center	n/a	n/a	n/a
<b>Average</b>		<b>39</b>	<b>46</b>	<b>1,512</b>

\*Weekdays only

\*\* Weekends only

Relatively few DTPW routes serve the study area, and no north-south route exists that covers the entirety of the corridor. DTPW bus route coverage can be seen in Map 4, which is an excerpt from DTPW's service map.

The transit service that does exist within the Northwest Corridor is generally low frequency, average headways are 39 minutes for weekday peak periods, and 46 minutes for weekday off-peak periods.



## 2. Literature Review

A literature review was performed for purposes of summarizing applicable relevant plans and studies as related to the Northwest Corridor. An overview of the following documents is provided:

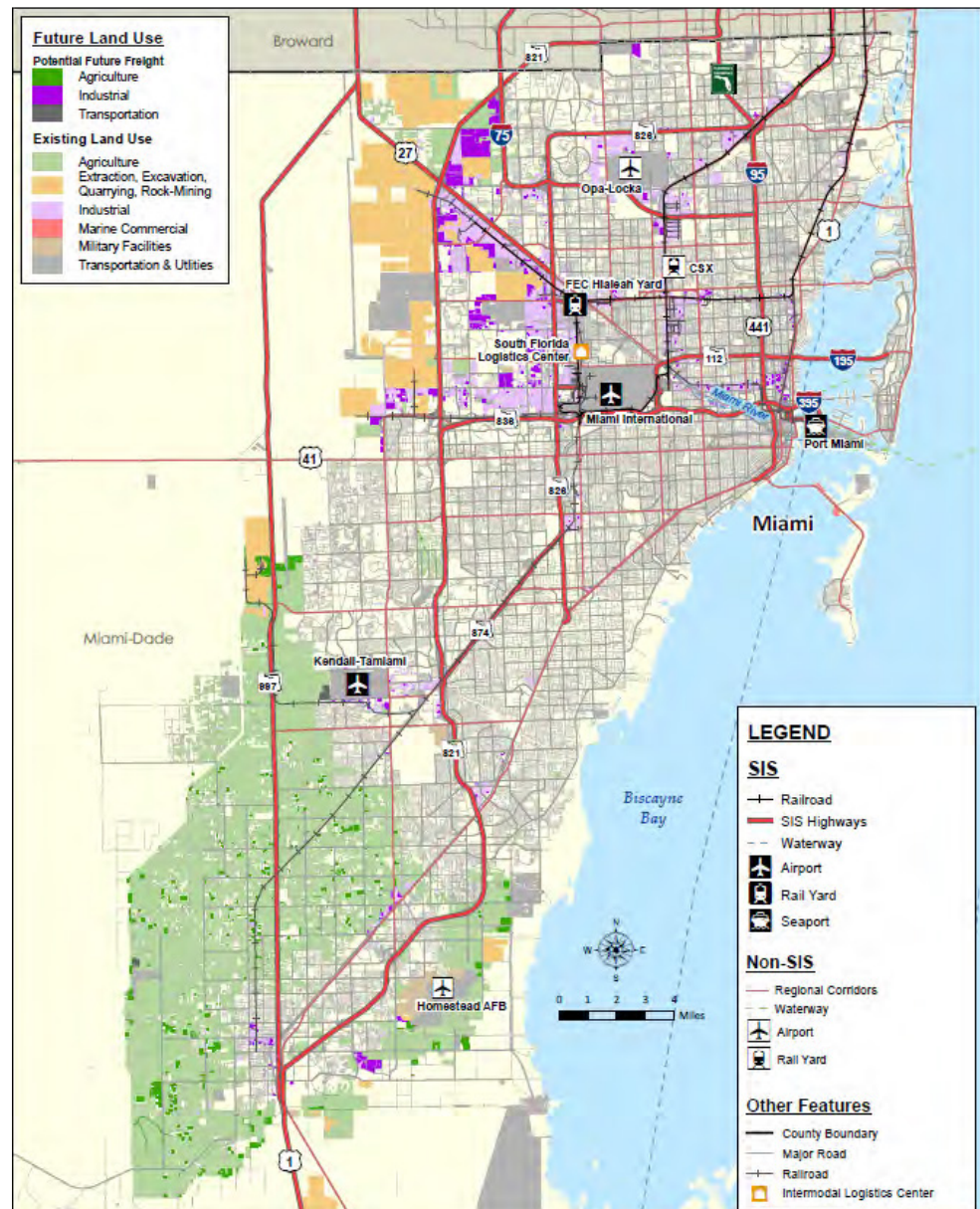
- Miami-Dade Freight Plan (2014)
- Rail Convertibility Study (2004)
- 10Ahead - Miami-Dade Transit Development Plan (2017)
- Miami-Dade 2040 Long Range Transportation Plan (2014)
- Southeast Florida Regional Transportation Plan (2015)

### Miami Dade Freight Plan, 2014

The Miami-Dade County Freight Plan Update is a TPO-commissioned study that was developed to identify needs and prioritize projects for the County's freight system. The August 2014 report predates the opening of the Panama Canal Expansion (2016), which allowed larger, Neopanamax class ships to traverse the canal. This resulted in a shift of trade routes, with some ships from Asia choosing to directly access the east coast of the United States instead of unloading on the west coast and sending goods east via road and rail. To accommodate the impending arrival of larger ships, Port Miami was dredged from 42 feet to 50-52 feet. This change has resulted in other planned improvements to the freight system in Miami-Dade County that are covered in this review.

Map 6 Illustrates existing and potential freight land uses in Miami-Dade County in dark and light purple. The highest concentration of these land uses is located generally between the Turnpike and the western end of Miami International Airport (MIA), which falls within the study corridor.

Map 6 - Existing and Potential Future Freight Land Use from the 2014 Miami-Dade County Freight Plan Update



The South Florida Logistics Center opened in 2014 located directly between the FEC rail yard and MIA Airport, and is planned to have nearly two (2) million square feet of industrial space when completed. This is expected to increase freight traffic along SR 826/Palmetto Expressway as well as on NW 36<sup>th</sup> Street/NW 41<sup>st</sup> Street/Doral Boulevard leading to HEFT.

The land situated in the triangle between HEFT, I-75 and NW 138<sup>th</sup> Street is also identified as an area with large scale development potential for the freight industry, with the intersection of Okeechobee and HEFT having a need for additional spaces. In the time since the Freight Plan was completed, four (4) additional warehouses were constructed near this intersection and site work initiated for more. In addition to the planned warehouses, the north section of this triangle has three (3) major projects in development. The Miami Gardens Park and Ride, the American Dream Miami Mall, and a 339-acre development by the Graham Companies, the group that developed Miami Lakes.

Map 7 - Miami-Dade County Freight Corridors from the 2014 Miami-Dade County Freight Plan Update





**LEGEND**

**Truck AADT (24 Hour)**

- < 2,500
- 2,501 - 5,000
- 5,001 - 10,000
- > 10,000

**SIS**

- Railroad
- Waterway
- Airport
- Rail Yard
- Seaport

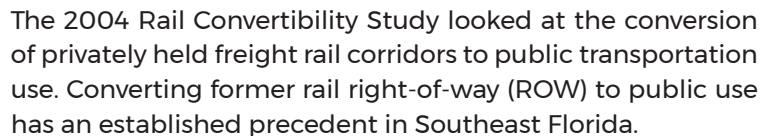
**Non-SIS**

- Waterway
- Airport
- Rail Yard

**Other Features**

- County Boundary
- Major Road
- Railroad
- Urban Area
- Intermodal Logistics Center
- Mine

Map 9 - Rail Right-of-Way Corridors from the Rail Convertibility Study



The South Dade Transitway and the southern portion of the Metrorail system run on former FEC Railroad ROW, and Tri-Rail operates on former CSX ROW within the South Florida Rail Corridor (SFRC). CSX and FEC operate freight service in other rail corridors throughout Miami-Dade, some of which have very limited service. Most of these segments are single-tracked and have approximately 100 feet of available ROW, presenting a tremendous opportunity for adaptive reuse.

Three rail corridors addressed in the Rail Convertibility Study are applicable to the Northwest Transit Corridor Study, shown in Table 6:

Table 6 - Relevant Rail Corridors

Corridor	From	To
FEC Okeechobee Corridor	Cemex Quarry (12155 NW 136 <sup>th</sup> St)	FEC Rail Yard
FEC Milam Dairy Corridor	FEC Rail Yard	Oleander Junction
CSX East-West Corridor	Oleander Junction	Cemex Cement Plant (1200 NW 137 Ave)

**The FEC Okeechobee Corridor** primarily serves the heavy building materials industry. The Cemex Quarry, Rinker Cement Plant, Titan America Pennsuco Cement Plant, SPI Inc Plant, and Coreslab Plant are all located within a half mile of the corridor. The scale of this industry is significant - Cemex is one of the largest building materials companies in the world, ranked #620 on the Forbes Global 2000 list with a market cap of \$13.1 Billion and nearly 43,000 employees worldwide as of May 2017. This corridor is identified in this report as “the highest priority corridor for future multi-use activity.” It has a single track, 50 feet of ROW, and relatively high traffic averaging between 10 and 20 freight trains per day, making joint use highly challenging.

**The FEC Milam Dairy Corridor** has a 100-foot ROW and is double tracked. North of NW 36<sup>th</sup> Street it is critical to freight operations due to the South Florida Logistics Center and FEC Rail Yard, but south of NW 36<sup>th</sup> Street it had no scheduled service at the time of this study. It has been approved for a bike trail, and south of Oleander Junction this corridor is identified as the future Ludlam Trail, a bicycle/pedestrian corridor and linear park that is currently in the planning stages.

**The CSX East-West Corridor** is single tracked with a 100-foot right-of-way. It is identified in this study as a transit corridor with strong potential as it connects the far west side of Miami-Dade County with the Miami Intermodal Center (MIC) and can accommodate high capacity train operations with Metrorail or light rail service. The Miami-Dade TPO completed studies in 2016 that affirmed the feasibility of operating passenger service, and established a Transit-Oriented Development framework to support such a service.



An additional source of funding identified in this study is to follow a model used by the cities along the US 441/SR-7 Corridor in Broward County; the formation of a coalition of interested governments along the route, The SR-7 Collaborative. This SR-7 Collaborative has combined the resources of 14 municipalities, Broward County, the South Florida Regional Planning Council, and the Seminole Tribe of Florida to obtain other grants. The SR-7 Collaborative could secure a \$2 million planning grant from the USDOT through this joint approach. A coalition this size is also capable of direct appropriation through the Florida Legislature as well as through the U.S. Congress.

The Rail Convertibility Report also included a list of grade crossings, a relevant selection of which are included below in Table 7.

Table 7 - Relevant Grade Crossings

Rail Corridor Grade Crossings FEC Biscayne Boulevard to the Florida Turnpike			
NE 71 <sup>st</sup> St	W 1 <sup>st</sup> Ave	NW 74 <sup>th</sup> Ave	
NE 2 <sup>nd</sup> Ave	Red Rd	NW 69 <sup>th</sup> Ave	
NE Miami Ct	W 22 <sup>nd</sup> St	NW 93 <sup>rd</sup> Ave	
N Miami Ave	W 23 <sup>rd</sup> St	NW 89 <sup>th</sup> Ave	
NW Miami Ct	W 8 <sup>th</sup> Ave	NW 106 <sup>th</sup> St	
NW 2 <sup>nd</sup> Ave	NW South River Dr		
NW 17 <sup>th</sup> Ave	NW 72 <sup>nd</sup> Ave		
NW 22 <sup>nd</sup> Ave	NW 77 <sup>th</sup> Ave		

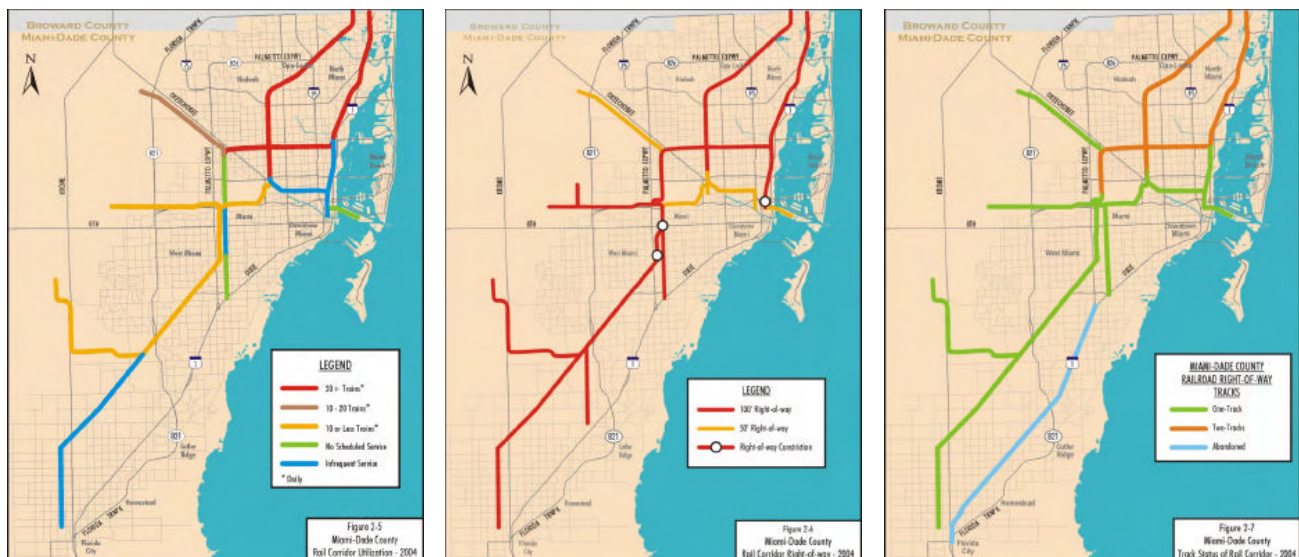
  

Rail Corridor Grade Crossings CSX MIA to NW 145 Ave		
LeJeune Rd	Milam Dairy Rd	NW 12 <sup>th</sup> St
SR 112 Ext	NW 78 <sup>th</sup> Ave	NW 107 <sup>th</sup> Ave
NW 15 <sup>th</sup> St	NW 82 <sup>nd</sup> Ave	NW 110 <sup>th</sup> Ave
Red Rd	NW 84 <sup>th</sup> Ave	NW 12 <sup>th</sup> St
Perimeter Rd	NW 87 <sup>th</sup> Ave	NW 122 <sup>nd</sup> Ave

Rail Corridor Grade Crossings FEC Yard to U.S. 1			
36 <sup>th</sup> St Access Rd	NW 25 <sup>th</sup> Ter	SW 12 <sup>th</sup> St	SW 56 <sup>th</sup> St
NW 25 <sup>th</sup> St	NW 25 <sup>th</sup> St	SW 16 <sup>th</sup> St	SW 60 <sup>th</sup> St
NW 70 <sup>th</sup> Ave	NW 16 <sup>th</sup> St	SW 21 <sup>st</sup> St	SW 64 <sup>th</sup> St
NW 22 <sup>nd</sup> St	NW 12 <sup>th</sup> St	SW 22 <sup>nd</sup> St	SW 72 <sup>nd</sup> St
Milam Dairy Rd	W Flagler St	SW 24 <sup>th</sup> St	SW 80 <sup>th</sup> St
NW 31 <sup>st</sup> St	SW 4 <sup>th</sup> St	SW 32 <sup>nd</sup> Ter	
NW 75 <sup>th</sup> Ave	SW 8 <sup>th</sup> St	SW 40 <sup>th</sup> St	

Figure 9 - Miami-Dade Rail System, 2004





# 10Ahead – Miami-Dade Transit Development Plan

The Transit Development Plan (TDP) is a benchmark document that describes the current state of the Miami-Dade County Department of Transportation and Public Works (DTPW) and the direction it intends to go in the next 10 years. It acts as a strategic guide for public transportation in Miami-Dade County and requires yearly updates to receive State Transit Block Grant funding. The TDP inventories upcoming transit projects per their funding status: funded, unfunded, and partially funded. A catalogue of relevant projects follows below.

Map 10 - Funded Transit Projects

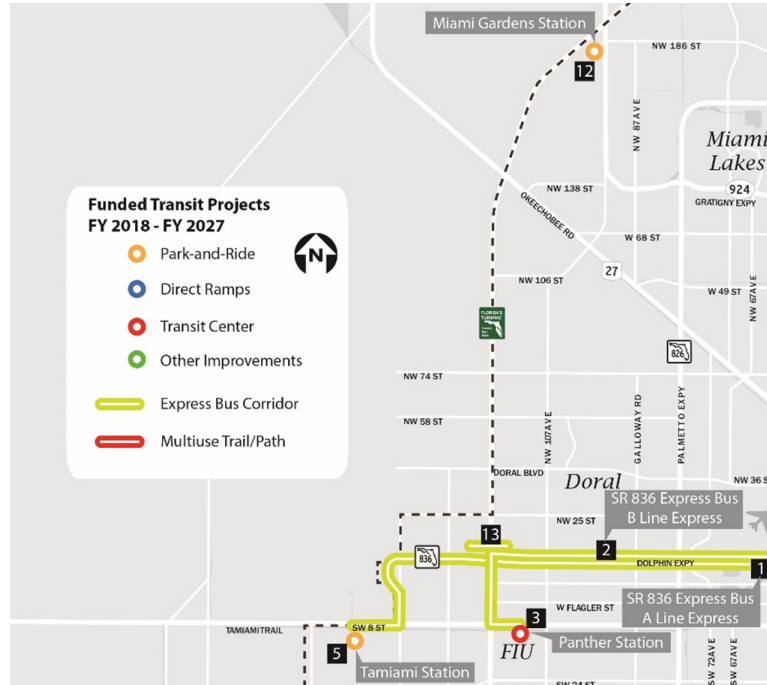


Table 8 - Funded Transit Projects

Map ID #	Project Name	Location	Project Description Reference	2017 Annual Update Implementation Year	2040 LRTP Status
1	SR 836 Express Bus A Line Express	SR 836 Express Bus A Line: Tamiami Station (US-41/SR 90/SW 8th Street and SW 147th Avenue) to the proposed Downtown Miami Intermodal Terminal (NW 1st Street and NW 1st Avenue)	<b>A Line Express</b> would provide premium express transit service along SR 836 from the proposed park-and-ride/transit center Tamiami Station (US-41/SR 90/SW 8th Street and SW 147th Avenue) to the proposed Downtown Miami Intermodal Terminal (NW 1st Street and NW 1st Avenue) via US-41/SR 90/SW 8th Street, SW 137th Avenue and SR 836. This route will operate during peak periods only. Service headways will be 10 minutes during the AM/PM peak-hour. Service hours are weekdays 6:00am to 9:00am and 3:00pm to 7:00pm.	2020	Priority I
2	SR 836 Express Bus B Line Express	SR 836 Express Bus Route B: Panther Tech Station at FIU's MMC and the Miami Intermodal Center (MIC)	<b>B Line Express</b> would provide premium express transit service between the proposed Panther Tech Station at FIU's MMC and the Miami Intermodal Center (MIC), via US-41/SR 90/SW 8th Street, SR 821/HEFT and SR 836. This route will operate all day with 20 minute headways. Service hours are 6:00am to 10:00pm on weekdays.	2020	Priority I
3	Panther Station	Florida International University's (FIU) Modesto A. Maidique Campus – MMC	Florida International University (FIU) constructed a parking garage along SW 8th Street with ground floor space reserved for a future transit center. The location of the new parking garage, between SW 112th Avenue and SW 109th Avenue, presents an access challenge that requires roadway widening to construct bus only lanes and traffic signal improvements to provide bus signal priority at the two intersections along this roadway segment. The new transit center would provide 10 bus bays to accommodate the relocation of the existing DTPW routes from the current bus terminal located near SW 107th Avenue/SW 17th Street and provide capacity for future routes such as the SR-836 Express Bus, the Flagler Street Bus Rapid Transit (BRT) and express routes operating on the Homestead Extension of the Florida Turnpike (HEFT). Completion of the transit center should coincide with the beginning of the SR-836 Express Bus in 2020.	2020	N/A
5	Tamiami Station	SW 8th St and SW 147th Ave	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 493 parking spaces, which would serve as the western most station for the new premium bus service in the corridor as well as other local bus routes. The estimated completion date is 2020.	2020	Priority I
12	Miami Gardens Station (f.k.a. American Dream North)	I-75 and Miami Gardens Drive Interchange	Construct new park-and-ride facility with 298 parking spaces to support new express bus service connection	2018	Unfunded
13	NW 12th Street Roadway Improvements (Bus-Only) Project for Dolphin Station	along NW 12th Street between 122nd Avenue and 114th Avenue	This project includes widening and resurfacing along NW 12th Street to add bus-only lanes from NW 122nd Avenue to NW 114th Avenue. These new bus-only lanes will allow buses to bypass traffic congestion along this segment of NW 12th Street and will thereby reduce travel time for buses traveling between the Dolphin Station Park-and-Ride/Transit Terminal and Dolphin Mall. This roadway project is an integral component of the Dolphin Station Park-and-Ride/Transit Terminal Facility. The Dolphin Station Park-and-Ride/Transit Terminal Facility is part of the East West Corridor Rapid Transit Project which connects the largest employment areas of Miami-Dade County (Florida International University (FIU), City of Doral, Miami International Airport (MIA), Miami Health District, Downtown Miami and Brickell). The East West Corridor Rapid Transit Project will also connect to the Miami Intermodal Center (MIC) – the County's major ground transportation hub.	2021	Priority I
Not Mapped	East West Corridor Transit Oriented Development (TOD) Project	generally along SR-836 between the MIC and FIU	The East-West Corridor is one of six premium transit corridors included in the Strategic Miami Area Rapid Transit (SMART) Plan as endorsed by the Miami-Dade MPO Governing Board. DTPW will conduct a comprehensive planning effort that will inform transit and land use planning in the East-West Corridor, a 12-mile corridor linking the Miami Intermodal Center with Florida International University and the western communities of Miami-Dade County. In June 2016, DTPW submitted a grant application to FTA under the TOD Planning Pilot Program. In October 2016, FTA awarded \$960,000 to DTPW for this project. DTPW is currently finalizing a draft scope of services for this project.	2019	Priority I

Map 11 - Partially Funded Transit Projects



Table 9 - Partially Funded Transit Projects

Table 6-4: Partially Funded Transit Projects FY 2018 - FY 2027					
Map ID #	Project Name	Location	Project Description Reference	Status 2017 Annual Update Implementation Year*	2040 LRTP Status
1	Palmetto Intermodal Terminal	SR 826 (Palmetto Expressway) at NW 74th Street	DTPW recommends that the FDOT SR 826/Palmetto Expressway Express Lanes PD&E Study address the feasibility of acquiring an 11.88-acre semi-vacant parcel of land located immediately south of the Palmetto Metrorail Station for the purpose of constructing the Palmetto Station Intermodal Terminal that will include but not be limited to: a minimum of 1,000 parking space garage which includes long-term parking, short-term parking, kiss-and-ride, pool-and-ride and a minimum of 12 bus bays.	TBD	Priority III
3	* Flagler BRT ††	FIU to Downtown Miami	In 2016, FDOT initiated a Project Development and Environment (PD&E) study to examine implementation of Bus Rapid Transit (BRT) service and infrastructure improvements along SR 968/Flagler Street from SR 821/HEFT to SR 5/US-1/Biscayne Blvd. The primary study objective is to evaluate the implementation of a cost-effective, high-ridership BRT system within the SR 968/Flagler Street Corridor that is to be part of an overall interconnected premium transit network. The FDOT project team is currently identifying and refining recommended alternatives. The study is scheduled for completion by mid-2018. DTPW is coordinating the bus purchase component of this project which includes purchase of 10 new 60-foot alternative fuel buses. Acceptance of vehicles is anticipated in late 2017.	TBD	Priority I
6	*East-West Corridor	Miami International Airport west along the SR 836/Dolphin Expressway, to the Turnpike in the vicinity of Florida International University (FIU)	This project will provide multimodal solutions for severe traffic congestion along SR-836, the only east-west expressway in central Miami-Dade County. This project will also serve major activity centers including FIU, Miami International Airport, the Miami Intermodal Center (MIC), Downtown Miami, and PortMiami, while transporting riders to and from major employment areas (Doral, Health District, Central Business District, Brickell, etc). The East-West Corridor is being studied as part of the Strategic Miami Area Rapid Transit, or SMART Plan.	TBD	Priority I
16	NW Miami-Dade Express	Miami Gardens Station / Palmetto Metrorail Station	Route will provide express bus service from the Miami Gardens Station to the Palmetto Metrorail Station. Headways will be 10 minutes during peak hours	TBD	N/A
18	Florida Turnpike Express (South)	344 St. Transitway Station/Dolphin Station	Route will provide express bus service from the SW 344th Street Park-and-Ride along the Transitway to Dolphin Station. Headways will be 10 minutes during peak hours.	2018	N/A

Map 12 - Unfunded Transit Projects

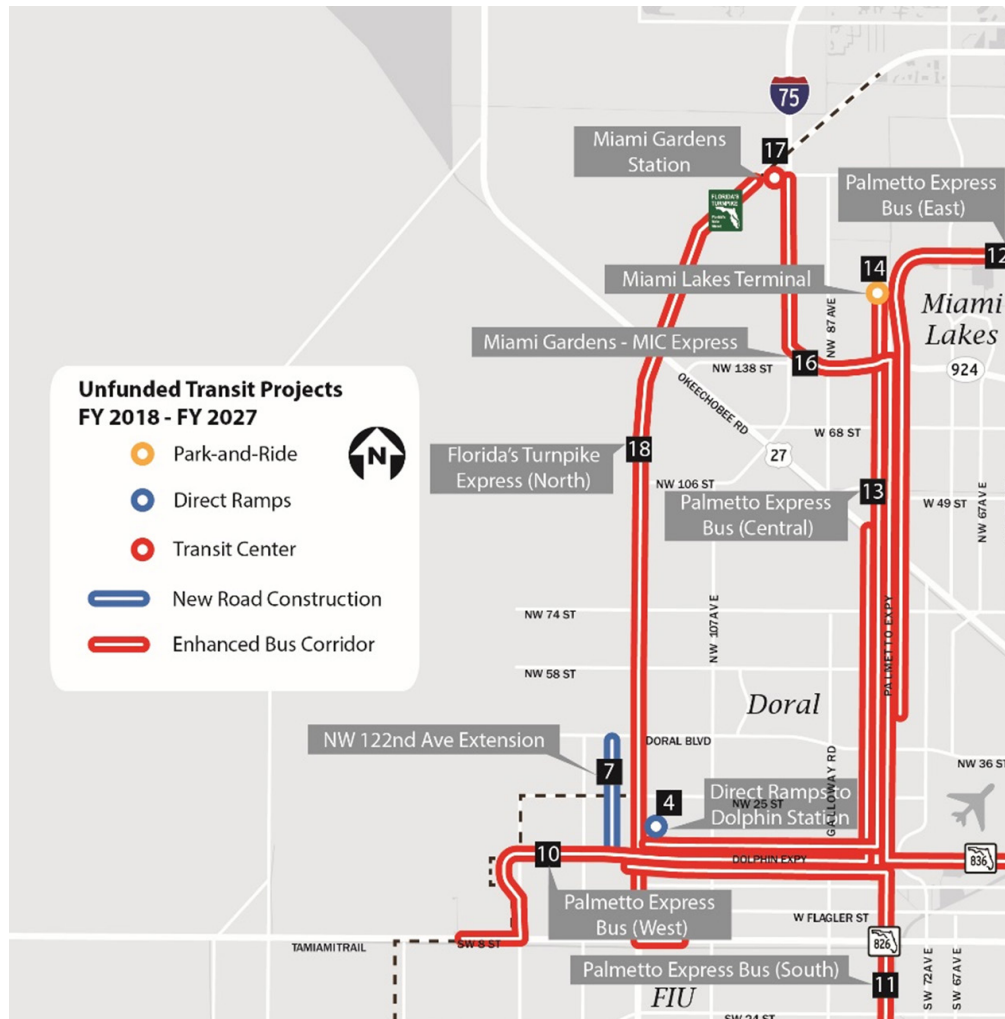


Table 10 - Unfunded Transit Projects

Map ID #	Project Name	Location	Project Description Reference	Status 2017 Annual Update Implementation Year*	2040 L RTP Status
4	Direct Ramps to Dolphin Station Transit Terminal	SR 821 HEFT Express Lanes to Dolphin Station	Construct direct access ramps to connect the SR 821 HEFT Express Lanes to Dolphin Station	TBD	Priority II
7	NW 122nd Ave	NW 12th St to NW 41st St	Construction of new two-lane road	TBD	Priority II
10	Palmetto Express Bus (West)	Tamiami Station (SW 8th St/SW 147th Ave) to Palmetto Intermodal Terminal	Implement express bus service on express lanes with 10 minute headways during the AM/PM peak-hour.	2024	Unfunded
11	Palmetto Express Bus (South)	Dadeland North Metrorail Station to Dolphin Station (HEFT/NW 12 St.)	Implement express bus service on express lanes with 10 minute headways during the AM/PM peak-hour.	2024	Unfunded
12	Palmetto Express Bus (East)	Palmetto Intermodal Terminal to Golden Glades Multimodal Terminal	Implement express bus service on express lanes with 10 minute headways during the AM/PM peak-hour.	2024	Unfunded
13	Palmetto Express Bus (Central)	Dolphin Station (HEFT/NW 12 St.) via Palmetto Intermodal Terminal to Miami Lakes Terminal (SR 826 at NW 154 St.)	Implement express bus service on express lanes with 10 minute headways during the AM/PM peak-hour.	2024	Unfunded
14	Miami Lakes Terminal	SR 826 (Palmetto Expressway) at NW 154th St	Construct new park-and-ride facility with 8 bus bays to support new express bus service connection	2024	Unfunded
16	Miami Gardens - MIC Express	Miami Gardens Station (Miami Gardens Mall) to MIC	Implement express bus service from Miami Gardens Station to MIC	2020	N/A
17	Miami Gardens Station	East of HEFT and west of I-75 between NW 170th St and the intersection of I-75 and HEFT	Construct Transit Center within the proposed Mall site with 6 bus bays, 2 layover bus bays, passenger waiting areas, bus operator comfort station, ticket vending and other associated transit amenities. Privately funded project	2020	N/A
18	Florida's Turnpike Express (North)**	FIU Panther Station/Miami Gardens Stations	Route will provide express bus service from the FIU Panther Station along the Turnpike to the Miami Gardens Station. This route will operate all day with 20 minute headways	TBD	N/A

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# Southeast Florida Regional Transportation Plan 2040 (RTP)

When Dade County was created in 1836, it included the land from current Palm Beach County all the way south to the Florida Keys. Though the region would be further subdivided into Broward and Palm Beach Counties, it has always been united by its unique geography and climate. Today the three counties form a continuous urbanized area. As such, the Planning entities have collaborated to create the Southeast Florida Regional Transportation Plan 2040 (RTP). The RTP takes the information in each county's numerous transportation plans and synthesizes them into a regional scale vision. The most recent iteration of this Plan was issued in October 2015.

The RTP gives a broad context to the analysis of the Corridor study area. From this perspective, it becomes apparent that the most unique characteristic of the study area is its freight activity. The Southeast Florida Region takes in \$32 Billion in Gross Regional Product from the freight industry, with \$19 Billion going directly into the regional economy in the form of employee compensation.

The Northwest corridor area contains or is adjacent to several important Freight terminals and sources of Freight:

- Cemex Quarry
- Rinker Cement Plant
- Titan America Pennsuco Cement Plant
- Miami Hialeah FEC Intermodal Terminal (FEC Rail Yard)
- South Florida Logistics Center
- MIA Airport
- FedEx Freight

Given this level of activity, care should be taken to make sure that any planned Transit activity in the region does not adversely affect Freight activity.

## Miami-Dade 2040 Long Range Transportation Plan (LRTP)

The LRTP is created and updated by the Miami-Dade Transportation Planning Organization (TPO), to fulfill federally mandated requirements for the funding of infrastructure projects. The LRTP's primary purpose is to assist citizens, businesses, and elected officials in cultivating their transportation vision for the County through the next 26 years. The 2040 LRTP was issued on October 23, 2014, and serves as an instrument to identify the needed improvements to the transportation network, and provides a long-term investment framework to address current and future challenges.

The LRTP categorizes projects per their timeframe for funding, or Priority, as follows:

Priority I: 2015 – 2020

Priority II: 2021 - 2025

Priority III: 2026 – 2030

Priority IV: 2031 - 2040

A catalogue of relevant projects from the LRTP are featured according to priority on the following pages.



