The Town of Medley

Freight Mobility Improvement Plan

Final Report

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Prepared for
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Executive Summary

The Town of Medley Freight Mobility Improvement Plan examines the existing and planned transportation infrastructure in and around the Town of Medley, Florida with respect to how effective it accommodates the existing and forecasted vehicular and truck traffic volumes. The study also considered the interaction between freight and other modes of transportation. The study area expands outwardly approximately two miles beyond the Town's municipal boundaries in all directions within Miami-Dade County and is made up of a high concentration of industrial land uses. As such, the Town of Medley generates a significant amount of truck traffic, which is expected to increase as economic growth continues.

The primary objectives of this study were to:

- Investigate the freight corridors within the Town of Medley study area
- Analyze alternatives through the evaluation of existing conditions and previous and on-going studies to formulate recommendations
- Develop a plan of viable alternatives to enhance freight connectivity and minimize conflicts

This study explored existing, planned and potential freight corridors within and around the Town of Medley using industry accepted planning documents, data collection and analysis methods to identify opportunities to enhance freight connectivity within the study area. The study also gave significance to comments provided to the study team by stakeholders who are impacted by and influence freight movement within the study area. Stakeholder comments were recorded in-person or by telephone interviews. Key stakeholders include local government staff members, businesses and property owners/managers within the study area that generate significant freight traffic, and those whose operation directly impacts the local economy and built environment. The comments received were reviewed, analyzed, and cross-referenced alongside existing planned and program projects (i.e. Miami-Dade Transportation Planning Organization's Long-Range Transportation Plan and Transportation Improvement Program projects). These comments not only pertained to freight, but mobility and congestion in general, whose treatments will also impact freight mobility in the study area. Reaching out to these key stakeholders and receiving their input was crucial in formulating effective and comprehensive findings.

Common themes throughout the discussion with key stakeholders within the area of freight mobility in Medley were safety and connectivity.

This plan presents recommendations to address the needs identified during the study in implementation schedules categorized as follows:

- Short-Term (1 to 5 years)
- Mid-Term (5 to 10 years)
- Long Term (10 or more years)

The major deciding factors regarding the proposed projects implementation schedules are whether or not (and the amount of) Right-of-Way must be acquired in order to implement the project and the level of environmental screening/clearances and mitigation required.

Below is the complete list of recommendations and proposed implementation schedules from the Town of Medley Freight Mobility Improvement Plan.

Short-Term Recommendations

	Facilities	***Limits***	***Description***
1.	NW 121st Way	South River Drive to NW 102nd Road	Resurfacing to fix potholes/slippery pavement when wet
2.	NW 138th Street	At NW 115th Avenue	Resurfacing to fix flood retention issues during raining conditions
3.	NW 105th Way	At Okeechobee Road / US-27	Widen turning radius
4.	Hialeah Gardens / NW 116th Way / Beacon Station Boulevard	FL Turnpike to US-27	Transportation Systems Management and Operations (TSM&O)
5.	NW 138th Street	US-27 to 115 Avenue	Access management. Operational, and drainage improvements
6.	NW 72nd Avenue (Milam Dairy Road)	Hialeah Expressway	Operational improvements
7.	NW 116 Way	US-27 to South River Drive	Signal re-timing and coordination
8.	NW 74 Street	NW 84 Avenue to NW 74 Avenue	Merge and close some access points on south side of NW 74 Street if possible. Provide

			advance signage WB lane drop after NW 79 Pl and other congestion management strategies
9.	SR-25 / Okeechobee Road	HEFT to NW 74th Street	Use of Traffic Adaptive Signal System throughout the corridor
10.	NW 106th Street/Hialeah Gardens Boulevard	HEFT to I-75 / NW 138th Street	Use of Traffic Adaptive Signal System throughout the corridor
11.	NW 74th Street	HEFT to SR-25 / Okeechobee Road (US- 27)	Use of Traffic Adaptive Signal System throughout the corridor
12.	NW 138th Street	SR-25/Okeechobee Road (US-27) to NW 106th Street / Hialeah Gardens Boulevard	Use of Traffic Adaptive Signal System throughout the corridor
13.	NW 122nd Street	SR-25 / Okeechobee Road (US-27) to SR-826 / Palmetto Expressway	Use of Traffic Adaptive Signal System throughout the corridor
14.	NW 103rd Street	SR-25/Okeechobee Road (US-27) to SR-826 / Palmetto Expressway	Use of Traffic Adaptive Signal System throughout the corridor

Mid-Term Recommendations

	Facilities	***Limits***	***Description***
1.	NW 121st Way	South River Drive to NW 102nd Road	Widen from 2 to 4 lanes
2.	NW 106th Street	South River Drive to NW 116th Way	Widen from 2 to 4 lanes
3.	NW 102nd Road	NW 116th Way to NW 121st Way	Widen from 2 to 4 lanes
4.	NW 100th Road	Existing western termini to NW 121 Way	Acquire Right-of-Way and construct roadway

5.	NW 90th Street	NW 87th Ave to NW 97th Avenue	Acquire Right-of-Way and construct roadway
6.	NW 97th Avenue	NW 74th Street north to NW 90th Street	Acquire Right-of-Way and construct roadway
7.	NW 97th Avenue	NW 90th Street north to NW 106th Street	Acquire Right-of-Way and construct roadway
8.	NW 107th Avenue	NW 122nd Street south to NW 106th Street	Acquire Right-of-Way and construct roadway
9.	NW S River Drive	NW 107 Avenue to NW 74 Avenue	Roadway and operational improvements; add dedicated left turn lane(s) that can accommodate truck movements
10.	NW 107 Avenue	US-27 to 1000 Feet north of W 122 Street	Widen Bridge over Miami Canal, re-time and improve signal coordination
11.	Palmetto Express Bus (East)	Palmetto Intermodal Terminal to Golden Glades Interchange Terminal	Implement express bus service on managed lanes between terminals
12.	Palmetto Express Bus (North)	Palmetto Intermodal Terminal to NW 138th Street / I-75 Interchange	Express commuter transit service

Mid and Long-Term Recommendations

	Facilities	*Limits*	*Description*
1.	SR-25 / Okeechobee Road	Along Corridor	Implement Active Arterial Management Techniques, including dynamic message sign system, CCTV coverage and detection systems that can collect traffic data
2.	Citywide		Implementation of a Virtual Freight Network (VFN) that identifies operational strategies using intelligent transportation technology to improve freight mobility within the area
3.	Citywide		Dynamic routing of freight vehicles

Long-Term Recommendations

	Facilities	*Limits*	*Description*
1.	US- 27 / Okeechobee Road	SR-826 to Palm Beach County Line	Build truck only lane
2.	Direct Ramps to Palmetto Intermodal Terminal	SR-826 Managed Lanes to Palmetto Intermodal Center	Direct access ramps for transit Coordinate with multimodal study
3.	Okeechobee Enhanced Bus Intermodal Terminal	SR-821 (HEFT) to Miami Intermodal Center	Implement limited stop enhanced bus service

Citywide Recommendations

	Facilities	*Term*	*Description*
1.	At-Grade Railroad Crossings	Short/Mid/Long	Monitor rail movements along the Florida East Coast (FEC) railroad corridor in the study area on an annual basis
2.	Multi-Modal projects (Per Multimodal Mobility Plan)	Short/Mid/Long	Recommendations from the Town of Medley Mobility plan (including TDM strategies) that reduce the demand for local automobile travel, specifically for employees (i.e. bus circulator, bike/ped facilities)
3.	At-Grade Railroad Crossings	Short/Mid/Long	Evaluate the need for rail grade separations at affected locations

Purpose and Need

In the crosswinds of uncertainty due to the Great Recession and an unforeseen dynamism due to new technologies, Florida's public and private leaders identified a "once-in-a-generation opportunity" to revitalize and catalyze the State's economy by becoming a "global hub for trade, logistics, and export-oriented manufacturing actives" (Florida Trade and Logistics Study, 2010). This opportunity came in the completion of the procurement process for the Panama Canal Expansion Project in 2010; a project which promised the world safe passage of container ships carrying approximately 150% to 200% more cargo than before (The Geography of Transport Systems, 2012). This promise and vision of growth comprised the essence of an overarching need for an improved freight infrastructure and logistics system that ensured the mobility of goods and enhanced the economic prosperity of the State.

Since then, Florida has seized this opportunity with major investments in strategic transportation projects such as the $667 million PortMiami Tunnel, its first-ever statewide Freight Mobility and Trade Plan (FMTP) fully adopted in 2014 and supported by the Fixing America's Surface Transportation (FAST) Act (Pub. L. No. 114-94), innovative programs for employer-driven training and company-specific export developments (Florida: Made for Trade – Florida Trade and Logistics Study 2.0, 2013), and multiple other efforts of statewide, regional, and county scope.

At a granular level, this subarea freight study is the ultimate step in identifying specific needs and improvements that support the State's vision in becoming a global hub. Miami-Dade County is the most populous of Florida's 67 counties with a 2016 estimated population of 2.7 million people living in just over 2,400 square miles (approximately 13% of the total state population living on approximately 4.5% of the total area) and an increasing population. Today, the main freight movement within the County runs along an axis that extends from PortMiami in the east to the rock quarries in the west. This east-west freight belt is comprised of the Miami International Airport (MIA), the Florida East Coast (FEC) Rail Yard, and major warehouse districts along the Dolphin Expressway (SR 836). This freight belt is further supported by major north-south roadways such as SR 9A/I-95, SR 821/Homestead Extension of Florida's Turnpike (HEFT), SR 826/Palmetto Expressway and SR 992/Krome Avenue that further distribute goods to adjacent counties and beyond. This unique study, along with its counterparts, will help extract the full potential out of Miami's existing freight assets while recognizing local opportunities for growth.

Existing Conditions

Introduction

The Existing Conditions section of this report provides an assessment of the Town of Medley's current conditions as they relate to the movement of freight. This section first presents summaries of recently adopted studies and plans in South Florida that address freight movement in and around the Medley area. It will then provide an overview of social and economic conditions while identifying the multimodal transportation infrastructure that serves goods movement in the geographic area. The report utilizes data from various sources to describe the regional economic activities and assesses the adequacy of the transportation network. Considering the social and environmental impacts of freight movement in the region, the report also identifies major cultural, historic, social, and environmentally sensitive features that may need to be protected when exploring opportunities to improve the transportation system. The observed existing conditions serve as the foundation, for identifying future travel demand and alternative analysis, based on the study area's transportation needs and current/potential development of the freight mobility plan.

It should be noted that, for the purpose of this study, the existing conditions portion of this report was established prior to the study's data collection efforts being completed. More in-depth supplemental data analyses have been conducted when and where applicable and are addressed in the study's analyses efforts.

Review of Previous and On-Going Studies

The purpose of this literature review is to analyze previously published studies and plans as well as summarize planned and programmed projects that may impact freight movement, and potential treatments thereof, within and around the Town of Medley, Florida. The goal is to use the available information to help create the foundation and establish a context upon which to build alternatives concepts for the Town of Medley Freight Mobility Improvement. The documents listed below have been reviewed with special attention payed to freight movement data, major freight generators and planned projects that facilitate freight movement.

- Miami-Dade Freight Plan
- Miami-Dade Transportation Planning Organization (TPO) 2040 Long Range Transportation Plan (LRTP)
- Southeast Florida Regional Transportation Plan
- PortMiami Master Plan 2035
- Economic Analysis of The Miami River Marine Industry
- Miami-Dade TPO Program Priorities
- Assessment for Potential Truck Parking Locations within Miami-Dade County
- FDOT Five Year Work Program – Miami Dade County FY2017-2021
- Southeast Florida Regional Freight Plan
- Florida Freight Mobility and Trade Plan - Investment Element
- Strategic Intermodal System (SIS) Strategic Plan – First 5 Year and Second 5 Year
- Trends in Heavy Truck Traffic Management, Executive Summary and Final Report
- Truck Route System for Miami-Dade County, Executive Summary and Final Report
- Medley Sub-Area Freight Study
- Okeechobee Road Project Development and Environmental (PD&E) Study
- NW South River Drive Corridor Study Area Expansion, HEFT/ SR-25 (Okeechobee Road) to NW 121st Way (Medley West Industrial Area), Volume I: Engineering Analysis (Master Plan)
- NW South River Drive Corridor Study Area Expansion, HEFT/ SR-25 (Okeechobee Road) to NW 121st Way (Medley West Industrial Area), Volume II: Traffic Report
- Miami Toll Truckway: Preliminary Feasibility Study
- Fiscal Year 2016-2020 Work Program
- US 27 Multimodal Planning and Conceptual Engineering (PACE) Study

The purpose of each study reviewed is summarized below as well as any consideration for the Town of Medley and surrounding areas as related to freight mobility.

Miami-Dade Freight Plan

Agency: Miami-Dade TPO
Adoption Date: August 2014
Link: http://miamidadempo.org/library/studies/freight-plan-update-2014-08.pdf

A number of major studies are in agreement that Miami-Dade County will see a steady increase in freight traffic and freight related business activities. In response, Miami-Dade County has seen significant investment in freight infrastructure and freight related projects. The Miami-Dade Freight Plan identified remaining freight movement needs and prioritized them accordingly. Those remaining needs that directly impact the Town of Medley are:

Prioritized Highway Needs		
Project Name	**Location**	**Description**
Medley Bridge/Canal Improvement Program	NW 121st Way, NW 116th Way NW 105th Way, NW 79th Avenue	Improve the connections between Okeechobee Road and Medley through a combination of bridge widening and canal improvements

Low Ranking Freight Only Projects		
Project Name	**Location**	**Description**
Medley Bridge/Canal Improvement Program	NW 121st Way, NW 116th Way, NW 105th Way, NW 79th Avenue	Corridor Traffic Operations Improvements

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

Agency: Miami-Dade TPO

Adoption Date: October 2014

Link: http://www.miamidade2040lrtp.com/wp-content/uploads/2040_LRTP_Plan.pdf

FHWA defines an LRTP as the official intermodal transportation plan that is developed and adopted through the metropolitan transportation planning process for the metropolitan planning area, in accordance with 23 U.S.C. 134, 23 USC 135 and 49 U.S.C. 5303. A critical component of the LRTP is the inclusion of a financial plan for securing sufficient revenues to cover the costs of implementing strategies. This is usually expressed in a detailed Cost Feasible section of the LRTP. Cost Feasible projects are not yet necessarily funded, but based on revenue projections, sufficient funding should be available to fund them within the LRTP horizon. Additionally, when funding resources become available, the Freight Set Aside projects will be explored. The *Miami-Dade TPO 2040 LRTP* projects that may impact freight movement in and around the Town of Medley are listed below:

Figure 1-1: Miami-Dade TPO 2040 LRTP

Priority II Projects		
Project Name	**Location**	**Description**
Medley Freight Access Roadway Improvements	US-27 / Okeechobee Road to Medley	Bridge widening and canal improvements
NW 107th Avenue	1000-ft north of NW 122 Street to US-27/ Okeechobee Road	Widen bridge over Miami Canal

Priority III Projects		
Project Name	**Location**	**Description**
US-27/ Okeechobee Road	At SR-826 / Palmetto Expressway	Operation Improvements

Priority IV Projects		
Project Name	**Location**	**Description**
US-27/ Okeechobee Road	SR-826/Palmetto Expressway at SR-997 / Krome Avenue	Operational/capacity improvements with grade separated intersections

Bicycle/Pedestrian Priority IV Projects		
Project Name	**Location**	**Description**
NW 79 Place/NW 79 Avenue	Palmetto Metrorail Station to US-27/Okeechobee Road	Bicycle Facility Improvements

Freight Set-Aside Projects Priority II		
Project Name	**Location**	**Description**
NW 116 Way	US-27/Okeechobee Road to S River Drive	Improve signal operations with truck headways and lost time. Retime and improve signal coordination.

Freight Set-Aside Projects Priority II		
Project Name	**Location**	**Description**
US-27 /Okeechobee Road	NW 138 Avenue to NW 79 Avenue	Signal timing improvements, and access improvements to provide better flow
Truck Parking Improvement	US-27 / Okeechobee Road	Provide a location in the area of Okeechobee Road and the HEFT for long-term truck parking and staging
W 16 Avenue	US-27 / Okeechobee Road and NW S River Drive	Improve signal timing and coordination considering truck headways. Pull back curb at the right turn spot to allow wider right turn status
NW 72 Avenue / Milam Dairy Road	NW 58 Street to NW 74 Street	High number of access points on the south side of NW 58th Street. Merge and reduce access points close to busy intersections if possible

Medley freight hub streetlight and local roadway improvements	No location specified in the LRTP	Add street lights to local roads in Medley to increase safety and help to facilitate expanded hours of operations
NW 74 Street	NW 84 Avenue to NW 74 Avenue	Merge and close some access points on south side of NW 74 Street if possible. Provide advance signage WB lane drop after NW 79 Place

Southeast Florida Regional Transportation Plan

Agency: Southeast Florida Transportation Council (SEFTC)

Adoption Date: October 2015

Link: http://seftc.org/system/uploads/documents/SEFL2040RTP_Final_Oct2015_small-2.pdf

Each M/TPO is required to adopt an LRTP. The South Florida "Region" encompasses three M/TPOs (Palm Beach, Broward and Miami-Dade). The three M/TPOs actively participate in a coordinating body, SEFTC, which helps ensure that the long and short-range planning efforts of each M/TPO are compatible and contribute to an efficient and seamless regional transportation system. As SEFTC describes it, the *2040 Regional Transportation Plan (RTP)* is a key tool linking long-range transportation plans between the Broward (Commitment 2040), Miami-Dade (Mobility Options 2040), and Palm Beach (Directions 2040) M/TPOs.

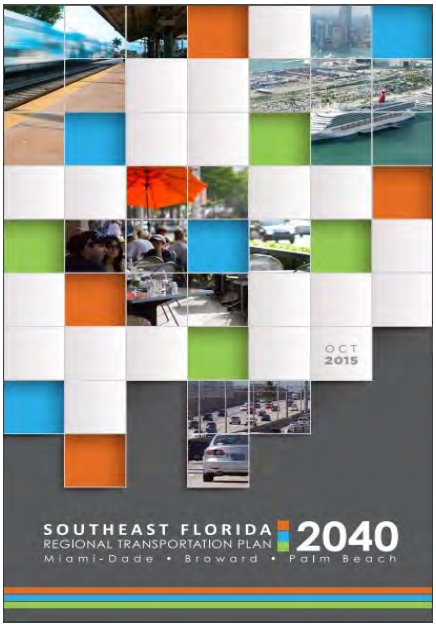


Figure 1-2: Southeast Florida RTP

The Southeast Florida RTP includes a chapter on the need for freight movement improvements using the following strategies:

- Promote economic contributions of freight and logistics industry
- Engage the freight community in the identification of freight bottlenecks
- Maximize use of available funding programs
- Leverage investments through public-private partnerships
- Evaluate the effectiveness of the freight system
- Ensure trade and logistics remains a targeted industry
- Support work force development programs
- Continue to develop, test and expand pilot programs
- Monitor intermodal logistics center developments and partner as appropriate
- Support advancement of solutions for missing freight links
- Promote regional freight mobility

The plan included prioritized Unfunded Needs (no Cost Feasible projects) from the region's three LRTPs. Of the projects listed, the only project/need mentioned with direct impact to the Town of Medley's freight movement is a missing link along Okeechobee Road (US-27) that could potentially house a railroad from PortMiami to Western Palm Beach County.

PortMiami (POM) Master Plan 2035

Agency: PortMiami (Miami-Dade County)
Adoption Date: November 2011
Link: http://www.miamidade.gov/portmiami/master-plan.asp

According to the PortMiami website, the *POM 2035 Master Plan* is a planning tool used to update the Port of Miami Master Plan sub-element of the County's Comprehensive Development Master Plan. This document was prepared simultaneously with the County's *Evaluation and Appraisal Report*, which analyzes if the Port is meeting its goals, policies, and objectives that are centered on more efficiently increasing Port business. Increasing Port business ultimately helps increase the County's economy as a whole.

The Masterplan did not mention specific Town of Medley project needs but did identify the Medley area as a potentially attractive location for a distribution center. Most of the Port's existing and projected cargo/freight destined for or originating in the Town of Medley is expected to be captured by additional documents reviewed and data collected within this study. Additionally, PortMiami cargo forecast are the basis for the projected growth scenarios of this study's analyses.

Economic Analysis of the Miami River Marine Industry

Agency: Miami River Commission
Adoption Date: April 2008
Link:
http://www.miamirivercommission.org/PDF/EconomicAnalysisoftheMiami%20River42808.pdf

The *Economic Analysis of the Miami River Marine Industry* contains a review of several economic studies and other research documents published since 1990 that are relevant to demonstrating the significance of the Miami River to local economic activity. The report discusses a number of opportunities that could support the economy along and related to the river, including freight connections to railroads but does not list Medley (or the surrounding areas specifically).

FDOT is currently producing a *Miami River Freight Improvement Plan* which will seek to optimize freight movement on the existing rail system as well as opportunities to utilize the Miami River for intra-county freight movement. A thorough review of that study's report will be performed upon its conclusion for the programming phase of this study.

Miami-Dade TPO Program Priorities
Agency: Miami-Dade TPO
Adoption Date: May 2015
Link: http://miamidadempo.org/library/reports/program-priorities-2017-2021.pdf

The Miami-Dade *TPO Program Priorities* is the official mechanism by which the Miami-Dade TPO Board provides its program priorities to FDOT for funding consideration. Once the TPO adopts these TPO Program Priorities Project Listing, FDOT produces a *Five-Year Work Program* to execute these priorities as directed by the TPO, essentially allocating funds to the projects based on their prioritization and available funds. The TPO Program Priorities communicates to the State the priority projects approved by the TPO to be added in the "new 5th year" of the Florida Department of Transportation (FDOT) Work Program and subsequently the TIP and Statewide Transportation Improvement Program (STIP).

FY 2021 TPO Priority Projects

Project Name	Location	Description
NW S River Drive & Medley Bridges connecting to Okeechobee	from NW S River Drive Bridges to Okeechobee Road	Widen bridges and intersections between Okeechobee Road and NW S River Drive. Address inadequate geometry and improve freight and truck movements

Assessment for Potential Truck Parking Locations within Miami-Dade County

Agency: FDOT
Adoption Date: 2016
Link: Not Available

Miami-Dade TPO conducted the *Comprehensive Parking Study for Freight Transport Phase I* and subsequently the *Development of Truck Parking Facilities in Miami-Dade County Phase II* to identify potential and to serve as a guide to implement new truck parking facilities. FDOT's District 6 is now in the final stages of carrying out the *Assessment for Potential Truck Parking Locations within Miami-Dade County* effort, which follows-up on the aforementioned Miami-Dade TPO's efforts by re-assessing sites evaluated and recommended by the Miami-Dade TPO, developing site specific conceptual layouts, and developing inventory that will serve as a bank of options and lead to further feasibility analyses.

At the time this report was written, the FDOT study's final report had not been published, but the near finalized version revealed that a potential site for a 15.10-acre truck parking facility located on the southeast corner of the SR 826/SR 836 Interchange. This is not within the Medley study area.

FDOT Five Year Work Program (Miami-Dade County) FY 2017-FY 2021
Agency: FDOT
Adoption Date: June 2016
Link: http://www2.dot.state.fl.us/fmsupportapps/workprogram/workprogram.aspx

In accordance with Section 339.135. Florida Statutes, the Department of Transportation is responsible for the development of a State Transportation Five-Year Work Program. The *Five-Year Work Program* is based on a balanced financial plan which maximizes available revenue sources, achieves equitable geographic distribution, and lists all transportation activities and projects scheduled for implementation during the ensuing five-year period. It is developed through extensive coordination with local governments, Metropolitan Planning Organizations, regional planning groups and Florida citizens.

Projects listed in the FDOT 5 Year Work Program that are directly related to freight movement within and around the Town of Medley are as follows:

Five Year Work Program		
Project Name	**Location**	**Description**
SR-25/Okeechobee Road	From east of NW 107 Avenue to east of NW 116 Way	Add Lanes & Rehabilitate Pavement
SR-25/Okeechobee Road	From east of NW 116 Way to east of NW 87 Avenue	Add Lanes & Rehabilitate Pavement
SR-25/Okeechobee Road	From east of NW 117 Avenue to east of NW 107 Avenue	Add Lanes & Rehabilitate Pavement
SR-25/Okeechobee Road	From east of NW 87 Ave to NW 79 Ave	Add Lanes & Reconstruct
SR-25/Okeechobee Road	From north of NW 186 Street to south of NW 170 Street	Intersection Improvement
SR-25/Okeechobee Road	From west of Krome Avenue to east of NW 117 Avenue	Add Lanes & Reconstruct
SR-25/Okeechobee Road	At SR-826/Palmetto Expressway (Various Ramps)	PD&E/MO Study
SR-25/Okeechobee Road	From NW 79th Avenue to NW 72nd Avenue	Transportation Planning

Five Year Work Program		
Project Name	**Location**	**Description**
SR-25/Okeechobee Road	From SR-997 / Krome Avenue to NW 79th Avenue	PD&E/Emo Study
SR-25/Okeechobee Road and SR-932/NW 103 Street	At NW 87 Avenue	Add Turn Lane(s)
SR-25/Okeechobee Road	At West 16th Avenue	Intersection Improvement
SR-25/US 27/Okeechobee Rd	From NW 72 Avenue/W 12 Avenue to SE 4 Avenue/E Drive	Transportation Planning

At the time this report was written, Miami-Dade TPO's FY 2017 TIP was under FDOT review for final adoption. A review of the TIP was not done at that moment in time as the major source of information for the TIP is the FDOT Work Program, and such a review would most likely produce redundant results. Prior to this study's making programming recommendations, a thorough review of the TIP and STIP will be performed to ensure consistency and identify any relevant items that were not captured in the FDOT TIP review.