Map 13 - Priority I LRTP Projects

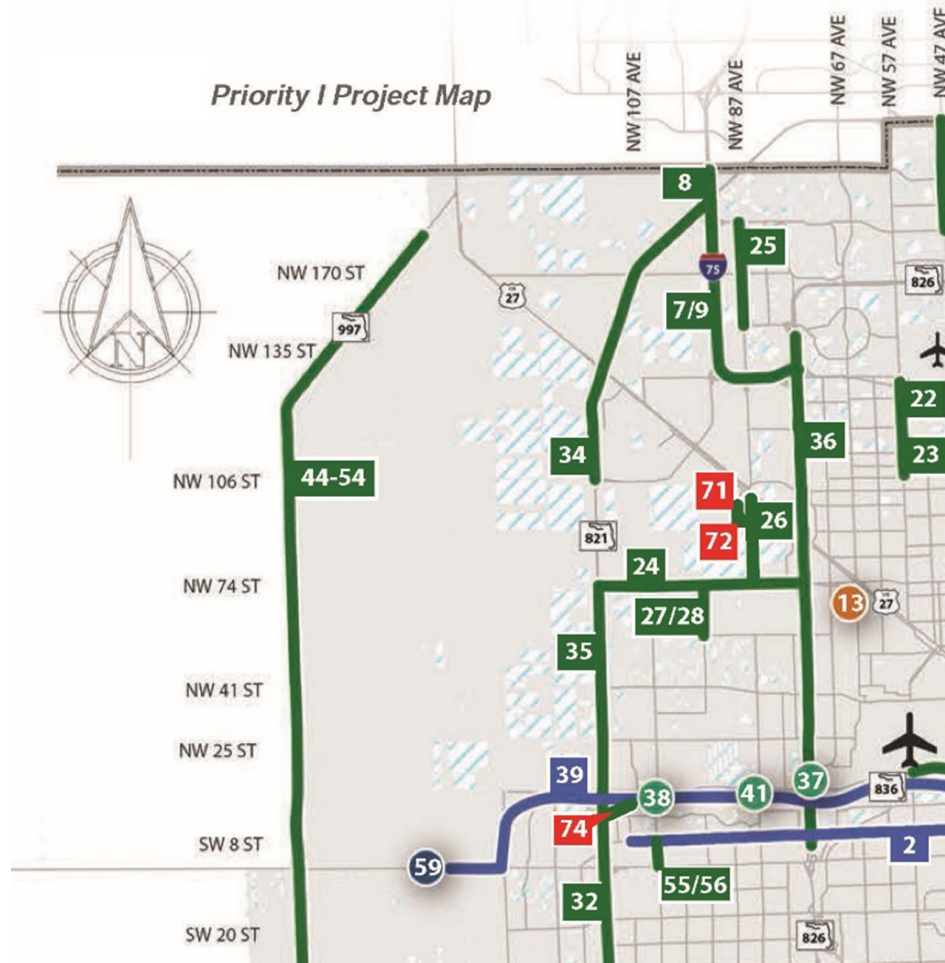


Table 11 - Priority I LRTP Projects

Map Label	Project	From	To
7	I-75 ITS Communication	Miami Dade County Line	South of NW 170 St
8, 9	I-75 Managed Lanes	Miami-Dade County Line	NW 170 St
24	Add 2 Lanes and Reconstruct NW 74 St	HEFT	SR 826
25	Add 2 Lanes and Reconstruct NW 87 Ave	NW 154 St	NW 186 St
26	New 2 Lane Road Construction on NW 87 Ave	NW 74 St	NW 103 St
27	New 4 Lane Road Construction on NW 97 Ave	NW 70 St	NW 74 St
28	Add 2 Lanes and Reconstruct NW 97 Ave	NW 58 St	NW 70 St
34	Add lanes and Reconstruct HEFT	NW 106 St	I-75
35	Add lanes and Reconstruct HEFT	SR 836	NW 106 St
36	Managed Lanes on SR 826 / I-75	Flagler / NW 170 St	NW 154 St / SR 826
39	Enhanced Bus Service on SR 836	MIC	Tamiami Park-and-Ride (SW 147 Ave / SW 8 St)
71	Widen NW 89 Ave to 3 lanes	NW 93 St	NW 95 St
72	Widen NW 93 St to 3 lanes	NW 89 Ave	NW 87 Ave
74	New Ramp Connections	SR 836	HEFT

Map 14 - Priority II LRTP Projects

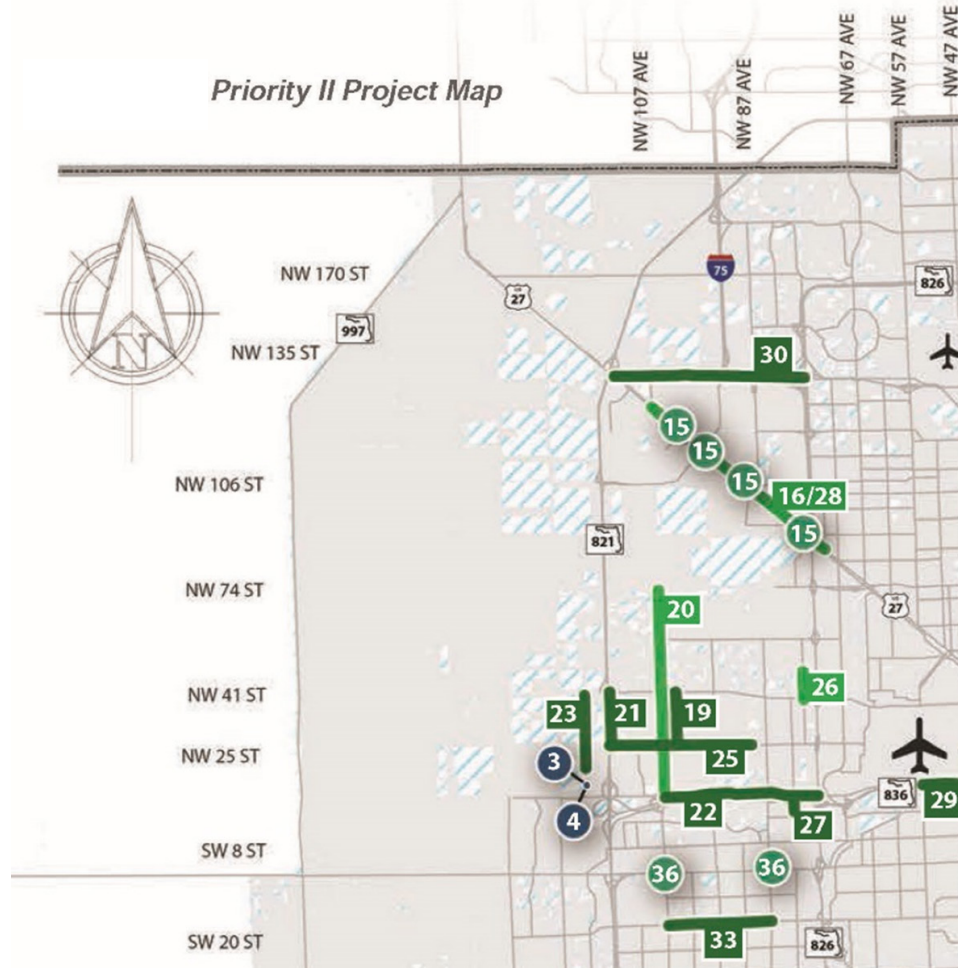


Table 12 - Priority II LRTP Projects

Map Label	Project	From	To
15	Medley Bridge/Canal Improvement Program (Improvements at NW 121 Way, NW 116 Way, NW 105 Way, NW 79 Ave)		
16	Medley Freight Access Roadway Improvements	Okeechobee Rd	Medley
19	Add 2 Lanes and Reconstruct NW 107 Ave	NW 41 St	NW 25 St
20	Operational and Capacity Improvements on NW 107 Ave where feasible	NW 12 St	NW 74 St
21	New 2 Lane Road to support trucks	NW 25 St	NW 41 St
22	Widening NW 12 St	NW 107 Ave	SR 826
25	Capacity and Operational Improvements to NW 25 St	NW 89 Ct	HEFT
26	Merge and Reduce Access Points if Possible on NW 79 Ave	NW 48 Way	NW 36 St
27	New 4 Lane Road Construction on NW 82 Ave	NW 8 St	NW 12 St
28	Roadway and Operational Improvements to NW South River Dr	NW 107 Ave	NW 74 Ave
30	Extend SR 924 to HEFT with connections to I-75 and SR 826	SR 826 / I-75	HEFT

Map 15 - Priority III LRTP Projects

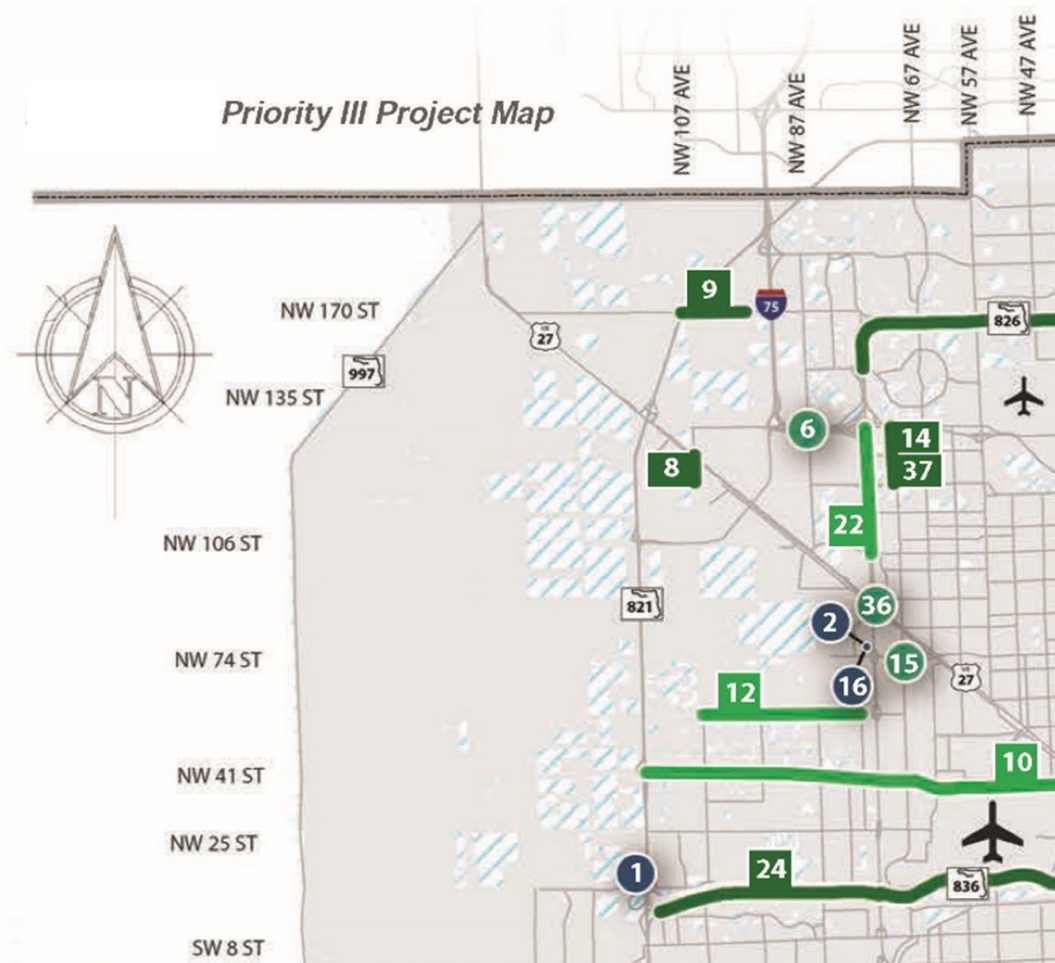


Table 13 - Priority III LRTP Projects

Map Label	Project	From	To
1	Direct Access Ramps	SR 836 Managed Lanes	Dolphin Station Transit Terminal
2	Direct Access Ramps	SR 826 Managed Lanes	Palmetto Intermodal Terminal
6	Construct Offramp	SB I-75	SB NW 87 Ave
8	Widen NW 107 Ave Bridge over Miami Canal	1000' North of W 122 St	Okeechobee Rd
9	6 Lane Divided Roadway on NW 170 St	HEFT	NW 97 Ave
10	Operational Improvements to NW 36 St	NW 42 Ave	HEFT
12	Corridor Traffic Operational Improvements on NW 58 St	NW 107 Ave	NW 82 Ave
14	Add Center Turn Lane to NW 72 Ave	NW 122 St	NW 138 St
15	Operational Improvements on NW 72 Ave	Hialeah Expy	
16	Expand Park and Ride Facility at Palmetto Intermodal Terminal	SR 826 / NW 74 St	
22	Add a Braided Off Ramp From SR 826 to NW 122 St	NW 138 St	NW 103 St
24	Two New Managed Lanes on SR 836	HEFT	SR 826
36	Operational Improvements to Okeechobee Rd	SR 826	
37	Roadway Improvements NW 72 Ave	NW 122 St	W 77 St

Map 16 - Priority IV LRTP Projects

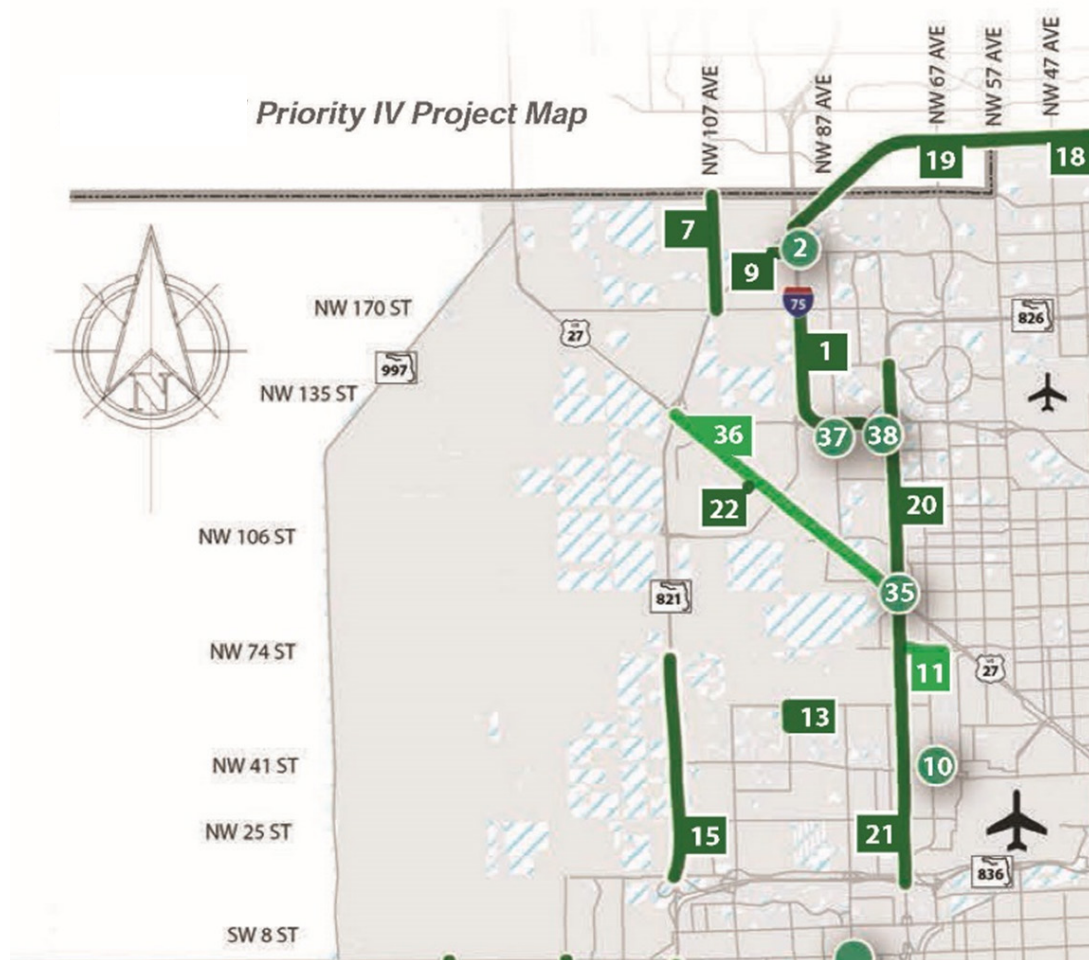


Table 14 - Priority IV LRTP Projects

Map Label	Project	From	To
1	Widen I-75 with Express Lanes	SR 826	NW 170 St
2	Modify Interchange	I-75	Miami Gardens Dr
7	Extend NW 107 Ave	NW 170 St	Broward County Line
9	New 4 Lane Road Construction on NW 186 St	NW 97 Ave	I-75
10	Grade Separation of NW 36 St over NW 72 Ave		
11	Modify Connector on NW 74 St	SR 826	FEC Intermodal Yard
13	Add 2 Lanes and Reconstruct NW 97 Ave	NW 58 St	NW 52 St
15	Transportation Systems Management and Operations on HEFT	NW 12 St	NW 74 St
18, 19	Widen HEFT to 8 Lanes	I-75	Turnpike (Mainline)
20	Widen SR 826 with Express Lanes	NW 103 St	NW 154 St
21	Add 4 Special Use Lanes to SR 826	SR 836	NW 103 St
22	New Bridge on SW 102 Ave Over Tamiami Canal	Tamiami Canal	
35	Ramp Improvements to Okeechobee / SR 826 Interchange	NW 95 St	W 16 Ave
36	Operational / Capacity Improvements with Grade Separated Intersections to Okeechobee Rd	SR 826	Krome Ave
37	Operational Improvements to W 24 St	W 28 Ave	
38	Lower Curbs to Allow Wider Turns on W 24 St	W 23 Ave	



Map 17 - Partially Funded LRTP Projects

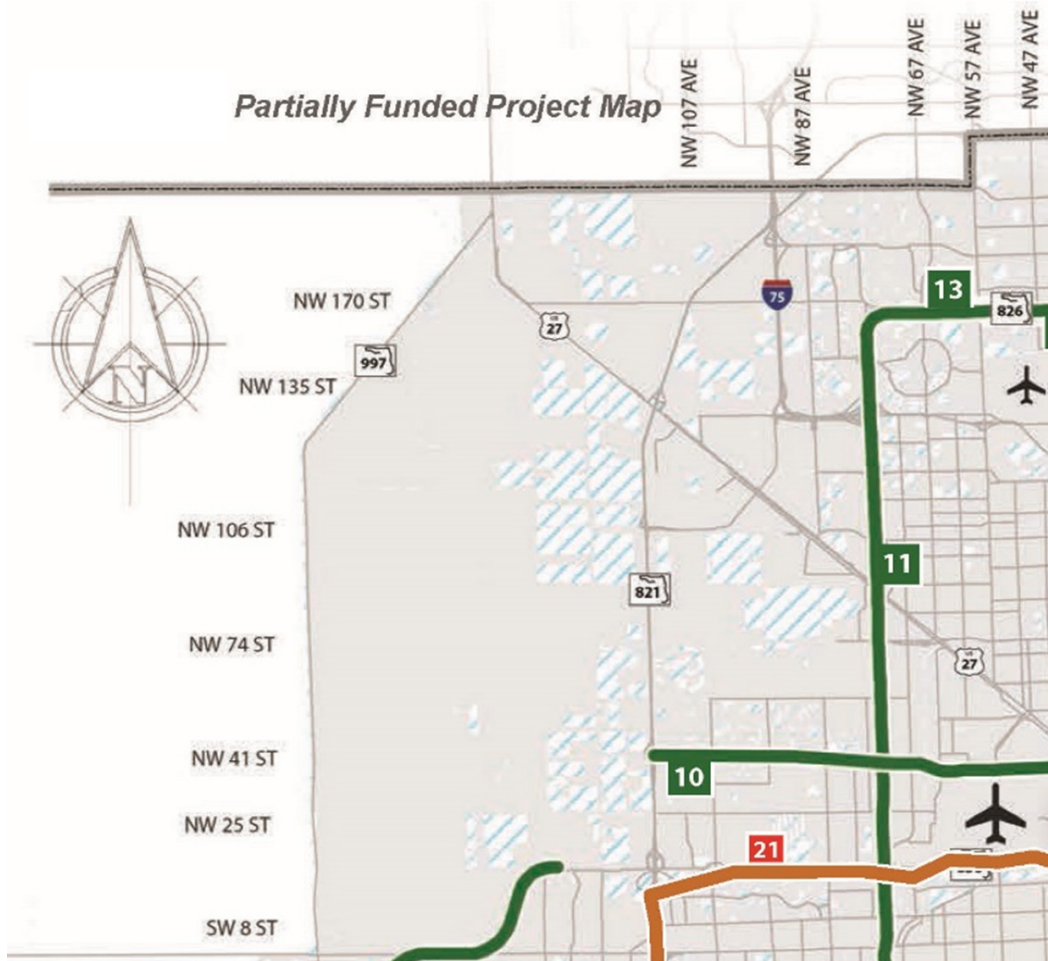


Table 15 - Partially Funded LRTP Projects

Map Label	Project	From	To
10	Redesign NW 36 St as a Superarterial Express St	HEFT	NW 42 Ave
11	Operational and Capacity Improvements to SR 826	West Flagler St	NW 154 St
13	Operational and Capacity Improvements to SR 826	East of NW 67 Ave	East of 57 Ave
21	SMART Plan East-West Corridor	MIC	FIU

### 3. Corridor Identification

This section consists of an overview of corridors throughout the study area analyzed over the course of this study. The corridors were selected based upon a two-step process.. An initial set of corridors was identified through an aerial review of the study corridor, which took land use, development and existing street grid patterns into consideration. Added to these was a set of corridors previously identified through DTPW studies and new route proposals, particularly the Turnpike North and Palmetto Express routes. These corridors were presented to the project's Study Advisory Committee (SAC), which then made suggestions for additional routes for evaluation.

These corridors are illustrated on the subsequent maps in the overall Northwest Corridor Conditions Analysis. This approach is taken so that a universe of potential transit route alignments can be understood in the context of their surroundings. An in-depth analysis of the socioeconomic characteristics of each individual alignment is then conducted in the Corridor Refinement chapter.

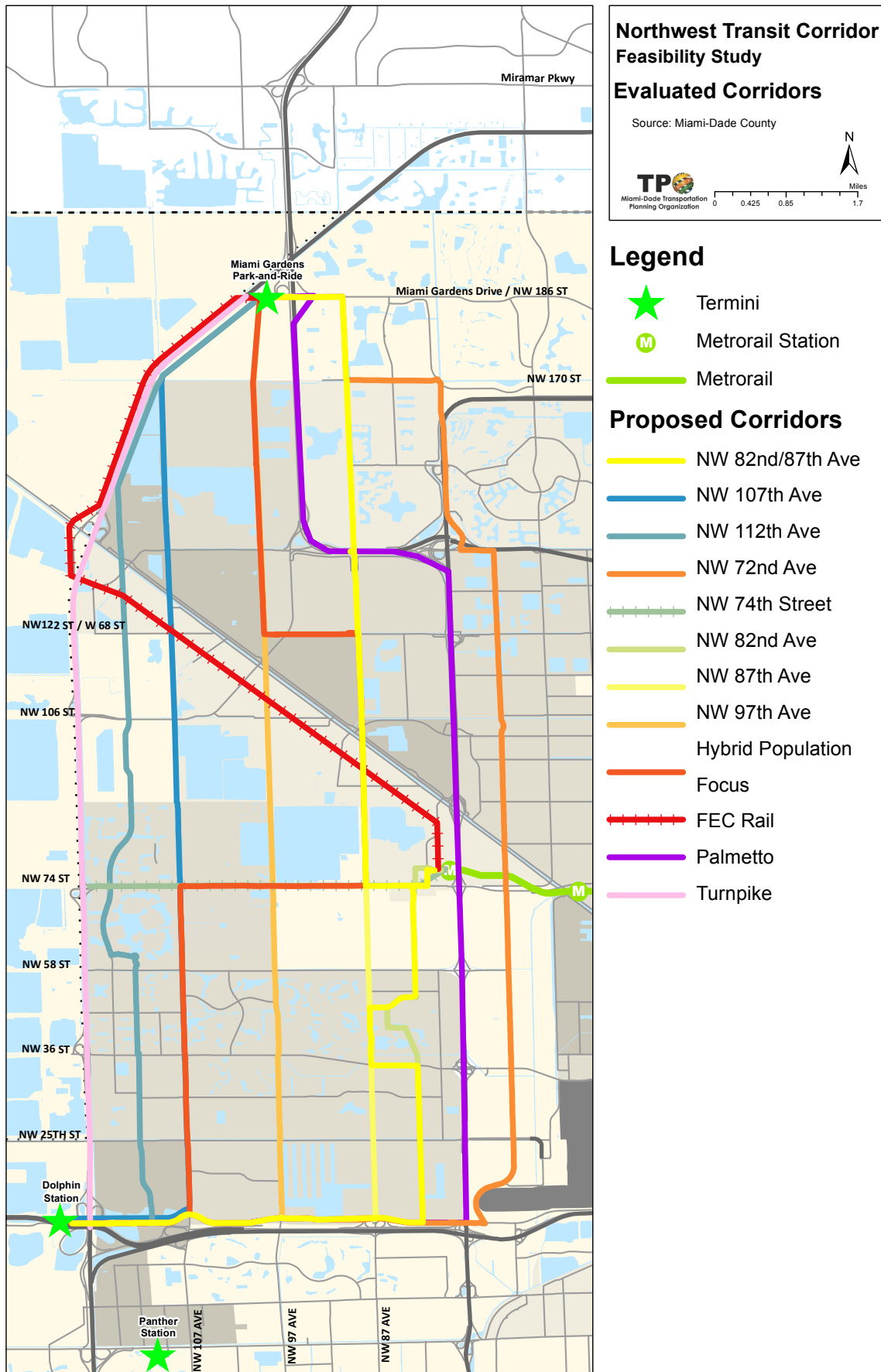
#### Overview of Preliminary Corridors

An initial desktop analysis was conducted to identify 12 corridors for further evaluation. This step was taken to focus the subsequent in-depth analysis. Each of the 12 corridors is described briefly in Table 16, and depicted in Map 18. These corridors are listed geographically from west to east.

Table 16 - Summary of Evaluated Corridors

Corridor	From	To	Notes
HEFT	Dolphin P&R	American Dream P&R	Express Route
NW 112 <sup>th</sup> Avenue	Dolphin P&R	American Dream P&R	Public right-of-way interrupted at NW 106 <sup>th</sup> Street
NW 107 <sup>th</sup> Avenue	Dolphin P&R	American Dream P&R	Public right-of-way interrupted at NW 106 <sup>th</sup> Street
NW 97 <sup>th</sup> Avenue	Dolphin P&R	American Dream P&R	Public right of way interrupted at NW 90 <sup>th</sup> Street
NW 87 <sup>th</sup> Avenue	Dolphin P&R	American Dream P&R	Missing link for north-south connectivity is under construction
NW 82 <sup>nd</sup> Avenue	Dolphin P&R	American Dream P&R	Public right-of-way interrupted at NW 74 <sup>th</sup> Street
NW 82 <sup>nd</sup> /87 <sup>th</sup> Avenue	Dolphin P&R	American Dream P&R	Hybrid combination of the two previous corridors
Palmetto Expressway	Dolphin P&R	American Dream P&R	Express Route
NW 74 <sup>th</sup> Street	Palmetto Metrorail Station	HEFT	Western extension of Metrorail Green Line
FEC Railroad	Palmetto Metrorail Station	American Dream P&R	Northwestern extension of Metrorail Green Line
NW 72 <sup>nd</sup> Avenue	Palmetto P&R	American Dream P&R	Illogical route that focuses service on employment centers
Population Focus	Palmetto P&R	American Dream P&R	Illogical route that seeks to maximize service to population hub

Map 18 - Evaluated Corridors



## Evaluated Corridors

- 1) **Homestead Extension of the Florida Turnpike (HEFT)** – the HEFT alignment would take a transit route from the Dolphin Park-and-Ride to the Miami Gardens Park-and-Ride facility via the HEFT. This would mirror the alignment of DTPW’s proposed Florida’s Turnpike Express North BERT Corridor.
- 2) **NW 112<sup>th</sup> Avenue** – the western-most corridor evaluated, this alternative would run from the Dolphin Park-and-Ride facility along NW 12<sup>th</sup> Avenue to NW 112<sup>th</sup> Avenue, bisecting the residential communities on the northwest end of Doral. This corridor would travel through suburban developments, and would potentially need to navigate operational constraints, including traffic circles. The alignment shifts to NW 114<sup>th</sup> Avenue north of NW 58<sup>th</sup> Street, and would serve a warehouse district and office park between NW 90<sup>th</sup> Street and NW 105<sup>th</sup> Street. Public right-of-way is interrupted at NW 106<sup>th</sup> Street, and resumes two miles north, at North Okeechobee Road, where it runs parallel to the HEFT.
- 3) **NW 107<sup>th</sup> Avenue** – this corridor is like NW 112<sup>th</sup> Avenue, but provides better access to a more diverse mix of commercial and residential land uses. Just like NW 112<sup>th</sup> Avenue, NW 107<sup>th</sup> Avenue public right of way ends at NW 106<sup>th</sup> Street, but recommences at NW 122<sup>nd</sup> Street. The corridor crosses the Miami River Canal, but does not currently connect across Okeechobee Road. A new project jointly funded by the Florida Turnpike Enterprise, Miami-Dade Expressway Authority, and Hialeah Gardens will create a new two-mile extension of NW 107<sup>th</sup> Avenue, extending it from its current terminus near NW 138<sup>th</sup> Street to a future extension of NW 170<sup>th</sup> Street at the southwest corner of the planned American Dream Miami and Graham Property parcels.
- 4) **NW 97<sup>th</sup> Avenue** – this corridor would provide service to a set of land uses that are not transit sustaining. Water bodies, landfills, pastures, gated single family housing developments, and golf courses are the predominant land uses south of Okeechobee Road. Moreover, the corridor has no public right of way connection from NW 90<sup>th</sup> Street to NW 122<sup>nd</sup> Street. No connection across Okeechobee Road exists. However, north of NW 122<sup>nd</sup> Street, the corridor would provide access directly to the middle of the proposed American Dream and Graham Property Development.
- 5) **NW 87<sup>th</sup> Avenue** – this corridor operates along one of the busiest commercial activity corridors within the study area. Between NW 12<sup>th</sup> Street and NW 58<sup>th</sup> Street, NW 87<sup>th</sup> Avenue serves a mix of commercial uses, particularly office parks and retail land uses. Between NW 36<sup>th</sup> Street and NW 58<sup>th</sup> Street, the corridor would serve the still-developing transit-oriented development hub serving Downtown Doral. North of 74<sup>th</sup> Street, the public right of way ends until it recommences at NW 106<sup>th</sup> Street. FDOT is currently building an extension of NW 87<sup>th</sup> Avenue, creating link from NW 74<sup>th</sup> Street to NW 106<sup>th</sup> Street, which includes a new bridge across the Miami River Canal and Okeechobee Road. This will provide a needed connection between north and south sides of the corridor. Within Hialeah and Hialeah Gardens, NW 87<sup>th</sup> Avenue serves dense single-family and multi-family housing neighborhoods. The typology remains largely the same as the corridor continues north into Miami Lakes. This corridor’s alignment would necessitate the NW 154<sup>th</sup> or NW 170<sup>th</sup> Street bridges across I-75 to be opened, or could continue to NW 186<sup>th</sup> Street/Miami Gardens Drive to complete the connection.
- 6) **NW 82<sup>nd</sup> Avenue** – serves an area similar to NW 87<sup>th</sup> Avenue. Within the southern extent end of the corridor, the land uses it serves are generally more pedestrian-friendly. Moreover, the corridor would serve CityPlace Doral, which has introduced mixed-use development. Although some right of way would need to be acquired, a NW 82<sup>nd</sup> Avenue alignment could provide near-direct access to the Palmetto Metrorail Terminal, enhancing the corridor’s multimodal nature. Due to right of way and access issues, the NW 82<sup>nd</sup> Avenue would have to shift its alignment to NW 87<sup>th</sup> Avenue north of NW 74<sup>th</sup> Street.
- 7) **NW 82nd/87th Avenue** - This alternative consists of a hybrid combination of the preceding two alternatives. This configuration is evaluated with the intention of developing a route that provides service to greater concentrations of population and employment density, in addition to major transit, shopping and entertainment hubs.



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- 8) Palmetto Expressway** - The Palmetto Expressway alignment would provide service from the Dolphin Park-and-Ride, via NW 12<sup>th</sup> Street and then to the Palmetto Expressway, transferring to I-75, and ultimately providing a northern link to the Miami Gardens Park-and-Ride.
- 9) NW 74<sup>th</sup> Street** (from the Palmetto Metrorail Station to HEFT) – as the only east-west alignment evaluated, NW 74<sup>th</sup> Street can serve as an extension of Metrorail, which currently terminates at NW 70<sup>th</sup> Avenue. The tracks at the Palmetto Metrorail Station are oriented for a continuation to the west, which would simplify the proposed expansion. Since the Metrorail station opened in 2003, new residential and commercial developments projects have appeared along NW 74<sup>th</sup> Street. However, the corridor’s potential is limited by industrial parcels, landfills, and water bodies on the eastern side of this arterial.
- 10) FEC Railroad** (from Palmetto Metrorail Station to American Dream Park-and-Ride) – this corridor would leverage the existing FEC railroad tracks operating parallel to Okeechobee Boulevard by transforming an existing railroad corridor to passenger service from its current freight-only use. These tracks, which are still actively used to serve the adjacent quarry and industrial properties, presents land use challenges for transit-supportive service. This challenge persists at the HEFT, where new tracks would need to be constructed.
- 11) NW 72<sup>nd</sup> Avenue** – Serving the easternmost reaches of the study corridor, the NW 72<sup>nd</sup> Avenue alignment would provide service via NW 12<sup>th</sup> Street and NW 72<sup>nd</sup> Avenue. This route operates almost exclusively east of the Palmetto Expressway. Due to land use development patterns in Miami Lakes, the route would shift to the west at the intersection of NW 72<sup>nd</sup> Avenue and NW 138<sup>th</sup> Street, would follow an alignment near the Palmetto Expressway to NW 17<sup>th</sup> Street before cutting west to NW 87<sup>th</sup> Avenue to reach the Miami Gardens Park-and Ride via Miami Lakes. The NW 72<sup>nd</sup> Avenue alignment also serves the largest concentrations of job densities within the study area.
- 12) Population Focus** – a custom route was designed to connect the major population density clusters within the study corridor. This alignment would run from NW 12<sup>th</sup> Street to NW 107<sup>th</sup> Avenue to NW 74<sup>th</sup> Street, then turn east to NW 87<sup>th</sup> Avenue before running north to NW 122<sup>nd</sup> Street and cutting back north at NW 97<sup>th</sup> Avenue. Thanks to the east and west switchbacks in this route, it touches upon the largest population centers in Doral, Hialeah and Hialeah Gardens.

## 4. Corridor Conditions Analysis

This chapter analyzes the Northwest Corridor's current conditions. The corridor's character is assessed through an evaluation of the socioeconomic conditions, travel characteristics and origin-destination patterns, existing transit services, and ongoing public and private investments.

### Socioeconomic Conditions

Current and future socioeconomic conditions are assessed in this section. Geographic Information System (GIS) maps were prepared that measure a number of characteristics of the corridor to understand potential transit demands within the study area. With the exception of the land use assessment map, each of the proposed corridors is depicted out on the maps in this section so that the strengths and weaknesses of each of the evaluated routes can be better understood. The following socioeconomic conditions were evaluated:

**Existing Land Use** – using Miami-Dade County shapefiles, existing and uses were mapped to identify current development patterns.

**2010 and 2040 Population Density** – using Southeast Florida Regional Planning Model (SERPM) data, population density was mapped on a Traffic Analysis Zone (TAZ) level for 2010 and 2040.

**2010 and 2040 Employment Density** – SERPM data was used to identify present and anticipated future employment concentrations within the corridor

**Transit Propensity** – several factors were combined to determine transit dependence and propensity within the study corridor. Factors such as youth (under 18) and elderly (over 65) populations, low-income and low-vehicle households were combined to identify patterns where transit service is needed most and where it is anticipated to be needed in 2040.

### Land Use

The Northwest Corridor contains a mix of development land use activities. The middle core is predominantly industrial, surrounded by residential uses to the north, and increasingly, more mixed use, and transit-oriented development projects within the City of Doral.

The northern end of the corridor, although currently undeveloped, is expected to undergo a significant transformation through the implementation of two large-scale projects. The first project is the American Dream Miami mega-mall, theme park and hotel. Occupying 174 acres, American Dream is a \$4 billion development with a proposed 3.5 million square feet of retail space and would be the largest mall in America. Just south of the mall, 337 acres are being proposed as a business park by the Graham Companies. The Miami-Dade County Board of County Commissioners approved both project's rezoning requests in May 2018. Construction on each of these projects is anticipated to begin in the early 2020s.

Land use within the study area is predominantly residential on the northern side, which transitions into a mix of commercial and industrial within the middle portion of the corridor. South of Medley, land use shifts from industrial to multi-family and single-family housing, and more commercial and industrial mixes. Large tracts within the central part of the corridor also contain quarries, vehicle storage lots, and landfills. A summary of the land use types within the corridor is depicted in Figure 10. Each rectangle depicts the share of each land type within the study corridor. Land uses on the corridor are depicted on Map 19. Overall, industrial land use is the current predominant land use type, followed by water bodies, and vacant land. Single family is the largest residential share at eight percent.

The land uses along the corridor offer opportunities, but also challenges for supporting a rapid transit service. The industrial core in the middle of the study area contains a mix of uses that are not transit-supportive. These include quarries, landfills, and warehouses. Large scale cement plants and quarry facilities dominate the central portion of the corridor. These facilities currently impede several arterials from completing north-south connections through the study area. NW 107<sup>th</sup> Avenue, for example, ends at NW 106<sup>th</sup> Street at the southern end of the Titan America cement manufacturing plant, shown in Figure 11.

The opportunities for transit-oriented development are more apparent on both the north and south ends. Doral is undergoing a transformation from industrial and vacant and agricultural land uses to mixed-use, commercial and residential land uses. To the north, Hialeah and Hialeah Gardens both contain high-density residential uses, while the Graham Property and American Dream Miami parcels in unincorporated Miami-Dade County have the potential for being transit supportive as well. The development plans for both the Graham and American Dream facilities are explored in further detail later in this report.

Figure 10 - Distribution of land uses

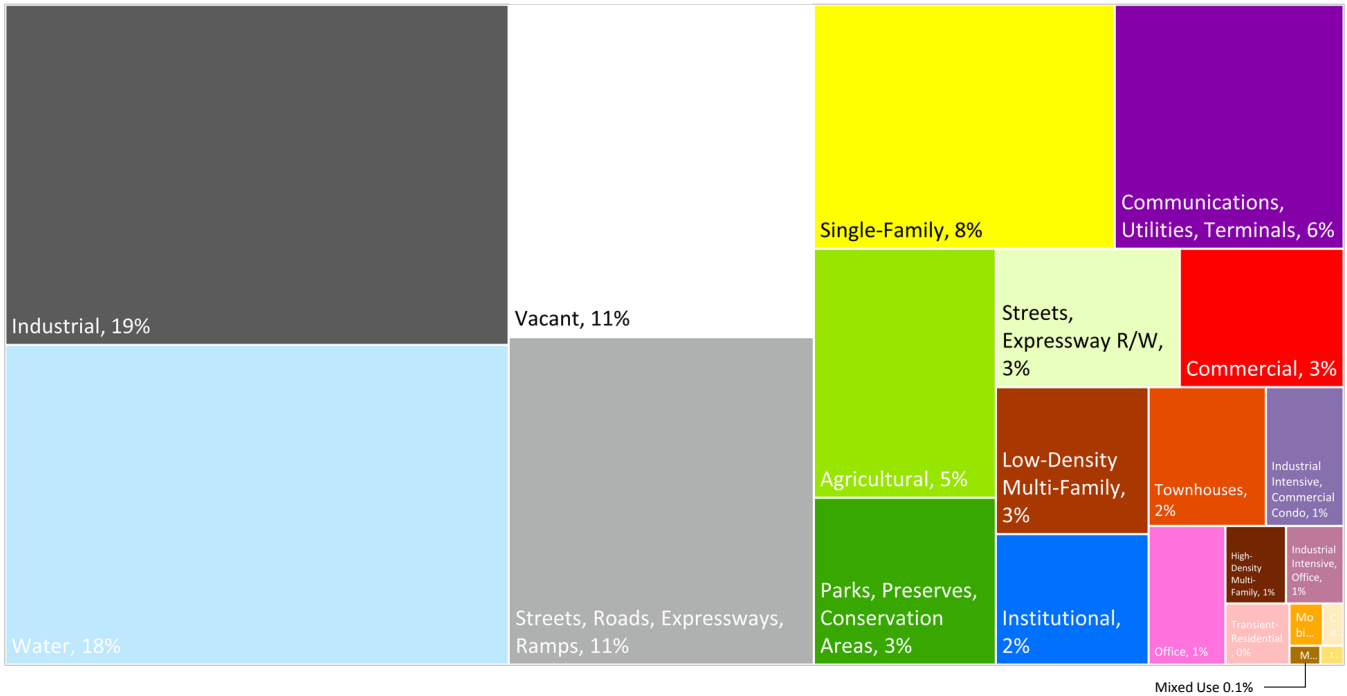
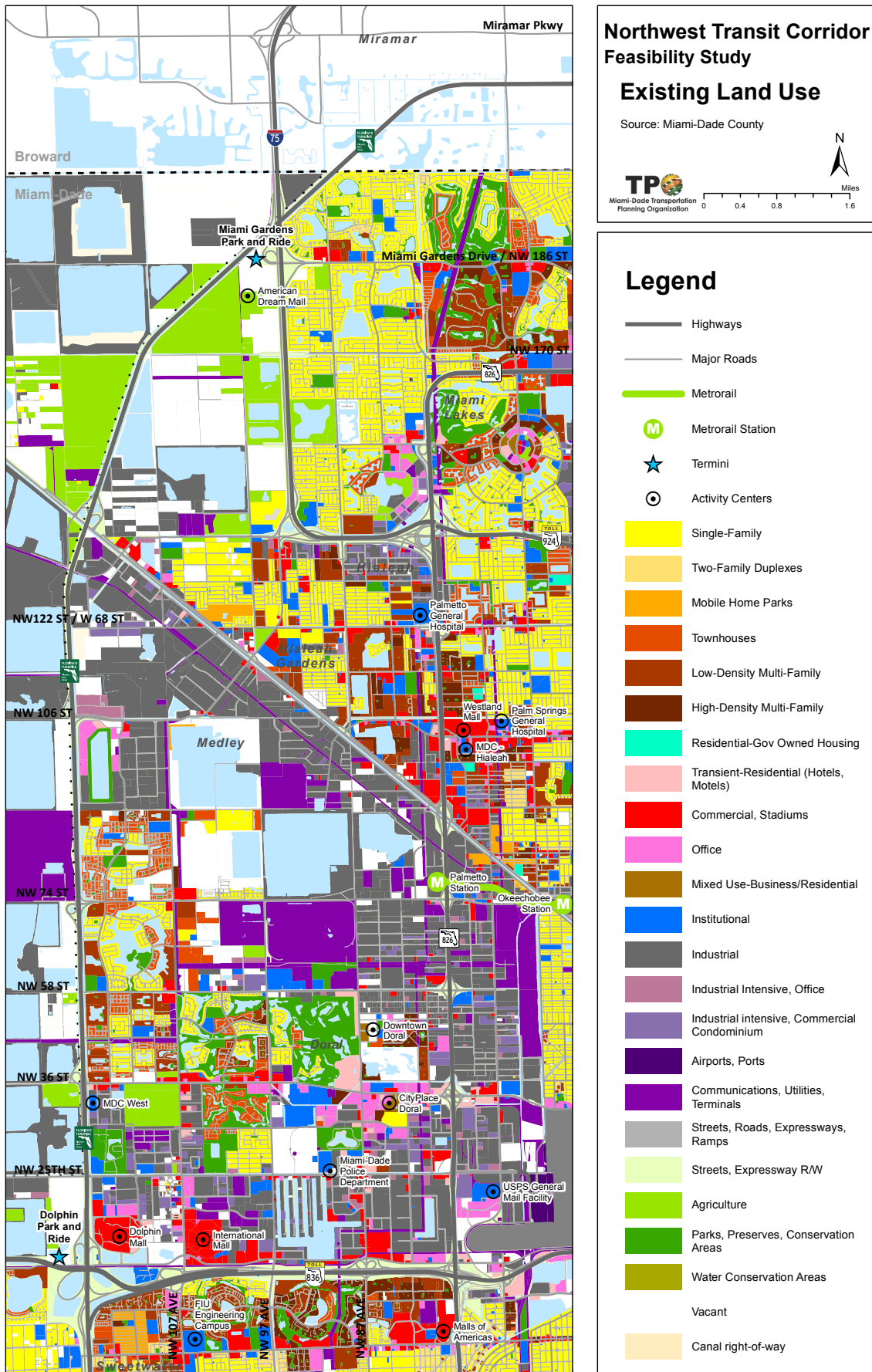


Figure 11 - Titan America Cement Plant





Map 19 - Existing Land Use



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## Population Density

This section explores the current (2010) and future (2040) population densities on the NW Corridor. These are depicted on the following two maps - Map 20 and Map 21. Identifying where current population density exists and where it is anticipated to increase over the next 20 years. Developing a working understanding of this characteristic of the corridor will provide a useful benchmark in identifying viable corridors for new transit corridors.

### 2010

Population density along the NW Corridor is depicted alongside the proposed corridors. In 2010, population was largely concentrated in Hialeah and Hialeah Gardens. Large residential development projects have emerged in recent decades in northwest Doral, which are also captured on Map 16, between NW 90<sup>th</sup> Street and NW 36<sup>th</sup> Street. Population density began to emerge in Downtown Doral, a hub which is projected to experience further population growth in the coming years as new projects come online.

Large pockets of the study corridor are notable for an absence of population density. North and eastern Doral, and all of Medley contain no population density. These areas are comprised of industrial and commercial land uses. The northern end of the study area, which is currently vacant, also contains no population density.

### 2040

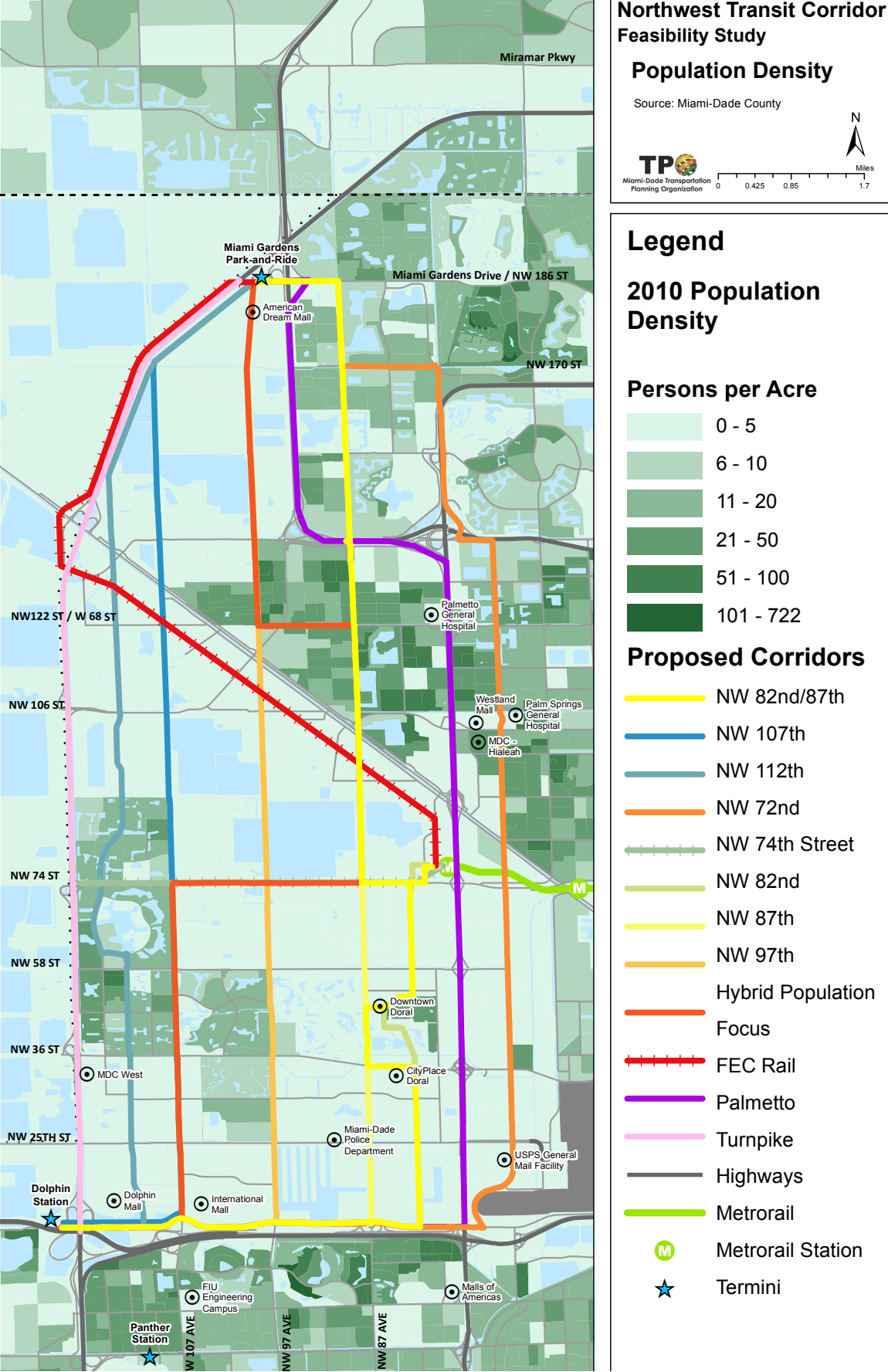
With significant stretches of vacant land, the Northwest Corridor experiences population density growth in 2040. Three pockets of growth are particularly noteworthy:

- 1) New housing construction between the Palmetto Expressway and I-75 to the west of Miami Lakes and south of the American Dream/Graham Property development sees a density increase. Field observations conducted during the course of this study affirm this observation, as new housing is currently under construction here.
- 2) North and west Doral is currently undergoing a significant housing construction boom. Several residential housing projects are under construction.
- 3) Downtown Doral and City Place Doral. This zone is noteworthy due to the lack of population density in the immediate surrounding areas to the node. Doral is introducing walkable, mixed-use development to this section of the city, however in 2040, the model does not anticipate this activity to trigger subsequent density in the immediate surrounding areas.

Certain pockets of the study corridor are not expected to experience much additional increases in population density. The Hialeah neighborhoods that fall within the study area are an example. These areas likely do not see much increased density because they have been built out.

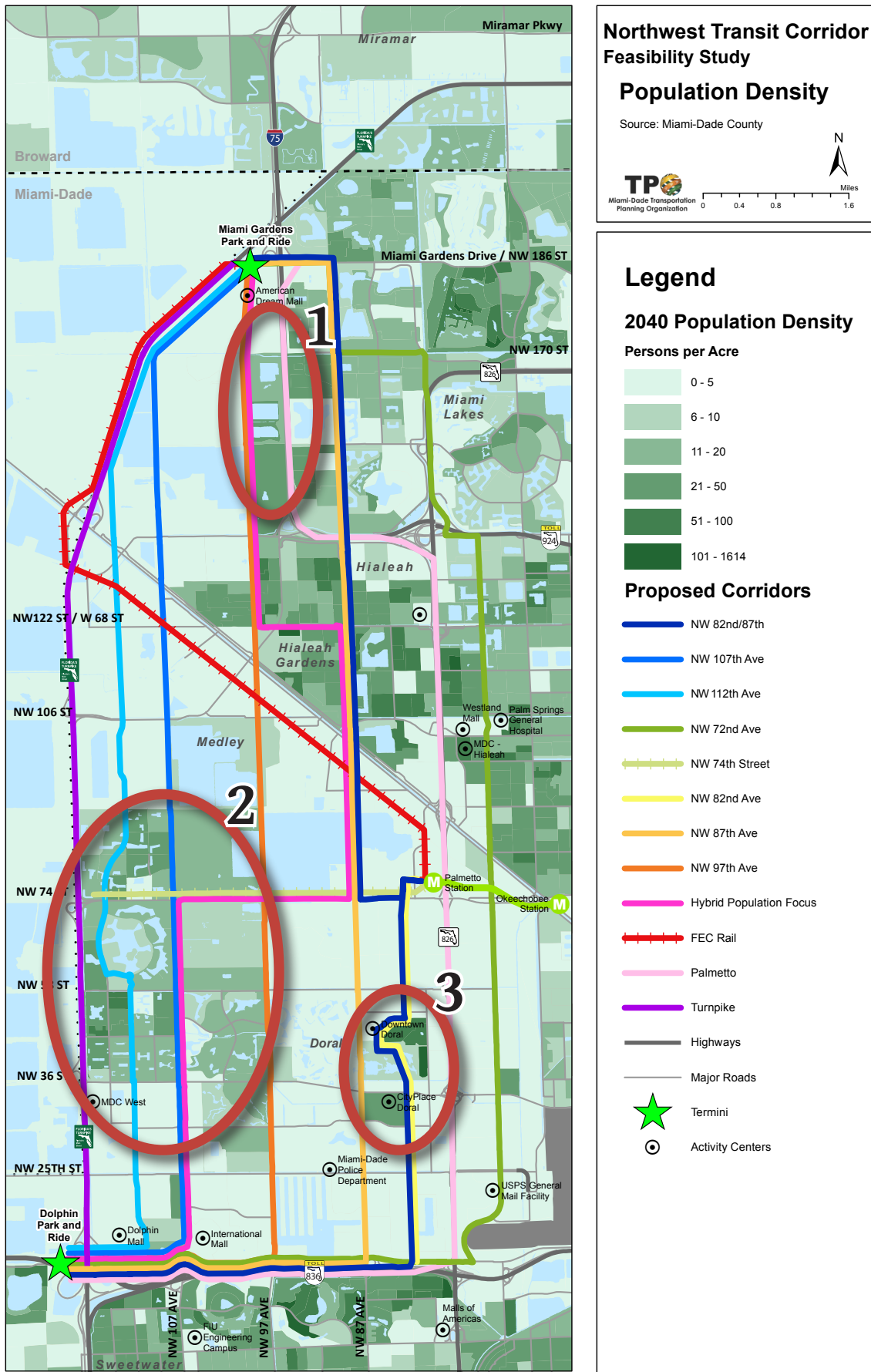
The American Dream/Graham Property triangle at the north end of the study area does not register any anticipated increased population density, despite proposals for the construction of 2,000 new residential units. This increase in density is not included because the projects proposed for this area have not yet been approved and remain in the permitting stages, therefore they are not included in the SERPM 7 model.

Map 20 - 2010 Population Density





Map 21 - 2040 Population Density



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## Employment Density

The employment density depicted on the following two maps provides a snapshot of potential transit trip destinations within the study corridor in 2010 and 2040. As with the employment density maps, these maps depict one characteristic of travel demand to help formulate a working transit corridor vision for the study area.

### 2010

Map 22 depicts the 2010 Employment Density on the Northwest Corridor. The employment density in 2010 is concentrated primarily along the expressways. Concentrations are noted in south and central Doral along the Dolphin Expressway, along the Palmetto Expressway, and near two hospitals in Hialeah. Dolphin and International Mall also register some density. Some density is also registered in existing office corporate parks.

Job concentration is generally diffuse within the study area, however, because much of it is spread out. Medley, for instance, does not appear on this map, even though it is a noted jobs center. However, as these jobs are frequently situated in warehouses, the concentration does not register in the analysis

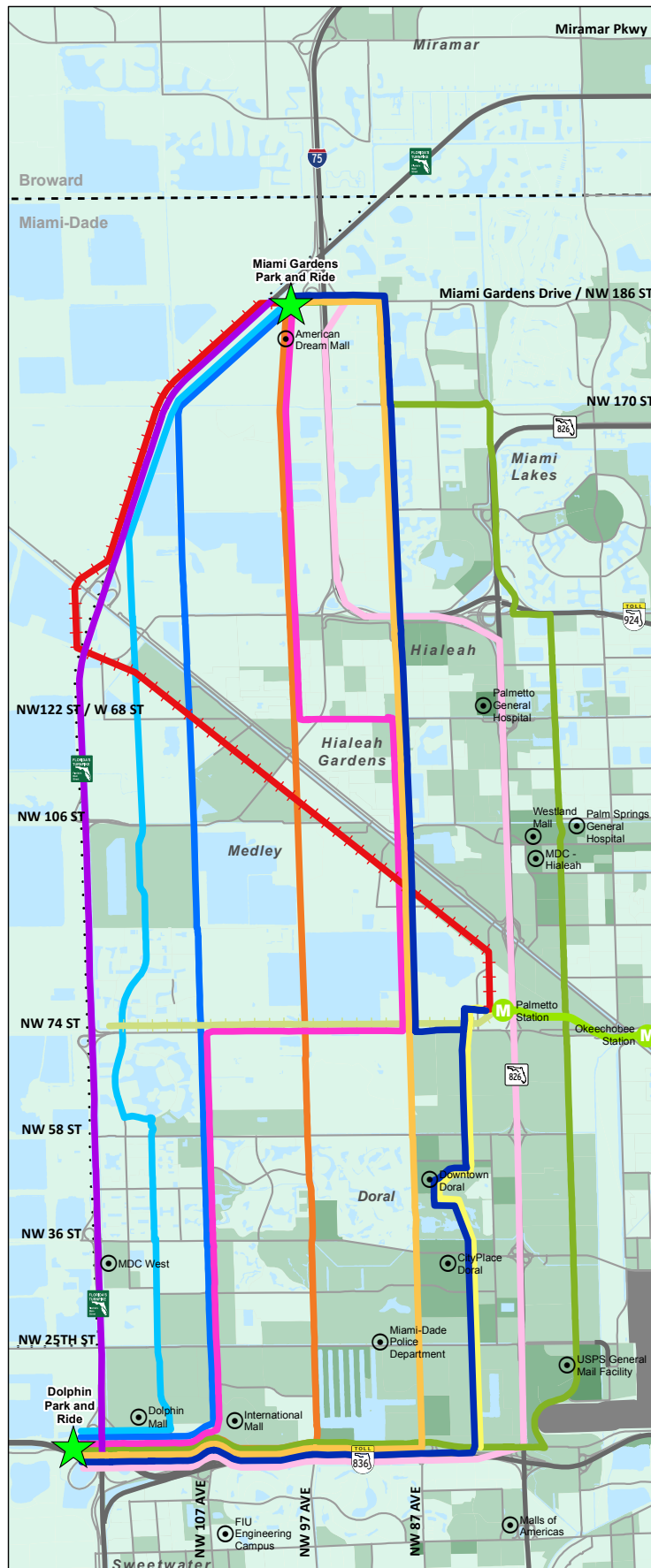
### 2040

Map 23 depicts the anticipated employment density in 2040. 2040 employment density factors some changes to the 2010 dataset. Two areas are particularly noteworthy in this analysis.

- 1) Density throughout Doral increases in 2040 relative to 2010. This general increase is observed throughout the study area, but appears to be especially concentrated in Doral.
- 2) The tract immediately to the south of the American Dream triangle, sees an increase from between zero and five jobs per acre to between six and twenty. Several new warehouses, some of which are already under construction, are planned for this part of the study area, which accounts for the density increase.

Similar to the 2040 population estimates, the anticipated employment growth for the north end of the study corridor at The Graham Properties and American Dream Miami are not factored in this analysis. This increase in density is not included because the projects proposed for this area have not yet been approved and remain in the permitting stages, therefore they are not included in the SERPM model.

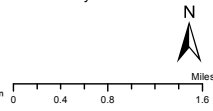
Map 22 - 2010 Employment Density



## Northwest Transit Corridor Feasibility Study

### Employment Density

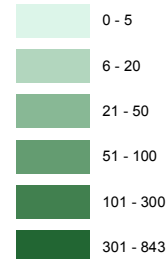
Source: Miami-Dade County



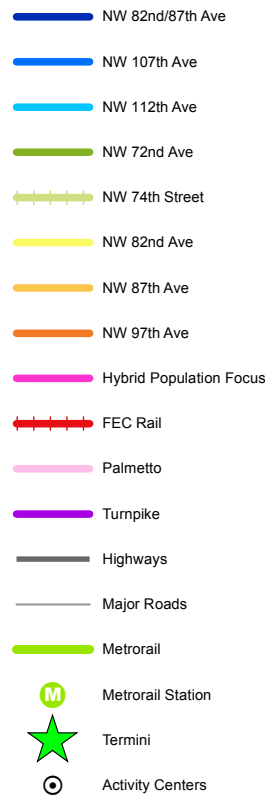
## Legend

### 2010 Employment Density

#### Jobs per Acre

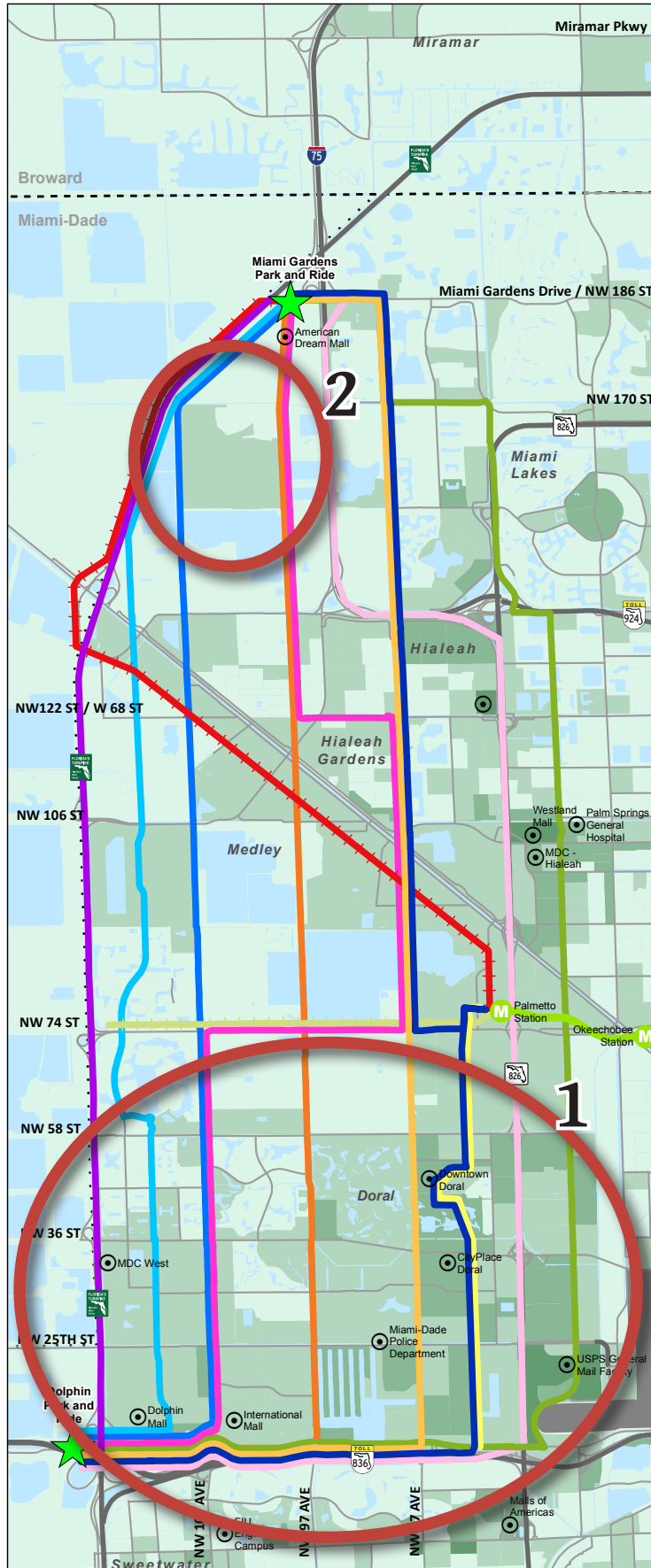


### Proposed Corridors





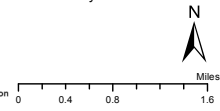
Map 23 - 2040 Employment Density



## Northwest Transit Corridor Feasibility Study

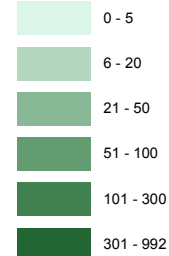
### Employment Density

Source: Miami-Dade County

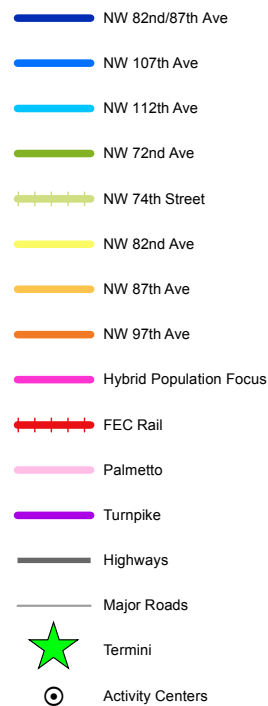


## Legend

### 2040 Employment Density



### Proposed Corridors



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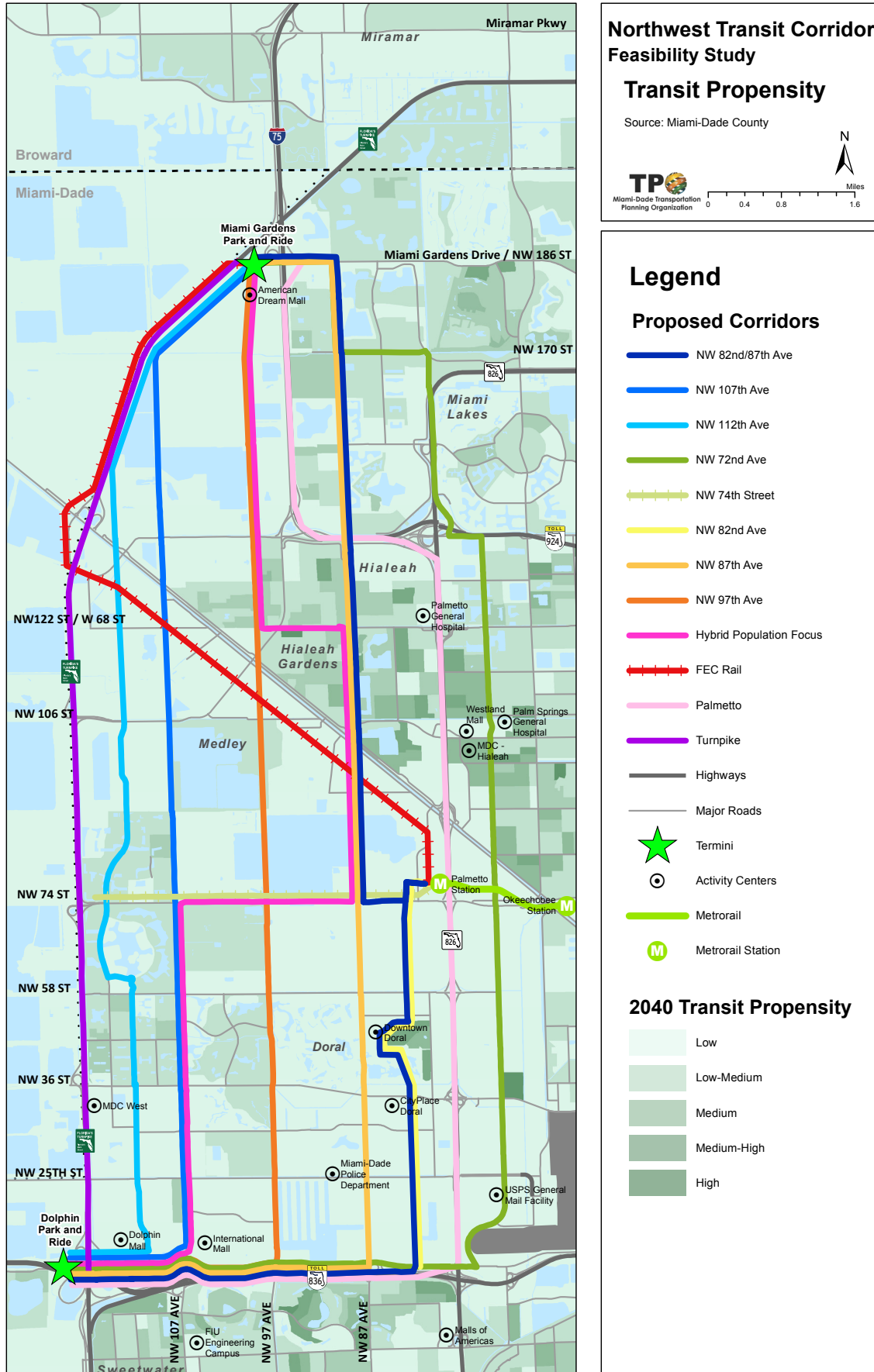
## Transit Propensity

The transit propensity analysis is conducted to identify areas within the study area that contain greater concentrations of individuals and households that are more transit dependent. Transit dependent characteristics were derived from the SERPM 7 TAZ dataset. These characteristics were as follows:

- Population Density (under age 18)
- Senior Population Density (65 and over)
- Low income households (earning less than \$25,000)
- Low-car vehicle (households where there are more employees than vehicles)

Each of these measures was weighted equally and combined to create Map 24. The transit propensity patterns are generally similar to the population density patterns observed on the previous maps. Concentrations of transit-dependent individuals reside throughout Hialeah and Hialeah Gardens, while additional pockets exist near Downtown Doral. Also noteworthy are where transit-reliant populations are absent. Despite the residential concentrations in Miami Lakes and the northwest corner of Doral, these areas do not stand out on the map.