Southeast Florida Regional Freight Plan (2014 Update)

Agency: FDOT and Southeast Florida Transportation Council

Adoption Date: 2014

Link: http://www.browardmpo.org/images/WhatWeDo/SFRFPFINALREPORT.pdf

Building on previous individual MPO's freight planning efforts, the two MPOs and Miami Dade TPO, located in the Miami-Dade Urbanized Area (UZA), published the first *Southeast Florida Regional Freight Plan* in 2010. The 2014 Update highlights how the freight system is evolving, celebrates its successes, and identifies strengths as well as the next steps and challenges as the South Florida region continues to position itself as a global logistics hub. The planning horizon for the *Southeast Florida Regional Freight Plan* is 2040 and has been closely coordinated with the 2040 RTP and the region's three M/TPO's 2040 LRTPs.

The plan highlighted the entire length of US-27 (within the region) as needing increased capacity via rail and/or widening. Recent planning studies are not in direct agreement as to the priority of this need. However, the study does include more specific needs prioritized by mode. The list of prioritized regional roadway needs directly related to the Town of Medley included:

Priority Projects		
Project Name	**Location**	**Description**
No. 10 Medley Bridge/Canal Improvement Program	Medley Bridge/Canal	Improve the connections between Okeechobee Rd and Medley through a combination of bridge widening and canal improvements (NW 121st Way, NW 116th Way, NW 105th Way, NW 79th Avenue)
No. 13 SR-25/Okeechobee Road/US 27	SR-25/ Okeechobee Road / US-27	Expressway Conversion - Construct Grade Separated Overpasses at Major Intersections. New Interchange at NW 79th Avenue, Krome Avenue / SR-997, NW 103rd Street/NW 87th Avenue
No. 14 SR-25/Okeechobee Road/US-27	SR-25/ Okeechobee Road / US-27	Conversion to limited access toll facility from Krome Avenue to SR-826

Florida Freight Mobility and Trade Plan - Investment Element

Agency: FDOT

Adoption Date: September 2014 (Addendum July 2015)

Link: http://www.freightmovesflorida.com/freight-mobility-and-trade-plan/freight-mobility-investment

Building on the *Florida Freight Mobility and Trade Plan's* Policy Element, when formalized the State's objectives and policies regarding advancing freight movement within the state and acknowledgements of the benefits thereof, the Investment Element moves from policy direction to project implementation. The investment element directly addresses the prioritization process for funding and a complete assessment of freight infrastructure needs. The needs list was comprised of over 70 projects costing over $32 B.

Of those, the following High and Medium Priority projects are located in or adjacent to the Town of Medley:

Figure 1-3: Freight Mobility and Trade Plan Logo

High and Medium Priority Projects	
Project Name	**Location**
SR-997 / Krome Avenue	From MP 10.935 To MP 14.184 / Okeechobee Road
SR-25 / Okeechobee Rd	From SR-826 To Krome Ave
NW 74 St	From SR-826 / Palmetto Expressway To US-27 / Okeechobee Road
SR-25/Okeechobee Road / US-27	From Krome Avenue to NW 79th Avenue
SR-25 / Okeechobee Road / US-27 & NW S River Drive	At Palmetto Expressway
W 16 Avenue	From S Okeechobee Road to NW S River Drive

Strategic Intermodal System, First 5 Year Plan (2015-2020)

Agency: FDOT

Adoption Date: February 2016

Link:

http://www.dot.state.fl.us/planning/systems/programs/mspi/pdf/Adopted_First_Five.pdf

The FDOT Systems Planning Office produces a document set known as the *SIS Funding Strategy*, which includes three inter-related sequential documents that identify potential Strategic Intermodal System (SIS) capacity improvement projects in various stages of development. The combined document set illustrates projects that are funded (Year 1), programmed for proposed funding (Years 2 through 5), planned to be funded (Years 6 through 10), and considered financially feasible based on projected State revenues (Years 11 through 25). The First Five Plan illustrates projects on the SIS that are funded by the legislature in the Work Program (Year 1) and projects that are programmed for proposed funding in the next 2 to 5 years. There were no SIS projects in or near the Town of Medley for the First 5 Year.

Strategic Intermodal System, Second 5 Year Plan (2020-2025)

Agency: FDOT

Adoption Date: February 2016

Link:

http://www.dot.state.fl.us/planning/systems/programs/mspi/pdf/Approved_Second_Five.pdf

The FDOT Systems Planning Office produces a document set known as the *SIS Funding Strategy*, which includes three inter-related sequential documents that identify potential Strategic Intermodal System (SIS) capacity improvement projects in various stages of development. The combined document set illustrates projects that are funded (Year 1), programmed for proposed funding (Years 2 through 5), planned to be funded (Years 6 through 10), and considered financially feasible based on projected State revenues (Years 11 through 25). The Second Five Plan illustrates projects that are planned to be funded in the five years (Years 6- 10) beyond the Adopted Work Program, excluding the Turnpike. Projects for this plan could move forward into the First Five Year Plan as funds become available. There were no SIS projects in or near the Town of Medley for the First 5 Year. The following projects from the Second 5 year are located in or adjacent to the Town of Medley:

Strategic Intermodal System, Second 5 Year Plan (2020-2025)		
Project Name	**Location**	**Description**
SR-25 / Okeechobee Rd	From west of Krome Avenue to east of NW 117 Aveune	Modify Intersection
SR-25 / Okeechobee Rd	From east of NW 87 Avenue to NW 79 Avenue (Concrete)	Add 2 Lanes To Build 8 Lanes
SR-25 / Okeechobee Rd	From east of NW 107 Avenue to east of NW 116 Way (Concrete)	Modify Intersection
SR-25 / Okeechobee Rd	From east of NW 117 Avenue to east of NW 107 Avenue (Concrete)	Modify Intersection
SR-25 / Okeechobee Rd	At SR-826 / Palmetto Expressway (Various Ramps)	Project Development & Environment

Trends in Heavy Truck Traffic Management, Executive Summary and Final Report

Agency: Miami-Dade TPO

Adoption Date: February 2005

Link: http://miamidadempo.org/library/studies/trends-in-heavy-truck-traffic-management-executive-summary-2005-02.pdf

http://miamidadempo.org/library/studies/trends-in-heavy-truck-traffic-management-final-report-2005-02.pdf

Figure 1-4: Trends in Heavy Truck Traffic Management

The *Trends in Heavy Truck Traffic Management* study identified opportunities for improved truck operations in Miami-Dade County. Its objective was to develop recommendations for a heavy truck management program for Miami-Dade County that facilitates the efficient and reliable movement of freight while maximizing passenger safety and security.

Study recommendations were based on preparation of a series of case studies. These case studies were then compared to documented existing conditions in Miami-Dade County, to integrate case study findings with the identified needs of Miami-Dade County. Recommendations to guide the development of a truck management program were then prepared.

Based on integration of case study findings to identified Miami-Dade County heavy truck issues, recommendations were offered in three areas:

- Institutional/organizational set up – five institutional steps from truck program management planning to monitoring were proposed
- Specific truck management program goals – four areas for goal development to guide a Truck Management Program were identified.
- Specific truck management techniques – recommendations for truck management techniques were made for 11 functional areas, such as regulation, enforcement, incentives, and technological innovation

Ten steps were outlined for the next steps for the development of a Truck Management Program.

Identification of world-wide truck management strategies that are applicable to conditions in Miami-Dade County provides a strong base from which to continue robust regional freight planning.

Truck Route System for Miami-Dade County, Executive Summary and Final Report
Agency: Miami-Dade TPO
Date: June 2007
Link: http://miamidadempo.org/library/studies/truck-route-system-final-report-2007-06.pdf
http://miamidadempo.org/library/studies/truck-route-system-executive-summary-2007-06.pdf

The *Truck Route System for Miami-Dade County* study examined developing a managed truck route system to accommodate the increase of freight on the transportation system in Miami-Dade County. Its objectives were:

- To recommend a truck route management system for Miami-Dade County in the midst of high level of congestion.
- To place primary emphasis on improving existing streets at a low cost level and at major cost level building projects such as the Port Tunnel and the 25th Street Viaduct to separate trucks and traffic.
- To place secondary element on the ability of public and private sector to embrace technology to provide truckers better information about how and where to go to best make their trips.

The study recommended the following activities regarding a Miami-Dade County truck system:

- Work with responsible agencies to identify operational issues on roads defined as part of the system and incorporate specific design parameters into future projects on truck roads.
- Develop a typical truck route cross-section to be included in the Comprehensive Development Master Plan (CDMP).
- Develop and implement signage program with uniform signage consistently placed on facility type (similar logo but different designs and fonts for expressways, major arterials, minor arterials, and local streets).
- Identify and monitor municipalities with truck restrictions and maintain a freight information Web site that trucks and companies can access for information on current streets with truck restrictions as well as construction updates and other factors in the truck route system routes.
- Continue to encourage strong participation through FTAC in the planning process.

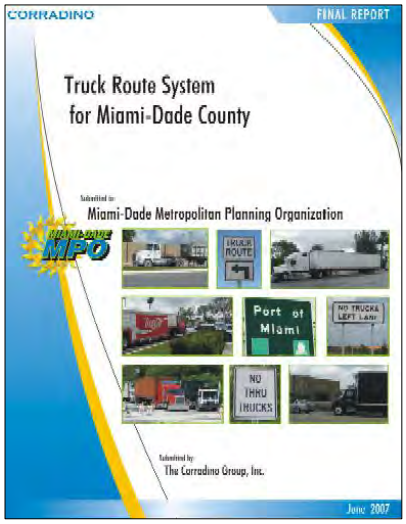


Figure 1-5: Truck Route System for Miami-Dade County

- Support truck-only and/or major capital projects such as the Port Tunnel, elevated lanes on 836, and other projects that will facilitate efficient and timely movement of trucks at all times of day.
- Explore concept of truck-only or truck-only toll lanes in rail corridor in the County with no or limited rail service with particular emphasis on east-west connections.

The study documented that the TPO has and will continue to have a role in providing direction to the various state, regional, and local agencies building and maintaining the County's transportation infrastructure. With the support and leadership of the TPO, this plan was seen as a starting point for creating a truck-supporting and friendly roadway environment.

Medley Sub-Area Freight Study
Agency: Miami-Dade TPO
Adoption Date: March 2009
Link: http://miamidadempoe.org/medley-sub-area-freight-study-final-report-2009-03.pdf

The *Medley Sub-Area Freight Study* examined the opportunities to improve infrastructure to meet the growing demand on the freight system in the Medley area. Medley was selected as a sub-area study because of its relatively concentrated degree of freight activity and its proximity to key facilities such as MIA. With a high concentration of warehouses and distribution centers, it is experiencing growing constraints as freight volumes continue to outpace system improvements – maintenance and capacity.

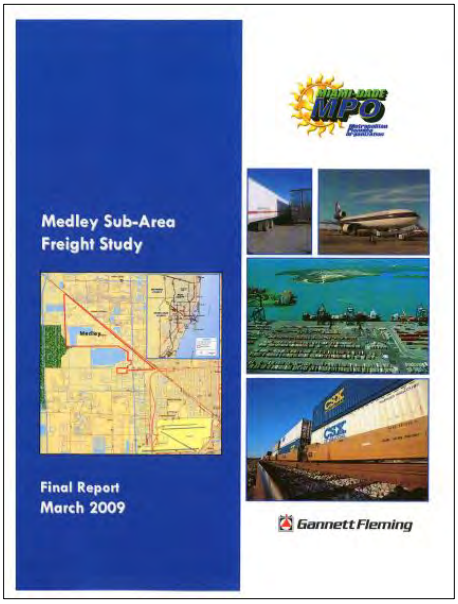


Figure 1-6: Medley Sub-Area Freight Study

The study objective was to identify Medley sub-area freight issues and needs and to make associated recommendations. This included transportation improvements and other non-infrastructure actions as appropriate.

This information was to be incorporated into the county-wide Miami-Dade Freight Plan as one of several plan inputs to help set the long-range freight direction for the County.

The study found that Medley's existing infrastructure required additional investment for improved pavements, traffic signals, as well as intersection improvements and road widening projects. Reported opportunities to improve freight flow in the area included:

- Improving roadway conditions, both in terms of maintenance and geometrics for better truck operations
- Installing signing and wayfinding focused on truck operations
- Increase capacity through selected roadway widening
- Examine intermodal connectivity opportunities

Medley's strategic advantage is access to the road system and other modes, making Intermodal Connectivity an area of particular importance. Safety and security is central to the business of Medley's freight stakeholders. Some of their concerns include improved lighting and signing and truck parking.

The value of this plan would be in potential application of freight-improvement strategies to other subareas within the region. Findings from this and other regional or corridor studies could be compiled to be a compendium of best practices and lessons learned.

Okeechobee Road PD&E Study

Agency: FDOT

Adoption Date: April 2015

Link: http://www.fdotmiamidadt.com/okeechobeeroadstudy

The purpose of the *US-27/SR 25/Okeechobee Road Project Development and Environment (PD&E)* study was to develop a proposed improvement strategy that is technically sound, environmentally sensitive and publicly acceptable. This document fully adheres to the requirements of the National Environmental Policy Act (NEPA) and other related Federal and State laws, rules and regulations as required to qualify for federal funding which will be sought for this project. The study objectives included:

- Document existing conditions, including engineering and operational deficiencies, to define project need and purpose
- Document corridor environmental conditions
- Develop and evaluate potential alternatives
- Evaluate environmental impacts
- Propose recommended corridor improvements

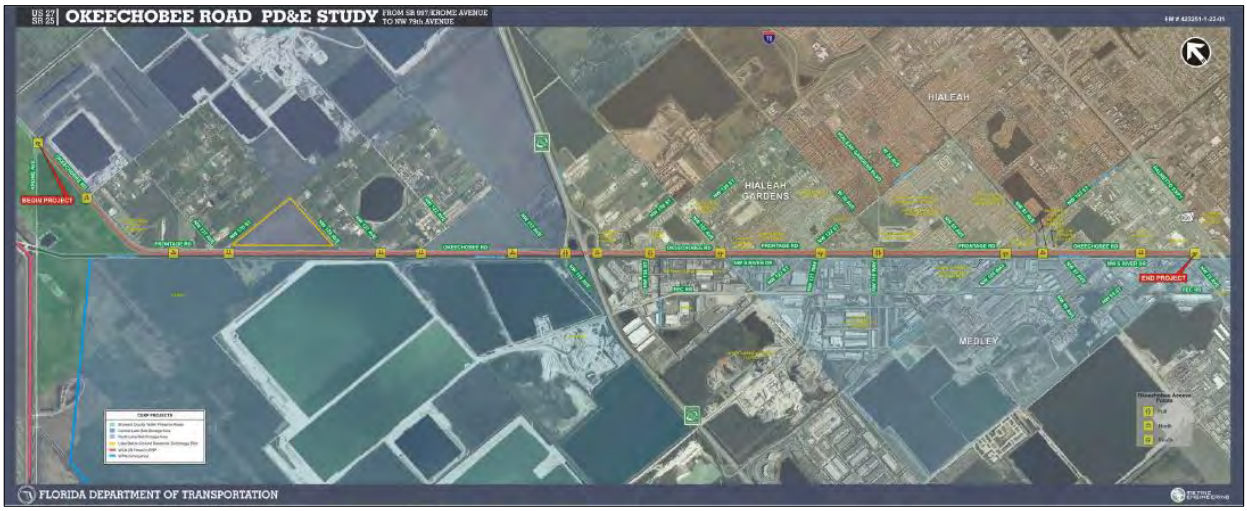


Figure 1-7: Okeechobee Road PD&E Study Map

Key findings and recommendations of this study regarding freight or logistics were:

- The corridor is an element of Florida Strategic Intermodal System (SIS) and is identified as a major freight facility linking to other major transportation facilities
- The corridor is a major truck route from Port of Miami to Town of Medley distribution centers; route serves high concentration of industrial and freight logistics businesses which are essential to regional economy
- The defined project purpose is to improve overall traffic operations and safety
- The study identified deficiencies including geometric, capacity, operational (close intersection spacing and truck operations (20% +/- trucks) adversely affects traffic operations), access, and safety

- The study includes both [minor] Transportation Systems Management & Operations (TSM&O) options as well as major improvements and proposed improvements including:
    - Provision of safety and mobility features along Okeechobee Road
    - Frontage road enhancements and intersection improvements including grade-separated intersections
    - Bridge widening/canal crossing improvements and multimodal options

The US-27/SR-25/Okeechobee Road corridor has been identified in multiple planning documents as a critical freight corridor for the region, connecting intermodal major regional freight hubs to important freight warehousing and distribution centers. As a major commuter corridor, efficient interaction between freight carriers and personal vehicular traffic is critical to regional mobility.

The PD and E study resulted in the following projects, located along the Okeechobee Road corridor, being funded in FDOT's Work Program:

- From Dade/Broward County Line to east of NW 117th Avenue (FM: 423251-2-32-01)
    - Includes capacity improvements along Okeechobee Road and frontage road

- From east of NW 117th Avenue to east of NW 107th Avenue (FM: 423251-6-32-01)
    - Includes concrete pavement reconstruction and widening from the Homestead Extension of Florida's Turnpike to east of NW 107th Avenue

- From east of NW 116th Way to east of NW 87th Avenue (FM: 423251-5-32-01)
    - Includes a design of a flyover bridges connecting Okeechobee Road to NW 116th Pl. and reconstruction of Okeechobee Road at this segment

- From east of NW 116th Way to east of NW 87th Avenue (FM: 423251-4-32-01)
    - Includes the design for a flyover bridge connecting NW 87th Avenue and Okeechobee Road, the construction of a new bridge over the Miami Canal on NW 106th Street and roadway reconstruction on Okeechobee Road.

- From east of NW 87th Avenue to NW 79th Avenue (FM: 423251-3-32-01)
    - Includes capacity improvements in the form of additional lanes and roadway reconstruction on Okeechobee Road

NW South River Drive Corridor Study Area Expansion, HEFT/ SR-25 (Okeechobee Road) to NW 121st Way (Medley West Industrial Area), Volume I: Engineering Analysis (Master Plan)

Agency: Town of Medley
Adoption Date: November 2005
Link: http://miamidadempo.org/library/studies/medley-south-river-drive-corridor-expansion-engineering-analysis-2005-11.pdf

The *NW South River Drive Corridor Study Expansion, HEFT/ SR-25 (Okeechobee Road) to NW 121st Way (Medley West Industrial Area), Volume I: Engineering Analysis (Master Plan),* identified various improvements required to enhance mobility along NW South River Drive and access to the industrial areas within the Town of Medley east of NW 107th Avenue. The purpose of the study was to investigate transportation characteristics/deficiencies associated with the Town of Medley's western most industrial area and its interaction with SR-25 (Okeechobee Road) and NW South River Drive.

Figure 1-8: NW South River Drive Corridor Study Area Expansion (Vol. 1)

The report objectives included the following:

- Evaluate existing transportation system conditions
- Summarize traffic conditions (documented in Vol. 2)
- Identify and evaluate alternative improvements, including preliminary cost estimates
- Recommend roadway improvements

This engineering analysis report examined alternatives and identified a series of immediate, short-term (Phase 1, 2008), mid-term (Phase 2, 2018), and longer-term (Phase 3, 2028) needs that could be addressed by FDOT and local transportation agencies. The report states that right of way constraints and funding availability dictate the phasing plan.

- Immediate need recommendations:
  - Modify bridge design on NW 138th Street to accommodate future needs
  - Commence planning for the implementation of the 2018 and 2028 improvements
- Phase I (2008) recommendations:
  - Construct improvements over the Miami Canal on NW 107th Avenue, on NW 138th Street, and along NW 107th Avenue
  - Improve selected intersections
  - Synchronize the traffic signals along SR-25, at NW 138th Street and NW 107th Avenue
- Phase II (2018) recommendations:
  - Construct further improvements for NW South River Drive

    - Widen the bridge at NW 138th Street and SR-25 (Okeechobee Road) intersection
    - Widen the bridge at the NW 121st Way and SR-25 (Okeechobee Road) intersection
    - Improve the SR-25 (Okeechobee Road) and NW 138th Street Intersection.
- Phase III (2028) recommendations:
    - Expand NW 138th Street to a 4-lane section from NW 113th Avenue Road to the FEC railroad corridor
    - Widen NW South River Drive from NW 107th Avenue to NW 121st Way
    - Provide traffic signals at NW 113th Avenue Road with NW 138th Street and NW 127th Street with NW 107th Avenue intersections.
    - Support FDOT efforts to provide a grade separation of SR-25 over NW 138th Street

This detailed study provided key recommendations for improving traffic and freight flow within the study area. From a regional freight planning perspective, this report has little value, as it is now ten years old and focused almost exclusively on traffic conditions and potential engineering solutions.

NW South River Drive Corridor Study Area Expansion, HEFT/ SR-25 (Okeechobee Road) to NW 121st Way (Medley West Industrial Area), Volume II: Traffic Report

Agency: Town of Medley
Adoption Date: November 2005
Link: http://miamidadempo.org/library/studies/medley-south-river-drive-corridor-expansion-traffic-report-2005-11.pdf.

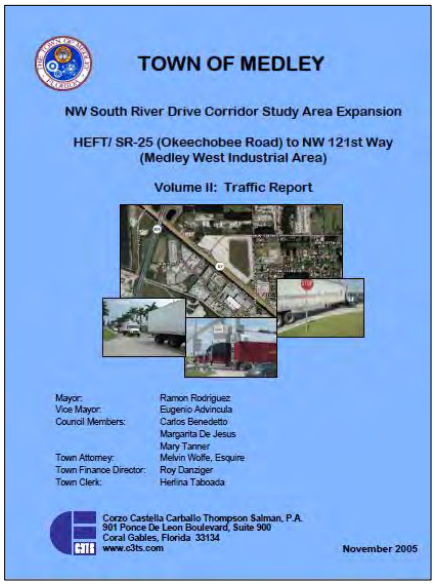


Figure 1-9: NW South River Drive Corridor Study Area Expansion (Vol. 2)

The *NW South River Drive Corridor Study Expansion, HEFT/ SR-25 (Okeechobee Road) to NW 121st Way (Medley West Industrial Area)*, identified various improvements required to enhance mobility along NW South River Drive and access to the industrial areas within the Town of Medley east of NW 107th Avenue. The purpose of this study was to provide the Town of Medley and the Miami-Dade TPO with documented information on the existing conditions within the NW South River Drive Area Expansion (a.k.a. Medley West Industrial Area) and its interaction with SR-25 (Okeechobee Road) and NW South River Drive and the need for improvements in this area.

This second volume of the study reporting addressed traffic circulation issues for the Medley West Industrial Area and identified needed improvements to its roadway network as a second step in addressing future expansion along NW South River Drive as well as improved access to SR-25 (Okeechobee Road) and the Town's transportation needs.

The goal of this traffic report was to provide the Town of Medley with proper documentation on the traffic methodology findings and recommendations of improvements within the study area. These recommendations were to be carried further as part of the Master Plan being developed for the area. This traffic report examined current and anticipated traffic conditions within the study area. A series of appendices in the report documents traffic data, safety data, and intersection and roadway operations analysis.

The report replicates the phased improvement recommendations contained in Volume 1, the engineering analysis, but the primary purpose is to document traffic data and traffic operations analysis.

This detailed study provided key recommendations for improving traffic and freight flow within the study area. From a regional freight planning perspective, this report had little value, as it is now ten years old and was focused almost exclusively on traffic conditions and potential engineering solutions.

Miami Toll Truckway: Preliminary Feasibility Study

Agency: Reason Foundation
Adoption Date: November 2007
Link: http://reason.org/files/2fe311245d30f86dae86997b95211b88.pdf

The *Miami Toll Truckway: Preliminary Feasibility Study* was a private study to examine the feasibility of constructing a dedicated east-west truck-only facility, connecting the new Port Tunnel with the area west and northwest of MIA, using truck tolls to finance construction and operation. The tolled truckway would begin at the entrance to the proposed Port Tunnel and extend to the Florida East Coast railroad intermodal yard west of Miami International Airport.

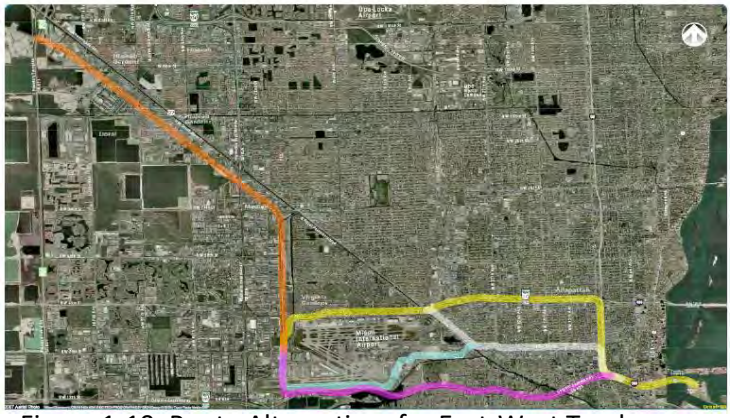


Figure 1-10: Route Alternatives for East-West Truckway

The objectives of the report were:

- To identify and examine alternative routes
- To estimate implementation costs
- To assess financial feasibility

This preliminary study yielded the following conclusions and recommendations:

- Four alternatives seem to show engineering and environmental promise
- The truckway would offer substantial operating time and cost savings to trucks moving to and from the port
- Broad public benefits would result, due to reduced congestion caused by truck traffic on existing roadways
- Truck tolls based on travel time savings appear feasible; toll revenues could support 54 to 58 percent of the project's cost
- The truckway would be a good candidate for public-private partnership

The study's author recognizes the limitations of the study, due to its very preliminary nature and its independent development, without any "official" sanction or support. As such, it is of limited value, unless FDOT or the TPO chooses to accept the study for review and consider its findings within a broader planning environment that provides more detailed data, engineering analysis, and financial assessment.

Fiscal Year 2017-2021 Work Program
Agency: Miami-Dade Expressway Authority
Adoption Date: March 29, 2016
Link: http://www.mdxway.com/pdf/work_programs/FY2017-2021_Work_Program.pdf

The Miami-Dade Expressway Authority (MDX) is a transportation entity of the State of Florida created to acquire, hold, construct, improve, maintain, operate, own and lease an expressway system located in Miami-Dade County. MDX currently oversees, operates, and maintains 222 lane-miles of highways in the County. The Airport Expressway (SR-112), Dolphin Expressway (SR-836), Don Shula Expressway (SR-874), Snapper Creek Expressway (SR-878) and Gratigny Parkway (SR-924) are all under MDX's authority.

MDX prioritizes certain projects that it may totally or partially fund over its 5-year Work Program. Some amendments and modifications could be made annually as priorities and projects, as a whole, are re-evaluated, completed, or new projects are identified. For the current FY 2016-2020 Work Program, the projected budget is $708.6 million and currently includes 40 projects.

Figure 1-11: MDX Fiscal Year 2017-2021 Work Program

MDX's Work Program, *Project 92404 - SR-924 Extension West to the Homestead Extension of the Florida's Turnpike*, funds the PD&E study and final design for a new expressway extension from SR-924 west to the HEFT and acquisition for improvements to the NW 138th Street from Okeechobee Rd. to west of I-75 via an agreement with the City of Hialeah and right-of-way of the ultimate improvements along NW 138th Street from NW 97th Avenue west to Okeechobee Road as a Phase I. Final design will begin at the end of FY 2017.

The Work Program literature includes a project in the System Expansion section that anticipates a new expressway extension from SR-924 east to I-95 at 32nd Avenue. The project is in the PD&E phase and there are no other phases funded in this MDX Five-Year Work Program.

US-27 Multimodal Planning and Conceptual Engineering (PACE) Study

Agency: FDOT
Adoption Date: December 2012
Link: Unavailable

The *US-27 Multimodal Planning and Conceptual Engineering (PACE) Study* examined the feasibility of a new rail corridor through information which included a forecast of highway traffic demand and freight traffic for a new rail bypass, development of conceptual engineering alternatives, an environmental screening of the rail alignments, cost estimates and coordination with resource agencies and key stakeholders. The project's purpose intended to address South Florida's projected increase in freight and passenger traffic movement. Ultimately this project's findings could lead to a feasible, efficient rail connection from PortMiami to a band of inland logistics centers in western Palm Beach County, removal of freight traffic from congested coastal corridors, and facilitation and restoration of passenger rail service along the SFECC.

The study concluded the following:

- There will be a need for widening US-27 to accommodate future traffic including truck traffic from planned ILCs
- Potential rail demand estimates suggest that 15 to 22 trains per day could travel on the US-27 rail corridor assuming rail to rail diversion and new Port Miami related rail demands
- Widening US-27 and adding a railroad to the corridor was determined to not have any fatal flaws from an environmental standpoint
- Widening US-27 was determined to not have any fatal flaws from an engineering standpoint
- Adding a railroad to the corridor was determined to be feasible from a physical standpoint of horizontal and vertical geometry
- If and when the ILCs are developed [in western Palm Beach County] , and depending on their actual traffic impacts, that is when the FDOT should initiate Project Development & Environment (PD&E) studies to focus on conceptual design and location approval for the new railroad and potential highway improvements.

All of the above stated points of conclusion require additional analysis, engineering and/or project development to determine a "preferred alternative."

Major Industrial Sectors and Employment

Miami-Dade County is home to diverse communities with extensive needs for industrial, commercial, and consumable goods, while serving as a gateway for import/export activities. The Town of Medley, located in Miami Dade County, has a high concentration of industrial and freight related businesses that play a significant role in helping to satisfy the growing demand for goods in Miami-Dade County and South Florida region.

Distribution of Industrial Sectors

The largest businesses in the Town of Medley include FedEx, Southeastern Consolidated, Titan America, Tarmac America, and Preferred Freezer Services, LLC. The Town has experienced an increase in commercial and industrial growth which is expected to be compounded by the anticipated increase in freight volumes due to PortMiami's upgrades, the intermodal facility, and FEC rail restoration. A substantial number of new jobs will be created which will directly translate to an increase in industrial and commuter traffic.

Miami International Airport (MIA), PortMiami, and the Florida East Coast (FEC) Rail Yard are among the State's most critical freight and logistics centers. MIA is ranked 1st in US international air freight and 9th globally. MIA has a total trade value estimated at $69.9 billion. PortMiami is the 13th largest US mainland container port. The total trade of PortMiami is valued at $25.3 billion, or 30% of the dollar value of Florida's total sea imports and exports. Together, MIA and PortMiami account for nearly 60% of Florida's total air and sea imports and exports. The FEC Hialeah Yard is a 360-acre facility located east of the Town of Medley that accommodates the movement of containers, automobiles, and aggregate. A programmed new transfer facility in the Yard will add additional intermodal transfer between trains, trucks, and planes.

According to the Miami Dade 2014 Freight Plan Update:

1) approximately 2-million tons moved through the Miami International Airport in 2013,
2) approximately 8-million tons moved through PortMiami in 2013,
3) approximately 400,000 short tons moved through the Miami River in 2011.

These numbers are expected to increase in the future with the completion of the upgrades in PortMiami and the FEC rail restoration. Additionally, per the Miami-Dade 2014 Freight Plan Update, the expansion of the Panama Canal, along with the growing North-South trade patterns, free trade zones impacts, and increasing Suez Canal usage has provided new cargo opportunities for this region, which requires additional capacity for regional warehouses, cold treatment facilities, distribution centers, and truck parking facilities. The cargo handled at PortMiami, and MIA is anticipated to grow substantially, which will strain the existing infrastructure in the Town of Medley as it is a crucial component of the County's freight infrastructure.

Employment Categories

Over 75% of the total area is attributed to industrial land uses and only 1% of the area is assigned residential uses. According to the US Census 2015 Population Estimates, the Town of Medley had a population of 851 as of July 1, 2015. However, based on the 2014 US Census Longitudinal Employment Household Dynamics (LEND) data, the Town employs nearly 18,300 workers in a wide range of industrial sectors. Nearly 21% of the workers are employed in the Wholesale and Trade sector, followed by Transportation and Warehousing sector with 18%. The Construction and Manufacturing Industrial sectors come in closely with 15% and 13% of the work force, respectively. The Retail and Trade sector accounts for approximately 12% of workers. This work force serves a large industrial community whose goods and services are transported in and out of the Town of Medley and the Miami-Dade County.

Existing Infrastructure

The existing infrastructure of the Town of Medley is aging as the town was incorporated in 1949 and much of the original infrastructure still remains. In addition to roadway, truck parking, and rail facilities catering to freight, the Town also has transit, pedestrian and bicycle facilities.

Freight Roadways Facilities

As part of this study, a two-mile buffer was applied to the limits of the Town of Medley to select the roadways to be studied. Using FDOT's functional classification system, the roadways were further refined to include only arterials and expressways, which are typical for freight traffic. FDOT's Urban Boundary and Functional Classification Handbook classifies the arterials as those roadways that serve the highest degree of through traffic movement and the largest proportion of total travel. The roadways selected are:

Roadway	Functional Classification	Number of Lanes	Tolled Facility/ Booths	Posted Speed
Interstate 75	Principal Arterial – Urban Interstate	8	No Toll	70 mph
SR-826 / Palmetto Expressway	Principal Arterial – Urban Freeway and Expressway	6	No Toll	50 mph
Homestead Extension of Florida's Turnpike	Principal Arterial – Urban Freeway and Expressway	6	Yes	70 mph
NW 107 Avenue	Minor Arterial – Urban Other	4	No Toll	40 mph
US-27/ Okeechobee Road	Principal Arterial – Rural Other (west of FL Turnpike) Principal Arterial – Urban Other (east of FL Turnpike)	6	At Turnpike	50 mph
NW 36 Street	Principal Arterial – Rural Other	6	No Toll	Unknown
W 68 Street	Minor Arterial – Urban Other	2	No Toll	Unknown
W 49 Street	Principal Arterial – Rural Other (east of SR-826)	6	No Toll	Unknown

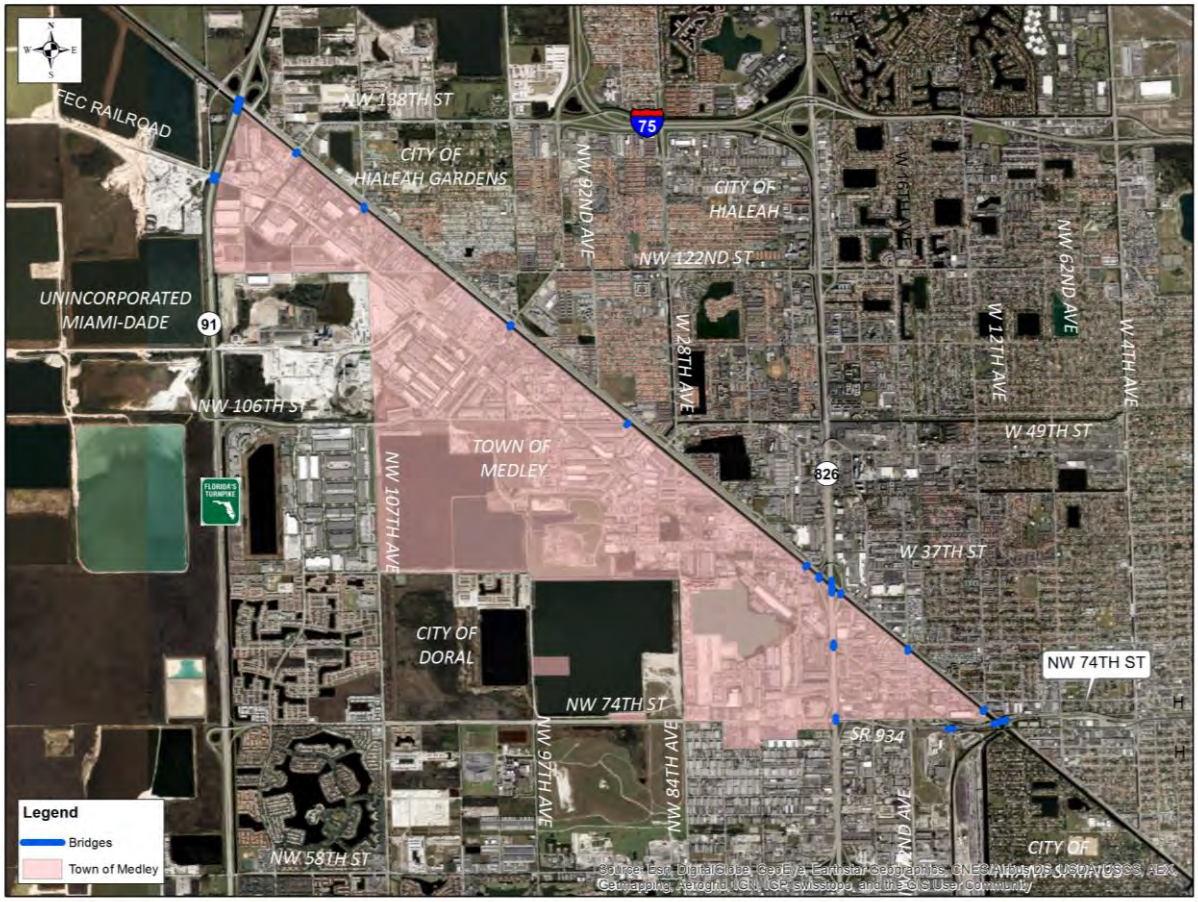
Roadway	Functional Classification	Number of Lanes	Tolled Facility/ Booths	Posted Speed
NW 58 Street	Minor Arterial – Urban Other	4	No Toll	40 mph
W 28th Avenue/ NW 84 Avenue	Principal Arterial – Rural Other (south of NW 36 Street) Minor Arterial – Urban Other (north of NW 36 Street)	2	No Toll	40 mph
NW 106 Street	Principal Arterial – Rural Other	2	At Turnpike	35-40 mph
W 16 Avenue / NW 72 Avenue	Minor Arterial – Urban Other	2	No Toll	30 mph
W 12 Avenue	Minor Arterial – Urban Other	4	No Toll	40 mph
W 4 Avenue	Principal Arterial – Rural Other	2	No Toll	45 mph
Palm Avenue	Minor Arterial – Urban Other	2	No Toll	Unknown
NW 92 Avenue	Principal Arterial – Rural Other	2	No Toll	Unknown
NW 74 Street	Principal Arterial – Rural Other	6	At Turnpike	40 mph
NW 138 Street	Minor Arterial – Urban Other	4	No Toll	30 mph
E 4 Avenue	Minor Arterial – Urban Other	2	No Toll	Unknown
E 9 Street	Minor Arterial – Urban Other	4	No Toll	Unknown
E 25 Street	Minor Arterial – Urban Other	4	No Toll	Unknown

The selected roadways are illustrated in the Figure 1-12 below:

Figure 1-12: Selected Roadways

The 16 bridges selected for review are those that may impose height restrictions on freight vehicles entering and exiting the Town of Medley. The bridges that affect freight movement are illustrated in Figure 1-13 below:

Figure 1-13: Bridges



The table below indicates the location of each bridge illustrated in the Figure 1-13 as well as the bridge ID numbers within the study area. Bridges adjacent to Okeechobee Road (US-27) cross into the town of Medley over the Miami Canal, connecting Hialeah and Hialeah Gardens to the study area.

Bridge Location	Bridge ID Numbers
Florida's Turnpike over Okeechobee Road (US-27)	87471000
Florida's Turnpike near NW 112th Court	87471000
NW 138th Street over Miami Canal	87000559
NW 107th Avenue over Miami Canal	87000751
NW 116th Way over Miami Canal	87109000
NW 105th Way over Miami Canal	87000193
NW 79th Avenue over Miami Canal	87000526
SR 826 Southbound Entrance from Okeechobee Road Eastbound	87260403
SR 826 Southbound Entrance from Okeechobee Road Westbound	87260407
SR 826 Northbound	87260000
SR 826 Exit onto Okeechobee Road	87260405
NW 72nd Avenue over Miami Canal	87106000
SR 934 Eastbound over Miami Canal and US-27	87080900
SR 934 over NW 69th Avenue Road	87080900
SR 826 over SR 934	87260000
SR 826 Exit onto SR 934	87260399

Truck Parking Facilities

The Miami Dade TPO Development of Truck Parking Facilities in Miami Dade County, Phase II: Options for Implementation (last revised in November 2012) was reviewed to identify existing and proposed truck parking facilities. The study also revealed that there are over 6,000 overnight truck parking facilities in the United States and they are mainly operated by three companies: Pilot Flying J (550 locations), Love's (287 locations), and TravelCenters of America (237). Originally, these facilities were developed to simply provide fuel for the drivers without having to deviate significantly from their travel path. However, as the demand for these facilities increased, they have evolved to provide a wide range of amenities. Data from the report and research from the three companies listed above identified that there are four existing area truck parking facilities in Miami Dade County:

- Pilot Flying J, Medley located in 12200 NE South River Drive, Medley FL 33178
    - 65 truck parking spaces, with amenities
- Pilot Flying J, Miami located at Dade Corners in 17696 SW 8 Street, Miami FL 33194
    - 26 truck parking spaces, with amenities
- Pilot Flying J, Miami Gardens located in 16650 NW 27 Avenue, Miami Gardens FL 33054
    - 20 truck parking spaces, with amenities
- MIA Overnight Truck Parking Lot, Miami
    - 20 truck parking spaces, no amenities

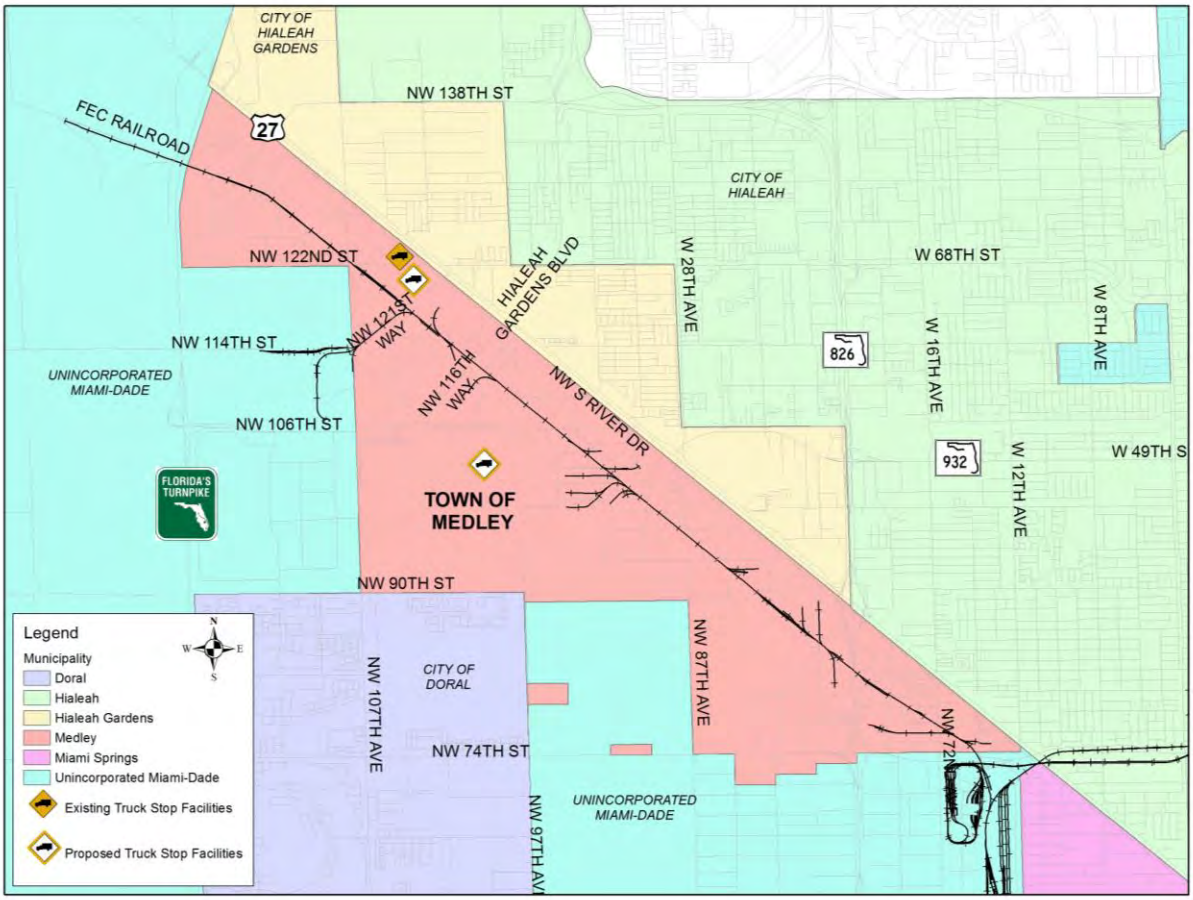
The same study identified thirteen potential overnight truck parking stations within the County, of which five are proposed in the City of Hialeah Gardens, two in the City of Medley, two in the City of Opa-Locka, two in Unincorporated Miami Dade County, one in the City of Miami Gardens and one in the City of Hialeah. The two truck parking facilities proposed in the City of Medley are located:

- NW 106th Street and NW 97 Avenue, located to the northeast of the American Wood Stork Lake, between NW 97 Avenue and NW 107 to the south of NW 106 Street. The total acreage of the facility is 258 AC of which 85 AC are considered usable. The facility will potentially have a capacity of 845 truck parking spaces. An ongoing FDOT effort is further refining this location and has yielded a conceptual design.

- 10400 NW 122 Street, located in the FedEx distribution center parcel, between NW 122 St and NW South River Drive and adjacent to the current Pilot Flying J Truck Stop. The total acreage of the facility is 30 AC of which 7 AC are considered usable (M). The facility will potentially have a capacity of 72 truck parking spaces.

See Figure 1-14 below for the proposed and existing Truck Stop Facilities.

Figure 1-14: Proposed and Exising Truck Stop Facilities in Miami Dade County



Intelligent Transportation System (ITS) Infrastructure

A robust and complete ITS system supports the roadway network leading into and serving the Town of Medley. As shown on Figure 1-15, this network is formed by SR-25 / US-27 (Okeechobee Road), SR-826 (Palmetto Expressway), the Homestead Extension to Florida's Turnpike and NW 74 Street.

Figure 1-15: Major Roadways Serving Town of Medley

This roadway network is equipped with a variety of tools to best manage traffic including:

- Dynamic message signs
- Closed circuit television systems
- Vehicle detection systems
- Future ramp signals
- Communication infrastructure that allows for active management via the SUNGUIDE Traffic Management Center

- Communication infrastructure that allows for active management via the Miami-Dade County Traffic Signal Control Center.

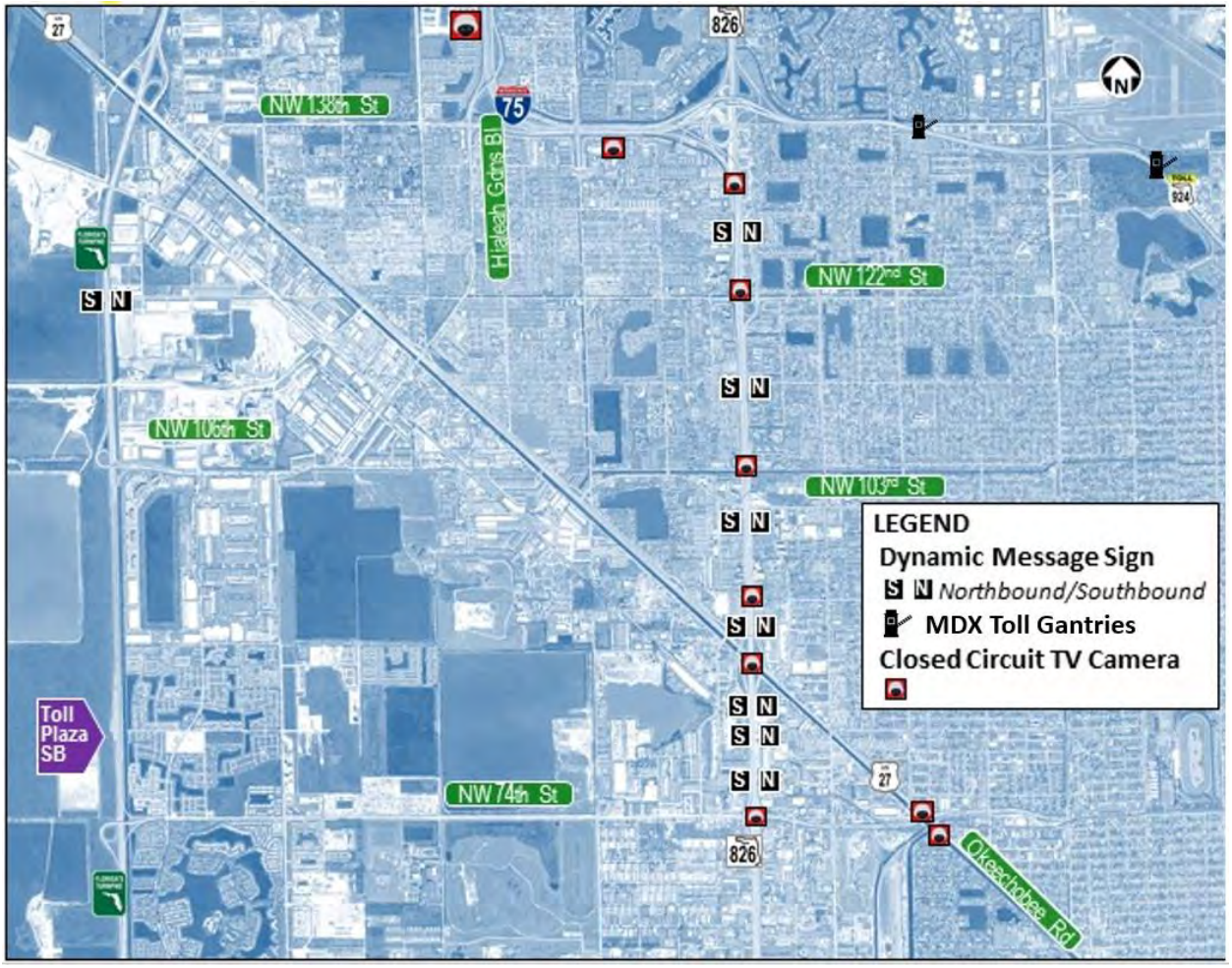
The specific infrastructure on each of the key roadways serving the Town of Medley is shown in Figures 1-16 through 1-18. Figure 1-16 shows the location of critical traffic signals controlling flow along the Town's arterial network.