Map 24 - Transit Propensity





# Origin-Destination Analysis

To understand the daily traffic flow and trip patterns within the Northwest Study Corridor, the study team defined 54 districts that formed the basis of the origin-destination analysis. These districts are depicted in Map 25. Out of the 54 districts, 26 districts (shown in cyan colored boundaries) make up the corridor study area.

The 54 districts encompass an area stretching between SW 88<sup>th</sup> Street to the south, and to Pembroke Pines-Miramar to the north. The western boundary of the analysis zone was bordered by the HEFT, and the eastern extent reaches I-95. To facilitate a granular analysis of the travel patterns, the districts vary in size. This enables a more refined assessment of the direct study corridor while still including relevant regional data from the broader analysis area. The districts are smaller in size near the proposed corridor and larger as one moves away from it.

Local knowledge of activity centers, important trip producers and attractors was taken into consideration when creating the districts. This was done to separate major points to better ascertain where trips begin and end. Furthermore, the boundaries of districts correspond to the one or several micro analysis zones (MAZ) as defined in the South Florida’s travel demand model (SERPM 7).

SERPM validates and forecasts trips by southeast Florida residents that start and end within the region. It models individual and joint travel choices with a high degree of behavioral realism. In short, the model produces details of individual trips including travel time, mode, and location. Spatial information, such as location details, are delineated by MAZs.

SERPM produces trip counts at the MAZ level, which is highly granular. Thus, MAZs were generalized through a geo-process analysis in a GIS software to the more broadly defined districts. The project team wrote a custom script to obtain origin-destination trip flows on district levels.

The trips obtained through this analysis include a total daily flow, excluding for bicycle, pedestrian, taxi and school bus-based trips. Higher trip flows indicate more movement between pairs of districts, which suggests more demand could be met by providing a mass transit alternative. The model does not account for specific paths taken, thus there is a degree of subjectivity to this analysis.

As depicted in Table 17, the combined internal and external districts create and receive a total of 4.3 million trips in 2015. Anticipating additional population and economic growth, this number grows 19 percent by 2040 to 5.1 million by 2040. As a proportion of all the trips, most of the growth is concentrated in the internal districts – 43 percent growth is anticipated between

Map 25 - Origin-Destination Travel Districts

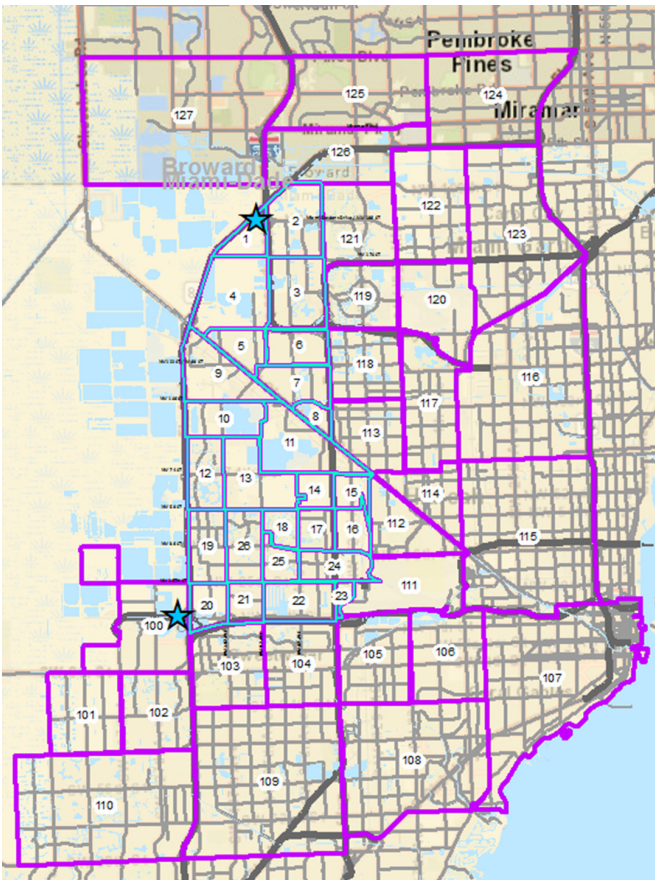


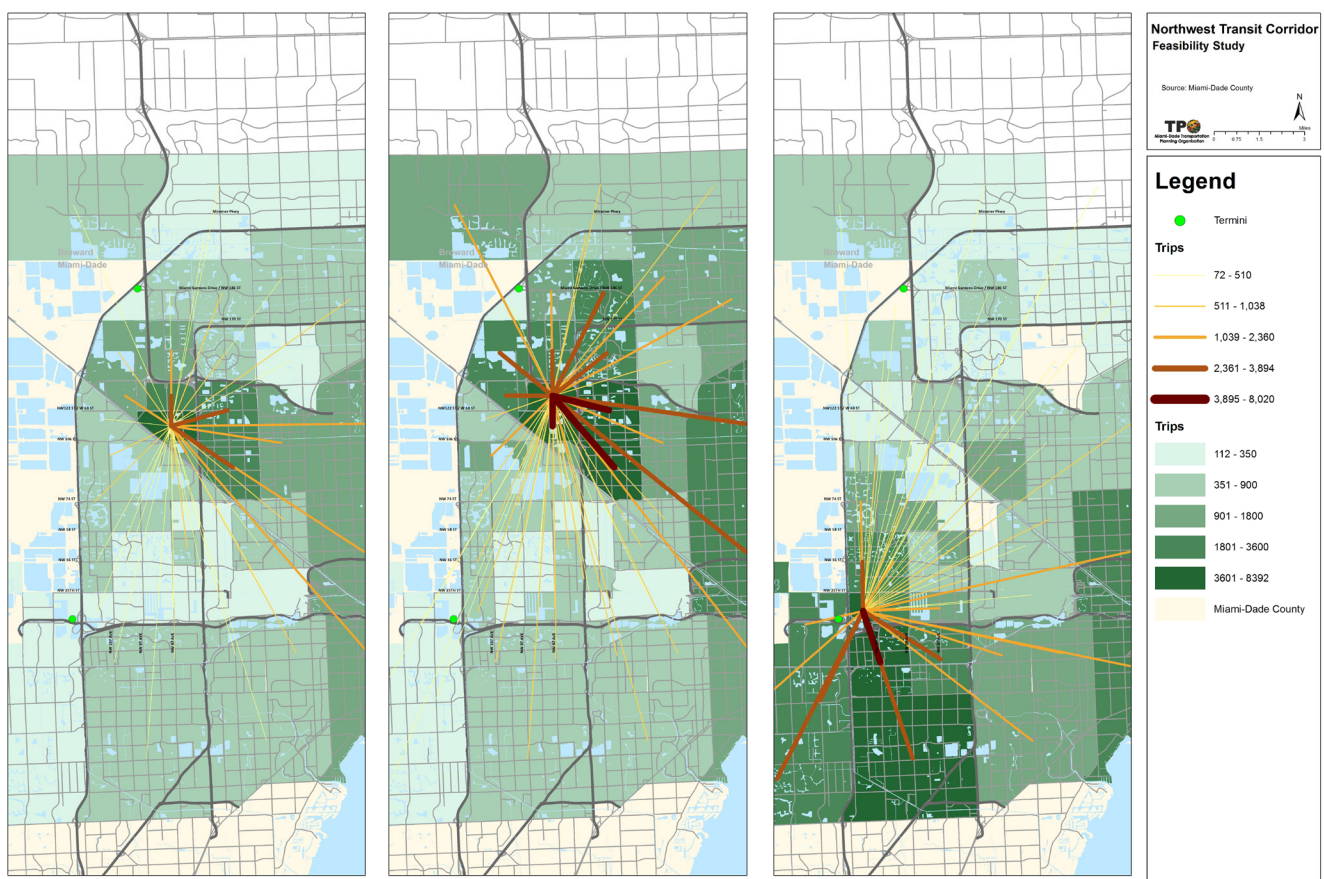
Table 17 - Trips Breakdown

Category	Year	Trips	Percent Change
Internal -> Internal Trips	2015	279,068	43%
	2040	398,226	
External -> Internal Trips	2015	381,986	26%
	2040	480,204	
Internal -> External Trips	2015	382,490	26%
	2040	482,336	
External -> External Trips	2015	3,298,650	15%
	2040	3,802,114	
Total	2015	4,342,194	19%
	2040	5,162,880	

2015 and 2040 for the internal districts, with a comparatively higher than anticipated growth for the remaining categories. This strongly suggests that the Northwest Corridor can expect to see a surge in trips, suggesting it is suitable for consideration for the implementation of a transit route.

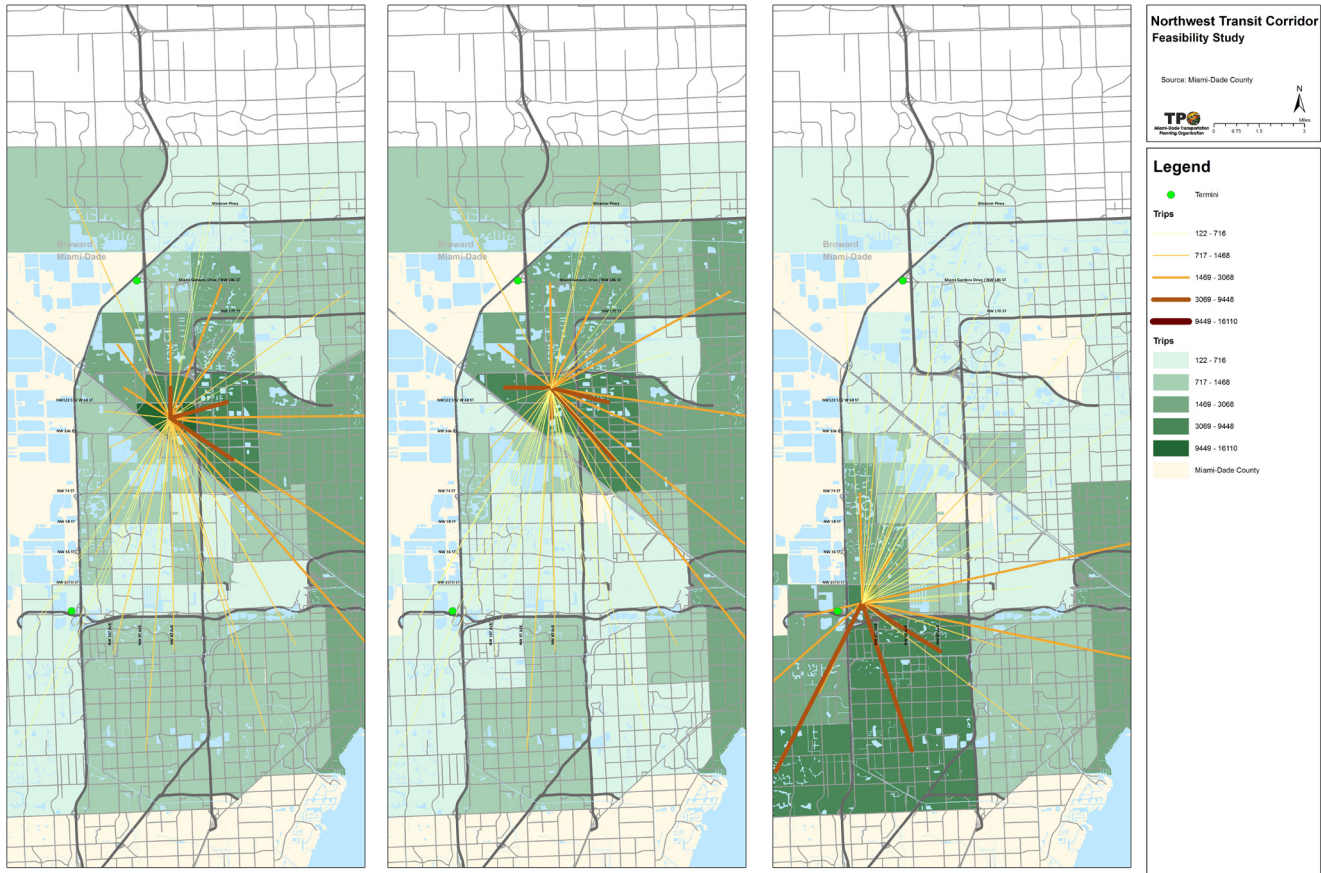
To further explore the trip patterns, the three largest trip producing and generating districts were evaluated using GIS software. The busiest districts were Districts 6, District 7, both located north of Okeechobee Road in Hialeah, and District 20, which contains Dolphin Mall. The trip patterns – shown by desire lines on Map 26 and Map 27 – from these districts are predominantly concentrated to the immediate surrounding districts. Another pattern becomes apparent, however. The combination of Okeechobee Road, a quasi-limited access roadway, and the Miami River Canal, acts as a barricade between the north and south sides of the corridor. Trips originating on the north side generally end on the north side, whereas south side trips typically end on the south side.

Map 26 - First, Second and Third Greatest Trip Generators in Study Area



Taking only internal trips into consideration, District 12, which includes the residential area on the northwest corner of the City, District 19, just north of Dolphin Mall, and District 26, International Mall, are also big contributors to overall trips in the corridor. Hence, a transit line connecting the Dolphin mall to Hialeah and possibly extending towards the upcoming American Dream Mall & Graham properties makes sense from the perspective of this origin-destination analysis. Potential alignments operating along NW 82<sup>nd</sup>, NW 87<sup>th</sup>, and or NW 107<sup>th</sup> Avenues would be viable transit-sustaining corridors. However, higher trip interaction among activity centers like downtown Doral, Okeechobee Metrorail Station, and Palm Spring Hospital, substantiates an imminent need to undertake a detailed study for the NW 82<sup>nd</sup> / 87<sup>th</sup> Avenue corridor.

Map 27 - First, Second and Third Greatest Trip Receivers in Study Area





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## 5. Corridor Refinement

An evaluation system was developed to refine the analysis from the initial 12 corridors to a focused set of two prime candidates. To begin, an evaluation process was conducted that identifies near-term future baseline conditions within the study area. These conditions are mapped to help establish a broad understanding of what can realistically be implemented.

Subsequent to the identification of the near-term conditions, a second step is taken that produces a refined evaluation of the overview developed in Chapter "4. Corridor Conditions Analysis" In this refinement, each corridor is evaluated on an individual basis against the criteria explored in the preceding chapter so that the strengths and weaknesses of each corridor is better understood. Corridors with higher population and employment densities, those with more transit-supportive land uses will be receive a better evaluation.

Assumptions of near-future baseline conditions. Map 28 depicts the near-future transportation connections within the Northwest Corridor. This map was developed with a thorough analysis of funded 2040 LRTP and 2017 Transportation Improvement Plan (TIP) projects within the study area.

These proposed improvements identified on Map 28 include an assortment of projects, both transit and roadway related to improve and create new connections within the NW Corridor study area. The subsequent analysis utilizes these improvements as the basis for assumptions about future conditions on the corridor to help identify potential north-south transit corridors.

NW 87th Avenue between 74th Street and Okeechobee Road is a key improvement identified on this map. As a part of the construction of the new two-lane road, a bridge will be built over Okeechobee Road and the Miami River Canal.

Additional improvements are proposed at several intersections of Okeechobee and crossing streets, including Hialeah Gardens Boulevard, and NW 79th Street.

Other improvements identified on this map include improved access from the Gratigny Expressway to the HEFT, a new leg of NW 107th Avenue from NW 138th Street to (future) NW 170th Street, and several widening projects on key arterials in Doral, including NW 82nd and NW 107th Avenues. Table 18 summarizes the projects identified on Map 28.

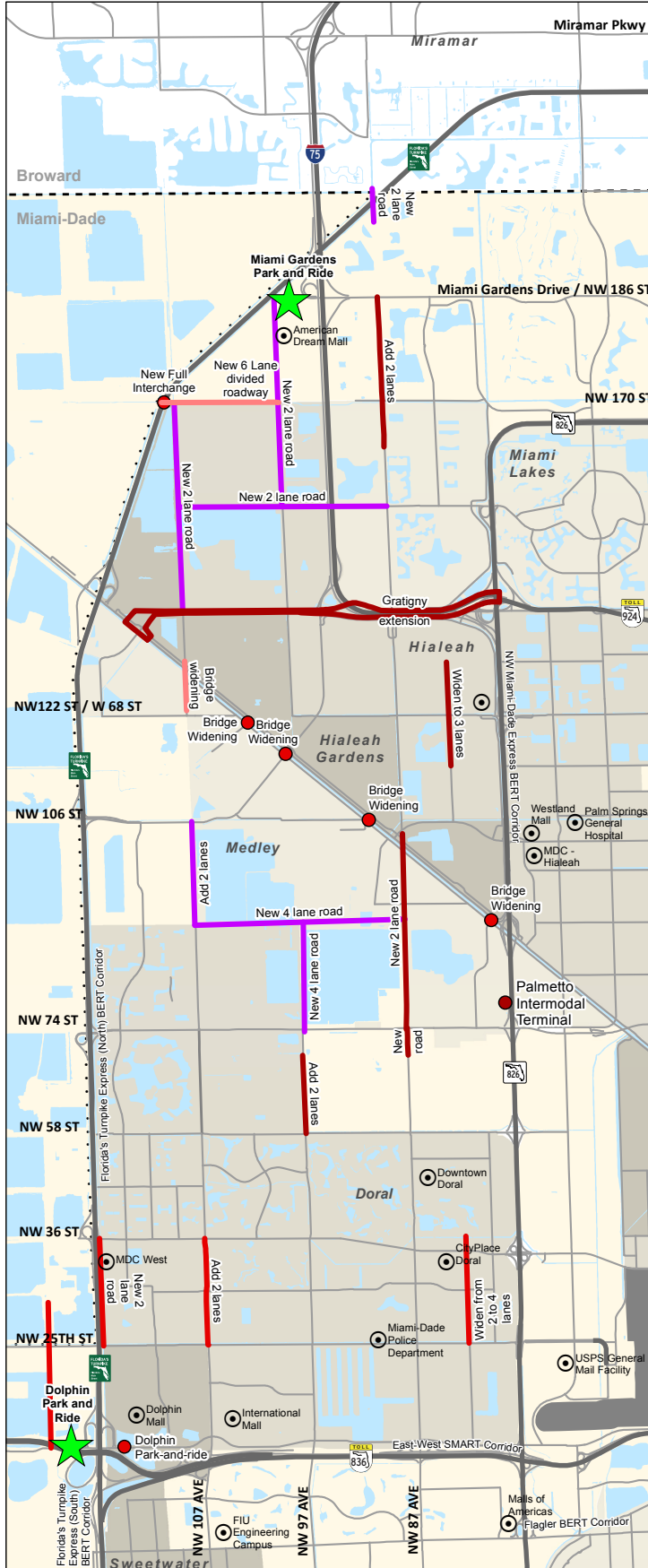
Considerable emphasis in this analysis is placed on existing public right of way availability, which means, in general, that this analysis assumes that the most likely alignment will follow an existing roadway. Most of the proposed corridors evaluated in this analysis adhere to existing roadway footprints identified in this map. However, exceptions exist. Particularly, where a corridor confronts a sudden termination of the public right-of-way, this evaluation proposes right-of-way takings to complete a route to maximize network logic for the transit service.



Table 18 - NW Corridor projects identified in TIP and LRTP

Project	From	To	Description	Source	Priority
NW 87 Ave	NW 154 St	NW 186 St	Arterial/Collector Road, Add 2 lanes	TIP	Priority I
SR 924 Extension West to the HEFT	Existing SR 924	HEFT	Expressway, Gragny extension	TIP	Priority I
NW 87Ave	NW 74 St	NW 103 St	Arterial/Collector Road, New 2 lane road	TIP	Priority I
NW 97 Ave	NW 58 St	NW 70 St	Arterial/Collector Road, Add 2 lanes	TIP	Priority I
W 24 Ave	W 60 St	W 76 St	Arterial/Collector Road, Widen to 3 lanes	TIP	Priority I
NW 87 Ave	NW 74 St	NW 103 St	Arterial/Collector Road, New road	TIP	Priority I
Palmetto Intermodal Terminal			Transit, Palmetto Intermodal Terminal	TIP	Priority I
NW 107 Ave	NW 138 St	NW 170 St	Arterial/Collector Road, New 2 lane road	LRTP	Priority I
NW 107 Ave	NW 95 St	NW 106 St	Add two lanes	LRTP	Privately Funded
NW 154 St	NW 87 Ave	NW 107 Ave	New 2 lane road	LRTP	Privately Funded
NW 90 St	NW 87 Ave	NW 107 Ave	New 4 lane road	LRTP	Privately Funded
NW 97 Ave	NW 154 St	HEFT	New 2 lane road	LRTP	Privately Funded
NW 97 Ave	NW 74 St	NW 90 St	New 4 lane road	LRTP	Privately Funded
NW 87 Ave	County Line	NW 197 Terr	New 2 lane road	LRTP	Privately Funded
NW 170 St	HEFT	NW 97 Ave	New 6 lane divided roadway	LRTP	Privately Funded
NW 107 Ave	Okeechobee Rd	NW South River Dr	Bridge widening	LRTP	Priority IV
NW 107 Ave	NW 25 St	NW 36 St	Add two lanes	LRTP	Priority II
Palmetto Metrorail Transit Ramps	Palmetto Expy	Palmetto Metrorail Station	Direct ramps for transit	LRTP	Priority IV
NW 122 Ave	NW 12 St	NW 34 St	New 2 lane road	LRTP	Priority II
NW 117 Ave	NW 25 St	NW 36 St	New 2 lane road	LRTP	Priority II
	NW 12 St	NW 41 St	Widen from 2 to 4 lanes	LRTP	Priority II
Dolphin Park-and-Ride	NW 12 St	HEFT	New park-and-ride facility	LRTP	Priority II
NW 170 St and HEFT			New full interchange	LRTP	Priority II
Hialeah Gardens Blvd/NW 116 Way			Bridge widening	LRTP	Priority II
NW 121 Way			Bridge widening	LRTP	Priority II
NW 105 Way			Bridge widening	LRTP	Priority II
NW 79 Ave			Bridge widening	LRTP	Priority II

Map 28 - NW Corridor Future Improvements



## Northwest Transit Corridor Feasibility Study

### Future Improvements

Source: Miami-Dade County



## Legend

### Planned Projects

- Privately Funded
- 2040 (Priority IV)
- 2030 (Priority III)
- 2025 (Priority II)
- 2025 (Priority II)
- 2020 (Priority I / TIP)
- 2020 (Priority I / TIP)
- Highways
- Major Roads
- ★ Termini
- Activity Centers

# Corridor Evaluation

Based upon the analysis conducted in the Corridor Conditions Analysis, each of the twelve corridors was evaluated to identify their suitability based upon the following attributes. Some of the corridors are longer than others, so it is important to ensure they are compared consistently. The criteria applied in this analysis include the following as defined:

- 2040 Population – identifying where concentrations of individuals reside within the study corridor ensures that a proposed transit service will have a user base. Population was measured to a distance of a half-mile from the corridor. It is evaluated as a measure of density (residents per acre) and as a function of the corridor's length, (population per mile of corridor length)
- 2040 Employment – establishing where individuals work will ensure that destinations for residents are adequately served. Employment is evaluated as a function of its density (jobs per acre within a half-mile of the corridor), and as a function of the corridor's length - how many jobs per mile of corridor.
- 2040 Youth and Elderly Populations – youth and elderly populations use transit at higher rates than the general population, consequently, concentrations of these demographics are sought in this analysis. This metric was evaluated as a measure of density per acre and of the corridor's length per mile.
- 2040 Limited Car Households – limited car households are defined as those that have contain more workers than vehicles. Consequently, these households are anticipated to be more reliant on transit than others.
- 2040 Network Logic – network logic is determined to be the perceived best approach for a transit route, based upon the prevalence of existing or future right-of-way, and the utilization of the most direct path between the two proposed route termini. For example, a route that runs significantly east to return west is assessed to have a lower route logic than one that runs predominantly north-south.
- 2040 Origin-Destination Demand – based upon the origin-destination analysis conducted in Chapter 4, the origin-destination analysis focuses on establishing new connections between the observed travel patterns. Routes that better serve the observed travel patterns receive a better assessment.

The purpose of utilizing the above measures is to establish a ranking of the corridors to refine the recommendations to ultimately provide guidance for selecting a corridor for future implementation.

The following section provides a detailed summary of the corridors with regards to the above classifications and a discussion of their viability for supporting a rapid transit service.

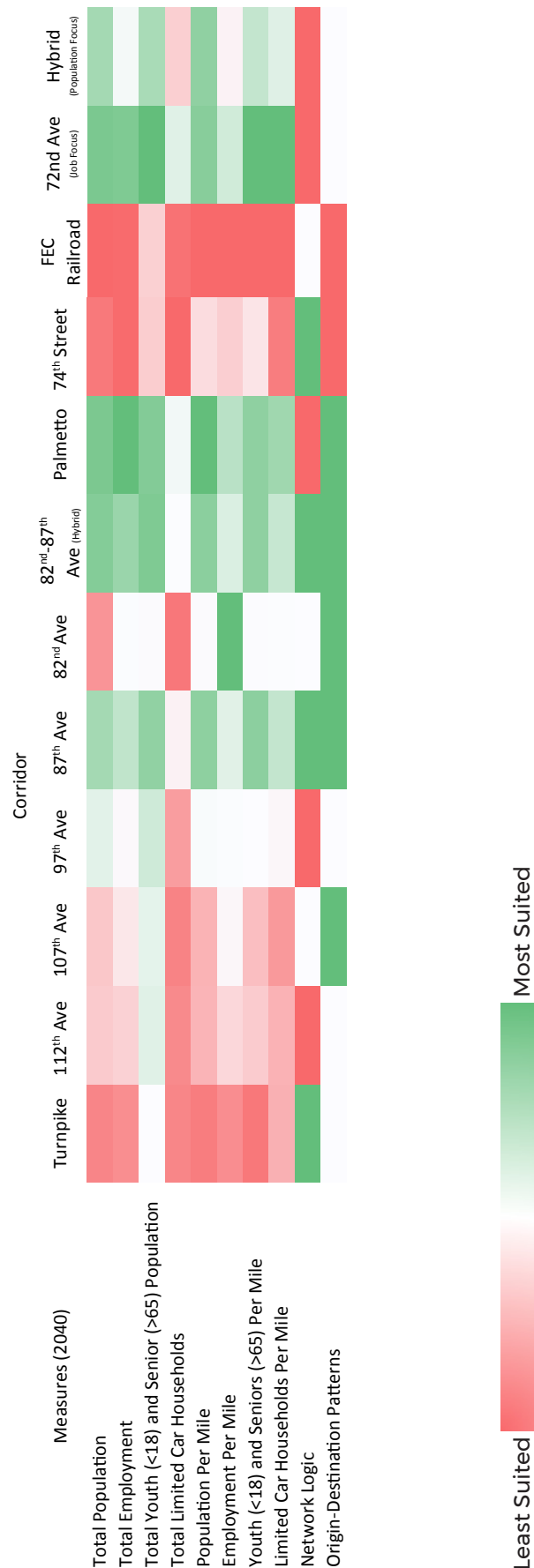
Table 19 provides a color-coded summary of the criteria used to evaluate the corridors. Based upon densities per corridor mile for the demographic measures, and a low-medium-high ranking for the network logic and origin-destination pattern criteria, the corridors were assigned colors from dark red (least suited) to dark green (most suited). Average corridors were assigned lighter colors, either light red, light green, or white.

Based upon the analysis conducted, NW 87<sup>th</sup> Avenue, NW 82<sup>nd</sup> Avenue, and a hybrid combination of the two corridors are most suited to support transit service. In addition to these corridors, despite relatively low rankings, NW 107<sup>th</sup> Avenue is also recommended for consideration as a transit-supportive corridor.

The hybrid combination of NW 82<sup>nd</sup>/87<sup>th</sup> Avenue has higher than average population per mile, employment per mile, and limited car households. The corridors also rank well for network logic. With the completion of FDOT's ongoing project, NW 87<sup>th</sup> Avenue will be poised to become a continuous north-south corridor that will provide direct access to both ends of the study corridor. NW 82<sup>nd</sup> Avenue is also an attractive option – it will have added access to neighborhoods south of the Dolphin Expressway thanks to an MDX project that is rebuilding their NW 87<sup>th</sup> Avenue exit. The corridor also serves transit-supportive uses, including corporate parks, Downtown Doral, and CityPlace. The latter two contain significant transit-oriented projects that can serve as potential anchors for a successful transit service. Finally, NW 82<sup>nd</sup> Avenue has the potential to include a near-direct link to the Palmetto Metrorail Terminal, which can further enhance the corridor's viability.

NW 107<sup>th</sup> Avenue in its present state is not an attractive transit corridor. Population and employment concentrations are lower than several other evaluated corridors. Large tracts of vacant land and a lack of

Table 19 - Comparative Corridor Evaluation Table



network connectivity in the middle of the corridor also work against this alternative's viability. However, the long-range potential of this corridor has much promise. The corridor is experiencing increasing densification on the southern end, as Doral's residential districts expand, and the northern end includes the large-scale developments that will bring new residential, commercial, retail and entertainment uses to the study area.