Figure 1-16: Critical Existing Traffic Signals

In addition to the traffic signals, ITS infrastructure exists primarily on SR-826 / Palmetto Expressway and the Homestead Extension of Florida's Turnpike (HEFT). This infrastructure includes dynamic message signs and closed-circuit television (CCTV) cameras as shown on Figure 1-17. In addition to the cameras and electronic signs, a complete vehicle detection and communication system exists along SR-826 / Palmetto Expressway and the HEFT that surveils traffic, measuring volume and speed. The communication system transmits that information

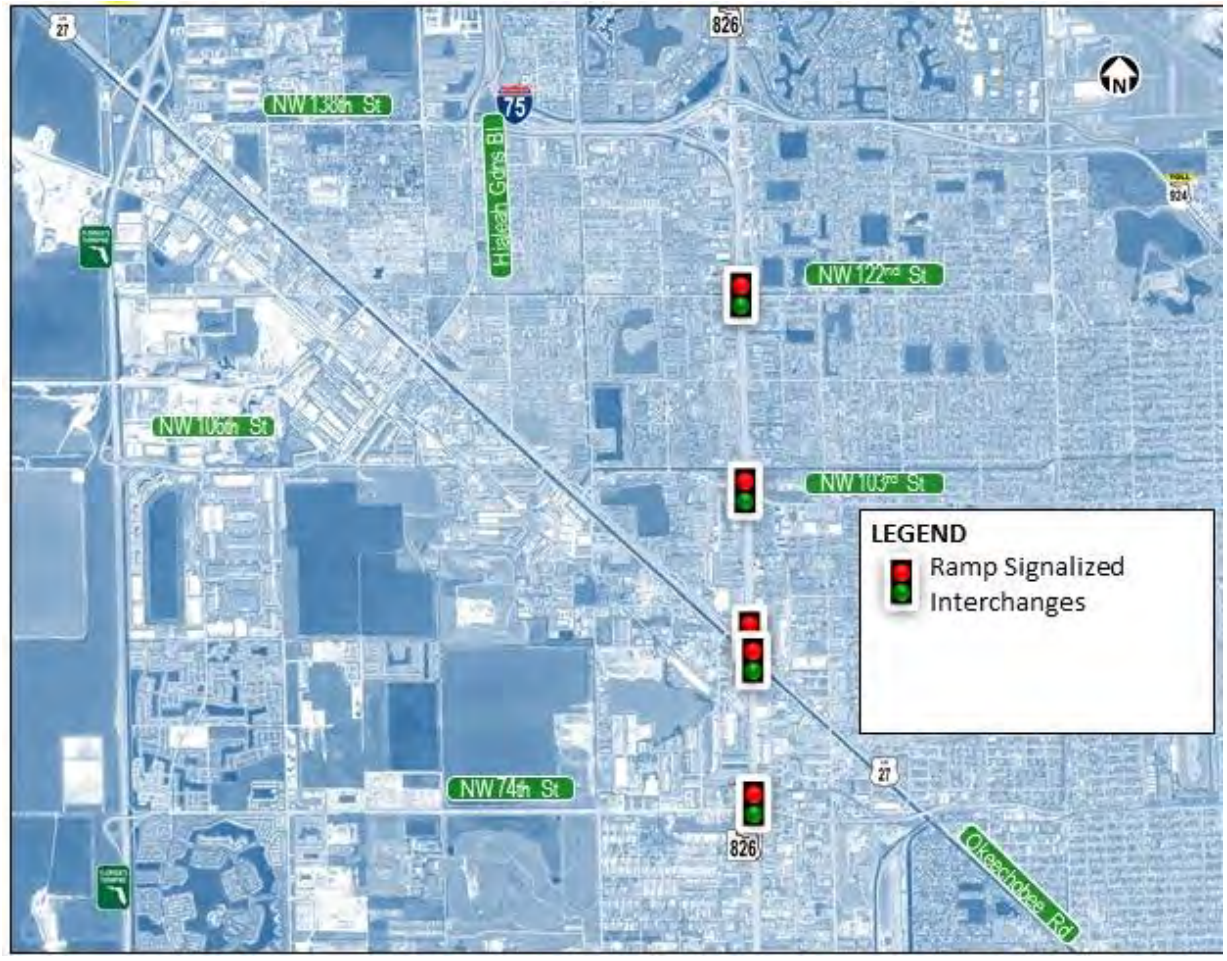
back to the traffic management center at the FDOT District Office location. This detection system consists of video imaging devices (VIDS) that measure vehicles, by lane, and report volume and speed through the communication system. These detection devices, located on concrete poles along the roadside, are spaced approximately every ½ mile.

Figure 1-17: Existing ITS Infrastructure in the Vicinity of the Town of Medley



In addition to the existing infrastructure, additional ITS infrastructure is being implemented on SR-826 associated with the 826 Express design/build project. Most significant is the addition of ramp signals, additional CCTV, additional dynamic message signs and toll collection equipment that will allow for dynamically priced tolling on the SR-826 express lanes. The location of proposed ramp signal locations are shown on Figure 1-18. ITS implementation are components of the following projects, which are in varying stages of maturity (phases) in FDOT's Work Program: FM#s 418423-1, 418423-3, 418423-5, 418423-6, 427555-1, 428358-1,428358-3, 430956-1, 432639-1, 432687-1, 435760-1, 435760-2, 435760-3, 435760-4, 435760-5, 435760-6, 436565-1.

Figure 1-18: Future Ramp Signals to be Installed within 826 Express



Rail Facilities

The Florida East Coast (FEC) Railway is one of two railroads that runs along Florida's east coast, the other being CSX. The railway operates 351 miles of the mainline track with numerous links in Florida. Within the Town of Medley, the FEC rail line runs parallel to US-27 / Okeechobee Road. See Figure 1-19 below for the FEC railway. Appendix S shows FEC's published schedule (fecrwy.com) that directly impacts the study area. It should be noted that in coordinating with FEC, the study team learned that there are factors beyond the FEC's control that impacts their ability to abide by the scheduled/planned departure and arrival times.

Figure 1-19: Rail Facilities

At-Grade Railroad Crossings

There are ten at-grade railroad crossings in the Town of Medley and four are located along the NW 74th Street in close proximity to the southeastern corner of the Town's limits. See Figure 1-20 below for the railroad crossings and Chart 1 for the number of rail tracks per crossing.

Figure 1-20: Railroad Crossings

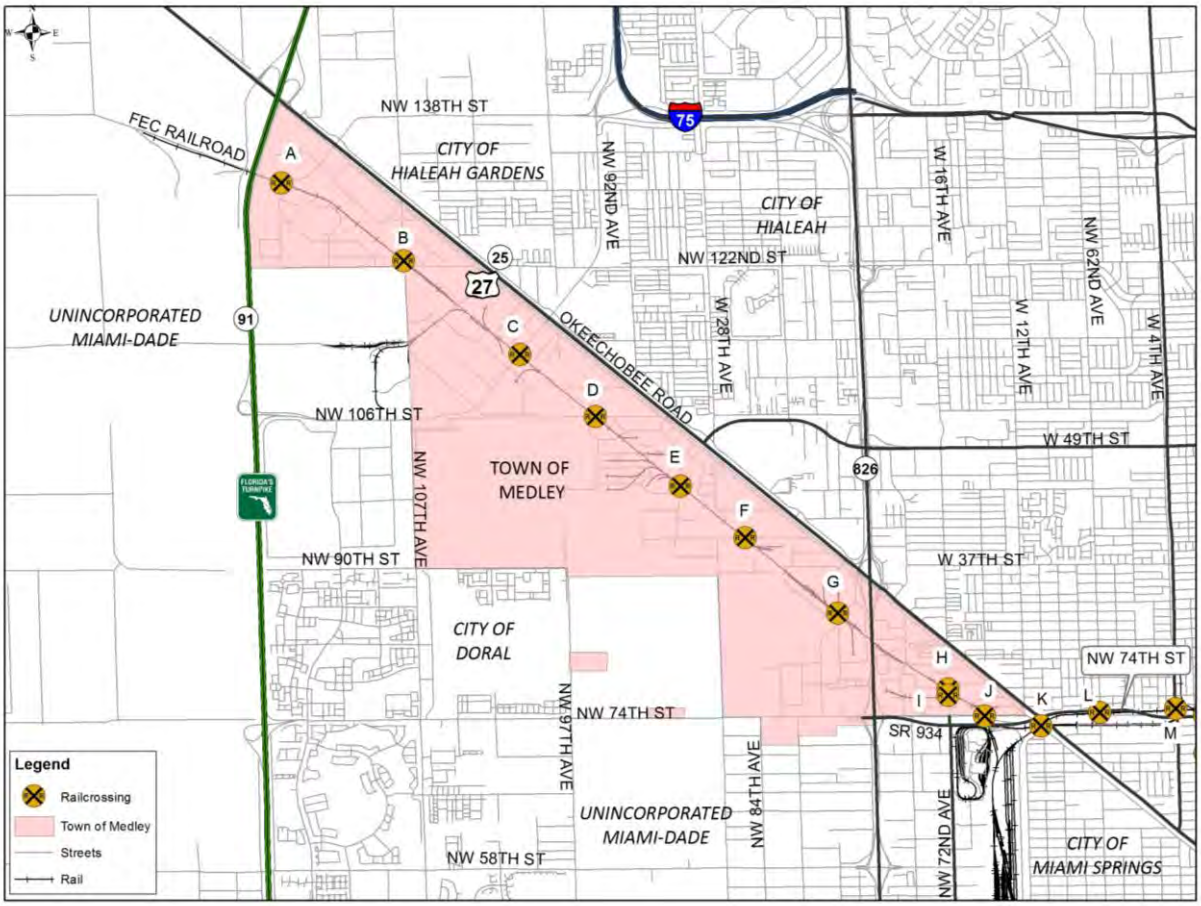


Chart 1: Railroad Crossing			
Railroad Crossing	**Number of Tracks**	**Railroad Crossing**	**Number of Tracks**
Crossing A	1	Crossing H	1
Crossing B	1	Crossing I	3
Crossing C	2	Crossing J	4
Crossing D	1	Crossing K	4
Crossing E	1	Crossing L	2
Crossing F	1	Crossing M	2
Crossing G	1		

Transit Facilities

A review of the Miami Dade Metro Rail Transit map identified two routes that services the Town of Medley:

Route 33 – this route services the Lehigh Industrial Park on NW 106 Street and NW 106 Way on select weekday trips (from 6:24am to 7:50am and from 4:16pm to 5:16pm), and the rest of the times, the route turns around at Okeechobee Road and heads back to Miami Shores via 49 Street/NW 103 Street, 95th Street and NE 96 Street. This route does not stop in the Town of Medley on the weekends, Saturday and Sunday.

Route 87 – this route services Palmetto Metrorail Station located on the northwest corner of the SR-826/NW 74 Street Interchange and traverses west on NW 77 Street and then south to Dadeland North Metrorail Station located on US-1 and SW 88 Street. This route does not stop at the Palmetto Metrorail Station on the weekends.

Pedestrian and Bicycle Facilities

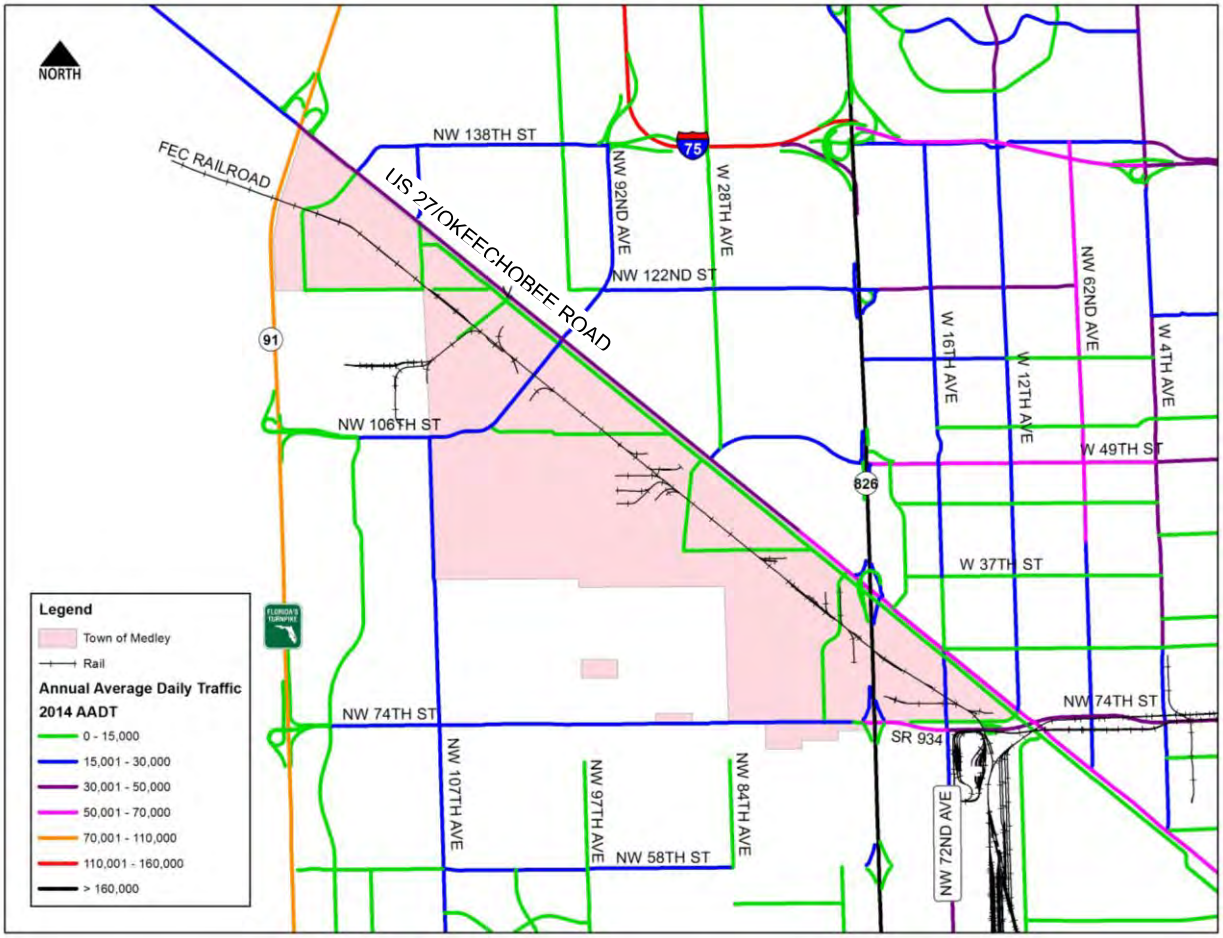
According to the Miami Dade 2040 Bicycle and Pedestrian Plan, there are existing sidewalks along NW 122 Street and on the western segment of NW 74 Street approaching the NW 74 Street / SR-826 interchange. The Plan also identified existing bike lanes on NW 74 Street from NW 107 Avenue to just past NW 87 Avenue and existing pave shoulders on west Okeechobee Road running from Broward County south to the Okeechobee Road / SR-826 interchange. Additionally, there are funded bike lanes on NW 87 Avenue from Okeechobee Road to NW 74 Avenue.

Traffic Data and Existing System Performance

Annual Average Daily Traffic (AADT) 2014

The data for the Annual Average Daily Traffic (AADT) is collected from Florida Department of Transportation's Traffic Data Shapefiles. Based on the data, Okeechobee Road (US-27) is the most travelled road ranging between 30,000 to 50,000 vehicles east of the Florida's Turnpike and 50,000 to 70,000 from before Okeechobee Road (US-27) and SR 826/Palmetto Expressway interchange. See Figure 1-21 below for the Annual Average Daily Traffic (AADT) counts for 2014.

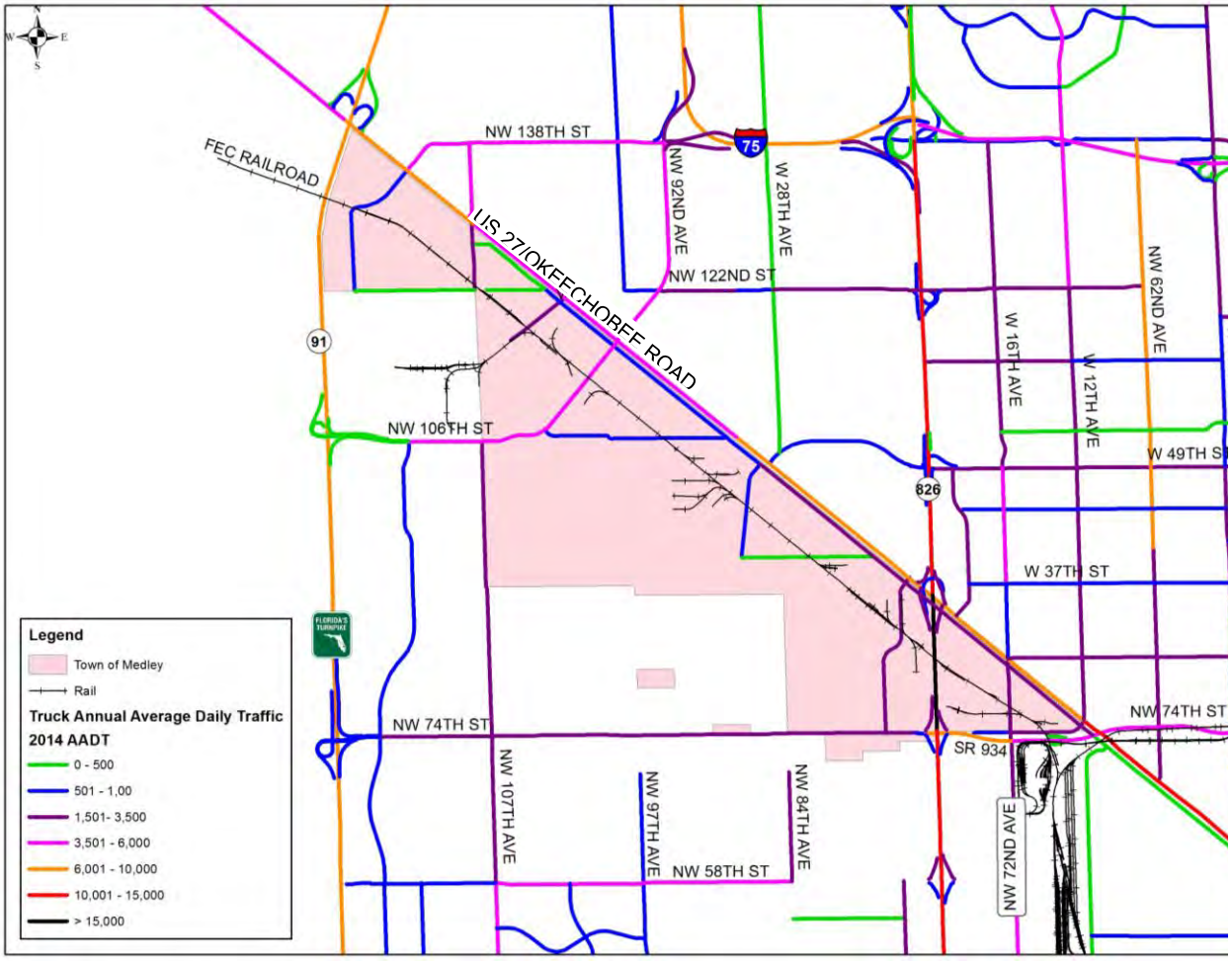
Figure 1-21: Annual Average Daily Traffic FY 2014



Annual Average Daily Truck Traffic (AADT) 2014

The data for the Annual Average Daily Truck Traffic (AADT) is collected from Florida Department of Transportation's Traffic Data Shapefiles. Based on the data, Okeechobee Road (US-27), NW 106 Street/ NW 92 Avenue, NW 107 Avenue north of Okeechobee Road (US-27), and NW 138 Street have the highest truck traffic. See Figure 1-22 below for the Annual Average Daily Truck Traffic (AADTT) for 2014.

Figure 1-22: Annual Average Daily Truck Traffic FY 2014



Crash Data

Crash data for state roads, Okeechobee Road (US-27/SR 25) and SR 826/Palmetto Expressway were collected to identify the total number of crashes and the number of crashes involving trucks between the years of 2012-2014. See Appendix R for crash analysis data on specific crash types and location on Okeechobee Road (US-27/SR 25) and SR 826/Palmetto Expressway.

Year	SR 826/Palmetto Expressway between SR 932 and SR 5 Total Crash (Truck crash)	US 27 between SR 932 and Florida's Turnpike Total Crash (Truck crash)
2012	158 (18)	436 (96)
2013	164 (24)	535 (112)
2014	158 (24)	693 (153)
Total:	482 (66)	1666 (361)

Environmental and Socioeconomic Conditions

According to the 2010 US Census, the Town of Medley experienced a slight increase in population, from 838 in 2010 to an estimated 851 in 2015. The Town is primarily an industrial and freight center that serves Miami-Dade County and its surrounding areas. The industrial development resulted in a small population but a densely developed area.

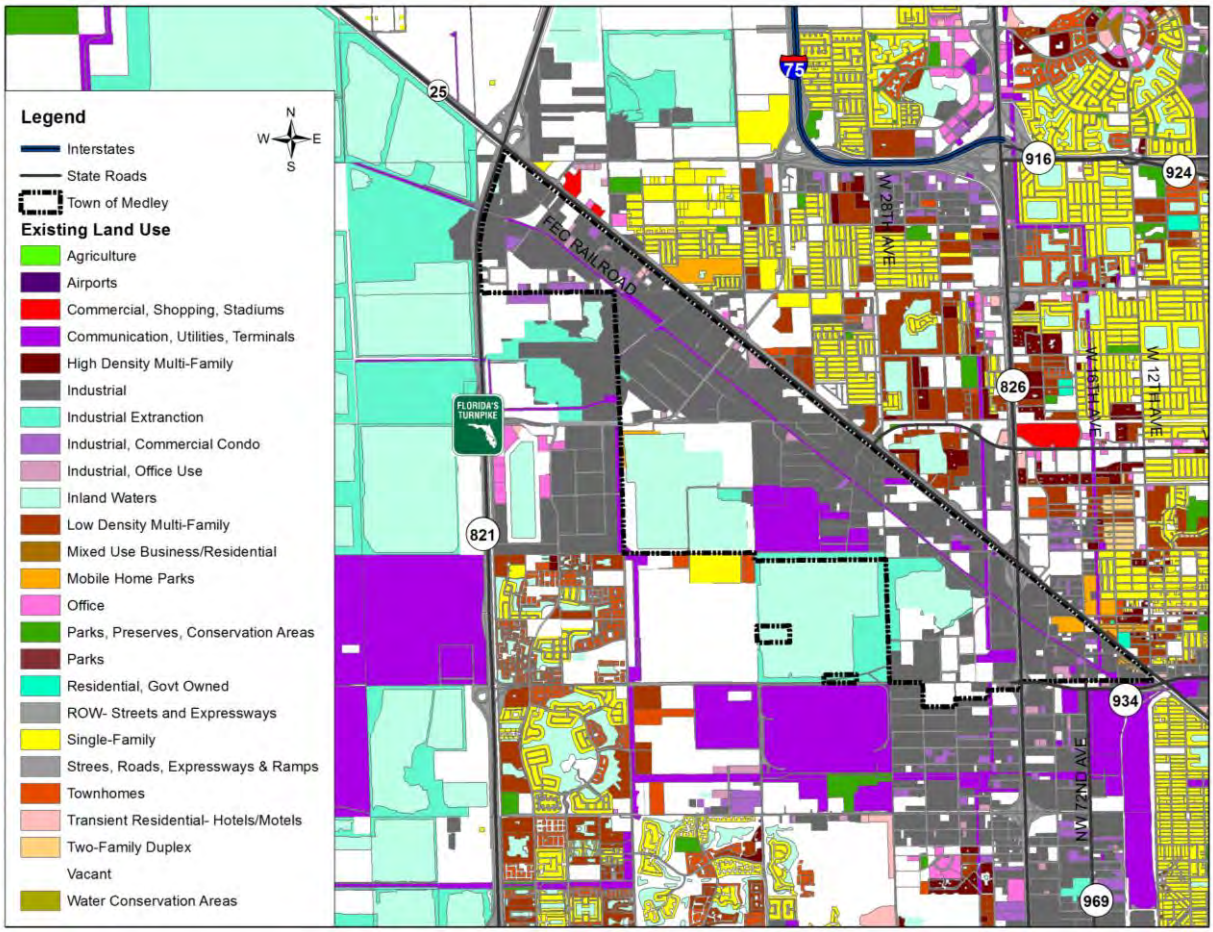
Land Use

Existing Land Use

A review of the Miami Dade County Existing Land Use Map (July 2015) identified a majority of the Town of Medley to be primarily industrial with small pockets of inland waters, communications, utilities, terminals and vacant areas. A few of the major industrial sites are Titan America, Pilot Travel Center, Aljoma Lumber Inc., FedEx Freight/Ground, GEM Paver Systems, Liberty Express, B/E Aerospace, AAR Landing Services, Paradise Freight, Seaboard Marine, Rinker Materials Concrete Pipe and Sysco South Florida.

Within the surrounding area is the City of Hialeah Gardens, located northeast of Medley, which is primarily residential with mixed densities. To the southwest is the City of Doral with a mix of residential, communications, utilities, terminals and vacant areas. To the west is Unincorporated Miami-Dade County, which is made up primarily of inland waters and industrial extraction uses. See Figure 1-23 below for the Miami Dade Existing Land Use Map.