Moreover, the corridor provides strong links to points south of the study corridor, including Florida International University, and other mass transit projects, such as the Flagler Street BRT network. The corridor restrictions today are not permanent- active uses currently blocking corridor connectivity have finite uses, and will eventually have right of way yielded for additional transportation network completeness.



Figure 12 - Population Per Mile 2040

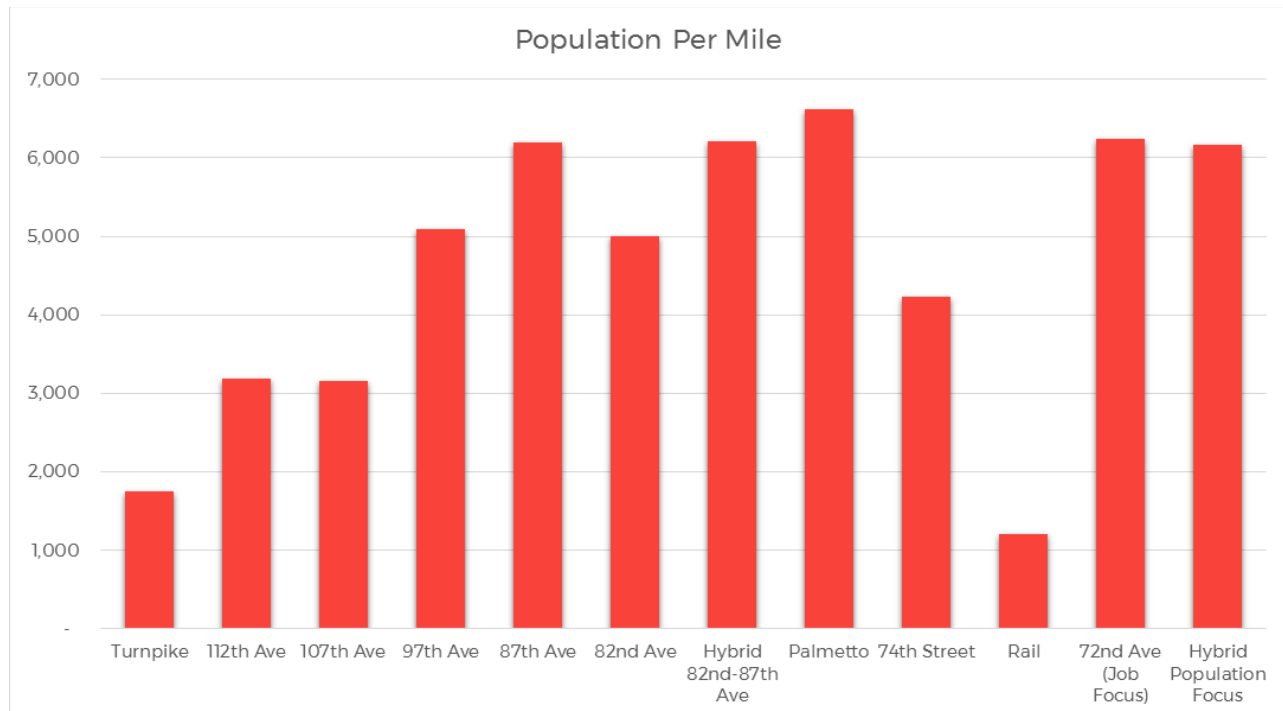


Figure 12 depicts the population per mile on the evaluated corridors. The corridors are displayed from west to east. In general, the further east a corridor is situated, the higher the population per mile. The FEC Railroad Corridor, followed by the Turnpike have the lowest concentrations, and the Palmetto, followed by NW 87<sup>th</sup> Avenue and the NW 82<sup>nd</sup>-87<sup>th</sup> Avenue Corridor have the highest.

Figure 13 - Jobs Per Mile 2040

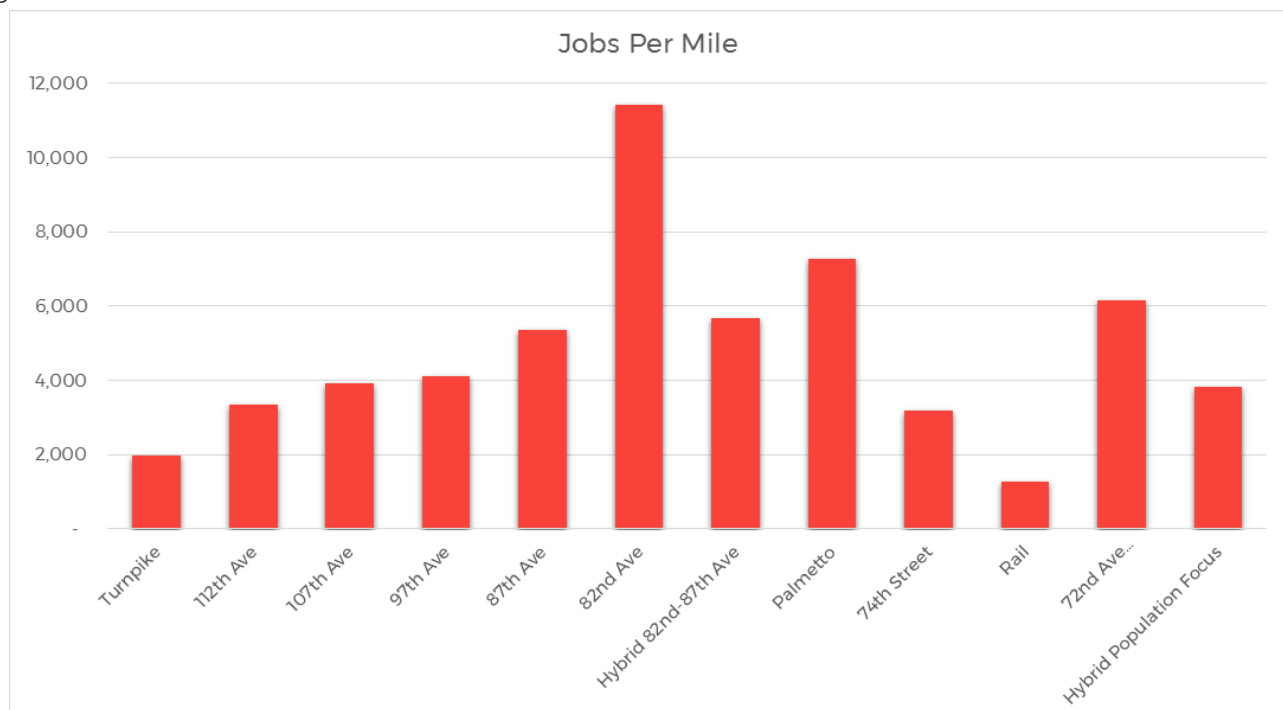


Figure 13 depicts the number of jobs per mile, as with the previous figure, the corridors are organized from west to east. Unlike the population per mile figure, the jobs per mile has a distinct spike towards the middle of the study area at NW 82<sup>nd</sup> Avenue, followed by the Palmetto and NW 72<sup>nd</sup> Avenue corridors. The FEC Railroad Corridor had the lowest job rates per mile, followed by the Turnpike.

Figure 14 - Under 18 and Over 65 Population Per Mile 2040

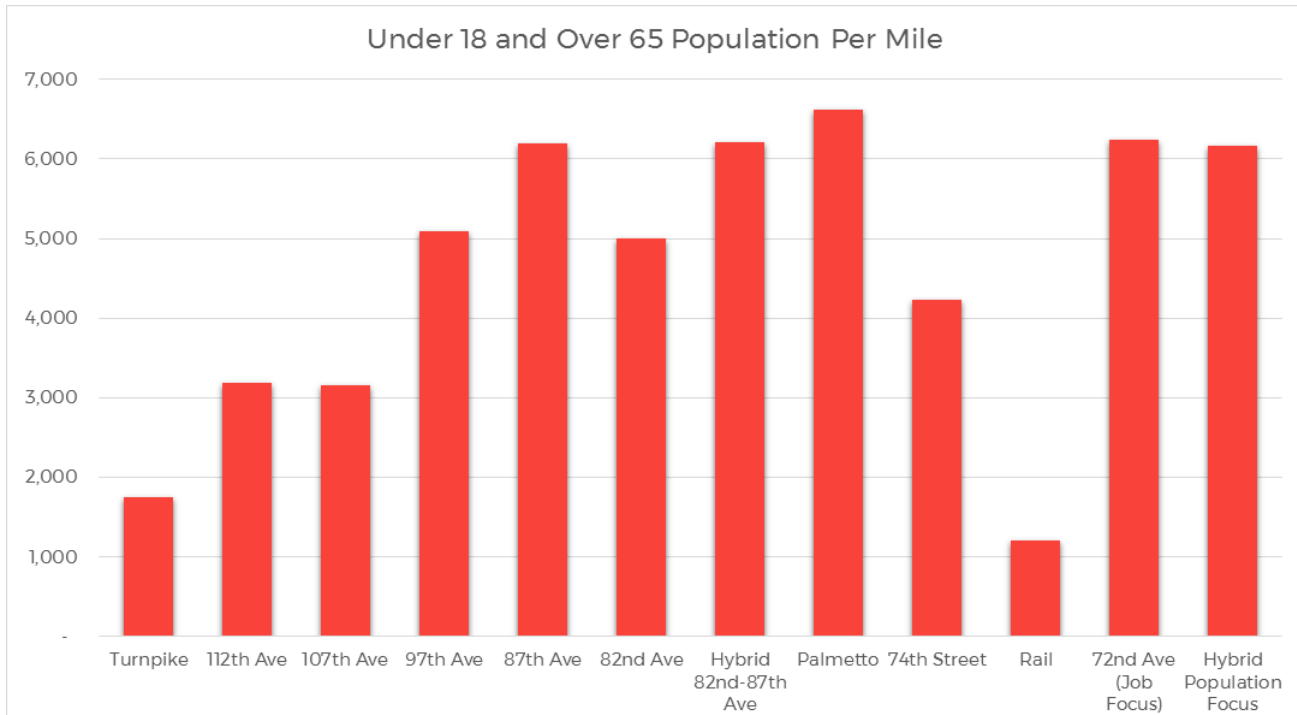


Figure 14 depicts individuals under the age of 18 and over the age of 65 on the corridor, per mile. These populations tend to be more reliant on transit than the general population. NW 72<sup>nd</sup> Avenue and NW 87<sup>th</sup> Avenue contain the highest concentrations of these groups, followed closely by the combined 82<sup>nd</sup>/87<sup>th</sup> Avenue corridor, and the Palmetto corridors. The FEC Railroad Corridor had the lowest concentrations, followed by the Turnpike and NW 107<sup>th</sup> Avenue.

Figure 15 - Limited Car Households Per Mile 2040

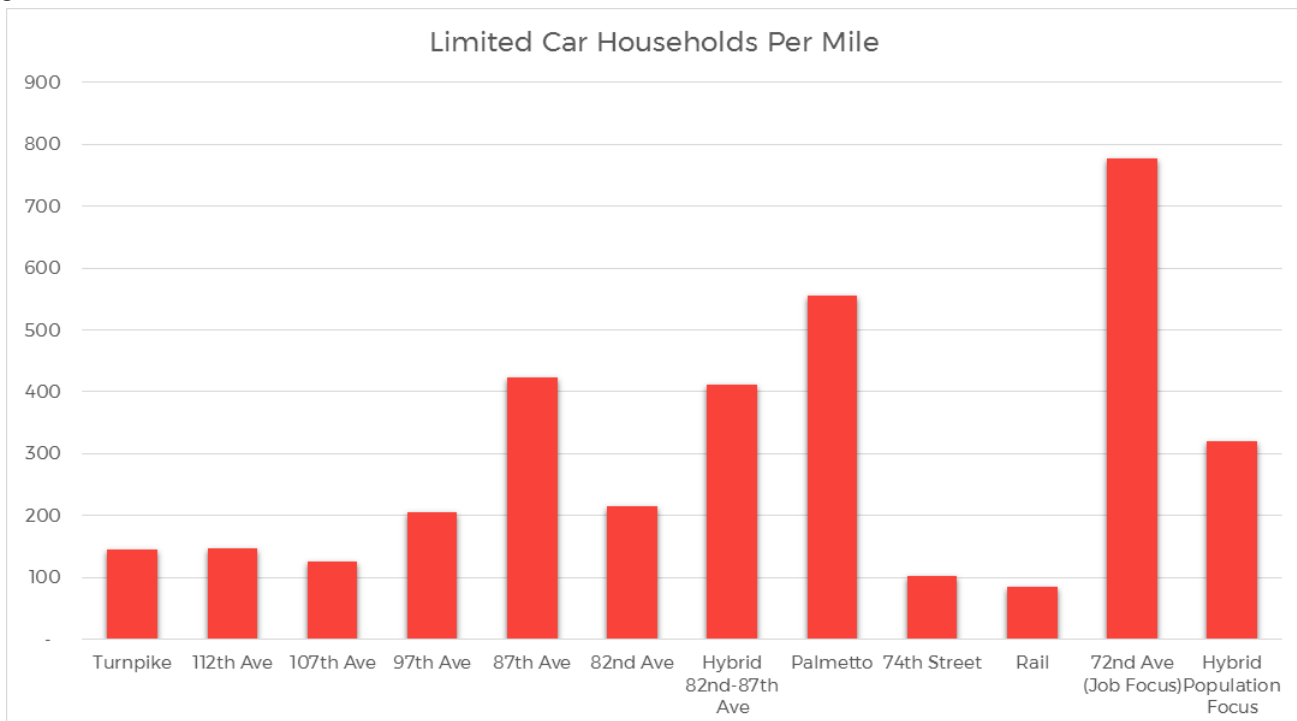


Figure 15 depicts low-car households by corridor. NW 72<sup>nd</sup> Avenue and the Palmetto corridors have the highest concentrations, with nearly 800 and approximately 550 per mile per corridor, respectively. The FEC Railroad Corridor was the lowest, followed by NW 74<sup>th</sup> Street and NW 107<sup>th</sup> Avenue.

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## Network Logic and Origin-Destination Patterns

Both the Network Logic and Origin-Destination Patterns assessments measured on a qualitative basis. The values assigned for the performance of each individual corridors for these two criteria is determined by the study team's understanding and familiarity with the corridors that has developed over the course of the study. Within the tables over the subsequent pages, a numerical value is assigned as either a one, two or three. These three numbers correspond to a low-medium-high equivalency.

A corridor with low network logic, for example, relies on transit routing that is illogical and excessively circuitous. A high score for network logic suggests a route that uses facilities that either exist or are funded for construction, and would offer the potential for a relatively direct and linear route.

Origin-Destination qualitative scores were determined through the analysis of the origin-destination analysis prepared in Chapter 4. Routes that are effective at providing service between the previously identified districts with high trip overlaps are evaluated more favorably than those that had little in common with one another.

## Individual Corridor Analysis

The following section is an analysis of each corridor. Looking at the criteria explored up to this point, this section summarizes the corridors individually, looking at their population, employment, and transit dependent populations. These metrics are used to rank the corridors against their peers to better understand how they perform within the context of the other alternatives. Based upon this evaluation, a recommendation is made to advance two corridors for further analysis.

### Florida Turnpike

With a route length of 11.6 miles, the Florida Turnpike route is the most direct between the proposed terminals. The directness earns the corridor a high network logic score, however, in the remaining categories, the corridor receives low scores. The population per mile is under 1,750, employment is a little higher, but still comes in just under 2,000 jobs per mile. The corridor possesses relatively low densities of youth and elderly populations, and very low densities of low car households. Of the eleven evaluated corridors, the Turnpike alignment ranks last in nearly categories evaluated, as depicted in Table 20. In one category – low car households per mile – the corridor ranks ninth out of 12. Overall, this corridor has the lowest population and employment densities and concentrations per mile. The proximity of the corridor to the Urban Development Boundary undermines its long-term potential to sustain a successful rapid transit corridor. Although the corridor could operate at relatively high velocities due to its location along the Turnpike, the lack of employment, population, and transit-dependent populations limits its prospects. It is not anticipated that such a route would attract significant ridership.

Table 20 - Florida's Turnpike Alignment Summary

Turnpike			
Population	20,267	Employment	22,782
Population Per Mile	1,744.7	Employment Per Mile	1,961.3
Rank	11	Rank	11
Population Density	2.8	Employment Density	3.2
Rank	11	Rank	12
Under 18 Over 65 Per Mile	606.8	Low Car Households Per Mile	145.9
Rank	11	Rank	9
Under 18 Over 65 Density	1.0	Low Car Households Density	0.4
Rank	12	Rank	8
Network Logic	3	Origin-Destination	2

Source: SERPM Model 2040 Outputs;

Network Logic and Origin-Destination scores are based on a high (3)/medium (2) /low (1) ranking determined by study team



## NW 112<sup>th</sup> Avenue

NW 112<sup>th</sup> Avenue's characteristics are summarized in Table 21. The corridor's population and employment numbers are similar, with approximately 40,000 of each. The corridor's per mile and density rankings are low – no single ranking is higher than eight out of 12 (low car households per mile). The remaining rankings are ninth. Despite being a relatively efficient corridor insofar as it provides quasi-direct service between the proposed termini, the corridor lacks right of-way North of NW 106<sup>th</sup> Street. The corridor does offer some opportunity for service on the south end, where Doral's residential district could be better interconnected with NW 12<sup>th</sup> Street and the commercial district along SR 836. The area is presently served by Doral Trolley services that meet present demand.

Table 21 - NW 112<sup>th</sup> Avenue Alignment Summary

NW 112 <sup>th</sup> Avenue			
Population	40,767	Employment	42,861
Population Per Mile	3,178.2	Employment Per Mile	3,341.5
Rank	9	Rank	9
Population Density	4.9	Employment Density	5.1
Rank	9	Rank	9
Under 18 Over 65 Per Mile	1,103.6	Low Car Households Per Mile	147.8
Rank	9	Rank	8
Under 18 Over 65 Density	1.7	Low Car Households Density	0.4
Rank	8	Rank	10
Network Logic	1	Origin-Destination	2

Source: SERPM Model 2040 Outputs;

Network Logic and Origin-Destination scores are based on a high (3)/medium (2) /low (1) ranking determined by study team

## NW 107<sup>th</sup> Avenue

NW 107<sup>th</sup> Avenue possesses below average population concentrations numbers, but average employment values, however, the corridor offers significant potential in a long-range vision. The corridor summary is depicted in Table 22. Population per mile and density is second lowest after the Turnpike corridor. Although slightly below average, employment values are higher, ranking seventh of the 12 corridors. NW 107<sup>th</sup> Avenue is assigned a medium score for network logic and origin-destination categories. The corridor's northern segment remains a blank slate in the 2040 model, which keeps the corridor's values artificially low, however, as previously discussed in Chapter 3, the northern end of the corridor is expected to undergo significant development in the coming years. This along makes NW 107<sup>th</sup> Avenue a strong candidate for eventual mass transit service.

The corridor possesses a significant disadvantage, which is that its alignment is bifurcated by the cement plant in Medley between NW 106<sup>th</sup> Street and the Miami River Canal. Right of way is expected to be ceded to the City once the quarry uses have been exhausted, but this is not anticipated to occur for two or more decades. In the short term, the corridor has significant potential on the south side, from NW 106<sup>th</sup> Street to NW 12<sup>th</sup> Street and points to the south beyond the limits of the study, where the corridor would interlink with the proposed Flagler Street BRT Corridor, and Florida International University. Additionally, the residential district of Doral is undergoing additional expansion and densification with new construction currently underway. The addition of these trips to the corridor further bolster the corridor's potential to support a rapid transit corridor that could be expanded in long-term scenario to the American Dream location terminal.

Table 22 - NW 107<sup>th</sup> Avenue Alignment Summary

NW 107 <sup>th</sup> Avenue			
Population	39,730	Employment	49,240
Population Per Mile	3,149.2	Employment Per Mile	3,903.0
Rank	10	Rank	7
Population Density	4.6	Employment Density	5.7
Rank	10	Rank	7
Under 18 Over 65 Per Mile	1,027.3	Low Car Households Per Mile	126.1
Rank	10	Rank	10
Under 18 Over 65 Density	1.5	Low Car Households Density	0.4
Rank	11	Rank	9
Network Logic	2	Origin-Destination	2

Source: SERPM Model 2040 Outputs;

Network Logic and Origin-Destination scores are based on a high (3)/medium (2) /low (1) ranking determined by study team

## NW 97<sup>th</sup> Avenue

NW 97<sup>th</sup> Avenue ranks in the middle for most categories – population of 67,300 and Employment of 54,500 is higher than any of the corridors to the west. However, the corridor lacks current or programed connections across the Miami River Canal and Okeechobee Boulevard, which hinders its network logic. However, north of the canal, the corridor has the potential to provide service to population centers in Hialeah and Hialeah Gardens. Moreover, the corridor is envisioned as a major access point to the future developments at Graham and American Dream. This corridor's summary is depicted in Table 23.

Table 23 - NW 97<sup>th</sup> Avenue Alignment Summary

NW 97 <sup>th</sup> Avenue			
Population	67,332	Employment	54,510
Population Per Mile	5,093.6	Employment Per Mile	4,123.6
Rank	6	Rank	6
Population Density	7.5	Employment Density	6.1
Rank	6	Rank	6
Under 18 Over 65 Per Mile	1,394.7	Low Car Households Per Mile	206.2
Rank	6	Rank	7
Under 18 Over 65 Density	2.1	Low Car Households Density	0.7
Rank	6	Rank	6
Network Logic	1	Origin-Destination	2

Source: SERPM Model 2040 Outputs;

Network Logic and Origin-Destination scores are based on a high (3)/medium (2) /low (1) ranking determined by study team

## NW 87<sup>th</sup> Avenue

NW 87<sup>th</sup> Avenue has relatively high population and employment densities, making the corridor an attractive option for a mass transit corridor. Moreover, the corridor has undergone significant commercial and TOD development, particularly on the southern end. The corridor has higher concentrations of youth and elderly populations, and one of the highest rates of low car households on the study corridor

Commercial and TOD hubs are beginning to emerge on the corridor, particularly in Doral. Unfavorable land uses exist adjacent to this corridor – between NW 36<sup>th</sup> Street and Okeechobee Road, the route is bordered by a golf course, a Miami-Dade County Solid Waste facility, low density warehouses, landfills, junk yards, and large man-made water bodies.

North of Okeechobee Road, the corridor would serve high density residential developments in Hialeah and Hialeah Gardens. The roadway varies from four lanes with a center turn lane in Hialeah to a four-lane road with a landscaped median and turning pockets in Miami Lakes. Right of way expansion opportunities are limited here, as the road runs parallel to residential communities on the east and a canal to the west. In Miami Lakes, single family residences abut the public right of way.

The corridor also ranks highly for origin-destination desirability and network logic. NW 87<sup>th</sup> Avenue's summary is depicted in Table 24.

Table 24 - NW 87<sup>th</sup> Avenue Alignment Summary

NW 87 <sup>th</sup> Avenue			
Population	95,354	Employment	82,684
Population Per Mile	6,191.4	Employment Per Mile	5,368.7
Rank	4	Rank	5
Population Density	9.2	Employment Density	8.0
Rank	4	Rank	5
Under 18 Over 65 Per Mile	2,186.9	Low Car Households Per Mile	422.5
Rank	2	Rank	3
Under 18 Over 65 Density	3.2	Low Car Households Density	0.9
Rank	4	Rank	5
Source: SERPM Model 2014 Outputs;	Network Logic	Origin-Destination	3

Network Logic and Origin-Destination scores are based on a high (3)/medium (2) /low (1) ranking determined by study team



## NW 82<sup>nd</sup> Avenue

NW 82<sup>nd</sup> Avenue contains the highest employment per mile of the evaluated corridors, but possesses an average population per mile concentration (ranked 7<sup>th</sup>). The corridor has a high low car household density relative to the other corridors. It possesses a moderate network logic, but a high origin-destination score.

The NW 82<sup>nd</sup> Avenue corridor offers a compelling alternative to NW 87<sup>th</sup> Avenue south of Okeechobee Road: the land uses adjacent to the corridor are more diverse, and the corridor faces fewer undesirable land uses such as landfills than its alternative to the west. The corridor would run directly through Downtown Doral, a growing TOD development, and can establish a multimodal connection with the Palmetto Metrorail Station. A previous TPO study established a vision for implementing commuter rail service on the CSX rail corridor that runs parallel to the Dolphin Expressway. This study identified NW 82<sup>nd</sup> Avenue as a promising candidate for a train station. Should this corridor be developed, this would add to NW 82<sup>nd</sup> Avenue's viability for the proposed rapid transit service. Finally, NW 82<sup>nd</sup> Avenue will soon have a new connection under the Dolphin Expressway. This increases the corridor's attractiveness, as it will establish a new link from the high density residential neighborhoods south of the Dolphin to the commercial and industrial job centers in Doral.

The proposed NW 82<sup>nd</sup> Avenue Corridor would terminate at the Palmetto Metrorail Station. Expanding the alignment to the north would require significant ROW takings, traversing of water bodies, and a route interrupted by I-75. NW 82<sup>nd</sup> Avenue's performance summary is provided in Table 25.

Table 25 - NW 82<sup>nd</sup> Avenue Alignment Summary

NW 82 <sup>nd</sup> Avenue			
Population	24,718	Employment	56,411
Population Per Mile	5,004.6	Employment Per Mile	11,421.6
Rank	7	Rank	1
Population Density	6.3	Employment Density	14.4
Rank	7	Rank	1
Under 18 Over 65 Per Mile	1,392.2	Low Car Households Per Mile	215.2
Rank	7	Rank	6
Under 18 Over 65 Density	1.8	Low Car Households Density	0.6
Rank	7	Rank	1
Network Logic	2	Origin-Destination	3

Source: SERPM Model 2040 Outputs;

Network Logic and Origin-Destination scores are based on a high (3)/medium (2) /low (1) ranking determined by study team

## Hybrid NW 82<sup>nd</sup> – 87<sup>th</sup> Avenue

This alignment offers a hybrid combination of NW 82<sup>nd</sup> Avenue and NW 87<sup>th</sup> Avenue. The route would concentrate on an alignment operating on NW 82<sup>nd</sup> Avenue in the south up until NW 36<sup>th</sup> Street, where the route would cut to NW 87<sup>th</sup> Avenue. At NW 53<sup>rd</sup> Street, where it would run through Downtown Doral before continuing north on a new cut-through of NW 82<sup>nd</sup> Avenue. An additional cut-through of the avenue is needed south of NW 74<sup>th</sup> Street on land that is occupied by automotive junk yards. At NW 74<sup>th</sup> Street, the route would run east to the Palmetto Terminal. With the multimodal link, the route would return west on NW 74<sup>th</sup> street to NW 87<sup>th</sup> Avenue, continuing north until Miami Gardens Drive/NW 186<sup>th</sup> Street to connect to the American Dream Park-and-Ride Facility northern terminus.

This route has the third highest population per mile, and the fourth highest employment per mile rankings of the evaluated corridors. It has a high network logic score, and based upon the origin-destination analysis, a strong travel demand market. It has the fourth highest low car household concentration and the third highest population under 18 and over 65 concentration. Despite not being the highest rank in any single category, it is a well-balanced corridor, with good access to employment centers, and direct connections to residential neighborhoods. This hybrid alignment's performance summary is provided in Table 26.

Table 26 - Hybrid 82<sup>nd</sup> - 87<sup>th</sup> Avenue Alignment Summary

Hybrid 82 <sup>nd</sup> - 87 <sup>th</sup> Avenue			
Population	109,528	Employment	99,756
Population Per Mile	6,215.1	Employment Per Mile	5,660.6
Rank	3	Rank	4
Population Density	9.9	Employment Density	9.0
Rank	2	Rank	4
Under 18 Over 65 Per Mile	2,168.4	Low Car Households Per Mile	411.6
Rank	3	Rank	4
Under 18 Over 65 Density	3.4	Low Car Households Density	1.0
Rank	2	Rank	4
Network Logic	3	Origin-Destination	3

Source: SERPM Model 2040 Outputs;

Network Logic and Origin-Destination scores are based on a high (3)/medium (2) /low (1) ranking determined by study team

## Palmetto

The Palmetto Corridor would provide transit service along the Palmetto Expressway/SR 826. The route ranks high for population per mile (first), and employment per mile (second). In each of the evaluated categories, the alignment's lowest ranking is fourth (under 18 and over 65 per mile). The corridor is an important north-south expressway, connecting northern suburbs to the central part of the County, and offers transfers to the Dolphin Expressway and I-75.

As far as a rapid transit service corridor is concerned, the Palmetto presents several challenges – the expressway acts as a barrier – the highway affords a limited number of crossing opportunities from the east to west. Moreover, the corridor runs near to the western ends of Miami International Airport and the Hialeah railway yard. These facilities restrict the County's street network – just one road (NW 36<sup>th</sup> Street) provides east-west access for a four mile stretch between the Dolphin Expressway and NW 74<sup>th</sup> Street. The Palmetto Corridor's performance summary is provided in Table 27.

Table 27 - Palmetto Alignment Summary

Palmetto			
Population	113,524	Employment	124,369
Population Per Mile	6,625.3	Employment Per Mile	7,258.2
Rank	1	Rank	2
Population Density	10.3	Employment Density	11.2
Rank	1	Rank	2
Under 18 Over 65 Per Mile	2,165.9	Low Car Households Per Mile	554.8
Rank	4	Rank	2
Under 18 Over 65 Density	3.4	Low Car Households Density	1.1
Rank	3	Rank	2
Network Logic	2	Origin-Destination	3

Source: SERPM Model 2040 Outputs;

Network Logic and Origin-Destination scores are based on a high (3)/medium (2) /low (1) ranking determined by study team

## NW 74<sup>th</sup> Street (Potential Metrorail Extension)

NW 74<sup>th</sup> Street was analyzed as one of two alignments that does not run predominantly north-south. This route would serve as a logical extension of Metrorail's Green Line from its current terminus to a point close to the HEFT. Land uses along this alignment are not optimal to sustain heavy rail service – the route is bordered by landfills, man-made lakes, and vacant land. Although the western end of the proposed corridor has undergone development recently, the alignment still ranks poorly on most measures.

At just 3.9 miles, this is the shortest route evaluated. Population per mile is eight out of 12, and employment is 10th out of 12. There are few low car households on the corridor – just 101.9 per mile, which ranks the corridor 11 out of 12.

The origin-destination analysis suggests this is a relatively low desirability corridor relative to other travel patterns in the corridor, however network logic is high. Much of the land parallel to the corridor is publicly owned, which could simplify the ROW acquisition process. Moreover, the Metrorail tracks at Palmetto Metrorail are aligned for an east-west expansion.

Overall, much more development is necessary on the NW 74<sup>th</sup> Street corridor, including significant density at the western end where Doral has undergone a marked construction boom in order for this alignment to be more attractive for a mass transit service. The summary for the Metrorail Extension is provided in Table 28.

Table 28 - NW 74<sup>th</sup> Street (Metrorail Extension) Alignment Summary

NW 74 <sup>th</sup> Street (Metrorail Extension)			
Population	16,451	Employment	12,328
Population Per Mile	4,233.5	Employment Per Mile	3,172.5
Rank	8	Rank	10
Population Density	5.6	Employment Density	4.2
Rank	8	Rank	10
Under 18 Over 65 Per Mile	1,253.0	Low Car Households Per Mile	101.9
Rank	8	Rank	11
Under 18 Over 65 Density	1.7	Low Car Households Density	0.3
Rank	9	Rank	10
Network Logic	3	Origin-Destination	1

Source: SERPM Model 2040 Outputs;

Network Logic and Origin-Destination scores are based on a high (3)/medium (2) /low (1) ranking determined by study team



## NW 72<sup>nd</sup> Avenue

NW 72<sup>nd</sup> Avenue is a route that ranks well in most of the socioeconomic measures; its lowest ranking is third out of the 12 corridors, and it contains the highest concentration of population under 18 or over 65 and of low car households per mile. By this basis, the corridor should be considered a prime candidate for being the preferred alignment. However, the corridor falls on the eastern side of the Palmetto Expressway, and suffers from poor connectivity to the rest of the study area. On the south end of the corridor, NW 72<sup>nd</sup> Avenue is boxed in by Miami International Airport and the Palmetto Expressway; a bit further to the north, the train yard impedes easy eastern access. At NW 138<sup>th</sup> Street, NW 72<sup>nd</sup> Avenue reaches an effective dead-end. Northward access is impeded by the Gratigny Parkway. Construction of a punch-through at this point is moot as the neighborhood immediately to the north of the Gratigny consists of water bodies and single family homes developed in a suburban typology. NW 72<sup>nd</sup> Avenue is summarized in Table 29.

Table 29 - NW 72<sup>nd</sup> Avenue Alignment Summary

NW 72 <sup>nd</sup> Avenue			
Population	113,659	Employment	111,855
Population Per Mile	6,245.4	Employment Per Mile	6,146.2
Rank	2	Rank	3
Population Density	9.7	Employment Density	9.6
Rank	3	Rank	3
Under 18 Over 65 Per Mile	2,473.5	Low Car Households Per Mile	777.2
Rank	1	Rank	1
Under 18 Over 65 Density	3.8	Low Car Households Density	1.7
Rank	1	Rank	3
Network Logic	1	Origin-Destination	2

Source: SERPM Model 2040 Outputs;

Network Logic and Origin-Destination scores are based on a high (3)/medium (2) /low (1) ranking determined by study team

## Hybrid Population Focus Alignment

This alignment consists of a zig-zag pattern, laid out to intentionally capture as much population density as possible on the corridor. While it accomplishes this objective – that is not sufficient to outweigh several negative aspects of the corridor. The route contains low employment per mile concentrations, and low car density concentrations. Moreover, the zig-zagged aspect of the alignment means it has poor network logic. While the route ultimately serves population cores within the evaluated corridor, this positive aspect does not do enough to outweigh the excessively long commuting times that would ensue as a result of the route's length of 15.5 miles. The hybrid population focus alignment is summarized in Table 30.

Table 30 - Hybrid Population Focus Alignment Summary

Hybrid Population Focus Alignment			
Population	95,376	Employment	59,194
Population Per Mile	6,170.0	Employment Per Mile	3,829.3
Rank	5	Rank	8
Population Density	9.0	Employment Density	5.6
Rank	5	Rank	8
Under 18 Over 65 Per Mile	1,797.5	Low Car Households Per Mile	320.8
Rank	5	Rank	5
Under 18 Over 65 Density	2.6	Low Car Households Density	0.7
Rank	5	Rank	8
Network Logic	1	Origin-Destination	2

Source: SERPM Model 2040 Outputs;

Network Logic and Origin-Destination scores are based on a high (3)/medium (2) /low (1) ranking determined by study team

## FEC Railroad Alignment

The FEC Railroad alignment would operate on the existing FEC tracks that run from diagonally through the study corridor. The route is an attractive alignment, given its existence. It would avoid impacts on congested roadways, and establish a potentially high capacity railroad service with relatively low startup costs relative to new railroad construction. Right of way considerations would be limited as well.

Hialeah and Miami Lakes have expressed support for converting the rail line for passenger use. In the proposed alignment, a new spur would need to be constructed from the intersection of the HEFT and Okeechobee Road to extend the tracks to a proposed terminus at the American Dream Park-and-Ride. The land uses along the corridor are challenging from a transit-supportive perspective. Industrial land uses are dominant, and the corridor is actively used by the FEC to support the adjacent services. Each of these factors alone would complicate the establishment of this corridor for transit service. Moreover, the alignment's proximity to the Urban Development Boundary would limit its potential to support additional development, as no construction would be permitted on the west side of the corridor.

In addition to the above challenges, the alignment ranks poorly in all the evaluated socioeconomic measures. It has the lowest population per mile, the lowest employment per mile, the lowest under 18 and over 65 populations per mile, and the lowest low car households per mile of the 12 evaluated corridors. These negative aspects alone are sufficient to ensure that rail service on this alignment would likely suffer from poor ridership. The FEC Railroad alignment is summarized in Table 31.

Table 31 - FEC Railroad Alignment Summary

FEC Railroad Alignment			
Population	11,636	Employment	12,328
Population Per Mile	1,202.0	Employment Per Mile	1,273.6
Rank	12	Rank	12
Population Density	1.7	Employment Density	4.2
Rank	12	Rank	10
Under 18 Over 65 Per Mile	516.5	Low Car Households Per Mile	84.5
Rank	12	Rank	12
Under 18 Over 65 Density	1.7	Low Car Households Density	0.3
Rank	9	Rank	10
Network Logic	2	Origin-Destination	1

Source: SERPM Model 2040 Outputs;

Network Logic and Origin-Destination scores are based on a high (3)/medium (2) /low (1) ranking determined by study team

# Corridor Refinement Conclusion

Map 29 depicts a summary of the corridors evaluated so far. Of the 12 corridors depicted, two are recommended for advancement to the plan development process. These corridors are the NW 82<sup>nd</sup> – 87<sup>th</sup> Avenue combination, and the NW 107<sup>th</sup> Avenue corridor.

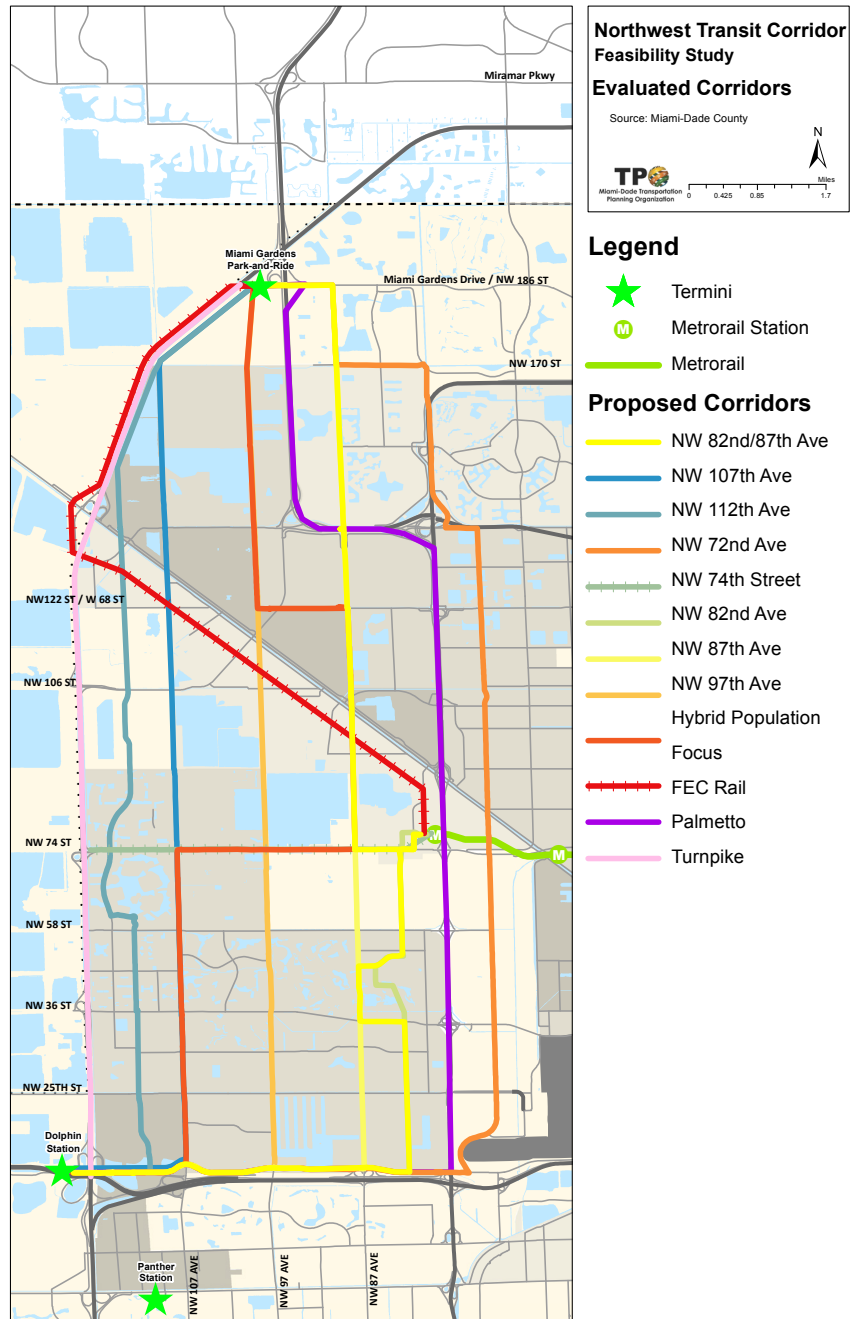
NW 82<sup>nd</sup> – 87<sup>th</sup> Avenue possesses a strong mix of land uses on the south end of the corridor, serving population and employment centers, including Downtown Doral, which has been envisioned as a Transit-Oriented Development community. The construction at this location over the past decade as brought this vision to fruition. This corridor also will soon have a new access point across Okeechobee Road, which ensures the route has a direct north-south route for a significant portion of its alignment. Moreover, the route can easily serve the Palmetto Metrorail Station, where a multimodal connection can be established to the Metrorail Green Line, and to the envisioned Express Bus Routes that DTPW has proposed to bring to this location.

On the north end, another important connection is being established through the connection of Miami Gardens Drive to the American Dream Park-and-Ride terminal near the intersection of I-75 and the HEFT.

NW 107<sup>th</sup> Avenue's potential is less apparent in the short term. The corridor remains bisected by the cement processing plant located between Okeechobee Road and NW 106<sup>th</sup> Street. The facility lies in Medley's jurisdiction, and the City anticipates the plant's closure in approximately two decades. At that juncture, right of way should be set aside to ensure roadway access that can support an exclusive transit lane continuously from NW 12<sup>th</sup> Street to the American Dream Park-and-Ride center. This alignment would help serve the commuting needs of the residential community situated in the northwest corner of Doral, and provide key links to the regional attractors at Dolphin Mall and International Mall.

The Northwest Corridor is undergoing significant changes. The corridors that are not currently recommended for advancement should be periodically monitored for future consideration for transit improvements as new development continues to be brought to the study area, and as new roadway links are constructed, and as demand dictates from a growing workforce and residential population in this corner of the County.

Map 29 - Corridors Evaluated Review





## 6. Transit System Plan Development

Map 30 depicts the proposed transit vision for the Northwest Corridor. The yellow line shows the envisioned route for the NW 82<sup>nd</sup>/87<sup>th</sup> Avenue service. This route serves several major hubs within the study corridor, including Dolphin and International Malls, CityPlace Doral, and Downtown Doral. The route also would provide transit service to the dense residential networks in Hialeah Gardens and Hialeah north of Okeechobee Road. On the north end, the route would connect to the northern terminus via Miami Gardens Drive/NW 186<sup>th</sup> Street.

The 82<sup>nd</sup>/87<sup>th</sup> Avenue alignment includes a proposed connection to the Palmetto Metrorail Station. This link is essential to ensure the route operates within and enhances Miami-Dade County's greater multimodal transportation and transit network, interlinking residents to jobs.

The blue line depicts an alternative for a longer-range vision, with rapid transit service operating on NW 107<sup>th</sup> Avenue. The route serves the two malls, and the residential district of Doral.

Overall, this alternative relies on land use changes to be viable. Both alternatives fill a service gap in north-south mobility for this region, but need enhanced east-west connectivity to reach their potential ridership. Moreover, the north end of this proposed corridor still confronts significant challenges; ROW needs to be acquired between Okeechobee Road and NW 106<sup>th</sup> Street, which is dependent on the ending of operations at the cement plant situated there.

### Regional Connectivity

The proposed transit network based on the recommended corridors is dependent on the expansion of the local transit system. A hub and spoke network of local circulators connecting to the major service to be provided on the proposed routes. These connectors are depicted by the green lines on the map. Existing transit services are also depicted here in light red (city circulators) and dark red (DTPW routes). In fact, a complementary network of circulators and DTPW routes is already operational within the study corridor. Tweaks, such as increased frequency, and route realignments will be necessary to ensure coordinated service.

### East-West Accessibility Overview

This section is an evaluation of the corridor's connectivity to the broader region, particularly to destinations and attractions east of the study area. A successful transit corridor should offer riders opportunities to transfer to intersecting routes. Existing transit services and the near-future roadway network were both discussed in Chapter 3; this section advances that analysis to explore how proposed north-south transit routes can connect with current and future east-west transit and transportation infrastructure.

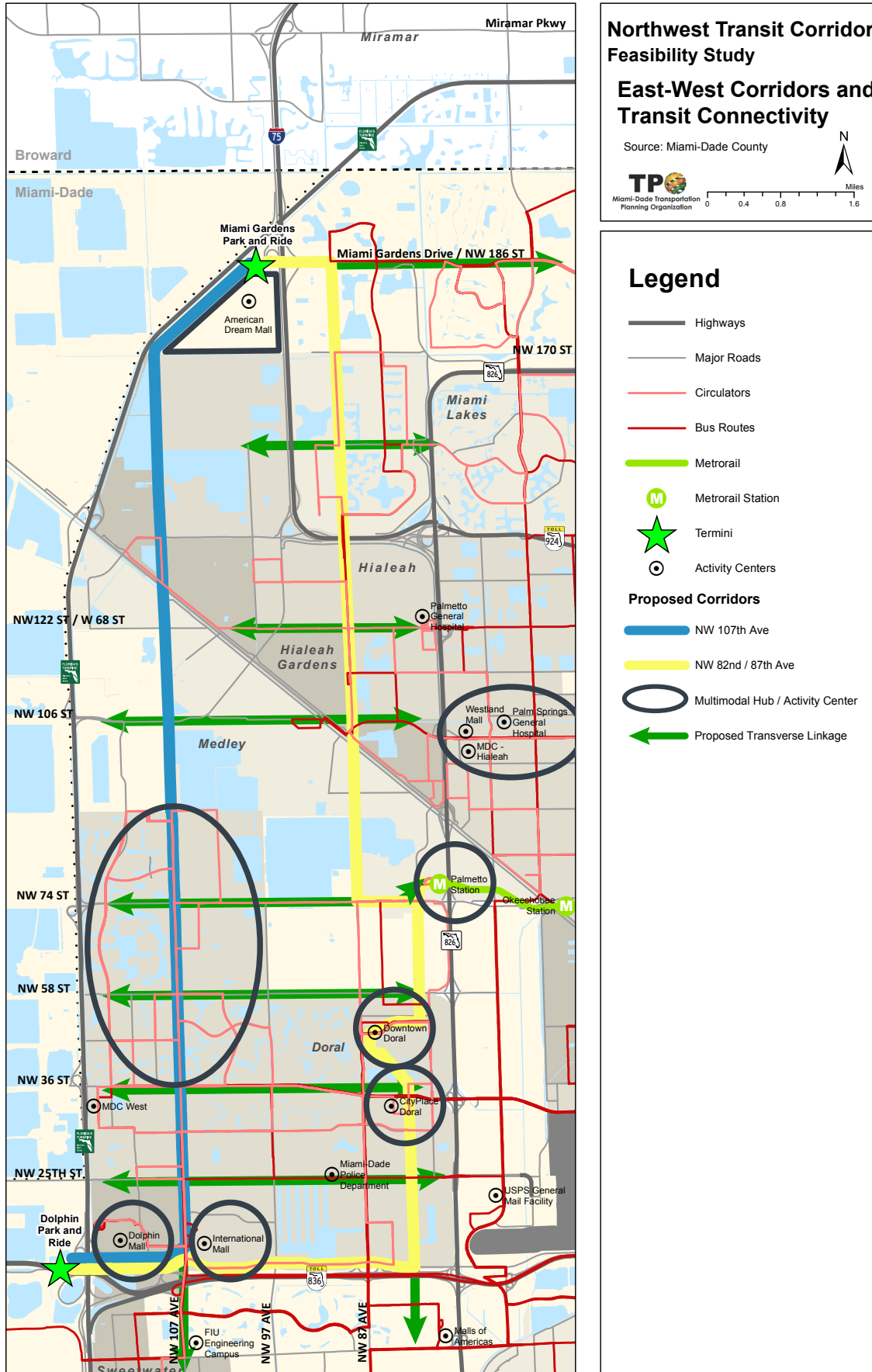
### Roadway Network Connectivity

Few east-west arterial connections exist between the Northwest Corridor study area and eastern in Miami-Dade County. Several obstacles inhibit direct connections, including at-grade expressways, water bodies, development patterns that break from the typical Miami-Dade County grid, and transportation infrastructure such as airports and rail yards.

On the north side of Okeechobee Road, the County's gridded street network is broken by a different land use development pattern. Curving streets, combined with man-made lakes, golf courses, and an intertwined network of expressways minimize east-west roadway connections. NW 183<sup>rd</sup> Street/Miami Gardens Drive is one of a limited number of roadways that provides uninterrupted access beyond a few miles. Other potential arterials nearby are interrupted by land uses at NW 67<sup>th</sup> Avenue, or by the western end of the Opa-locka Executive Airport.

Another possible corridor that offers long-distance east-west access is NW 103<sup>rd</sup> Street, which begins at NW 87<sup>th</sup> Avenue just north of Okeechobee Road on the western end, and continues east uninterrupted for 9.5 miles to NE 6<sup>th</sup> Avenue in Miami Shores. NW 103<sup>rd</sup> Street is a three-lane road that provides a combination of commercial uses and single-family housing.

Map 30 - Proposed Transit Vision for Northwest Corridor



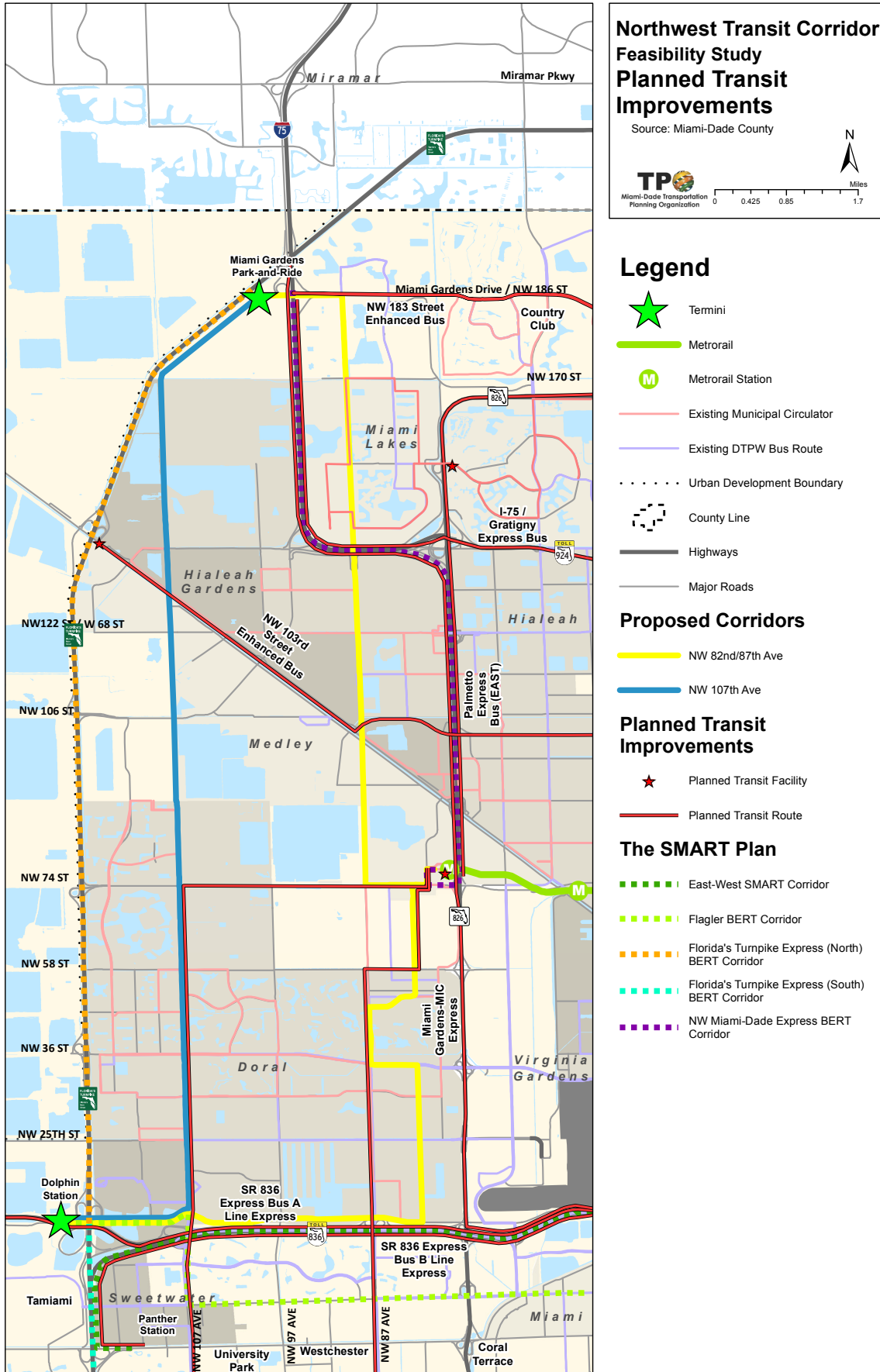
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## Analysis of Near-Future Transit Conditions

Map 30 depicts the planned transit improvements for the Northwest Corridor. Most the improvements are concentrated on the corridor's freeway network. These limited access facilities restrict many of the transit improvements to point-to-point express-type services. Some of these transit routes on the limited access facilities include:

- Florida's Turnpike Express (North BERT Corridor) – An express bus service that is planned to run from the Dolphin Park and Ride Station in the south to the Miami Gardens Park-and-Ride Station to the North
- Northwest Miami-Dade Express BERT Corridor – Running along I-75 and the SR 826 corridor, this BERT will connect the Miami Gardens Park-and-Ride Station with the Palmetto Intermodal Terminal for the Metrorail
- East-West Smart Corridor – On the southern edge of the project limits, the East-West Smart Corridor will connect the Dolphin Park-and-Ride Station on the west to Downtown Miami on the east
- The Gratigny Express is another planned transit route that will go along the current Gratigny Expressway / I-75. There are also plans to extend the Gratigny Parkway further west, which would allow for more service to the planned Okeechobee Terminal Park-and-Ride
- Complimenting this limited access facility transit network, the locally planned transit network will add to the connectivity in the region. The local routes in this system are subject to change and can be modified to serve new developments, such as the American Dream Mall. Some of these routes are:
  - To the south, the City of Doral has plans for a transit facility that connects the Dolphin Mall to the Palmetto Intermodal Station for the Metrorail via NW 107<sup>th</sup> Avenue and NW 74<sup>th</sup> Street
  - Similarly, to the east, the City of Doral has plans for a transit route along NW 87<sup>th</sup> Avenue connecting to Palmetto Intermodal Terminal
  - DTPW has plans for an enhanced bus along NW 103<sup>rd</sup> Street from the planned Okeechobee Park-and-Ride heading east into Downtown Miami
  - Another planned enhanced bus is the DTPW NW 183 Enhanced Bus, which will connect from the Miami Gardens Park-and-Ride and the American Dream Mall to eastern Miami-Dade County

Map 31 - Planned Transit Improvements





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## Transit Level of Service

Maps 31 through 34 depict a combination of factors to help develop an understanding of the transit level of service within the Northwest Corridor. Overall, the eastern edge of the study area has a relatively comprehensive transit network, while the western side does not. However, the pockets of the Northwest Corridor that currently contain commercial and residential uses are served by a mix of municipal and county transit services. Doral's residential district has coverage from the Doral Trolley system with some DTPW service, while Hialeah's transit coverage consists of a mix of both municipal and county services. Ridership on DTPW routes is highest on the south side, near Dolphin Mall, along with the north and east sides, with Route 54. Overall, existing County transit connectivity does not extend west of NW 87th Avenue north of NW 36th Street, which, although consistent with existing land use patterns and anticipated demand, presents opportunities for changes as development proceeds.

Map 32 shows the existing transit routes throughout the study corridor, including the frequencies for the DTPW routes. The heavier line weights designate the more frequent headways among the service; however, it can be seen from the map that the most frequent headways are 25-30 minutes. As this area develops more and developments such as the American Dream Mall are opened, there should be plans to decrease these headways to provide better levels of service throughout the study area. Headways on the municipal circulators are similarly high, typically ranging between 30 and 60 minutes.

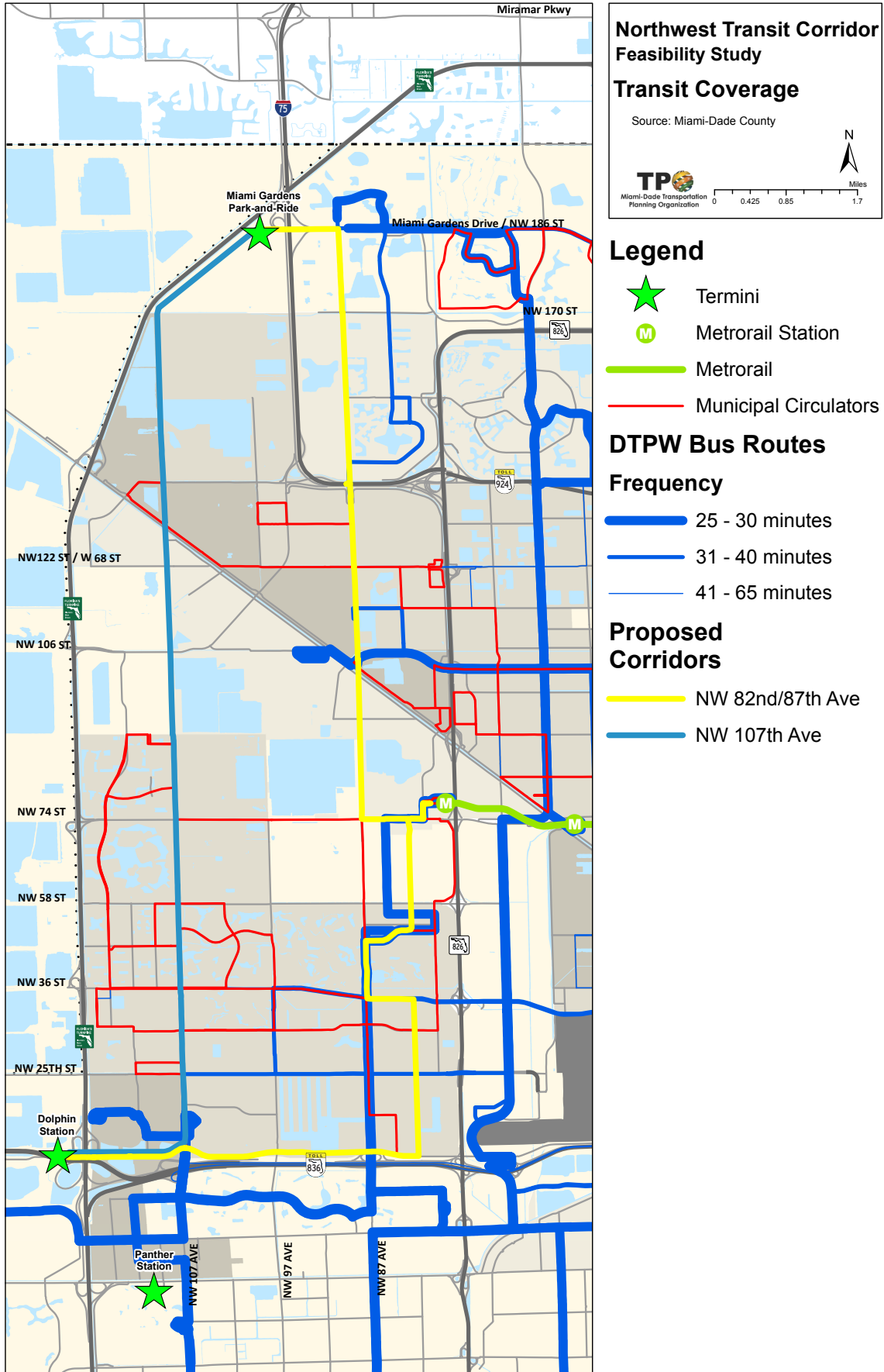
These existing bus routes should also be flexible and readily expandable to serve new demands, such as the American Dream Mall. There are currently no local routes serving the American Dream Mall area, but these local routes should be expanded further west and roadway lacking connection, such as the NW 154th Street for Miami Lakes should be extended further west to allow for more transit options to serve the lower end of the American Dream development. As can be seen from the map, various local circulators intersect and provide east-west connectivity with the potential NW 107th transit corridor and the NW 82nd/87th Avenue corridors.

Map 33 depicts average daily ridership on the DTPW routes within the study area. Thicker lines correspond to higher ridership routes, while thinner lines correspond to lower ridership routes. The routes that fall within the study area are high ridership routes. The highest ridership routes are Routes 7 and 54. Route 7 serves the southern end of the study area, linking Dolphin Mall to Downtown Miami via NW 17th Street. On weekdays, Route 54 operates between NW 87th Avenue and Miami Gardens Drive to Westland Mall in Hialeah, then runs east generally along NW 54th Street to Biscayne Boulevard. Two DTPW circulators, 132 and 286 have the lowest ridership within the study area. The 132 route operates between the Hialeah Market Tri-Rail Station and NW 87th Avenue, running along NW 36th Street. Route 286 operates at the north end of the study area. Also referred to as the North Point Circulator, Route 286 serves as a link between the surrounding community and a Park-and-Ride lot on Miami Gardens Drive and NW 73rd Avenue.

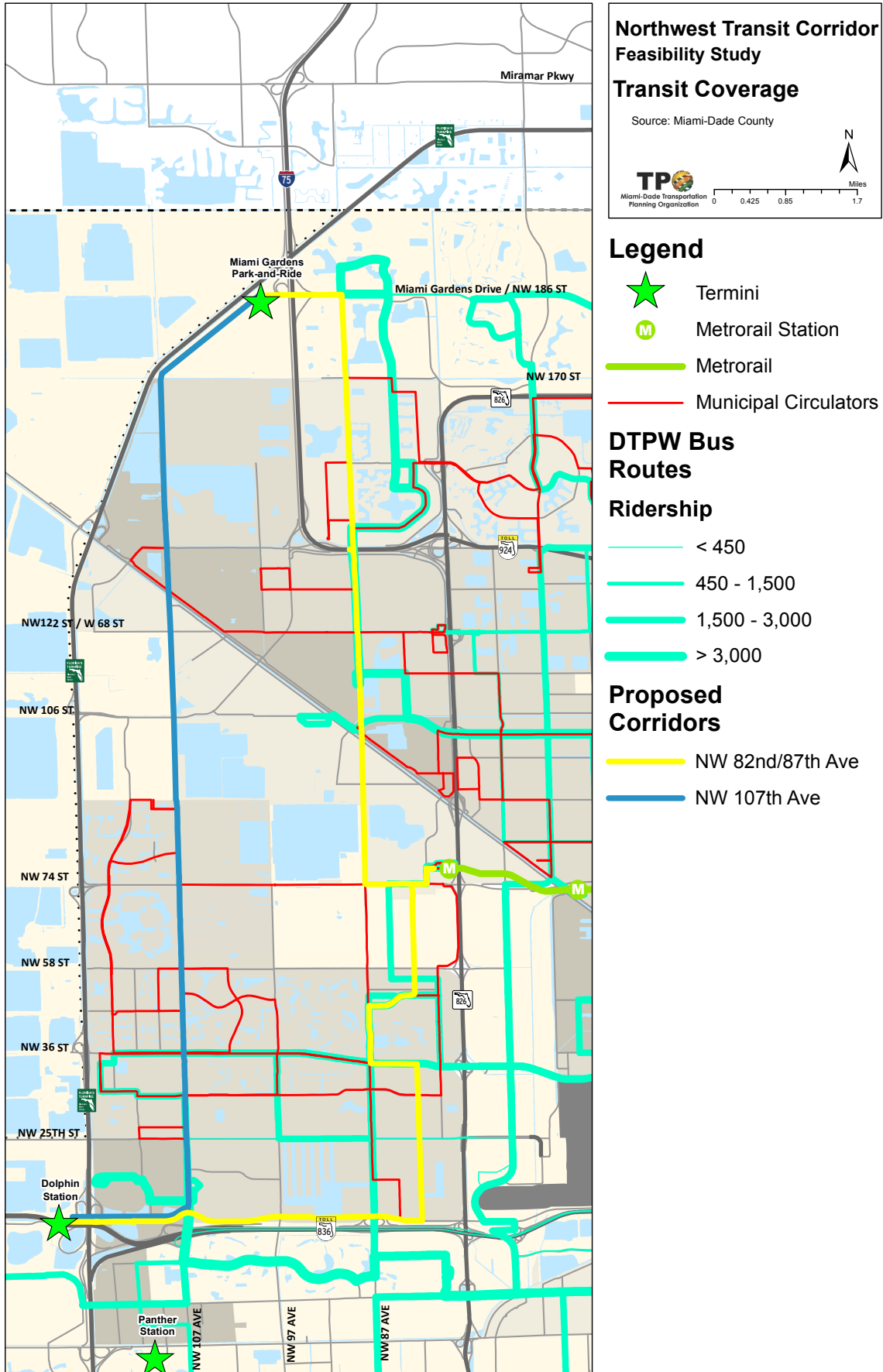
Map 34 represents current transit coverage in the Northwest 27th Avenue corridor. The buffers around the transit lines represent the quarter-mile walk shed. As can be seen from the map, the major east-west corridors are mostly covered throughout the corridor with overlapping (purple areas) DTPW and municipal circulators currently along various north-south and east-west facilities. What is apparent from the map is that there are no routes that connect across N Okeechobee Road; however, these routes would be able to be modified to connect across N Okeechobee Road with the development of north-south corridors such as NW 107th Avenue and NW 82nd / 87th Avenue.

Another gap in coverage area is the future American Dream Mall. With the continuing development of the residential housing along with the future development of the American Dream Mall, this area will need to expand transit services. NW 107th Avenue and / or NW 82nd / 87th Avenue will serve this future development well, but the east-west corridors of NW 185th Street, NW 170th Street, and NW 154th Street should be explored for the potential of expanded transit services further west.