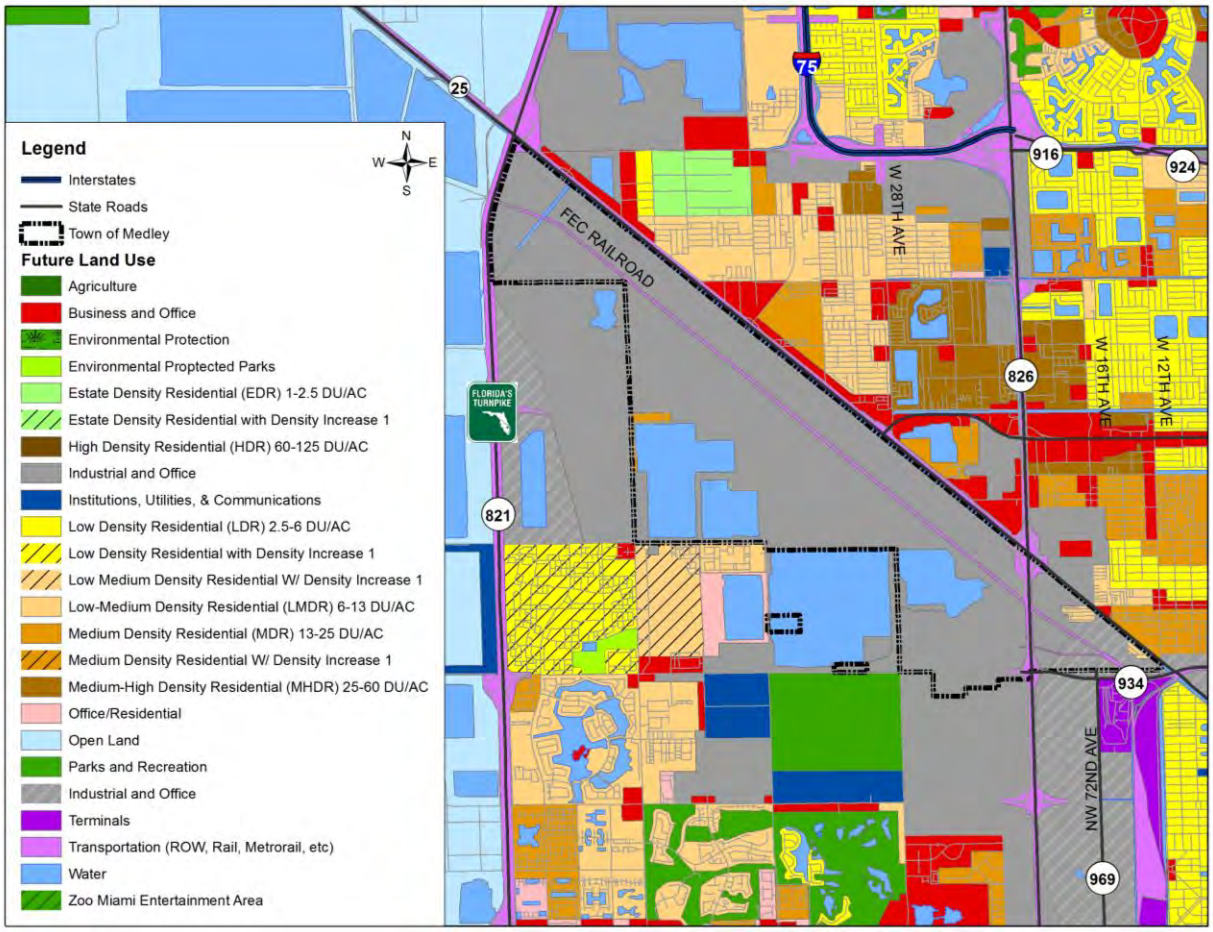
Figure 1-23: Existing Land Use



Adopted Land Use

A review of the Miami Dade County Future 2020-2030 Land Use Map (January 2016) identified Medley as retaining its industrial and terminal uses within the Town of Medley and its surrounding areas in the City of Hialeah Gardens, Doral and Unincorporated Miami Dade County. See Figure 1-24 on the following page for the Adopted 2020-2030 Land Use Map.

Figure 1-24: Adopted (Future) Land Use Map



Environmental Conditions

The Town of Medley is within several consultation areas, such as the American Crocodile Consultation Area, Snail Kite Consultation Area, as well as the Wood Stork Core Foraging Areas. The Town is also within the Biscayne Aquifer and South Florida Ecosystem Management Area-Lower East Coast Section. There are a few water features such as the American Wood Stork Lake, located north of NW 90 Street, and Roseate Spoonbill Lake, located south of NW 89 Street. Additionally, two parks are identified in and around the Town of Medley: Tobie Wilson Park is located along NW South River Drive and east of Milam Dairy Road, and Bernie Wilson Park is located on NW 103 Street to the east of US-27/Okeechobee Road. The Miami River Greenway also runs along the entirety of NW South River Drive.

The latest Cultural Resource Assessment Survey was conducted in 2014 as part of the Project Development and Environmental (PD&E) Study for US-27/Okeechobee Road from SR-997/Krome Avenue to NW 79 Avenue. Several historic bridges and standing structures were identified, but they are ineligible for National Register of Historic Places (NRHP).

There are various contamination sites identified within 500-ft:

- 157 US EPA Resource Conservation and Recovery Act (RCA) Regulated Facilities
- 125 hazardous waste facilities
- 15 toxic release inventory sites
- 12 biomedical waste facilities
- 7 large quantity generators of hazardous waste
- 9 solid waste facilities
- 8 superfund hazardous waste sites
- 1 brownfield area
- 1 landfill
- 1 off-site contamination notice

See Appendix N for the identification of the names of the facilities.

Socioeconomic Conditions

In addition to being an industrial and freight center, there are small pockets of other uses, such as residential, educational, medical, religious, and governmental facilities in the Town of Medley and its vicinity, City of Hialeah Gardens.

Residential

There are a few residential areas in and along the limits of the Town of Medley and along the east side of Okeechobee Road (US-27) that are pockets of multi-family homes. Additionally, there are three mobile/trailer homes communities within 500-ft of the Town of Medley:

- Medley Mobile Home Park, 8181 NW South River Drive, Medley, FL 33166
- Sunny Gardens Trailer Park, 2901 W 16th Avenue, Hialeah, FL 33012
- Medley Lakeside Retirement Park, 10601 NW 105th Way, Medley, FL 33178

Educational Facilities

The following educational facilities are located within 500-ft of the Town of Medley:

- Hialeah Gardens High School, 11700 Hialeah Gardens Boulevard, Hialeah Gardens, FL 33018
- Hialeah Gardens Middle School, 11690 NW 92nd Avenue, Hialeah, FL 33018
- Royal Kids Academy, 12503 W Okeechobee Road, Hialeah, FL 33018
- Youth Co-OP Charter School, 7700 W 20th Avenue, Hialeah, FL 33016
- Ronald W. Reagan Doral Senior High School, 8600 NW 107th Avenue, Doral, FL 33178

Medical Facilities

The Health Care Center of Miami 7911 NW 72 Avenue #111, Miami, FL 33166, is located in the Town of Medley.

Commercial Facilities

The following commercial, retail and entertainment facilities are within 500-ft of the Town of Medley:

- Westland Promenade Shopping Center, 3705 W 20th Avenue, Hialeah, FL 33012
- Walmart Supercenter, 9300 NW 77th Avenue, Hialeah Gardens, FL 33016
- Essex Village Shopping Center
- K1 Speed, 8600 NW South River Drive, Medley, FL 33166
- Splat Paintball Park, 9185 NW 96th Street, Medley, FL 33178

Religious Facilities

The following religious facilities are within 500-ft of the Town of Medley:

- Ministerio Internacional El Rey Jesus Hialeah, 8833 NW 107th Street, Hialeah, FL 33018
- Kingdom Hall of Jehova's Witness, 12305 W Okeechobee Road, Hialeah Gardens, FL 33018
- Forward Fellowship Church, 7362 NW 72nd Avenue, Miami, FL 33166
- Centro Cristiano Internacional, 7540 Paper Place, Medley, FL 33166
- Mision Avivamiento Y Fuego, 8250 NW South River Drive, Medley, FL 33166

Governmental Facilities

The Medley Town Hall and Police Department as well as the Florida Highway Safety and Motor Vehicles are located within the town limits, while the City of Hialeah Gardens City Hall and the Hialeah Gardens Fire Department #28 are located within 500-ft of the Town of Medley.

Methodology

Roadway Network Analysis

Miami-Dade County is home to diverse communities with extensive freight needs, while serving as a gateway for import/export activities. The Town of Medley, located in Miami-Dade County, has a high concentration of industrial and freight-related businesses that are part of the logistics supply chain that meet the increasing freight activity in the County.

Approach

This section describes the approach to conducting the roadway network analysis, including the purpose, methodology, and a summary of the additional truck trip volumes to be tested on the network according to the methodology.

Purpose

The purpose of this section of the report is to present the approach to performing an analysis of the roadway network within the study area for this plan. Specifically, this methodology for roadway network analysis addresses the scope requirements under Task 5 – Alternatives Analysis in terms of travel demand analysis and associated network deficiencies.

In regard to conceptual alternatives, improvement options with multiple, complimentary elements will be developed with consideration to the following four concepts:

1. Overall freight mobility for current and expected freight movements;
2. High freight growth scenario of post-Panamax vessels entering Florida ports and higher than average overall economic growth;
3. Low freight growth scenario of post-Panamax vessels entering Florida ports and lower than average overall economic growth, and;
4. No-build scenario, where no additional improvements are proposed beyond programmed improvements.

Methodology

The roadway network analysis methodology was developed to support the development and definition of the conceptual alternatives described above, and comprises of four companion scenarios. The principal variable in this travel analysis is the change in truck trips, particularly those moving shipping containers that are associated with container movements between PortMiami and the West Miami-Dade warehousing and distribution center district which includes the Medley study area. There are also significant cruise ship provisioning truck movements which enter and exit the seaport which are considered.

PortMiami is considering the development of an inland terminal facility in northwestern Miami-Dade County on the southern side of the study area. The facility would process cargo containers to and from PortMiami by rail, reducing truck trips on the roadway network, and allowing shippers to deliver and receive containers at the inland port rather than directly to and from PortMiami. The inland terminal would also serve as an additional storage point for empty containers, rather than at the seaport. In effect, the inland terminal would be an extension of the PortMiami cargo logistics structure, providing an alternate site for pick-up and delivery of containers.

The frame of reference for developing roadway network travel demand within the study area for these four concepts or scenarios will be the current 2035 PortMiami Master Plan which included three forecasts of future cargo growth in terms of Twenty-foot Equivalent Unit (TEU) movements, as follows:

- Moderate Growth
    - 2040 estimated volume: 2.4 million TEUs annually
- Aggressive Growth
    - 2040 estimated volume: 3.1 million TEUs annually
    - 29% increase over Moderate Growth forecast
- Aggressive Plus Growth
    - 2040 estimated volume: 3.7 million TEUs annually
    - 19% increase over Aggressive Growth forecast
    - 54% increase over Moderate Growth forecast

These forecasts were based on a 2014 reported TEU volume of approximately 1.0 million TEUs. Thus, the port's growth scenarios call for an increase in cargo by 2040 in the range of 2.4 to 3.7-fold over 2014 volumes, depending upon the forecast condition.

There are two other key sources of useful information for the Medley roadway network travel analysis:

- The first is the Southeast Florida Regional Planning Model (SERPM), referred to herein as the Travel Demand Model (TDM), underpinned the development of the 2040 Miami-Dade Long Range Transportation Plan. That TDM will be used as the foundation for a segment-based analysis of the study area roadway network, examining segment volume-to-capacity (V/C) ratio and level of service (LOS).

- The second is the completed study by FDOT District 6, entitled *Downtown Miami Freight Mobility Study (DMFMS)*, which is charged with examining the need for secondary PortMiami access through downtown Miami as an alternate to the PortMiami tunnel. This study has analyzed the truck traffic patterns and levels associated with the 2035 PortMiami Master Plan, and examined potential contingency network improvements to accommodate those needs over the long term. That study translated port cargo forecasts in TEUs into vehicular volumes for each of the three forecast scenarios. This travel demand information is very useful for application towards the Medley study area because of the strong linkage of PortMiami truck trips with the northwest Miami-Dade district and its substantial warehousing and distribution center operations. This methodology takes advantage of that data in the roadway network analysis methodology described herein.

Based on the definition of conceptual scenarios for this Medley study, the following points summarize the assumed relationship of those scenarios with the 2040 Long Range Transportation Plan, the current Transportation Improvement Program (TIP), and PortMiami cargo growth scenarios, and describe how the Travel Demand Model (TDM) and the Downtown Miami Freight Mobility Study (DMFMS) resources will be utilized to quantify varying travel demand by scenario on the roadway network within the Medley freight plan study area. The approach to analyzing the roadway network for each of the scenarios was conducted through the steps as described below, with the four scope scenarios reordered and expanded to represent a hierarchy of increasing cargo travel demand and proposed improvements to enhance freight mobility.

As a starting point, a baseline analysis was performed to establish the relationship of the 2040 Long Range Transportation (Cost Feasible Plan) as represented with the SERPM travel demand model, and using data from the DMFMS, as follows:

- Compare 2015 and 2040 PortMiami total and truck trip generation from SERPM with data from the DMFMS
- Identify PortMiami 2015 and 2040 truck trip distribution to travel analysis zones (TAZs) in the Medley study area per the TDM, total volume and percentage of PortMiami truck trips
- Review the above data for consistency, identify anomalies, and reconcile those. Compare TDM data for 2040 to DMFMS data to confirm their relationship to PortMiami cargo forecasting scenarios

This review determined that the cargo truck trips generated within the 2040 Long Range Transportation (Cost Feasible Plan) were nearly identical to those of the PortMiami 2035 Master Plan for its Moderate Growth scenario. This condition was defined therefore as the Low Growth condition under this study scope.

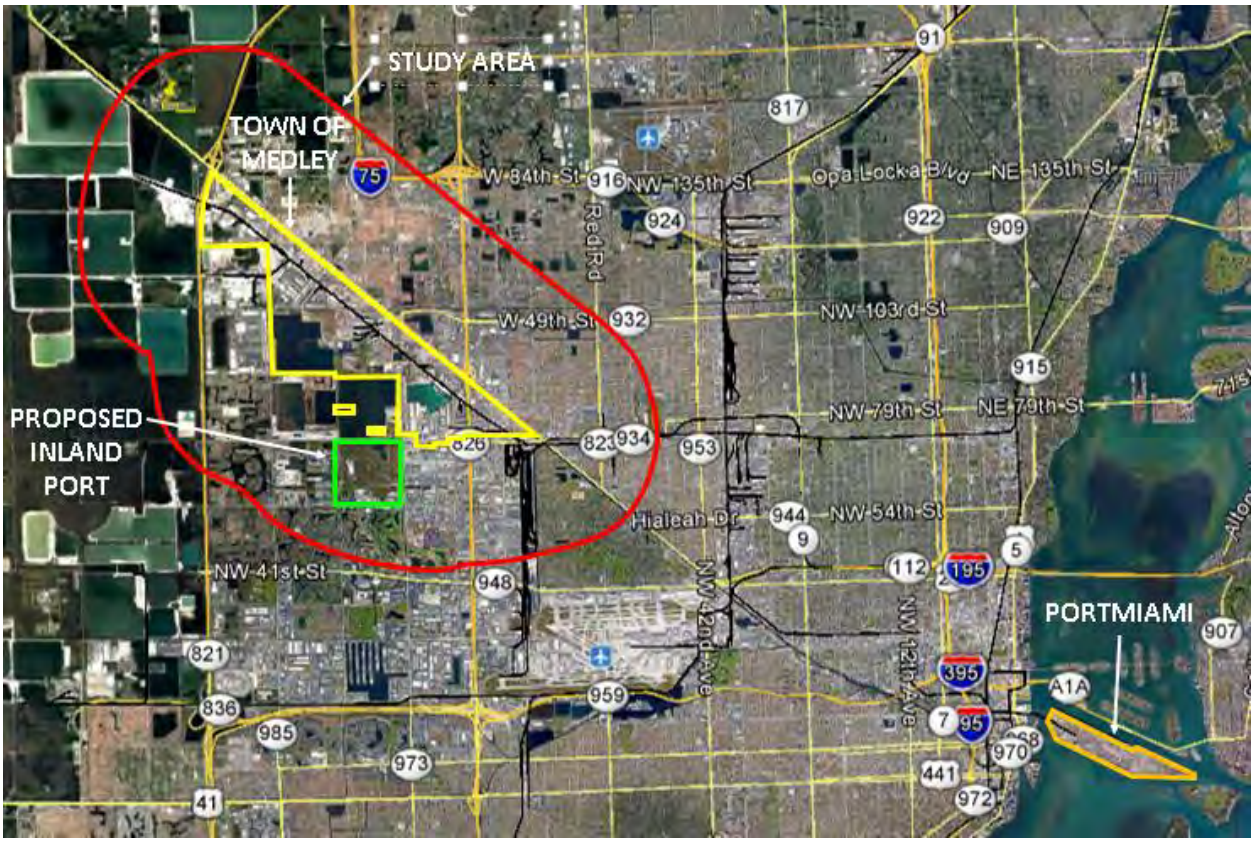
In addition, this review found that truck trips from the port to the Medley study area were underrepresented. As a result, this study made a best-case scenario assumption for roadway network testing purposes that 50% of port truck trips would be oriented to the relatively large Medley study area. The number of these truck trips increases across the three PortMiami cargo growth conditions of Moderate Growth, Aggressive Growth, and Aggressive Plus Growth.

The approach to incorporating the port truck trips per the port cargo forecasts involved the modification of the travel model trip table to reflect the increments of added truck traffic per the PortMiami cargo forecasts, and capturing 50% of those trips to the Medley study area. The DMFMS has quantified truck trips for PortMiami cargo growth scenarios and was the basis for estimating the additional truck trips to the Medley study area for each scenario.

Finally, PortMiami was considering the development of a potential inland terminal facility with rail access from the FEC Railroad at a location south of Medley shown in Figure 2-1 below. This proposed facility was included in the scenario analysis by estimating the number of daily truck trips it was estimated to generate based on a calculation of the number of containers projected to be processed at that facility, again based on the three PortMiami cargo growth conditions.

The proposed location shown in Figure 2-1 is no longer under consideration for PortMiami's inland terminal facility as per a resolution passed by the Miami-Dade County Board of County commissioners in January 2017. The resolution directed PortMiami to study other potential locations.

Figure 2-1: Freight Logistics Center Context



Again, using data from the DMFMS, the share of TEU movements leaving the port by rail were identified for each port cargo growth scenario. It was assumed that 50% of these containers would be oriented to the FEC rail yard in Hialeah for shipment, and the other 50% would be oriented to the proposed inland terminal site. For these volumes of TEUs, daily truck trips were estimated and then oriented to surrounding traffic analysis zones based on the level of truck trips associated with each zone. The TDM truck trip table movements were adjusted, the TDM traffic assignment ran, and output graphics generated to capture total daily link volumes, daily link truck volumes, and PM peak link LOS values for roadway segments within the study area.

After performing the Baseline Analysis review discussed above, it was confirmed that the Moderate Growth forecast for PortMiami growth was virtually identical in its seaport truck trip generation levels for PortMiami to the 2040 TDM values. In order to provide a range of future truck trip demand scenarios, the PortMiami Aggressive Growth forecast was included as Case 3 in the set of cases that were analyzed, summarized as follows:

- Case 1: No Build Scenario
  - This case is defined as the 2040 LRTP Cost-Feasible network, but edited to remove proposed cost-feasible projects to be implemented after the 5-year Transportation Improvement Program (TIP).
  - This case was defined as a framework for comparison of limited improvement of the roadway network.
  - No adjustments to truck trips was made in this case for PortMiami truck trips or the potential inland terminal facility.

- Case 2: Cost Feasible Plan Scenario
  - This case is defined as the 2040 LRTP Cost-Feasible network.
  - This case was defined as a framework for comparison to scenarios with increased truck trips as described above.
  - No adjustments to truck trips was made in this case for PortMiami truck trips or the potential inland terminal facility.

- Case 3: Low Freight Growth Scenario
  - Utilizes the PortMiami Moderate Growth forecast, in which the seaport truck trips equal the 2040 LRTP demand; and which increases the cruise terminal truck trips to equal the downtown freight study assumptions (increase of approximately 600 daily truck trips).
  - Conservatively assumes a 50% increase of truck trip travel between the cruise terminal and the study area.
  - Incorporates the potential inland terminal facility by converting PortMiami forecast of containers moved by rail to truck trips, with an assumption of 50% of seaport rail containers to the potential inland terminal facility, and the other 50% of seaport rail containers to the Hialeah Rail Yard for shipment out of the region. This yield approximately 700 daily truck trips associated with the potential inland terminal facility.

- Case 4: Medium Freight Growth Scenario
  - Utilizes the PortMiami Moderate Growth forecast, in which the seaport truck trips equal to the 2040 LRTP demand; and which increases the cruise terminal truck trips to equal the downtown freight study assumptions (increase of approximately 600 daily truck trips).
  - Other assumptions are as for Case 3.

- Case 5: High Freight Growth Scenario
  - 2040 LRTP Cost-Feasible network utilized to incorporate proposed network improvements.
  - Utilizes the PortMiami Aggressive Plus Growth forecast.
  - Other assumptions are the same as for Case 3.

- Case 6: High Freight Growth Scenario with Proposed Build Projects
  - This case is the same as Case 5, except that proposed roadway improvements discussed below are incorporated into the transportation network to assess their benefit.

Network Analysis Scenarios

The results of traffic assignments for the six case studies are presented graphically in the following series of study area maps depicting the resulting 2040 level of service, 2040 daily truck volumes, and 2040 daily traffic volumes by segment within the study area. The Roadway Network Scenario Analysis is located in Appendix L.

Case 1 – No Build Condition

Figures 2-2, 2-3, and 2-4 present the output graphics for the Case 1 – No Build Condition for study area roadways.