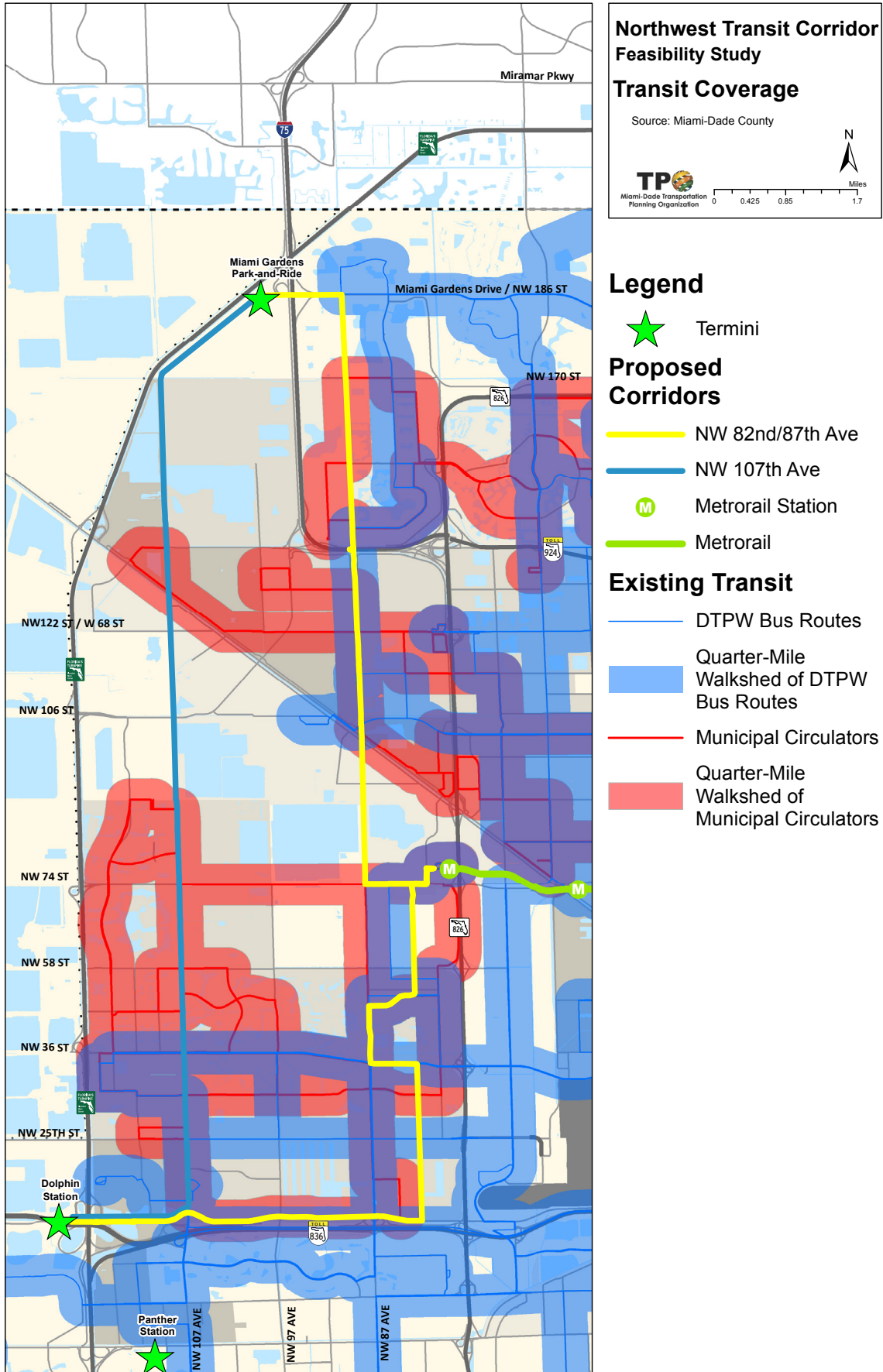
Map 32 - Existing Transit Route Frequency



Map 33 - Existing Transit Route Ridership



Map 34 - Existing Transit Walksheds







## 7. Right of Way Availability

A new transit corridor would necessitate the acquisition of additional ROW for roadway construction. Tables 32 and 33 identify parcels that may potentially be impacted by the implementation of mass transit service on the two identified corridors. The table lists each potentially impacted parcel's parcel number, area, parcel address, owner's name, the corridor in and the assessed property value as determined by the Miami-Dade County Property Appraiser's Office. The table also identifies potential environmental impacts that may stem from the takings. Several of the partial acquisition parcels are owned by governmental agencies (state and local), and may not require acquisition, however an easement may be required for these parcels. The land use values depicted represent the property's assessed value, and do not represent the cost of the needed take – in some cases easements, or partial takes would be needed. Moreover, ROW acquisition costs will incur additional fees, including broker fees, title, and legal costs.

The NW 82<sup>nd</sup>/87<sup>th</sup> Avenue Right of Way takings are depicted in Map 35 and summarized in Table 32. Two “punch throughs” are necessary in order for this alignment to be viable. One pocket located in Downtown Doral near NW 53<sup>rd</sup> Street. NW 82<sup>nd</sup> Avenue could be extended here with takings between two properties – a vacant lot and a four-story residential tower. The location of this taking is depicted in Figure 16.

Figure 16 - ROW Needed for NW 82<sup>nd</sup>-87<sup>th</sup> Alignment at NW 53<sup>rd</sup> Street.



A second ROW take location would be at a proposed cut-through of NW 82<sup>nd</sup> Avenue at NW 74<sup>th</sup> Street. Two properties would be impacted by this acquisition. The take is depicted in Figure 17.

Figure 17 - NW 82<sup>nd</sup>- 87<sup>th</sup> Avenue ROW need at NW 74<sup>th</sup> Street

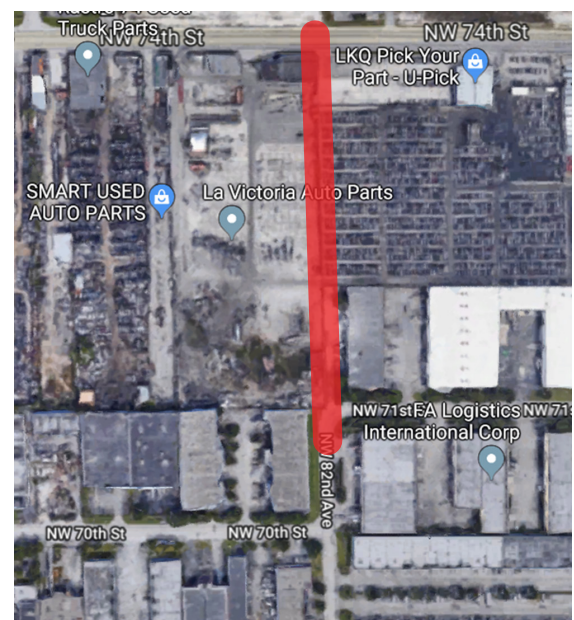
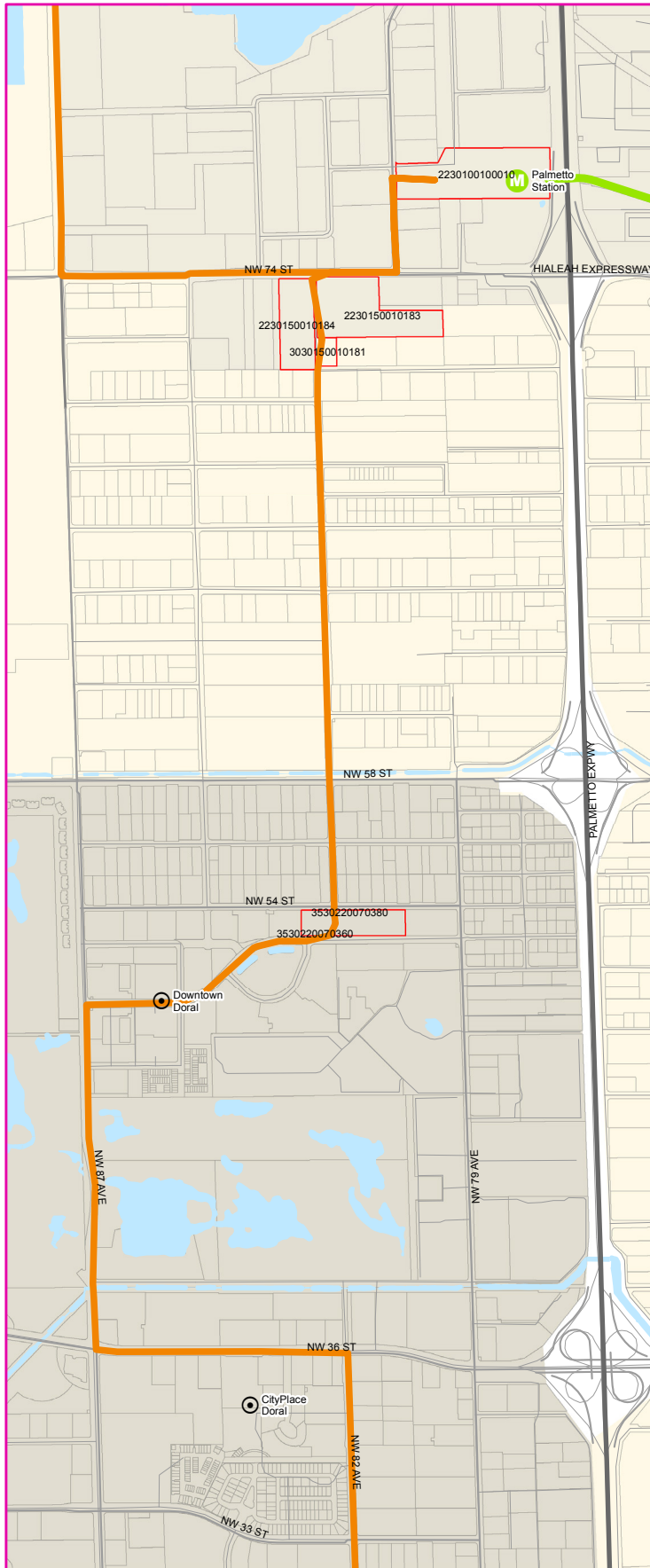


Table 32 - NW 82<sup>nd</sup>/87<sup>th</sup> Right of Way Impacts

Parcel Number	Area (acres)	Address	Owner Name	Property Value	Land Use	Environmental Impacts (if applicable)
2230100100010	18.15	7701 NW 79 AVE, Medley, FL, 33166	Miami-Dade County Transit	\$ 7,031,628	County land	Palmetto Metrorail Station
2230150010184	7.95	8130 NW 74 ST, Medley, FL, 33166	GPT 74TH STREET OWNER LLC C/O GRAMERCY PROPERTY TRUST	\$ 2,532,660	Open storage	Potential brownfield - currently used as a junk yard
2230150010183	13.91	8100 NW 74 ST, Medley, FL, 33166	GPT 74TH STREET OWNER LLC C/O GRAMERCY PROPERTY TRUST	\$ 4,652,205	Open storage	Potential brownfield - currently used as a junk yard
3030150010181	1.19	8199 NW 71 ST, Miami, FL 33166	LEONARD KESSLER TR	\$ 1,097,712	Light manufacturing	
3530220070380	4.53	8111 NW 53 ST, Doral, FL 33166	DORAL KI PHASE LLC JP MORGAN INV MANAGEMENT INC	\$ 7,135,065	Multifamily 10 units plus	ROW taking directly adjacent to residential apartment building
3530220070360	2.11	8245 NW 53 ST, Doral, FL 33166	DORAL H2 PHASE LLC C/O CODINA REAL EST MGMT INC	\$ 2,841,930	Professional service building	Vacant lot slated for future development in Downtown Doral

Map 35 - NW 82<sup>nd</sup>/87<sup>th</sup> Right of Way Impacts



**Northwest Transit Corridor  
Feasibility Study**

**Potential ROW Impacts**

Source: Miami-Dade County

**TPO**  
Miami-Dade Transportation  
Planning Organization

0 0.075 0.15 0.3 Miles

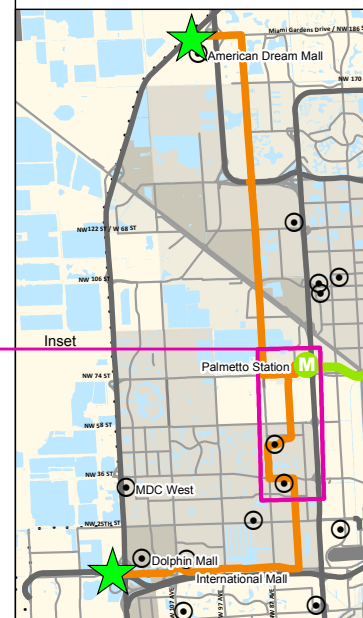
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## Legend

- Potential Parcel Impacts
- ★ Termini
- Activity Centers
- M Metrorail Station
- Metrorail

## Proposed Corridors

- NW 82nd/87th Ave
- Highways
- Major Roads



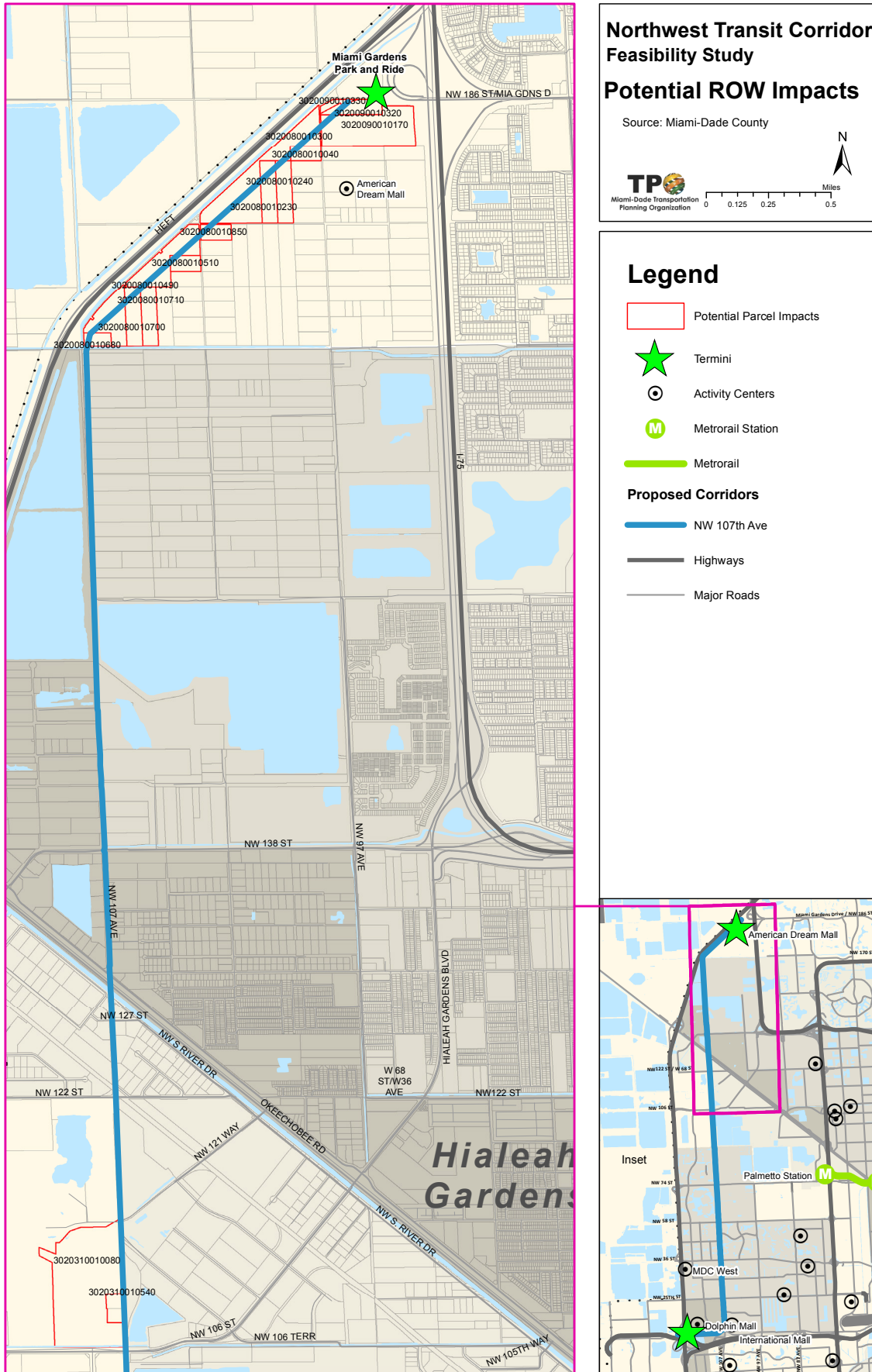
The right of way takings for NW 107<sup>th</sup> Avenue are depicted in Map 36 and summarized in Table 33. ROW is needed in two locations – the first is at the northern end of the corridor, beyond NW 170<sup>th</sup> Street in a proposed continuation to the American Dream Park-and-Ride. These parcels are owned by the developers of the Graham Properties and the American Dream Miami sites. The land remains vacant, but runs parallel to the Turnpike and a canal. A site for ROW acquisition would be north of NW 106<sup>th</sup> Street, at the location of the Tarmac cement plant. This taking may be dependent on the cessation of operations at the cement plant, which Medley city representative estimate to occur in approximately two decades. Further takings, not documented here may be needed to establish a connection across Okeechobee Road and the Miami River Canal. Although a roadway exists at this point, it consists of narrow, single lane street.

Table 33 - NW 107<sup>th</sup> Avenue Right of Way Impacts

Parcel Number	Area (acres)	Address	Owner Name	Property Value	Land Use	Environmental Impacts (if applicable)
3020080010240	9.84	Graham Companies Site, Uninc. County, 33018	TGC SEC 8 9 NORTH POINT LLC	\$ 4,000,000	Vacant land - pastures	
3020080010700	9.66	Graham Companies Site, Uninc. County, 33018	THE GRAHAM COMPANIES	\$ 4,000,000	Vacant land - pastures	
3020080010710	9.50	Graham Companies Site, Uninc. County, 33018	THE GRAHAM COMPANIES	\$ 3,820,000	Vacant land - pastures	
3020080010850	4.89	Graham Companies Site, Uninc. County, 33018	THE GRAHAM COMPANIES	\$ 2,100,000	Vacant land - pastures	
3020080010040	4.73	Graham Companies Site, Uninc. County, 33018	TGC SEC 8 9 NORTH POINT LLC C/O THE GRAHAM COMPANIES	\$ 2,100,000	Vacant land - pastures	
3020080010230	9.99	Graham Companies Site, Uninc. County, 33018	TGC SEC 8 9 NORTH POINT LLC C/O THE GRAHAM COMPANIES	\$ 4,000,000	Vacant land - pastures	
3020080010510	4.98	Graham Companies Site, Uninc. County, 33018	THE GRAHAM COMPANIES	\$ 2,100,000	Vacant land - pastures	
3020080010300	37.64	Graham Companies Site, Uninc. County, 33018	TGC SEC 8 9 NORTH POINT LLC	\$ 14,807,200	Vacant land - pastures	
3020080010490	33.53	Graham Companies Site, Uninc. County, 33018	THE GRAHAM COMPANIES	\$ 13,166,800	Vacant land - pastures	
3020080010680	3.69	Graham Companies Site, Uninc. County, 33018	THE GRAHAM COMPANIES	\$ 1,477,980	Vacant land - pastures	
3020090010170	32.56	American Dream Site, Uninc. County, 33018	INTERNATIONAL ATLANTIC LLC	\$ 10,242,843	Vacant land - pastures	
3020090010330	1.96	American Dream Site, Uninc. County, 33018	STATE OF FLORIDA DOT	\$ 762,300	Vacant land - government	
3020090010320	7.15	American Dream Site, Uninc. County, 33018	TGC SEC 8 9 NORTH POINT LLC	\$ 1,871,947	Vacant land - pastures	
3020310010540	1.16	Right of way adjacent to cement plant	MIAMI-DADE COUNTY	\$ 126,499	Vacant land - government	Miami-Dade County public easement
3020310010080	79.36	11200 NW 107 AVE, Medley, FL, 33178	TARMAC FLA INC.	\$ 24,607,274	Mineral processing	Site could potentially be contaminated given its current industrial use



Map 36 - NW 107<sup>th</sup> Avenue Right of Way Impacts







## 8. Recommendations

### Fatal Flaws, Viability and Feasibility of Recommended Corridors

The NW 82<sup>nd</sup>/87<sup>th</sup> Avenue alignment is the recommended alternative that has the best potential for success in the near-term. The corridor will be open for travel from north to south in its entirety by the end of 2019, which signifies that an initial service could begin operations with a couple of detours as soon as the new segment of NW 87<sup>th</sup> Avenue opens.

DTPW already operates transit service on NW 87<sup>th</sup> Avenue. The route's current northern terminus is the Palmetto Terminal. The route operates with 40 minute headways, and transports approximately 1,500 riders per day. This places the route in the bottom 30<sup>th</sup> percentile of all DTPW bus routes. Expanding the route north from Hialeah to the southern terminal at Dadeland South could establish a new travel market.

While the NW 82<sup>nd</sup>/87<sup>th</sup> Avenue alternative is preferred, it would not be implemented without complications. Concentrated development adjacent to the corridors on the north end in Hialeah and Miami Lakes may impede the corridor from being widened to accommodate an exclusive transit lane. Consequently, a future rapid transit alignment that would require a dedicated lane would have to take one of the existing lanes. Other stretches of the roadway are three lane arterials and will be less impacted by this issue.

Stretches of NW 82<sup>nd</sup>/87<sup>th</sup> Avenue have little development that can support transit – particularly NW 87<sup>th</sup> Avenue north of 74<sup>th</sup> Street, which will run parallel to a land fill. However, this deficiency is outweighed by the significant concentrations of residential, commercial and light industrial development both north and south of this point.

Although the alignment may hold promise in the future, the NW 107<sup>th</sup> Avenue configuration is flawed in the short term. In particular, the lack of a continuous roadway north of NW 106<sup>th</sup> Street limits this corridor's usefulness for a mass transit solution. Representatives from Medley have indicated that the Titan America cement plant currently occupying the right of way where NW 107<sup>th</sup> Avenue would connect has a finite life span of approximately 20 more years. Upon the completion of its useful life, there is a possibility that with a small ROW acquisition, an existing easement could be acted upon to connect the road northward. However, until this occurs, instituting a rapid transit mode on NW 107<sup>th</sup> Avenue remains impractical.

Additional residential and commercial development on NW 107<sup>th</sup> Avenue on the south side of the corridor is expected, which will exacerbate the traffic conditions in the area. Thus, it is recommended that DTPW and the TPO begin actively planning for the time when it is possible to connect both ends of NW 107<sup>th</sup> Avenue.



# Final Recommendations

Transit corridor recommendations are based upon analysis as presented in the previous sections of the document. Recommendations are provided for both NW 82<sup>nd</sup>/87<sup>th</sup> Avenue and NW 107<sup>th</sup> Avenue. In addition, Figures 18, 19, and 20 focus on specific segments of corridor to highlight specific transit and multimodal connection improvements to improve the understanding of how circulation can work in the area. This represents an initial step based upon the results of this feasibility study; additional analysis and stakeholder coordination is necessary to further formalize a capital improvement project for the study area.

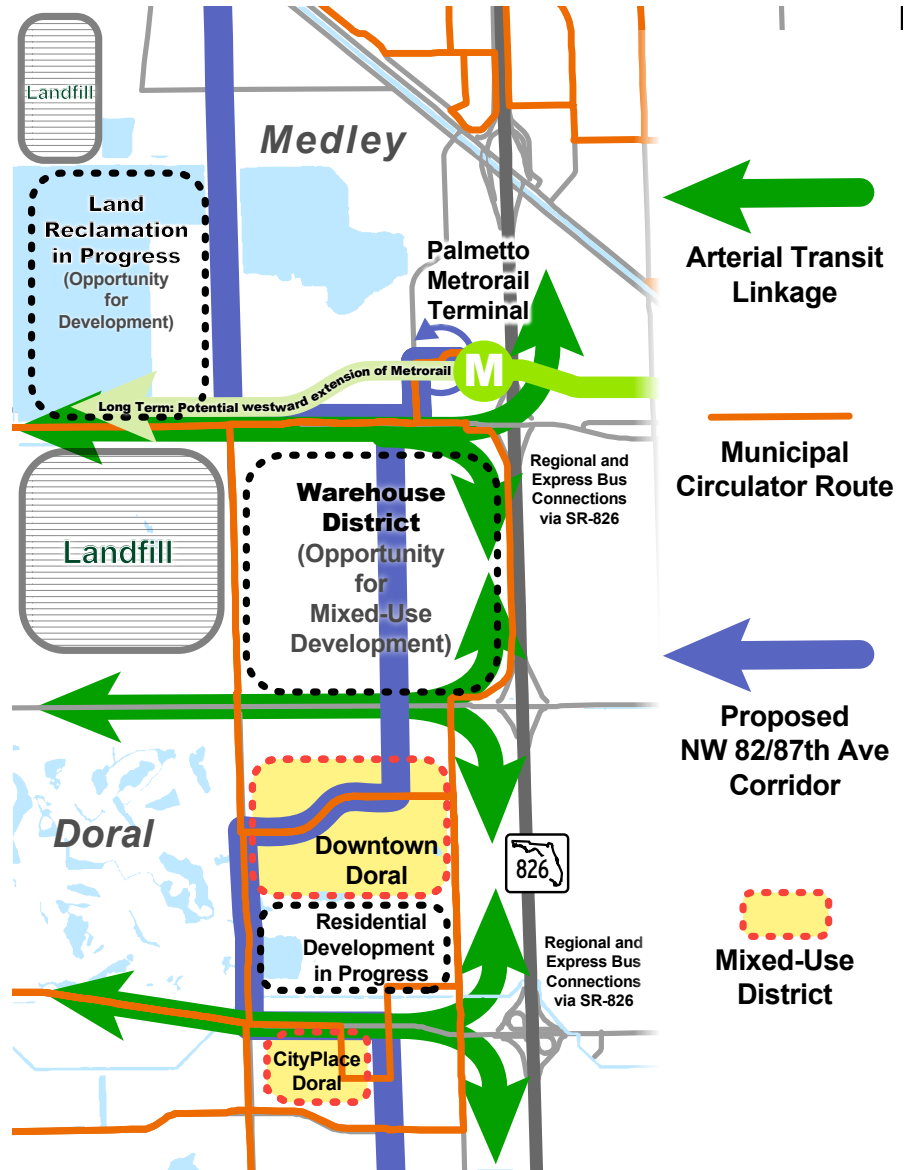
## NW 82<sup>nd</sup>/87<sup>th</sup> Avenue Corridor Recommendations

The rendering in Figure 18 presents a vision of how a rapid transit service on NW 82<sup>nd</sup>/87<sup>th</sup> Avenue can potentially operate within its surrounding context. The area surrounding the corridor includes a diverse mix of land uses, some that are immediately transit supportive, while others hinder opportunities to establish infrastructure that support efforts to establish transit service. The diagram includes general land uses and identifies existing supplemental transit links that ensure a system's long-term success. The recommendations to establish transit service on the corridor are as follows:

- NW 82<sup>nd</sup>/87<sup>th</sup> Avenue can commence operations as a regular DTPW route as soon as the end of 2019 when FDOT's Project linking NW 87<sup>th</sup> Avenue across Okeechobee Road is scheduled to end.
  - » Implementing route service will establish a ridership base, and assess the level of demand to support a more significant investment.
  - » Increase investment in the municipal circulator systems to enhance connections.

- Doral, Medley, Hialeah, Hialeah Gardens, and Miami Lakes should up-zone land use along the proposed corridor to establish TOD hubs that can support a rapid transit service mode.
- Medley and DTPW should establish a partnership to introduce commercial and residential components to planned upgrades to the Palmetto Terminal. This will leverage an existing investment that extended Metrorail to the current terminal.

Figure 18 - Rendering of NW 82<sup>nd</sup>/87<sup>th</sup> Avenue opportunities



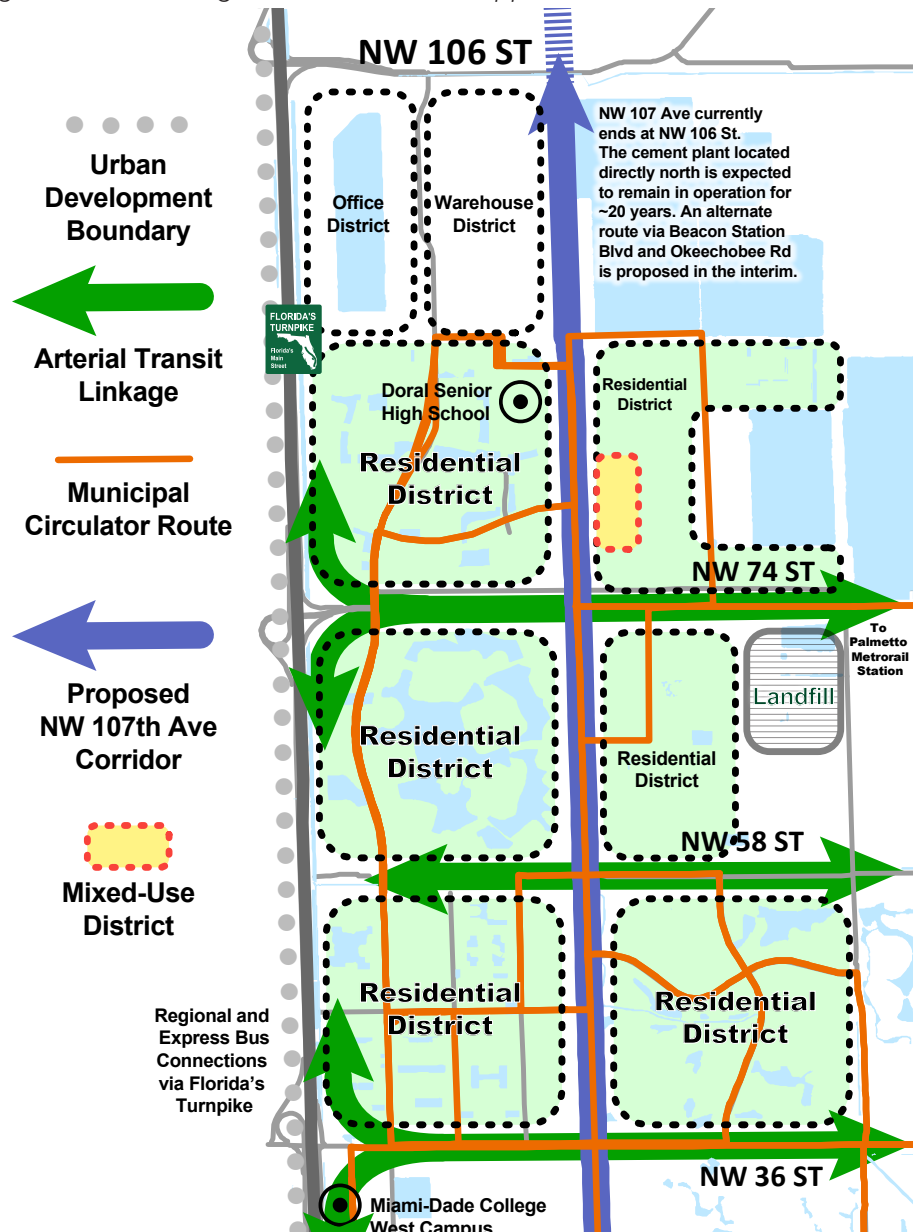
- Connection of NW 87<sup>th</sup> Avenue across Okeechobee transforms development potential of parcels that have previously been landlocked, resulting in a redevelopment opportunity for Medley.
  - » Parcels with potential include bus depot and empty lots/container storage yards.
- Cities and DTPW should consider acquiring land along corridor to ensure TOD uses are constructed once rapid transit service is programmed for construction. The ability to control the land use and the execution of the transit service by governmental entities will simplify the planning process and further ensure transit service's success.

## NW 107<sup>th</sup> Avenue Corridor Recommendations

NW 107<sup>th</sup> Avenue is a more challenging corridor to establish a rapid transit service than NW 82<sup>nd</sup>/87<sup>th</sup> Avenue. The vision identified for the corridor is depicted in Figure 19, which presents a segment of the corridor. The following are recommendations for establishing rapid transit service on the NW 107<sup>th</sup> Avenue Corridor:

- Establish a route on NW 107<sup>th</sup> Avenue in Doral to establish ridership and demand between NW 106<sup>th</sup> Street and the Dolphin Station Park-and-Ride.
- Encourage developers along NW 107<sup>th</sup> Avenue to reduce suburban typologies and establish TOD communities through density bonuses and other incentives.
- Establish talks with Titan America cement plant owners to identify time frame for extension of NW 107<sup>th</sup> Avenue.
- Coordinate with American Dream and Graham Properties developers to develop TOD hubs adjacent to the corridor.