Figure 2-2: Case 1 – No Build 2040 PM Peak Level of Service

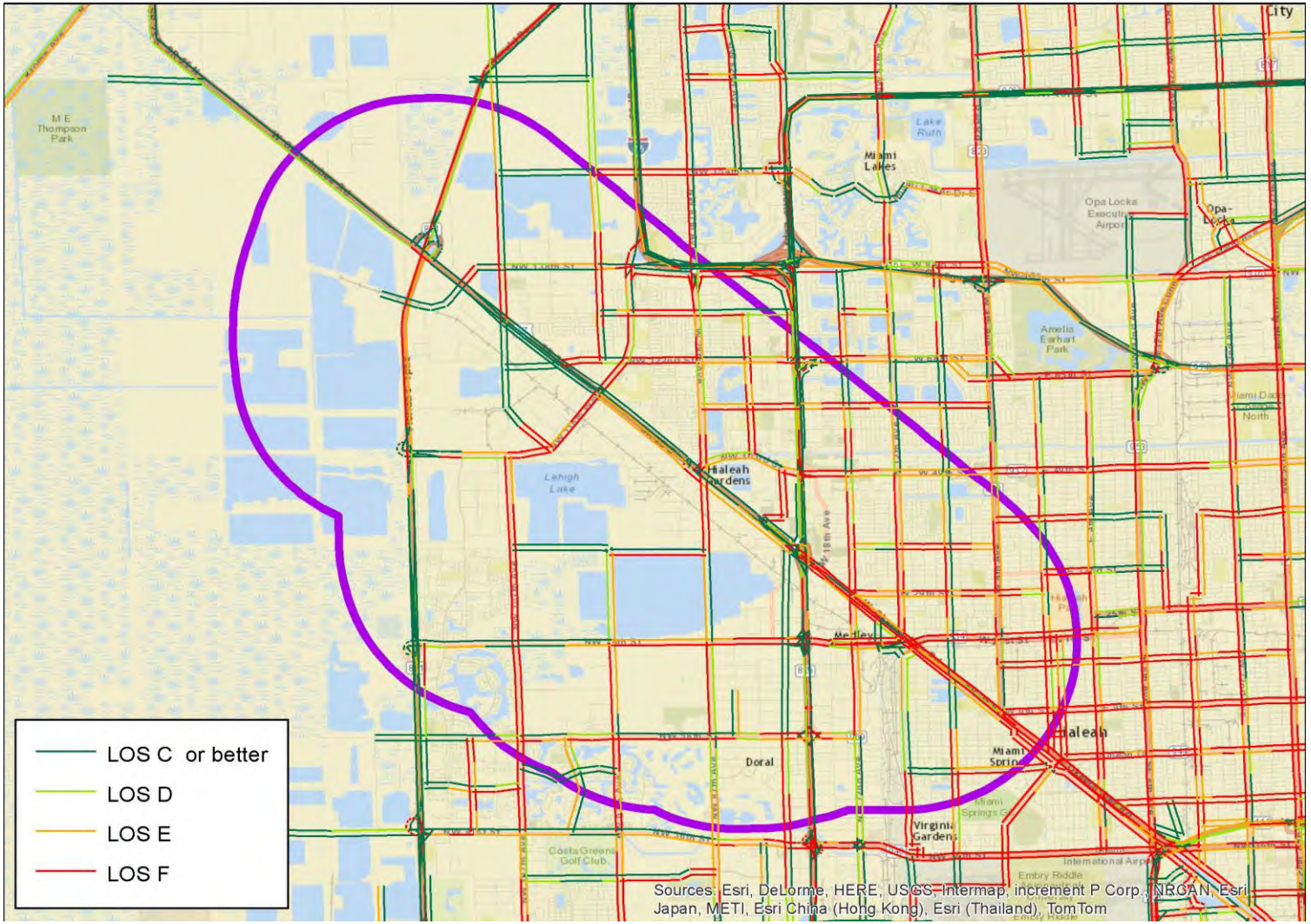


Figure 2-3: Case 1 – No Build 2040 Daily Truck Volumes

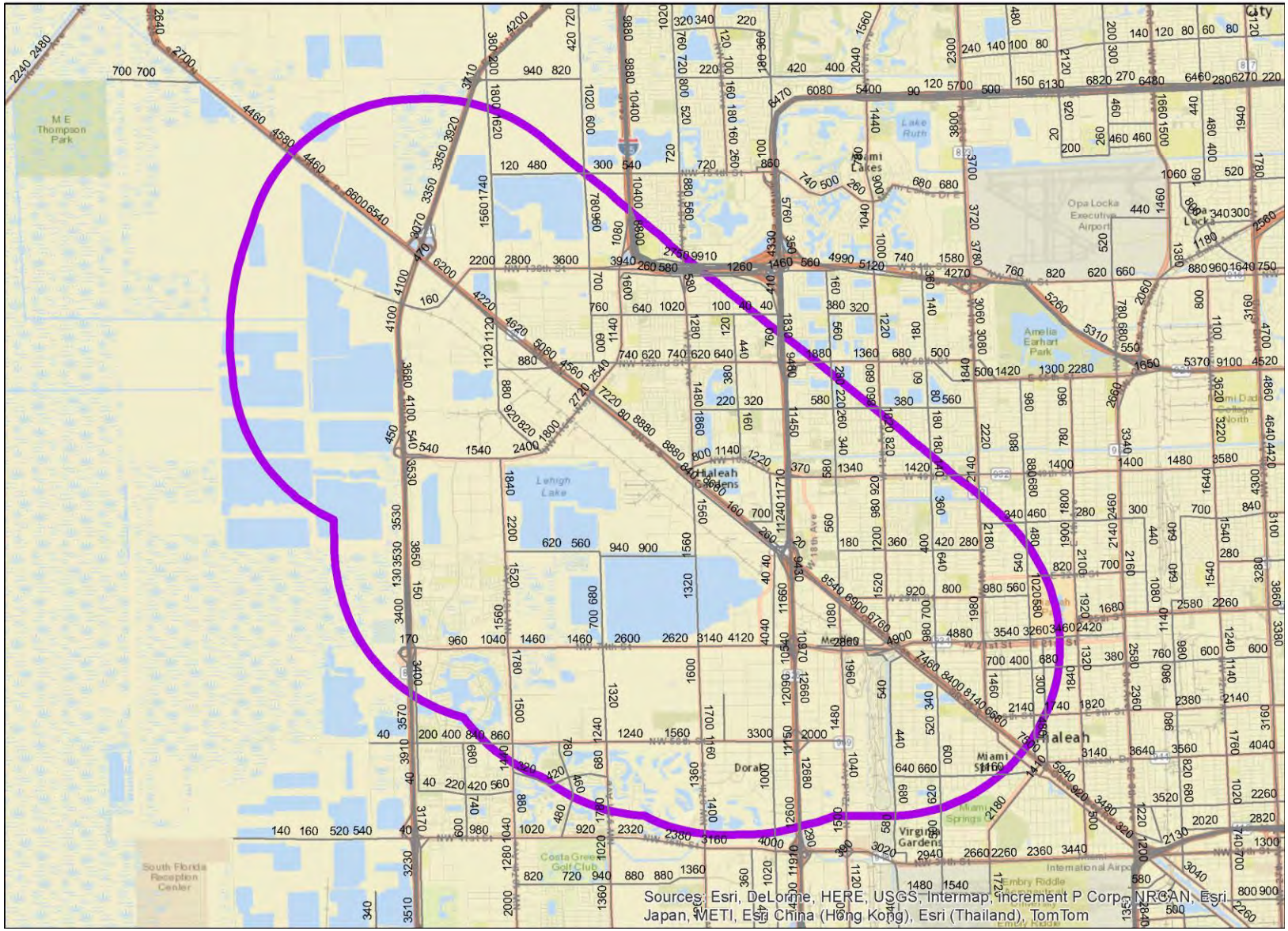
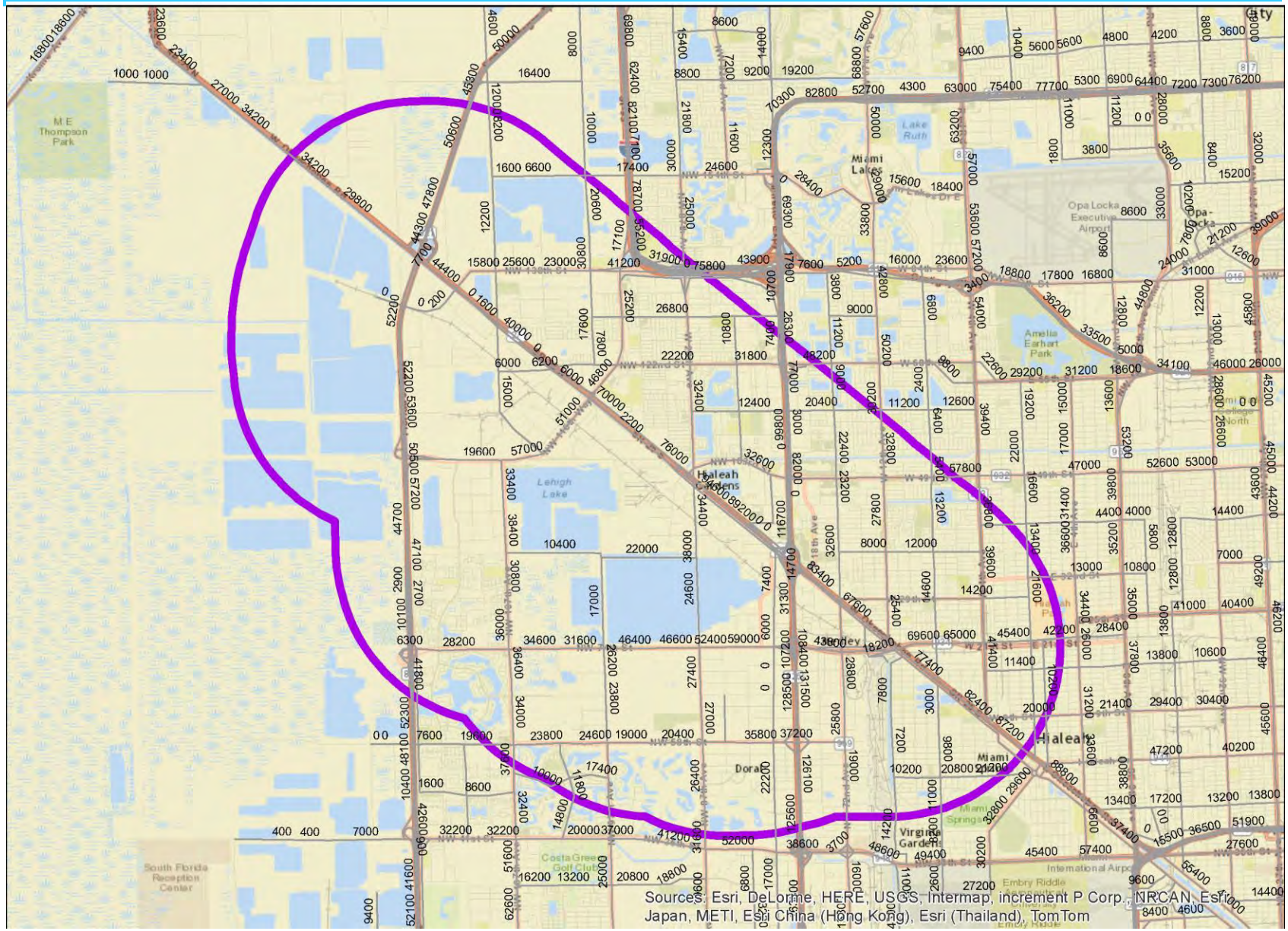


Figure 2-4: Case 1 – No Build 2040 Daily Volumes



Case 2 – Cost Feasible Plan Condition

Figures 2-5, 2-6, and 2-7 present the output graphics for the Case 2 – Cost Feasible Plan Condition for study area roadways.

Figure 2-5: Case 2 – Cost Feasible Plan Condition 2040 PM Peak Level of Service

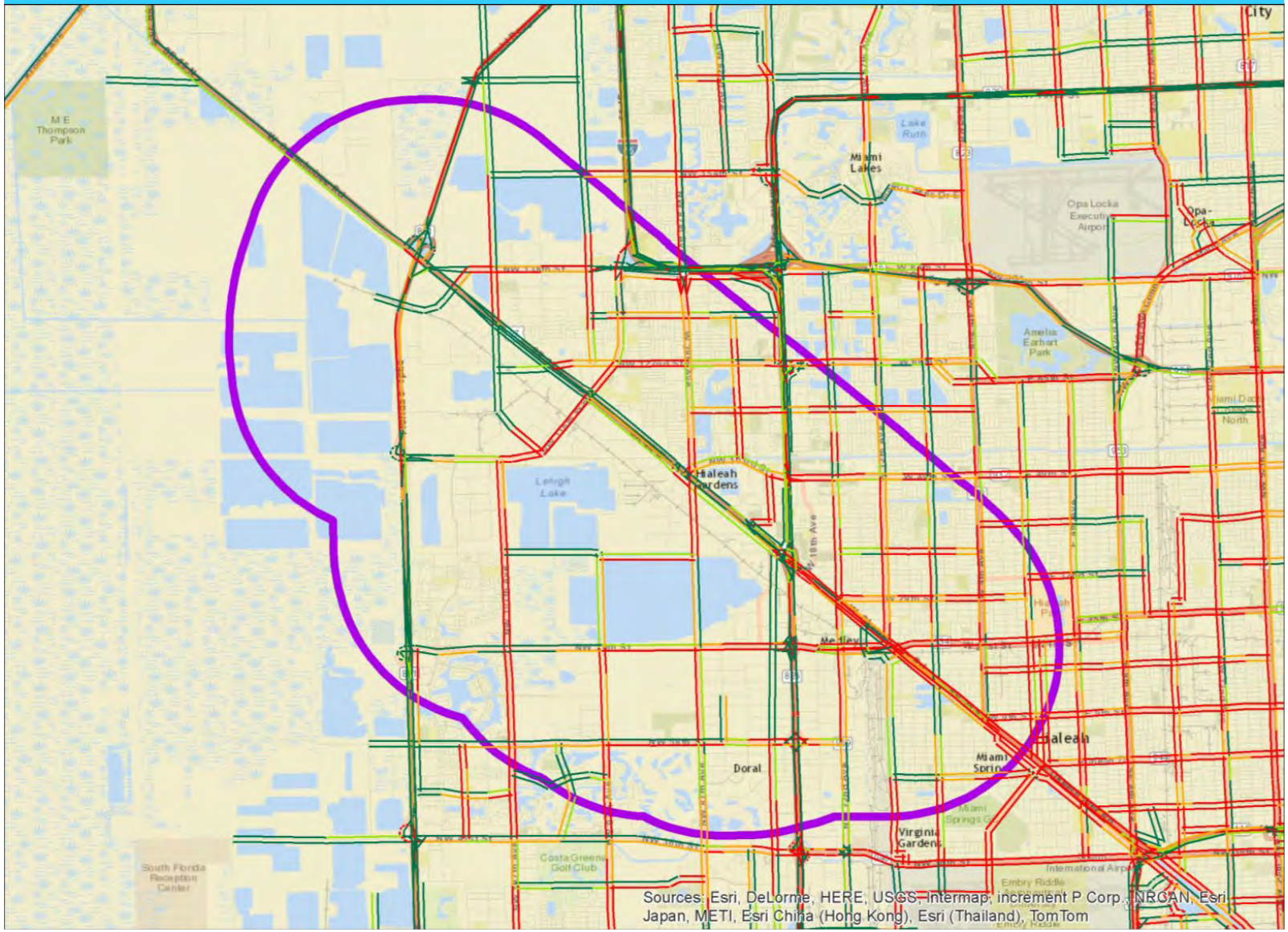


Figure 2-6: Case 2 – Cost Feasible Plan Condition 2040 Daily Truck Volumes

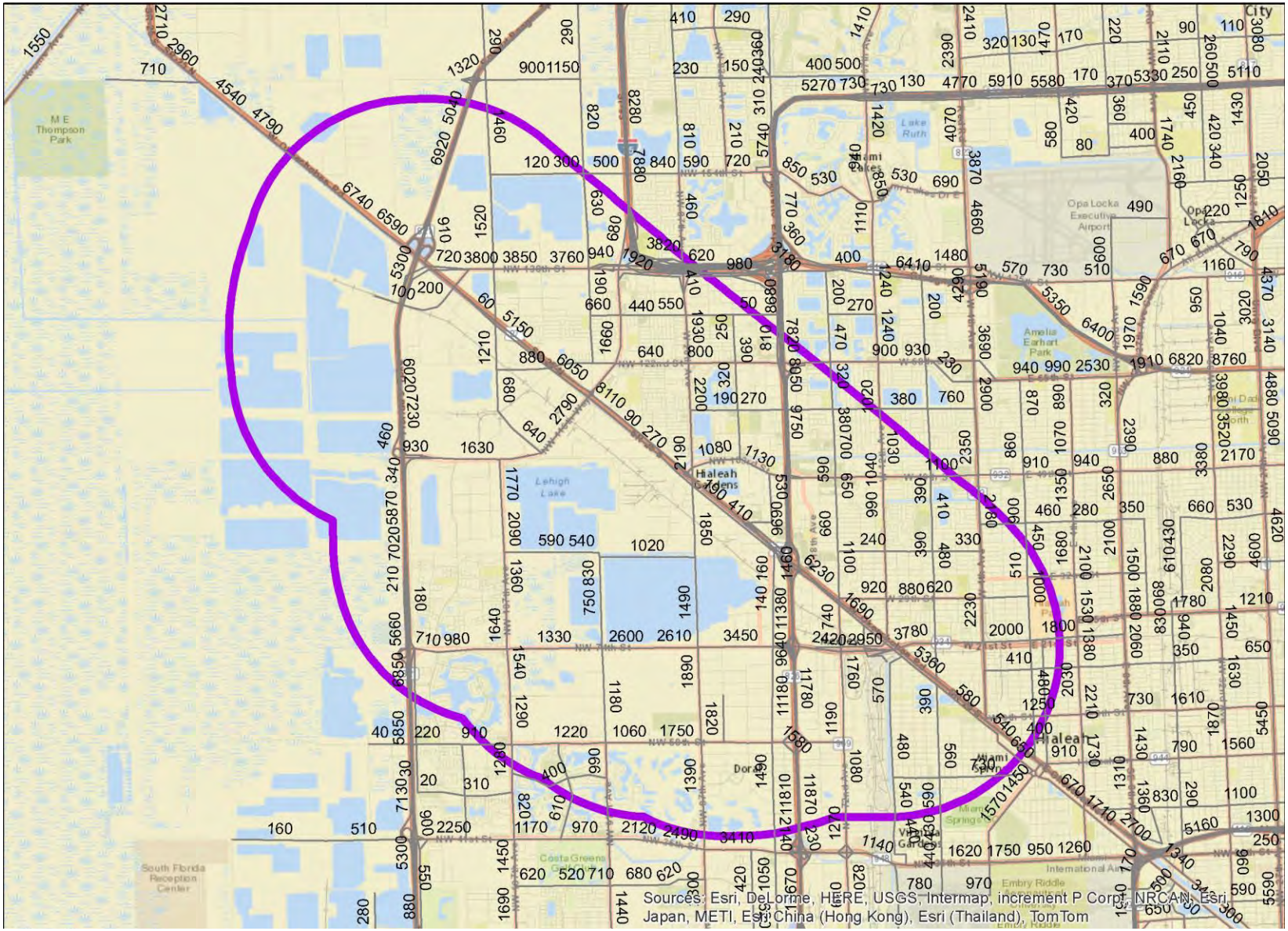
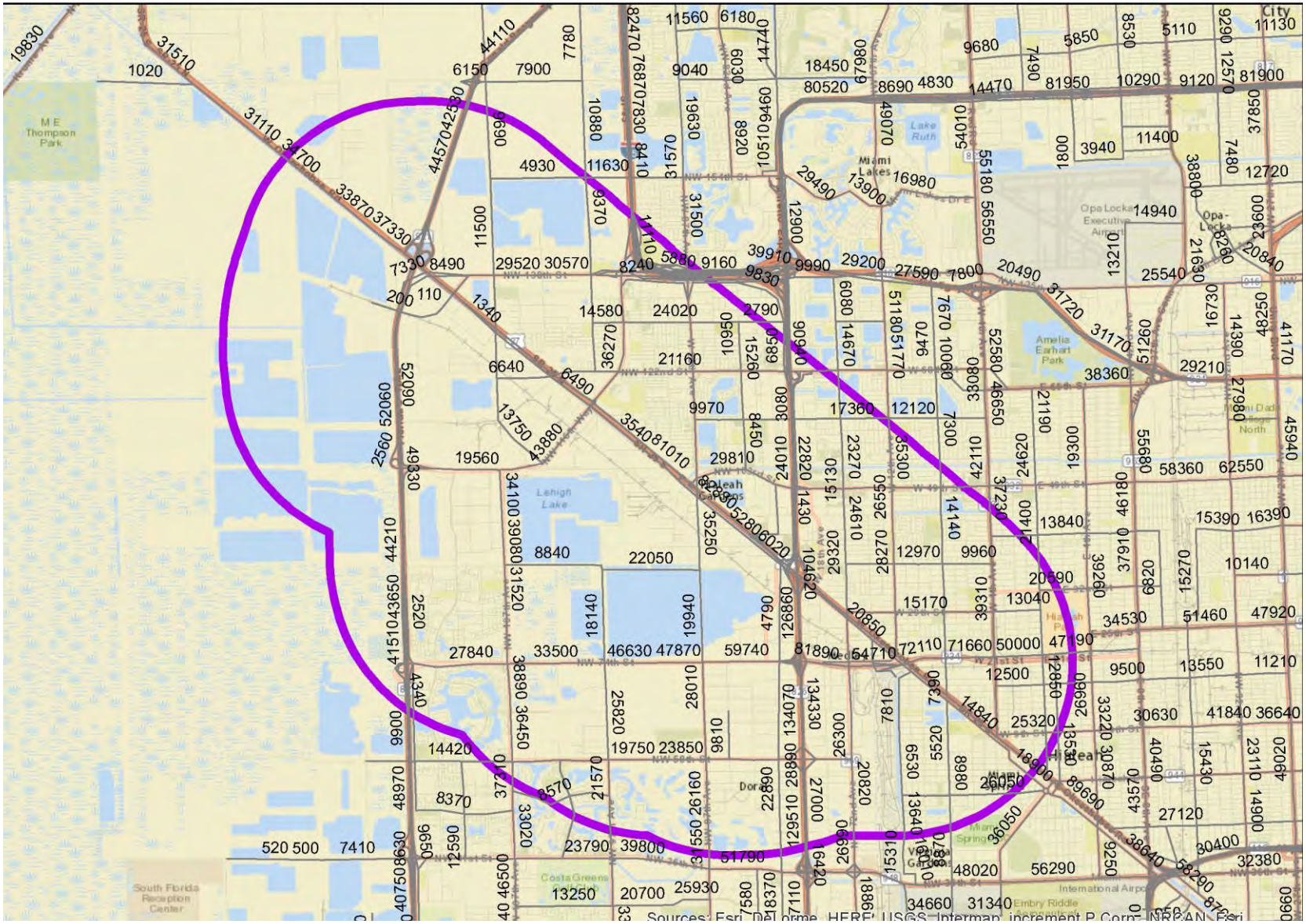


Figure 2-7: Case 2 – Cost Feasible Plan Condition 2040 Daily Volumes



Case 3 – Low Growth Condition

Figures 2-8, 2-9, and 2-10 present the output graphics for the Case 3 – Low Growth Condition for study area roadways.

Figure 2-8: Case 3 – Low Growth Condition 2040 PM Peak Level of Service

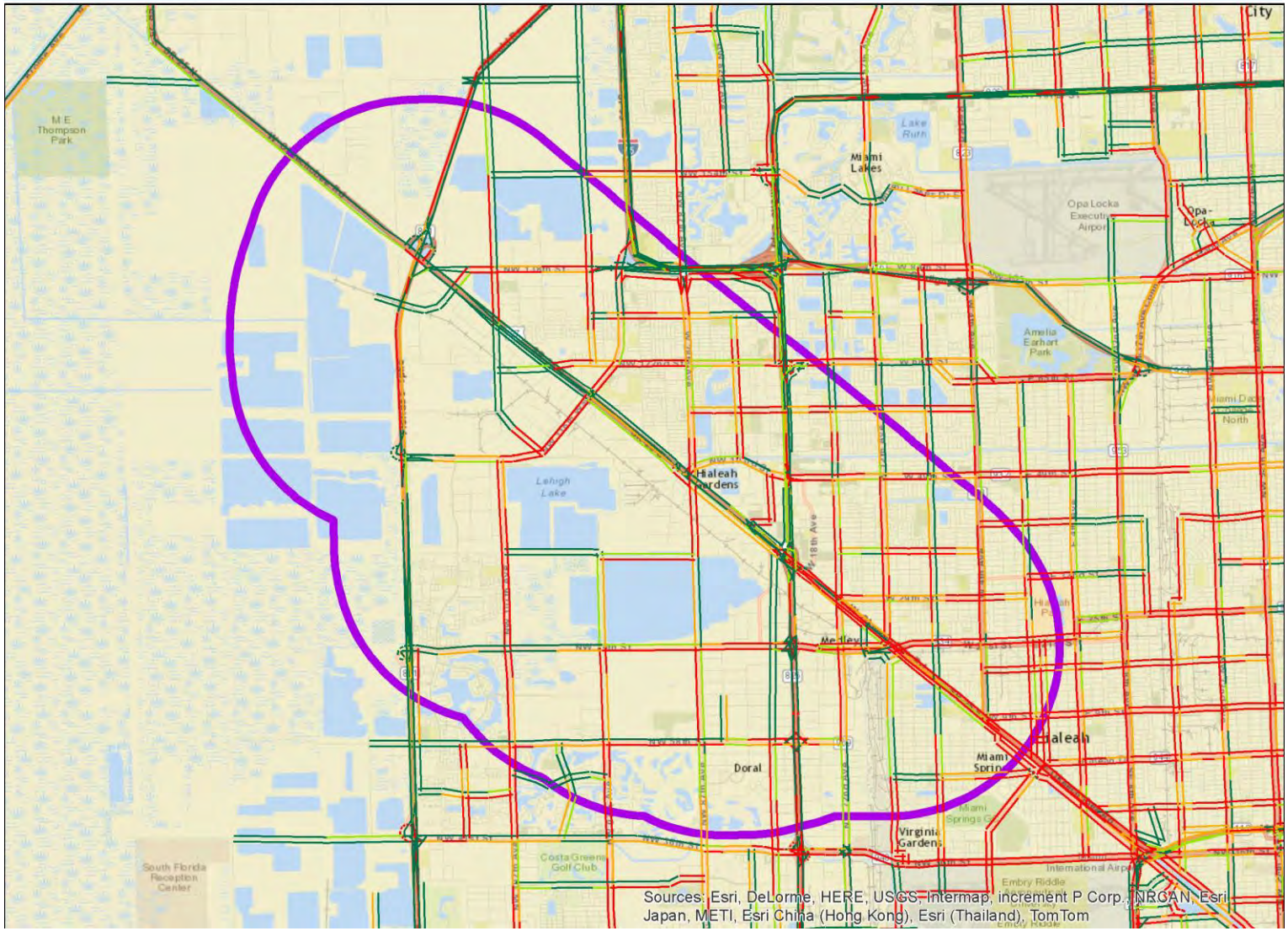


Figure 2-9: Case 3 – Low Growth Condition 2040 Daily Truck Volumes

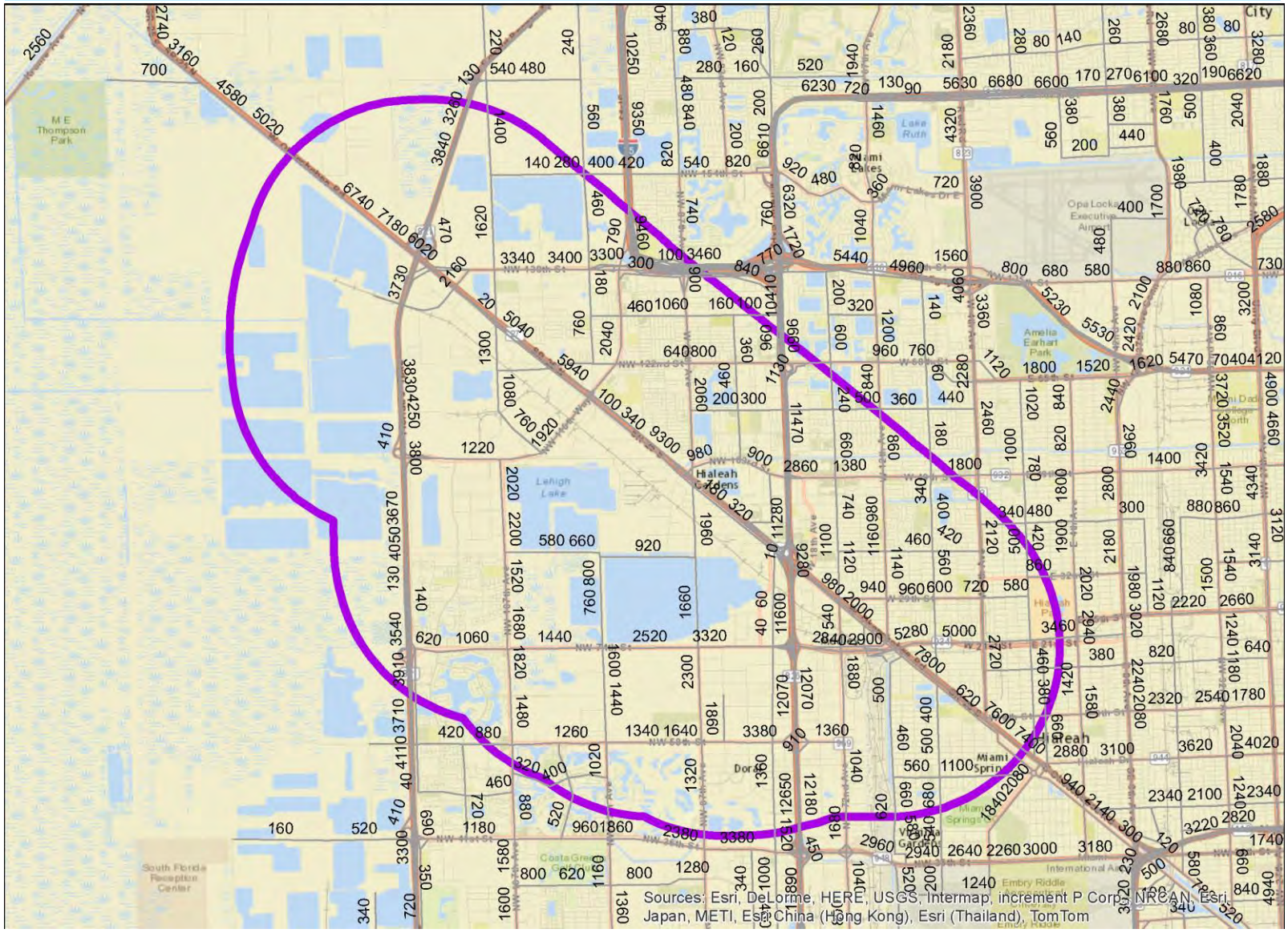
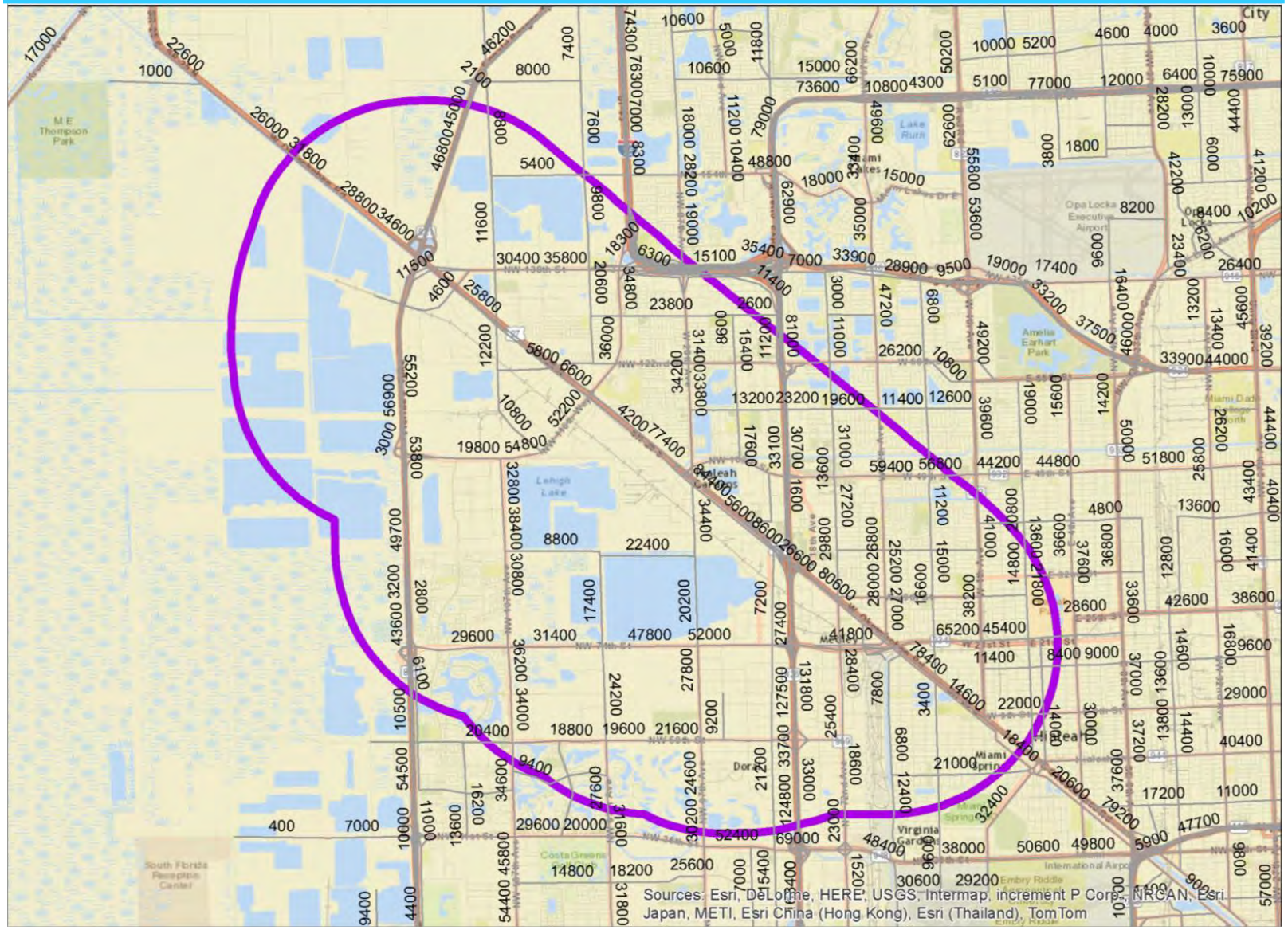


Figure 2-10: Case 3 – Low Growth Condition 2040 Daily Volumes



Case 4 – Moderate Growth Condition

Figures 2-11, 2-12, and 2-13 present the output graphics for the Case 4 – Moderate Growth Condition for study area roadways.

Figure 2-11: Case 4 – Moderate Growth Condition 2040 PM Peak Level of Service

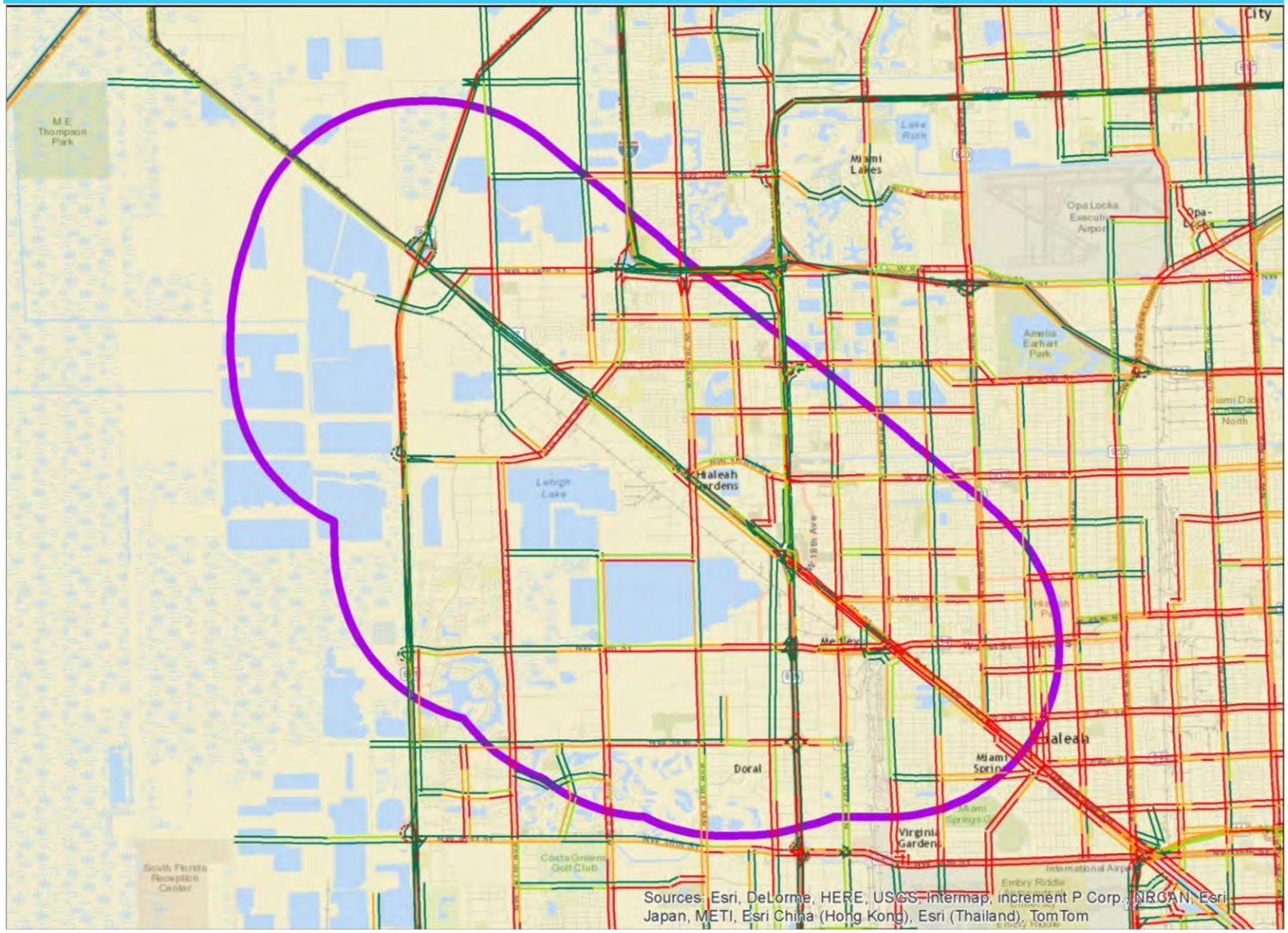


Figure 2-12: Case 4 – Moderate Growth Condition 2040 Daily Truck Volumes

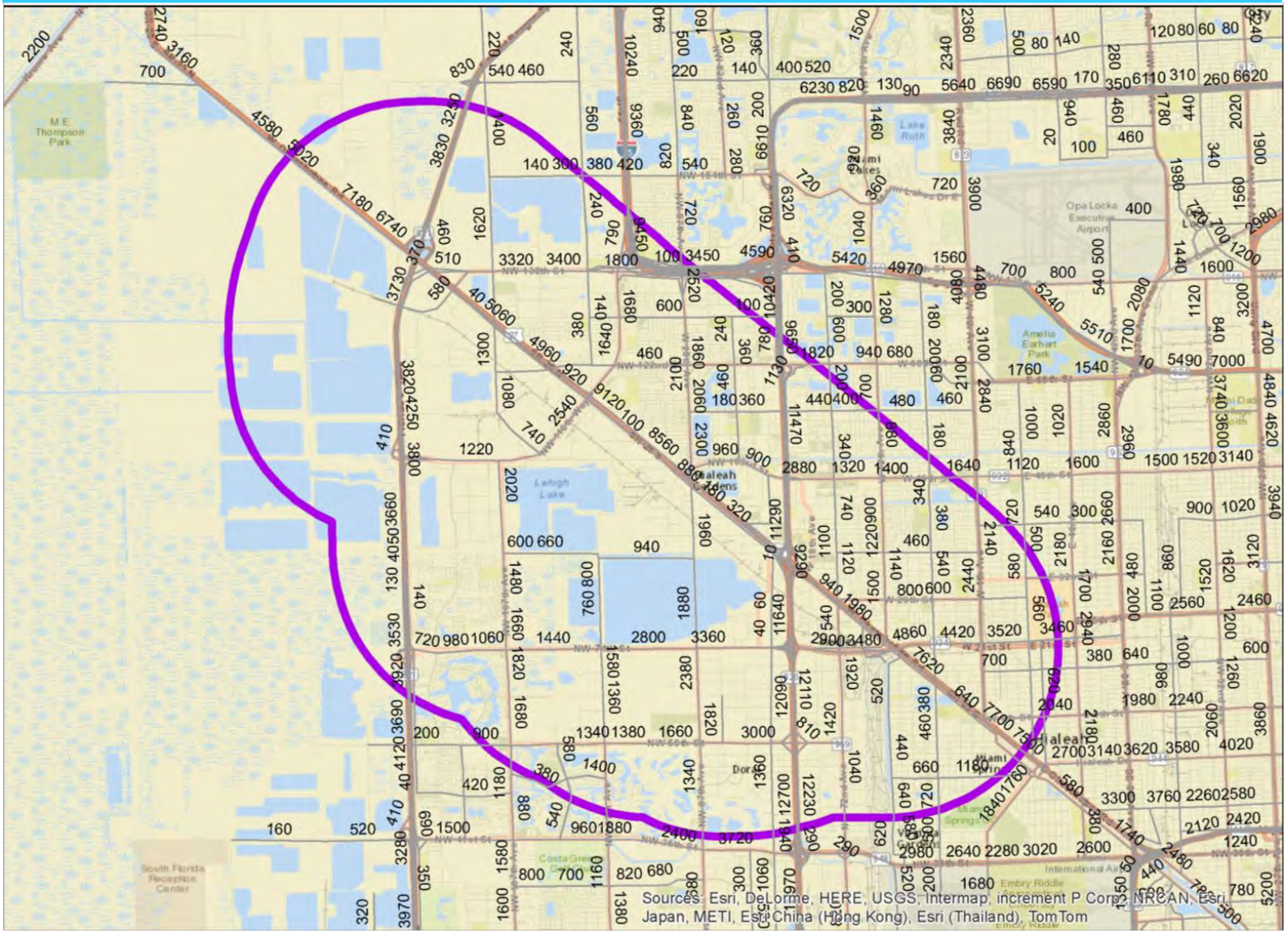
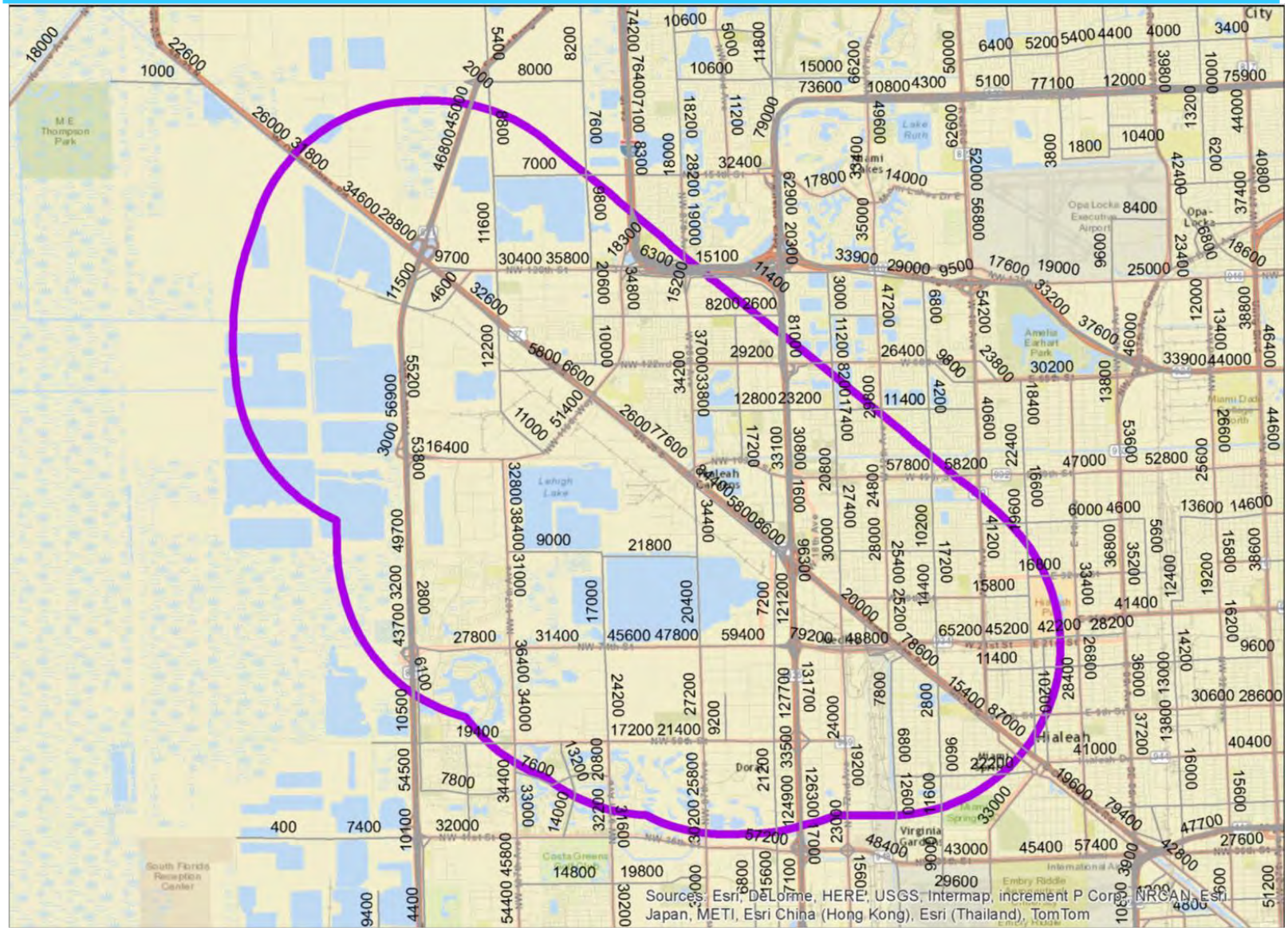


Figure 2-13: Case 4 – Moderate Growth Condition 2040 PM Daily Volumes



Case 5 – High Growth Condition

Figures 2-14, 2-15, and 2-16 present the output graphics for the Case5 – High Growth Condition for study area roadways.

Figure 2-14: Case 5 – High Growth Condition 2040 PM Peak Level of Service

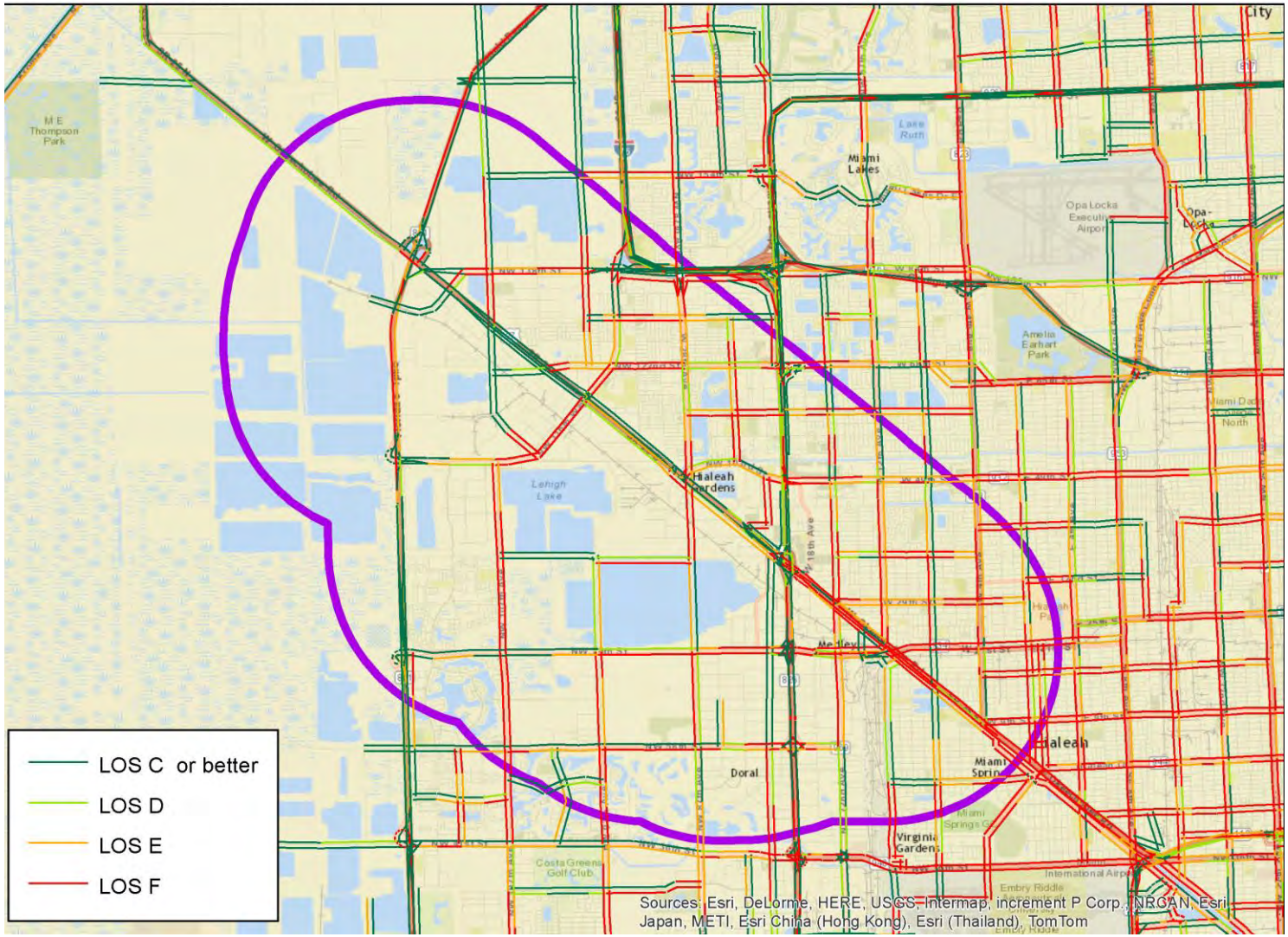


Figure 2-15: Case 5 – High Growth Condition 2040 Daily Truck Volumes

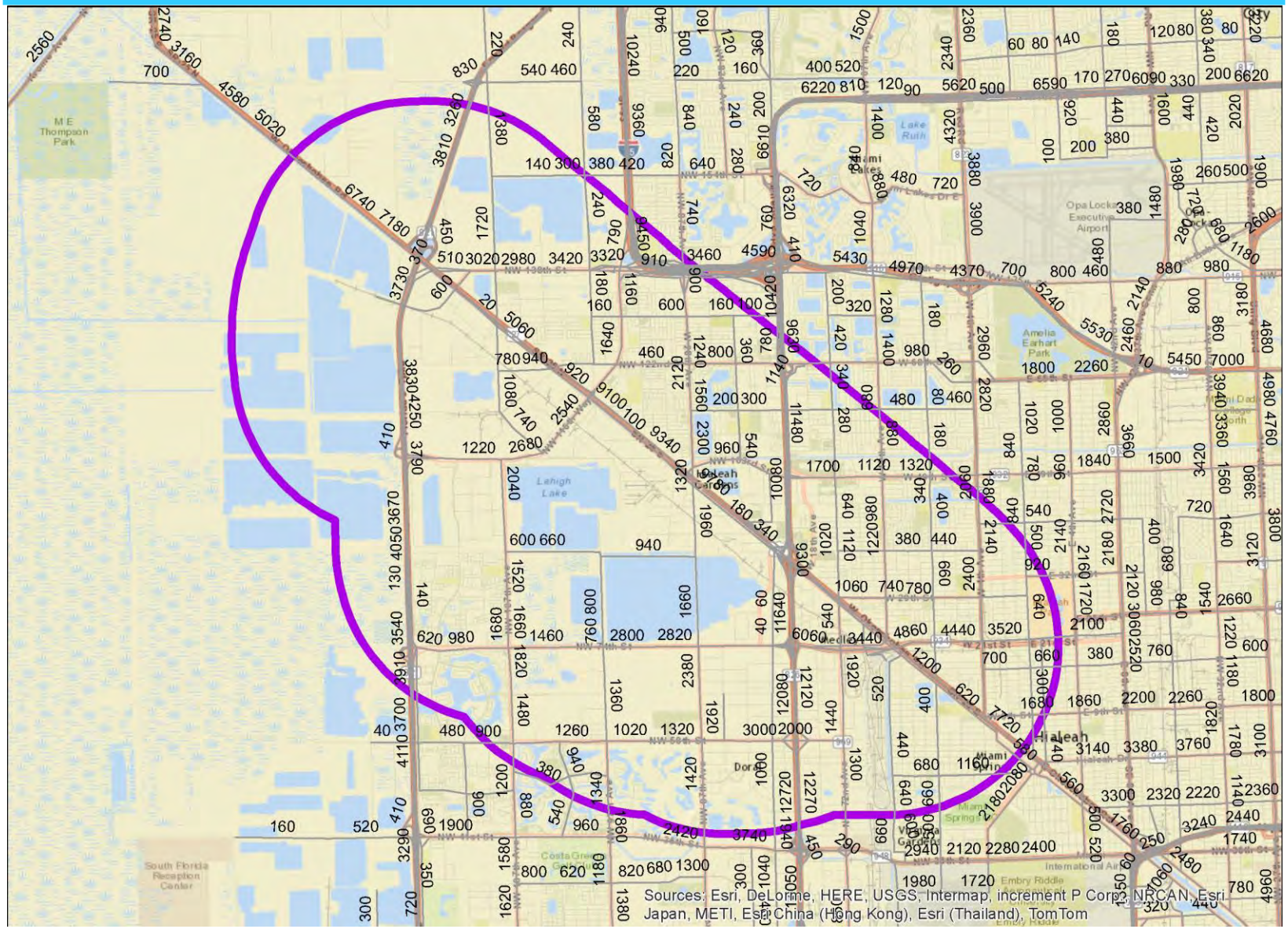
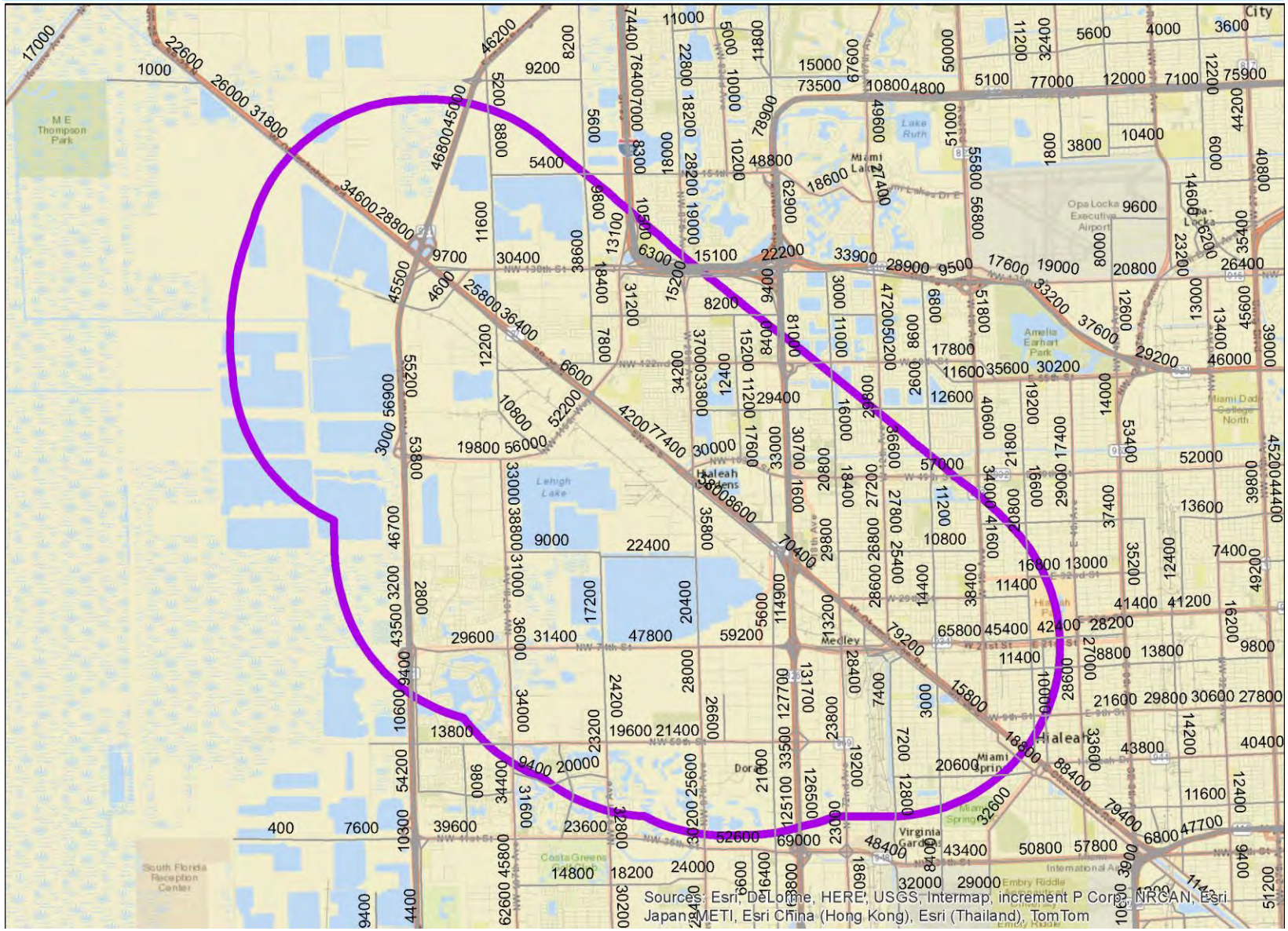


Figure 2-16: Case 5 – High Growth Condition 2040 Daily Volumes



Case 6 – High Growth with Proposed Projects Condition

Figures 2-17, 2-18, and 2-19 present the output graphics for the Case6 – High Growth Condition with Proposed Projects Condition for study area roadways.