Figure 19 - Rendering of NW 107<sup>th</sup> Avenue opportunities





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## Recommendations for Study Area's North End

The American Dream Mall development will invoke the need for transportation/transit improvements around the Mixed-Use District (yellow area in Figure 20). The \$4 billion project received final approval from the Miami-Dade County Board of County Commissioners (BCC) in May 2018. Once the State implements \$200 million of roadway improvements, this currently vacant section of the study area will be poised for activation into an entertainment complex that will attract thousands of visitors from throughout the region. Thus, the need to proactively plan how this area will connect to the regional transit network. The rendering in Figure 20 identifies the opportunities and constraints of establishing a comprehensively connected transit network within the northern end of the study corridor.

With the proposed NW 107<sup>th</sup> Avenue and NW 82<sup>nd</sup>/87<sup>th</sup> Avenue corridors providing north-south relief for the development, there will be the need to further develop and enhance the existing/planned east-west transit routes and to plan the creation of new transportation/transit routes. Discussed in the next section, there are three primary routes that provide the potential for the necessary east-west connections to/from the American Dream development: NW 186<sup>th</sup> Street, NW 170<sup>th</sup> Street, and NW 154<sup>th</sup> Street.

### East-West Connections

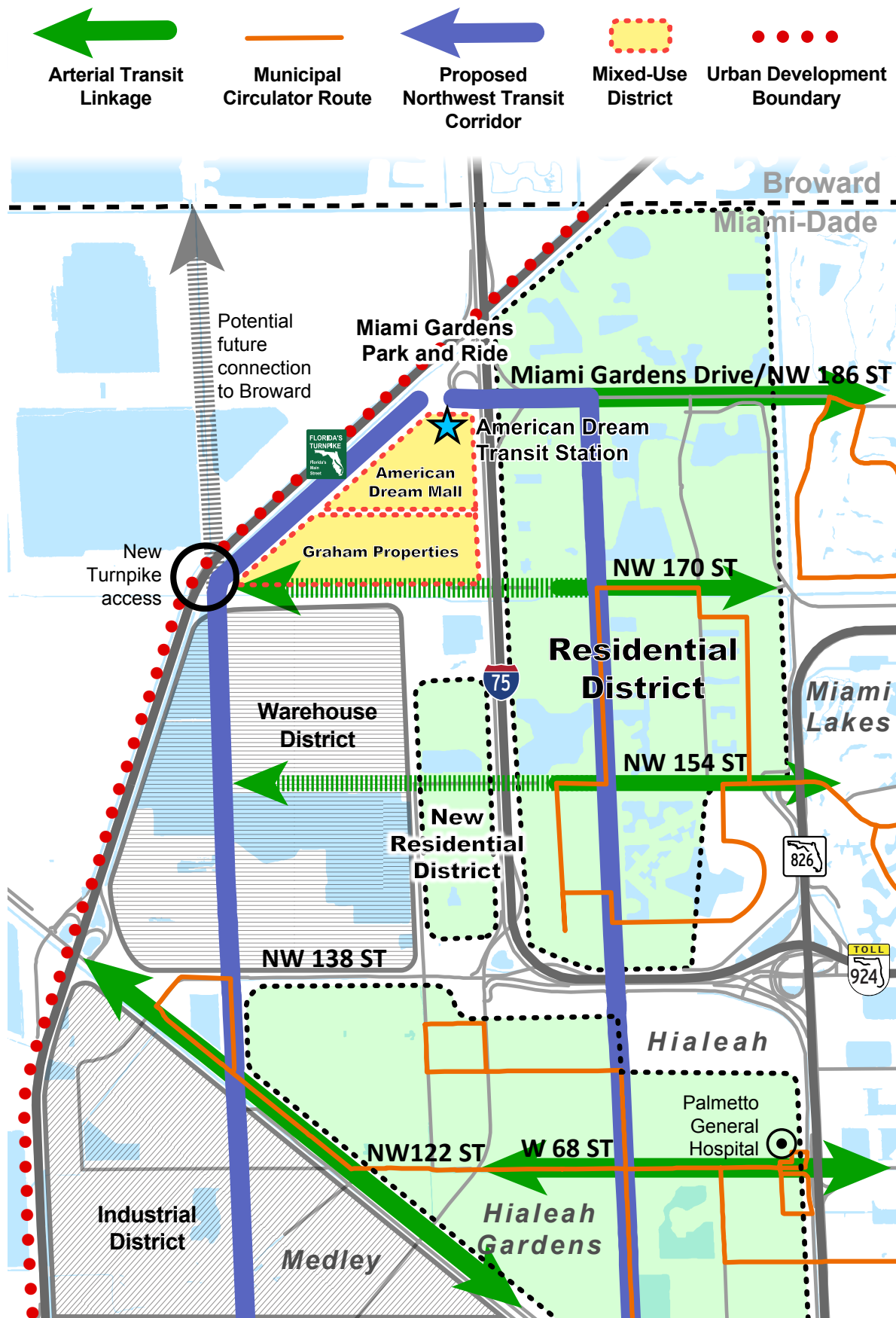
Currently one east-west street will provide access to the northern end of the study area. Miami Gardens Drive/NW 186<sup>th</sup> Street will provide access to the upcoming developments in the north end of the study corridor and the park-and-ride facility that is under construction at the intersection of the HEFT and I-75.

Community resistance has so far impeded efforts to create additional east-west road links, specifically NW 154<sup>th</sup> and 170<sup>th</sup> Streets. Miami Lakes officials have stressed this point during conversations with the study team. Although these roads provide limited eastern access (NW 170<sup>th</sup> Street connects to residential pockets of Miami Lakes while NW 154<sup>th</sup> Street feeds in to the Palmetto Expressway before doing the same), providing additional access points, particularly for pedestrians and transit, would conceivably ameliorate some traffic congestion in the area. The opening of one or both of these roads across I-75 could have a net positive impact for eastern residents as well, particularly as NW 170<sup>th</sup> Street will have a new access point to the HEFT, a connection that can help relieve southbound traffic pressure. All involved parties should coordinate to enhance the connectivity of the transportation/transit network in this area.

### Northern Connection

Other transportation connections should be evaluated to this site - a hypothetical northward connection to Broward County from NW 107<sup>th</sup> Avenue should be further evaluated, should the Urban Development Boundary be extended from its current alignment contouring the HEFT. In addition to the possibility of opening NW 154<sup>th</sup> and 170<sup>th</sup> Streets over I-75, Hialeah has proposed a possible connection along the FEC railroad tracks that run parallel to Okeechobee Road. This alternative could be attractive for future investment due to the fact that it would increase access to the northern end of the study area without adding congestion to the surrounding streets. However, the corridor is an active freight rail corridor, as evidenced by the land uses adjacent to it. Moreover, these land uses undermine the rail corridor's prospective viability to sustain transit, given the fact that intermediate stops on the rail corridor would not have a residential and commercial mix of land uses to sustain them. Thus, this alternative is not well-suited for a near-term implementation time frame.

Figure 20 - Rendering of Northern Terminus opportunities



## Transit Recommendations

Table 34 depicts the recommendations made to improve transit service connectivity to the north end of the Northwest Corridor. The proposed changes and expansions are contingent upon the substantial completion and opening of the two large-scale development projects west of I-75 - the American Dream Mall and Graham Properties. The table also makes recommendations for changes to the municipal circulators within the area - particularly Miami Lakes and Hialeah.

Several existing DTPW routes have a northern terminus at the park-and-ride facility located at the intersection of Miami Gardens Drive and NW 73<sup>rd</sup> Avenue. This facility, with approximately 120 parking is moderately utilized. The facility contains few amenities, and is intended for use by the surrounding community, given the site is not conveniently located for access from the surrounding expressways. Overall, recommended modifications include reductions in route headways, and suggestions for route realignments. Moreover, in shifting the termini of these routes to the west, more potential riders from the HEFT and I-75 could be captured.

The modifications to the service in this section of the county is further depicted in Figures 21 and 22. Figure 21 depicts the proposed changes, while Figure 22 shows how the existing DTPW network is configured today. Modifications are depicted for municipal circulators as well as DTPW routes.

Table 34 - Transit Recommendations for north end of Northwest Transit Corridor Feasibility Study

Route	Alignment	Frequency
Terminal	Construct new American Dream Mall Transit Terminal to include 10 bus bays, two layover bays, passenger waiting areas, etc. This project is to be privately funded	N/A
54	Shift route to NW 97 <sup>th</sup> Avenue at NW 122 <sup>nd</sup> Street/West 68 <sup>th</sup> Street to provide service to new commercial and residential developments west of I-75.	Reduce headways on north end of corridor from 60 minutes to 30 minutes
73	Extend route from current terminus at Park-and-Ride at NW 73 <sup>rd</sup> Avenue to American Dream Mall Transit Terminal	Reduce headways from 30 to 20 minutes during peak period; reduce from 40 to 30 minutes during off-peak
95	Extend route from current terminus at Park-and-Ride at NW 73 <sup>rd</sup> Avenue to American Dream Mall Transit Terminal	Mono directional peak-period limited stop express service; reduce headways from 40 minutes to 30 minutes
99	Extend route from current terminus at Park-and-Ride at NW 73 <sup>rd</sup> Avenue to American Dream Mall Transit Terminal	Reduce headways from 60 to 30
183	Convert route to proposed Enhanced Bus route; Extend route from current terminus at Park-and-Ride at NW 73 <sup>rd</sup> Avenue to American Dream Mall Transit Terminal	Maintain 15 minute headway service throughout the day (reduce mid-day headways from 20 to 15 minutes)
267	Extend route from current terminus at intersection of NW 87 <sup>th</sup> Avenue and NW 186 <sup>th</sup> Street to American Dream Mall Transit Terminal	Implement AM service; Reduce headways from 25 to 20 minutes
Florida's Turnpike Express (North)	New Bus Express Rapid Transit (BERT) route; Implement express service on HEFT to American Dream Mall Transit Terminal	Implement service with 15 minute peak period and 30 minute off-peak period headways
NW Miami-Dade Express	New BERT route; implement express service from American dream Mall Station to Palmetto Metrorail Station via I-75 and the Palmetto Expressway	Implement service with 10 minute headways
Miami Lakes Moover	Extend route across NW 170 <sup>th</sup> Street to connect to new development at Graham Properties. Consider additional expansion at NW 154 <sup>th</sup> Street to serve new warehouse district and residential community west of I-75	Implement midday service; reduce headways from 25 minutes to 20 minutes
Hialeah	Extend Flamingo route north along NW 97 <sup>th</sup> Avenue to serve new residential developments adjacent to I-75; consider additional expansion north to American Dream Mall Transit Terminal	Reduce headways during peak period from 30 to 20 minutes; reduce non-peak period headways from 50 to 30 minutes

Figure 21 - Proposed Future Transit System

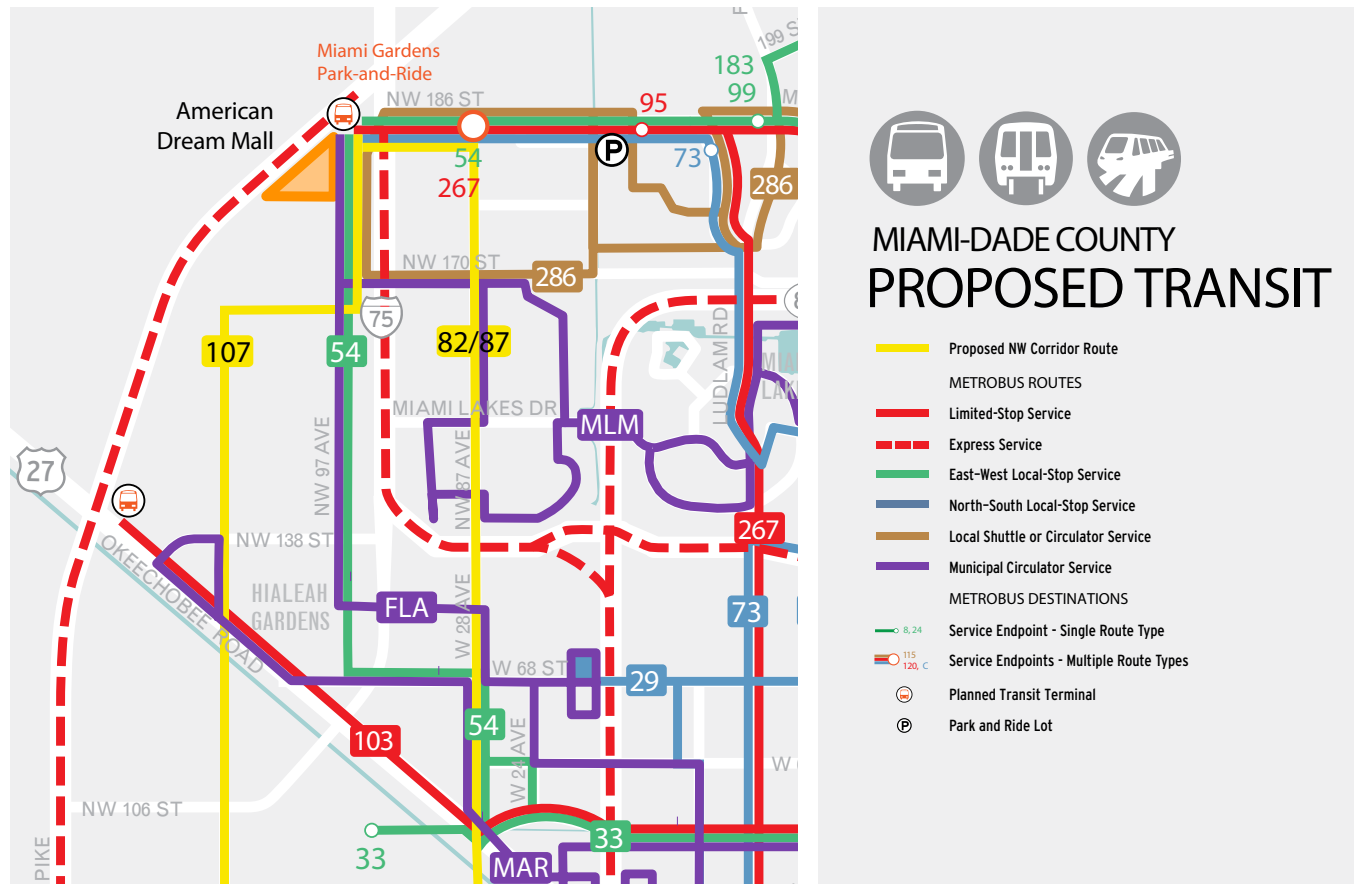
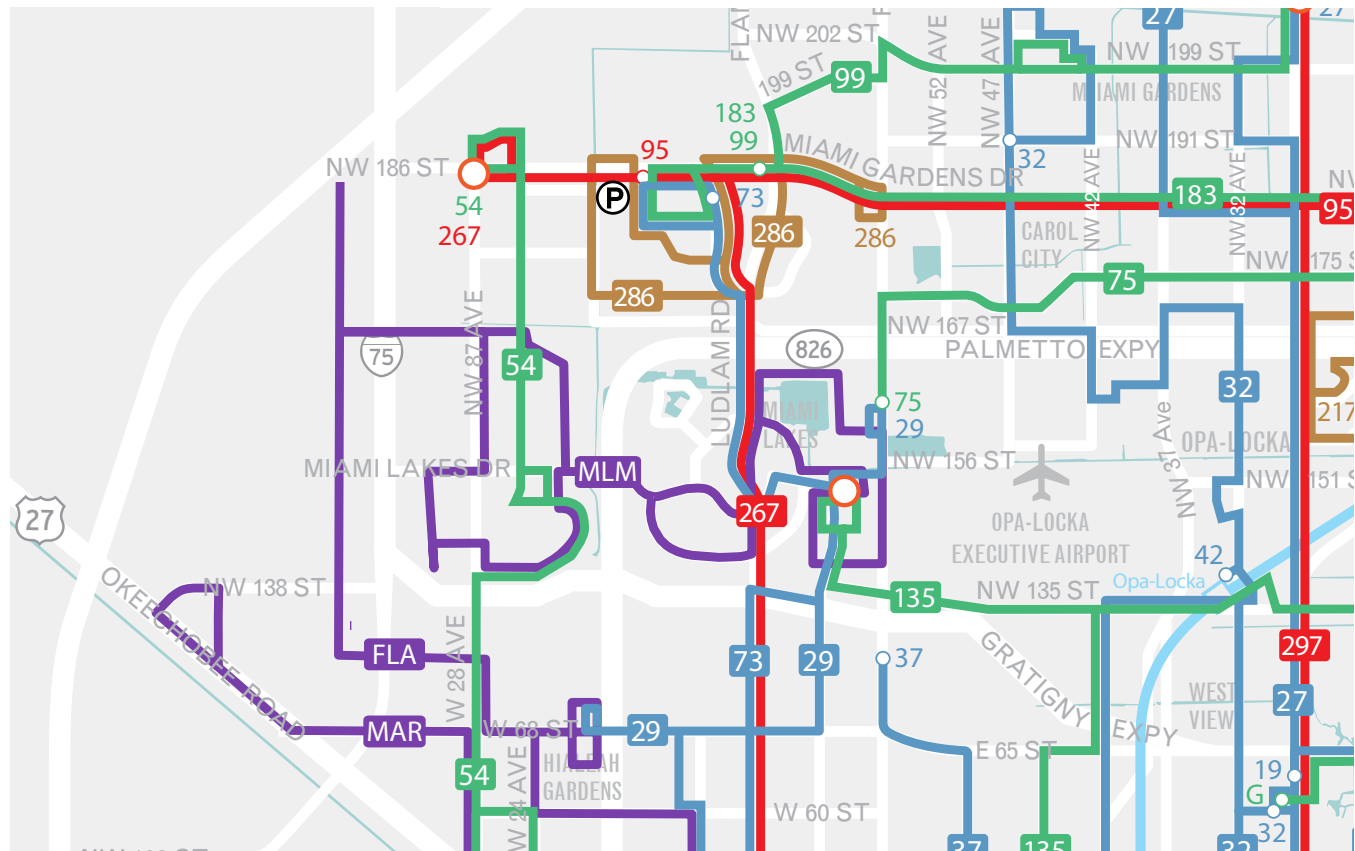


Figure 22 - Existing Transit System





# Plan Development

Table 35 presents a breakdown of the positive and negative impacts of the proposed corridors based upon various contextual factors.

Table 35 - Plan Development

Impact	NW 82 <sup>nd</sup> /87 <sup>th</sup> Avenue	
	Positive	Negative
Infrastructure Needed	Majority of infrastructure is in place except for small sections near Downtown Doral and near 74 <sup>th</sup> Street where the corridor will come back west to 87 <sup>th</sup> Avenue	Infrastructure will require impacts of two large property owners near downtown Doral and five properties near 74 <sup>th</sup> Street
Proposed Transit Services	Bus Rapid Transit along this route would serve a majority of the urban corridor in Doral, Medley, and Hialeah Gardens along with the Metrorail Station.	This option will not serve the new development in west Doral and the new residential developments in Hialeah Gardens.
Projected Travel Demand	This route offers highest potential demand since the corridor is already an established commuting corridor. Service on NW 87 <sup>th</sup> Avenue could help to reduce there are many businesses and residents already commuting within corridor	Travel demand strongest at the north and south end of corridor; central segment between NW 74 <sup>th</sup> Street and Okeechobee Road will be limited by unsupportive land use
Accessibility to Major Activity Centers	Highly accessible to Downtown Doral, and CityPlace Doral, both of which are Transit-Oriented Developments.	Not accessible to MDC West except through Doral's municipal circulators
Connectivity to Other Transit Systems, Highways, and Major Arterials	Corridor alignment offers opportunity for connection to Palmetto Metrorail Station ensuring connection to rail and proposed Express Bus routes operating on Palmetto Expressway	Transverse connections need to be created to service western portion of study area
Expansion of the Transit Corridor on the Managed Lanes Network	Opportunity for interface with I-75 Express Lanes and Palmetto Express lanes where alignment intersects with each of these facilities	None
Environmental Impact	Limited environmental impacts are anticipated	NW 87 <sup>th</sup> Avenue contours Miami-Dade County solid waste plant and landfill (between NW 58 <sup>th</sup> Street and NW 74 <sup>th</sup> Street)
Social Impact	Opportunity for two seat service from corridor to Downtown Miami exists with transfer at Palmetto Terminal; reliable transit service will help sustain existing TOD developments; foster new ones	Social impacts throughout corridor if dedicated BRT bus lanes and 6 lanes of traffic are desired;
Potential Community Acceptance	Municipalities along corridor are receptive to the service; Miami Lakes would be opposed to route that creates connection at NW 170 <sup>th</sup> Street or NW 154 <sup>th</sup> Street	Hialeah may prefer route further west and proponents of MDC may prefer a corridor further west
Right of Way Requirements	NW 87 <sup>th</sup> Avenue "punch through" bridge across Okeechobee completes the missing link of the corridor. Assuming roadway's existing ROW is used, none will be needed.	Segments of NW 87 <sup>th</sup> Avenue change from three lanes to two lanes. Immediate ROW needs would be two parcels in Downtown Doral, and several properties near NW 74 <sup>th</sup> Street
Estimated Capital and Operating Cost	15.4 miles BRT costs assumed to range from \$4-\$20 million per mile; estimated cost of \$61-\$308 million	\$1.2-\$3.9 billion for a rail alternative
East-West Connectivity	Various east-west transit services exist throughout the corridor that would intersect the potential NW 82 <sup>nd</sup> /87 <sup>th</sup> Avenue transit corridor. The majority of the current activity in the region is along this central/eastern portion of the corridor.	This route would be further away from the pending American Dream development

Note: Capital costs range from \$4-20 million for BRT; \$75-\$250 million for rail alternatives

Table 35 Continued - Plan Development

Impact	NW 107 <sup>th</sup> Avenue	
	Positive	Negative
Infrastructure Needed	New interchange at FTE would be a benefit and connection for this corridor. Infrastructure is in place in most of southern 107 <sup>th</sup> Avenue	New roads and bridges would be necessary on both sides of Okeechobee Road and more extensive on the north side
Proposed Transit Services	New services would be a benefit to the MDC West campus. Potential for coordination with express service along the HEFT and with Doral's trolley system	Limited municipal transit connections on north side of corridor - Hialeah Gardens shares circulator services with Hialeah; no service anticipated to overlap at NW 107 <sup>th</sup> Avenue
Projected Travel Demand	Travel demand with future development of American Dream Mall would likely be high as well as MDC and Dolphin Mall	Much of the corridor north of NW 106 <sup>th</sup> Street is industrial and travel demand would likely not be as high as routes further to the east in the more urbanized areas of the study corridor
Accessibility to Major Activity Centers	High accessibility to the MDC campus, American Dream Mall, and Dolphin Mall	Alignment does not serve the urban center activity centers in Doral and Hialeah
Connectivity to Other Transit Systems, Highways, and Major Arterials	Provides more connectivity for future interchange with 107 <sup>th</sup> Avenue and Florida's Turnpike. Facilitated connection for routes operating south of NW 12 <sup>th</sup> Street, including Flagler Street BRT route	Fewer multimodal connections; does not connect to Metrorail system
Expansion of the Transit Corridor on the Managed Lanes Network	Potential opportunity to interlink with HEFT Express Lanes at access points at NW 170 <sup>th</sup> Street	No connection with I-75 Express Lanes
Environmental Impact	This corridor would seem to have the least impacts environmentally	Due to the high industrial nature of the area, contamination may be an issue, limiting TOD opportunities at station sites; possible environmental impacts to vacant, undeveloped lands on north end of corridor
Social Impact	Due to a smaller population, the route will have fewer impacts on residents/businesses.	Residential impacts likely north and south of Okeechobee Road when dedicated BRT is desired; Social impacts likely south of Okeechobee Road when 6 lanes are necessary.
Potential Community Acceptance	Hialeah prefers this route over route to the east. This route is more industrial and may have more acceptance when corridor goes to 6 lanes due to less impacts to residents on this corridor	Commuters and transit advocates may push for the more urban route to the east to serve large population core
Right of Way Requirements	Construction of northernmost section of NW 107 <sup>th</sup> Avenue is funded and will connect NW 138 <sup>th</sup> Street to NW 170 <sup>th</sup> Street (Joint Hialeah Gardens/MDX/FTE Project)	Right of way acquisition needed to complete NW 107 <sup>th</sup> Avenue between NW 106 <sup>th</sup> Street and Okeechobee Blvd; unlikely to occur until after cement plant ceases operations (in approximately 20 years)
Estimated Capital and Operating Cost	12.6 miles BRT: \$50-\$252 million	Rail: \$950 million - \$3.2 billion
East-West Connectivity	Corridor's proximity to the HEFT provides indirect east-west access on a more regional level.	East-west connectivity is generally limited on NW 107 <sup>th</sup> Avenue

Note: Capital costs range from \$4-20 million for BRT; \$75-\$250 million for rail alternatives

# Corridor Multimodal Connection Opportunities

Several east-west roadways provide enhanced connectivity to the proposed Northwest corridor. As the American Dream Mall has recently been approved by Miami-Dade County, additional east-west connections that complement the proposed north-south corridor will be critical. This section provides a summary of the east-west connections to the Northwest corridor and provides recommendations for how they can be developed to improve transit and road network access throughout the Northwest Corridor.

## Miami Gardens Drive / SR 860 / NW 186<sup>th</sup> Street

Miami Gardens Drive intersects the proposed alignment at NW 87<sup>th</sup> Avenue north of the City of Miami Lakes and just east of I-75. NW 186<sup>th</sup> Street is a four-lane road with 11.5-foot travel lanes, two-foot curb and gutter, and a twenty-foot median; Beyond NW 67<sup>th</sup> Avenue / Red Road, NW 186<sup>th</sup> Street becomes NW 183<sup>rd</sup> Street and beyond NW 57<sup>th</sup> Avenue/Red Road/SR 823, it becomes a six-lane facility with 11-foot travel lanes and a 21-foot median. NW 183<sup>rd</sup> Street runs continuously throughout the county, a total of over 12.5 miles to Biscayne Boulevard. Points of interest along the route include a Park-and-Ride lot at NW 73<sup>rd</sup> Avenue and numerous shopping centers. Additional multimodal connections are available from the Golden Glades Intermodal Center and Aventura Mall, which both fall within a half mile buffer. Current transit routes along this corridor include the DTPW Routes 54 and 267.

- **Recommendation: Miami Gardens Drive Enhanced Bus Route to interline with NW 82<sup>nd</sup>/87<sup>th</sup> Avenue Corridor; extending to the American Dream transit facility. On the east side, there would be an opportunity for this route to connect to the Golden Glades Interchange and the SMART Plan North Corridor on NW 27<sup>th</sup> Avenue. Enhanced Bus Service is proposed, but unfunded, in DTPW's future plan (beyond 10-year horizon).**

## NW 170<sup>th</sup> Street

NW 170<sup>th</sup> Street could potentially offer access between the Turnpike on the west to the middle of Miami Lakes. A bridge connects Hialeah on the west side of I-75 to Miami Lakes on the east, and MDX and FTE are jointly preparing to construct the western leg that will ultimately provide access to the HEFT. However, Miami Lakes has opposed proposed openings of NW 170<sup>th</sup> Street to vehicular traffic, citing concerns about increasing traffic on local city streets. Moreover, access to NW 170<sup>th</sup> Street from the adjacent single-family neighborhoods within Miami Lakes is limited by a canal to just two intersections before the street terminates at NW 67<sup>th</sup> Avenue / Ludlam Road.

- **Recommendation: Open NW 170<sup>th</sup> Street over I-75 as a transit-exclusive roadway to expand transit access between new development west of highway and Miami Lakes.**

## NW 154<sup>th</sup> Street

NW 154<sup>th</sup> Street also offers opportunities for an east-west connection thanks to an already-built bridge over I-75. Miami Lakes has a park-and-ride facility planned near the intersection of NW 154<sup>th</sup> Street and the Palmetto Expressway, which could become a multimodal hub that combines express bus routes, local municipal circulators and BRT-like services to the proposed route at NW 87<sup>th</sup> Avenue. No other eastern access is practical for NW 154<sup>th</sup> Street, as its alignment terminates at NW 57<sup>th</sup> Avenue / Red Road. Considering the additional development that is expected to emerge west of I-75, and despite anticipated opposition from Miami Lakes residents, it is recommended that the County plan to establish a new road access at the NW 154<sup>th</sup> Street bridge. Providing additional access to the park-and-ride facility and access to the Palmetto Expressway will help to complete the roadway network and create opportunity for transit connections.

- **Recommendation: Miami Lakes-operated circulator to connect to Park-and-Ride facility at the Palmetto Expressway interlinked with new development west of I-75.**

## NW 138<sup>th</sup> Street / Gratigny Expressway

NW 138<sup>th</sup> Street/Gratigny Expressway is a combined arterial/limited access facility that links NW 27<sup>th</sup> Avenue to the HEFT. MDX is currently in the process of improving access on the west end, providing direct ramps to southbound HEFT movements. Access for transit service from NW 82<sup>nd</sup>/87<sup>th</sup> Avenue is complicated because they are grade separated. NW 87<sup>th</sup> Avenue intersects the road slightly to the west of the junction of the Gratigny, the Palmetto and I-75. Consequently, despite the confluence of several major highways, few opportunities currently exist to maximize the connection for rapid and express transit services.

- **Recommendation: Implement Gratigny Express transit route for rapid east-west transit alternative. Opportunity to intersect with the SMART Plan North Corridor on NW 27<sup>th</sup> Avenue near Miami-Dade College North station (proposed).**

## W 68<sup>th</sup> Street / E 65<sup>th</sup> Street / NW 119<sup>th</sup> Street

Moving eastward, W 68<sup>th</sup> Street in Hialeah becomes E 65<sup>th</sup> Street before it joins the Gratigny Parkway which then becomes NW 119<sup>th</sup> Street. There is a transit terminal planned at intersection of NW 119<sup>th</sup> Street and NW 27<sup>th</sup> Avenue, near MDC North. W 68<sup>th</sup> Street is currently a four-lane facility with a center median, a sidewalk on one side, no bike lane, and a two-foot curb and gutter. Local transit service currently exists on W 68<sup>th</sup> Street.

- **Recommendation: Extend local circulator along W 68<sup>th</sup> Street. Possibility of connection with west side of canal and NW 107<sup>th</sup> with FDOT Okeechobee project. Another possibility is to run transit along NW 116<sup>th</sup> Way / Beacon Station Boulevard / Hialeah Gardens Boulevard, which is a six-lane facility connecting with NW 138<sup>th</sup> Street and the future Gratigny extension.**

## Okeechobee Road / SR 25 / NW 103<sup>rd</sup> Street

The Florida Department of Transportation is developing the design for reconstruction of SR 25 / Okeechobee Road throughout the study corridor. Proposed work includes reconstruction of SR 25, a grade separation bridge over NW 87<sup>th</sup> Avenue along with flyover ramps, the realignment of NW 103<sup>rd</sup> Street, removal of bridge at NW 105<sup>th</sup> and the construction of a new bridge at NW 106<sup>th</sup> Street. In conjunction with this new construction, DTPW has plans for two express buses along the Okeechobee corridor with western termini at the Okeechobee Terminal near the Florida Turnpike.

- **Recommendation: Implement planned DTPW Express Bus Route as proposed for NW 103<sup>rd</sup> Street/ Okeechobee Road.**

## NW 74<sup>th</sup> Street / Hialeah Expressway

NW 74<sup>th</sup> Street / Hialeah Expressway is a six-lane divided facility with designated bicycle lanes and sidewalks. It is SR 934 east of SR 826 and continuing east to Miami Beach. There is an existing local circulator along NW 74<sup>th</sup> Street that provides access to the Palmetto International Terminal Metrorail Station. DTPW's Route 64 also has east-west service between NW 107<sup>th</sup> Avenue and connects to the Metrorail.

- **Recommendation: Enhance local circulator and DTPW route. Bus Rapid Transit would be a strong potential on this corridor with direct connection to the Metrorail.**



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## NW 36<sup>th</sup> Street

NW 36<sup>th</sup> Street is a six-lane divided facility with sidewalks and no bicycle lanes. It becomes SR 948 east of SR 826. It is a heavily traveled truck facility within the project limits and currently has existing local circulator bus. Doral operates a local circulator along this facility.

- **Recommendation: Enhance local circulator service provided by Doral, and improve transit access to the Miami Intermodal Center (MIC).**

## NW 25<sup>th</sup> Street

NW 25<sup>th</sup> Street is a four-lane divided facility west of NW 87<sup>th</sup> Avenue and a six-lane facility east of 87<sup>th</sup> Avenue. It currently has an existing DTPW bus route 238 which runs from Dolphin mall to NW 107<sup>th</sup> avenue, and east from there along NW 25<sup>th</sup> street. A Doral circulator briefly runs on NW 25<sup>th</sup> street west of NW 107<sup>th</sup> Avenue.

- **Recommendation: Enhance bus routes (local and DTPW)**







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