Figure 2-17: Case 6 – High Growth With Proposed Projects PM Peak Level of Service

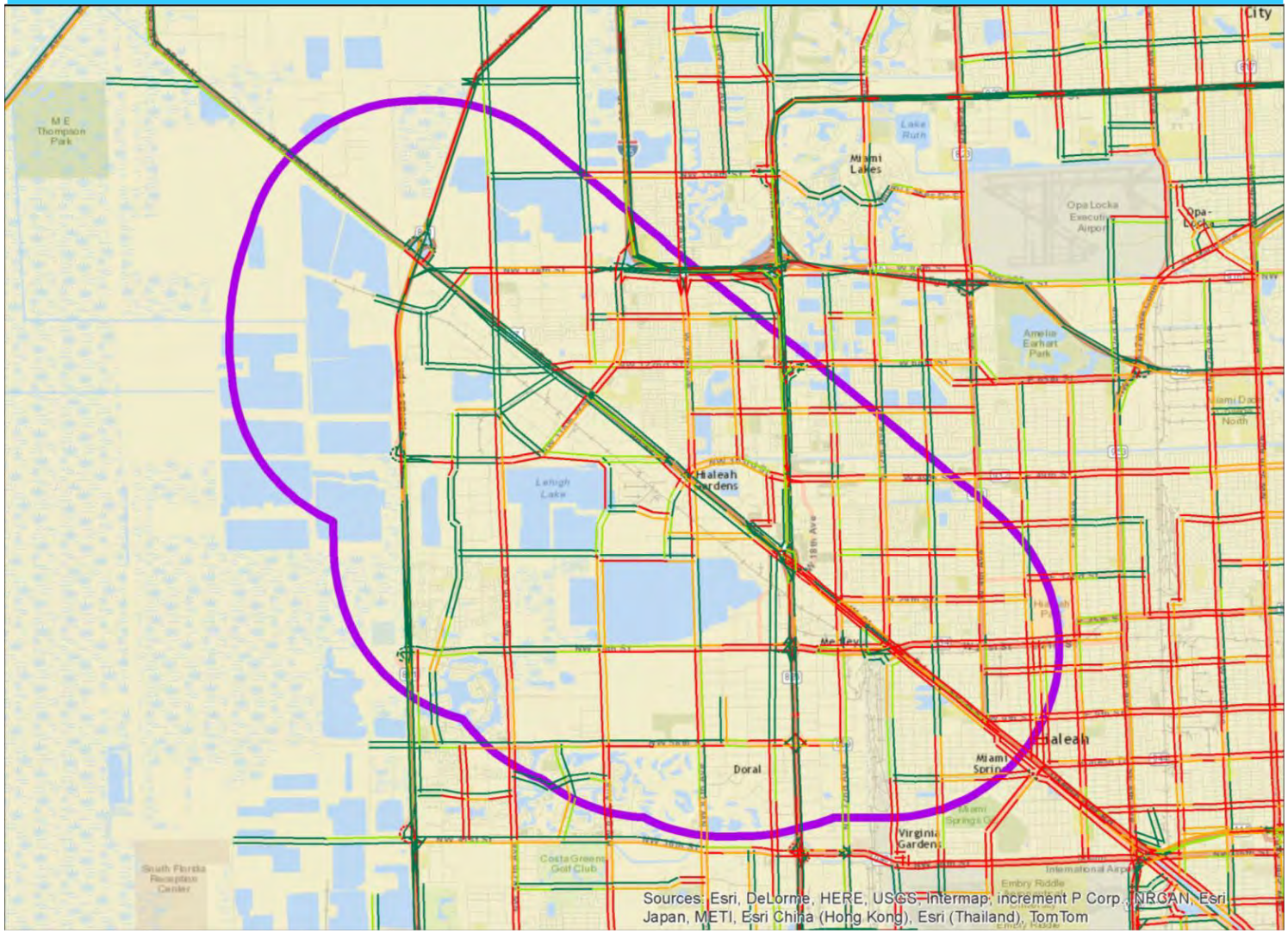


Figure 2-18: Case 6 – High Growth With Proposed Projects 2040 Daily Truck Volumes

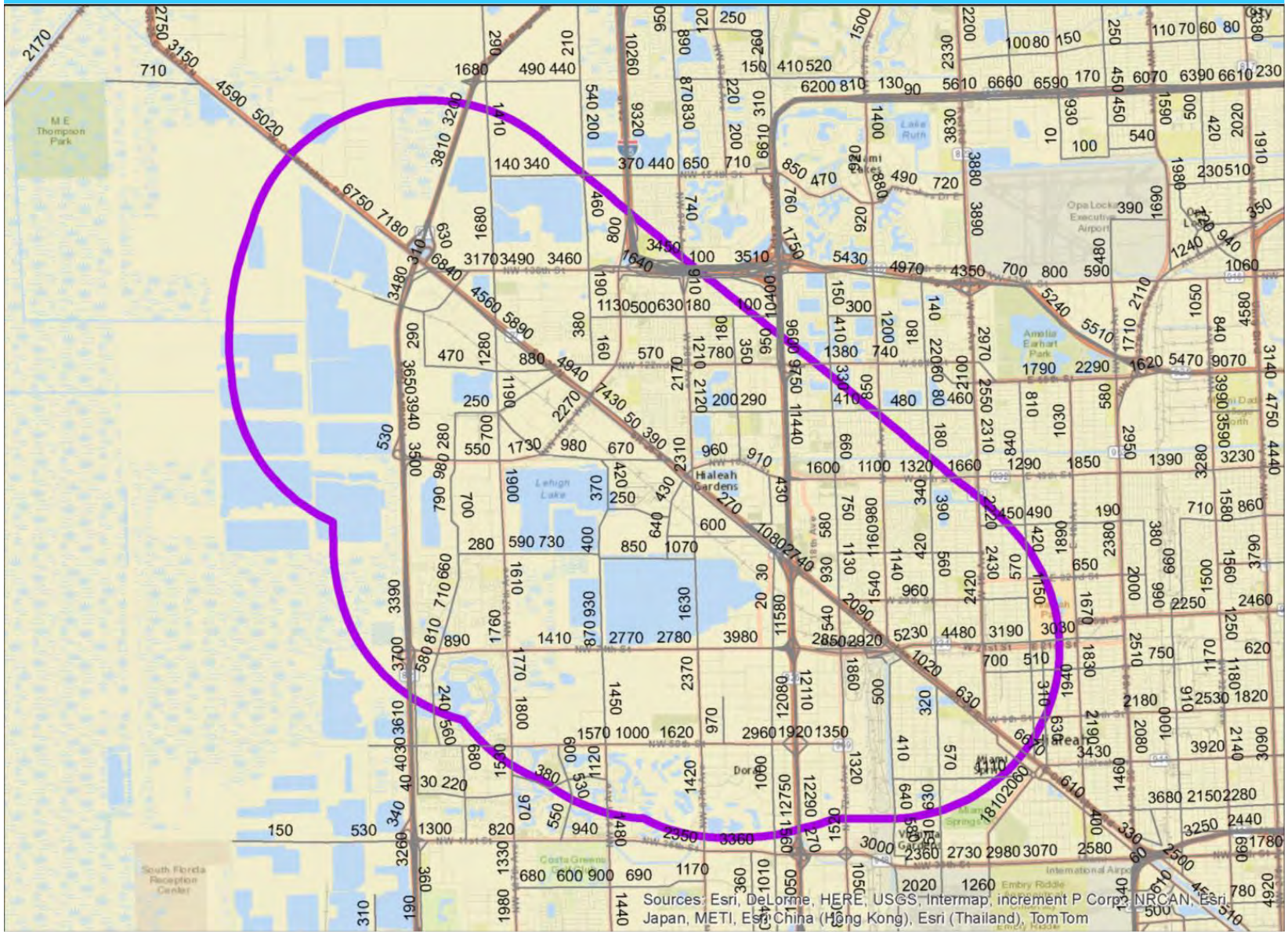
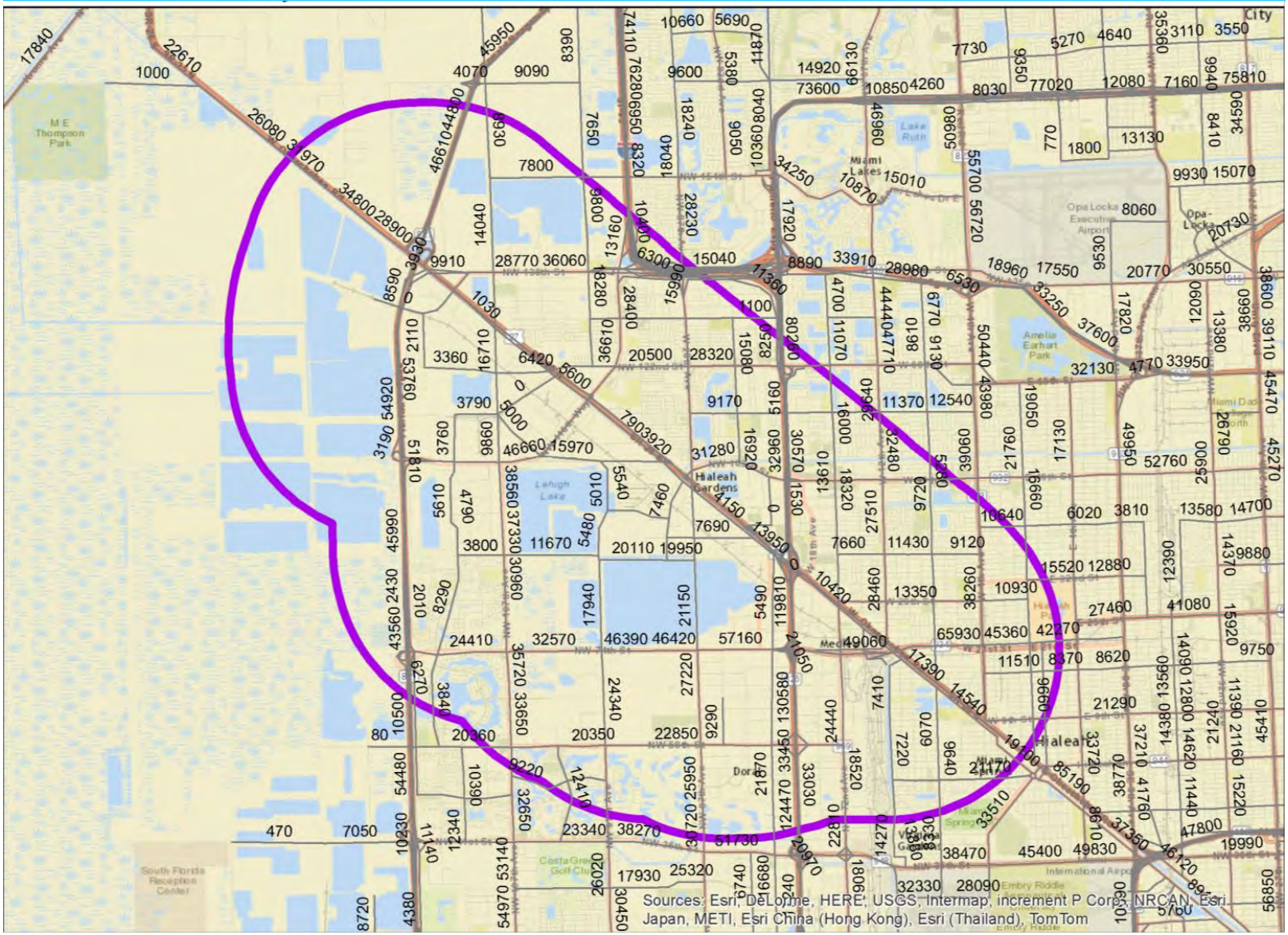


Figure 2-19: Case 6 – High Growth With Proposed Projects 2040 Daily Volumes



Stakeholder Outreach Methodology

The stakeholders contributed pertinent information to help formulate the study's findings via Stakeholder Outreach Meetings. Stakeholder Outreach meetings were held in-person and via teleconference with representatives of the distribution centers, the trucking industry, warehousing, and government who impact the study area.

Key stakeholders with whom the study team coordinated include:

Town of Medley	Jorge Corzo, P.E.
American Dream Mall	Edgar Jones
America's Industrial Realty	Alex Bernaldo
Bridge Development	Brian Latta, Eddy Santamarina
CEMEX	Rafael Jimenez, John Armas, Robert Hamblin
CSX Transportation	Bob O'Malley
Florida East Coast Railway	Rob Hinson
Florida Customs Brokers & Forwarders Association, Inc.	Barbara Pimentel
FedEx Express	Mario Dumas
Global Logistics	Chris Sutton, Stuart Gordon, Javier Dominguez
Florida's Turnpike Enterprise	John Easterling, Kim Samson
City of Hialeah	Jorge Hernandez, Jose Sanchez
City of Hialeah Gardens	Mirtha Gonzalez
Liberty Property Trust	Andy Petry, Pete Sheridan
Miami-Dade Expressway Authority	Kevin Brown, Ytve Guerrera, Mayra Diaz
Miami-Dade TPO	Carlos Roa
Miami International Airport	Pedro Hernandez, Carlos Jose, Ralph Cutie, Melvine Payne
Miami River Commission	Brett Bibeau
Old Dominion Freight Line	Steve Perhla
PortMiami	Andy Hecker, Kevin Lynskey, Alissa Penaloza
Preferred Freezer Services, LLC	Paul Montero
Pro Transport, Inc.	Oscar Acharandio
Prologis	Scott Gregory, Barbara Mantecon-Rodriguez
Seaboard Marine, Ltd.	Soulange Kruger, Maritere Martinez, Daniel O'Neil
South Florida Regional Transportation Authority	Lorainne Cargill, Bill Cross

The initial step in this outreach was to identify key stakeholders who are familiar with the local roadway network. Even though most trips to be considered in the study either originate or terminate in the Town, the study team assumed that there were impacts to the adjacent municipalities and scheduled meetings with said staff in addition to the Town of Medley's Town Engineer. The meetings with the impacted municipalities also provided the study team with the opportunity to identify and confirm the contact information of the entities (mostly private sector) with whom we should also coordinate as they would be intimately familiar with the challenges and opportunities to efficient freight movement within the study area. Moreover, each stakeholder meeting concluded with the study team asking the stakeholder being interviewed to recommend other persons/entities who should be contacted to learn their perspective on local freight movement. The list of proposed stakeholders ultimately became extensive. All members of the list were contacted but not all were available to schedule interviews. The study team is confident that the people who were available to be interviewed (see above) provided adequate information to formulate findings.

The purpose of the Stakeholder Outreach Meetings was to gather any insight or input on the needs of the stakeholder relative to local freight mobility. The discussion points in these meetings directed the dialogue towards any issues within the Town of Medley transportation system that interfered with efficient freight mobility. The meetings were intentionally conversational and free flowing to encourage open ended, uninhibited responses. Some of the discussion points were as follows:

- What are some specific locations that are concerning due to traffic/congestion?
- Does your organization have any perspective on already suggested solutions and proposals?
- Are there any objectives you would like to have met as a result of this effort?
- What businesses and business types are generating traffic within the area?
- Do you have any additional suggestions regarding the Town of Medley's transportation system?
- Are there any known "work arounds" being used by truckers?
- How much of a role does traffic play in your delivery/pick-up scheduling?
- What have you heard from your employees about their commute?
- What time of the day do you observe congestion/relief?

The comments received from these meetings were compiled and analyzed, to identify commonalities, complimentary and contradictory statements. The study team also sought to identify any comments that have been or are being addressed in any other study, plan, or existing project. As expected, many comments were related to Okeechobee Road (US-27), the subject of a then concluding PD&E study. Some stakeholders stated that they had provided their comments to the PD&E study team while some stated that they were active participants in the study advisory committee. As a result, comments related to Okeechobee Road (US-27) were not considered in the final analysis of this study.

Common stakeholder comments related to Okeechobee Road (US-27) included:

- Issues with the corridor's existing capacity
- Failing intersections (particularly at Hialeah Gardens Blvd and 138 Street)
- Obsolete bridges over the river
- Lack of traffic signal synchronization

Recommendations

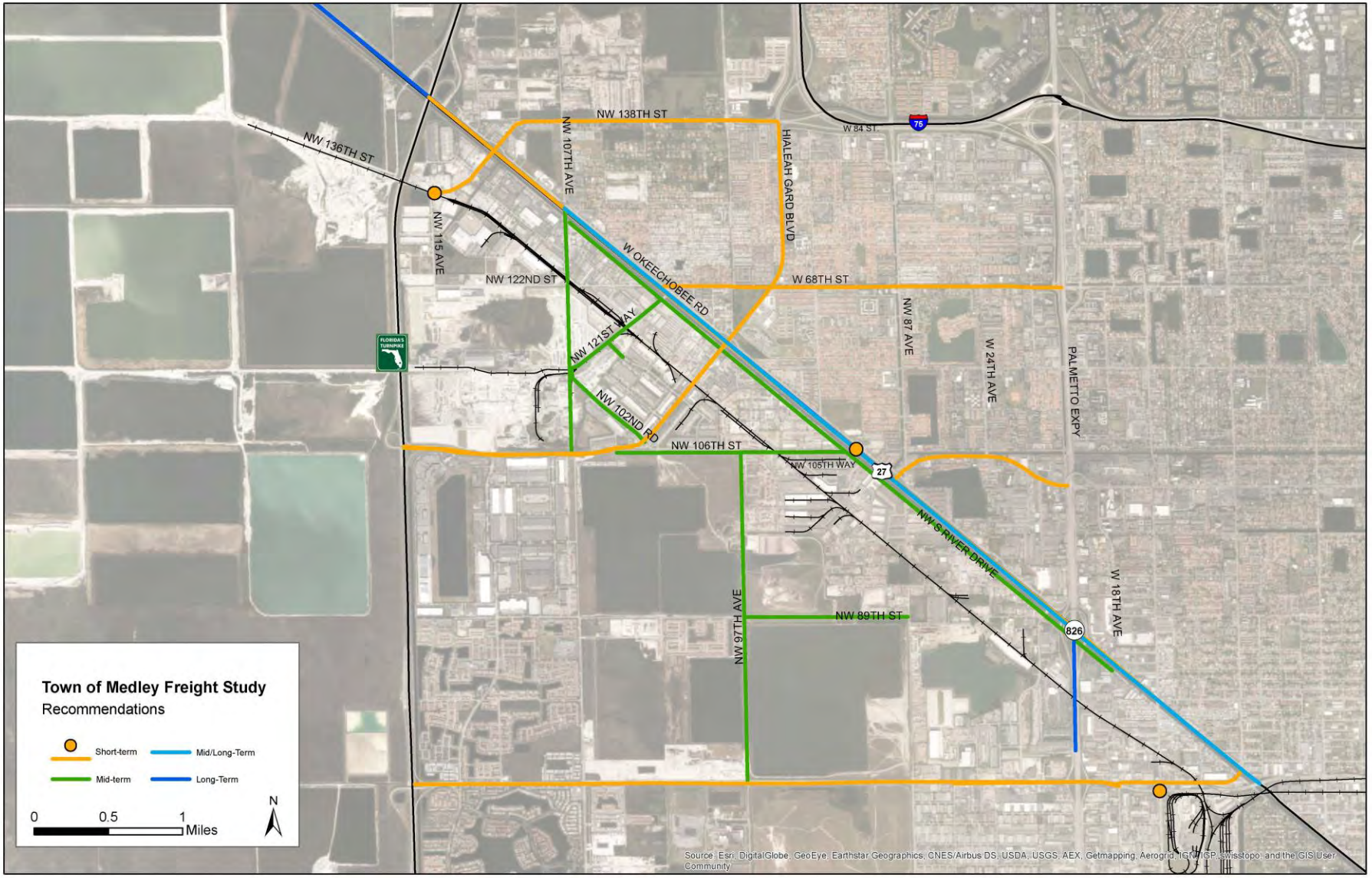
Recommendations for Freight Mobility

The following recommendations were developed based on the alternatives analysis conducted for the Town of Medley by considering different growth scenarios in the region and their impacts on freight movement in Town of Medley, and based on communications with stakeholders identified for the study. The recommendations below also incorporate relevant projects identified in the adopted Miami-Dade LRTP. The recommendations are categorized as short-term, mid-term, and long-term with respect to their implementation schedules. The consideration of the need for right of way acquisition and National Environmental Policy Act (NEPA) compliance played significant roles in determining the time period the proposed improvements can be practically implemented.

Included in the recommendations is an item (#33) to implement the findings of the currently in process *Town of Medley Multimodal Mobility Plan*. The Freight Plan's study team has coordinated with the study team of the *Town of Medley Multimodal Mobility Plan* and recognizes the value in making commuter modal choices more attractive as a strategy of congestion management. Reducing single occupant vehicle trips within the Town of Medley for the relatively large amount of persons employed within the Town will also benefit local freight mobility and connectivity with the regional freight network.

It should be noted that the planned improvements to Okeechobee Road as part of the PD&E study provide considerable enhancement to capacity and level of service along this corridor. Many of the deficiencies identified during the study can be addressed by the proposed improvements. The recommendations provided below assume that all planned improvements to Okeechobee Road will be implemented, and the identified projects represent additional improvements needed for the study area.

Figure 3-1: Map of Proposed Recommendations



Town of Medley Freight Mobility Plan

Proposed Recommendations

Short-Term Recommendations

Item No.	*Facilities*	*Limits*	*Description*
1.	NW 121st Way	South River Drive to NW 102nd Road	Resurfacing to fix potholes/slippery pavement when wet
2.	NW 138th Street	At NW 115th Avenue	Resurfacing to fix flood retention issues during raining conditions
3.	NW 105th Way	At Okeechobee Road / US-27	Widen turning radius
4.	Hialeah Gardens / NW 116th Way / Beacon Station Boulevard	FL Turnpike to US-27	Transportation Systems Management and Operations (TSM&O)
5.	NW 138th Street	US-27 to 115 Avenue	Access management. Operational, and drainage improvements
6.	NW 72nd Avenue (Milam Dairy Road)	Hialeah Expressway	Operational improvements
7.	NW 116 Way	US-27 to South River Drive	Signal re-timing and coordination
8.	NW 74 Street	NW 84 Avenue to NW 74 Avenue	Merge and close some access points on south side of NW 74 Street if possible. Provide advance signage WB lane drop after NW 79 Pl and other congestion management strategies
9.	SR-25 / Okeechobee Road	HEFT to NW 74th Street	Use of Traffic Adaptive Signal System throughout the corridor
10.	NW 106th Street/Hialeah Gardens Boulevard	HEFT to I-75 / NW 138th Street	Use of Traffic Adaptive Signal System throughout the corridor

11.	NW 74th Street	HEFT to SR-25 / Okeechobee Road (US- 27)	Use of Traffic Adaptive Signal System throughout the corridor
12.	NW 138th Street	SR-25/Okeechobee Road (US-27) to NW 106th Street / Hialeah Gardens Boulevard	Use of Traffic Adaptive Signal System throughout the corridor
13.	NW 122nd Street	SR-25 / Okeechobee Road (US-27) to SR-826 / Palmetto Expressway	Use of Traffic Adaptive Signal System throughout the corridor
14.	NW 103rd Street	SR-25/Okeechobee Road (US-27) to SR-826 / Palmetto Expressway	Use of Traffic Adaptive Signal System throughout the corridor

Mid-Term Recommendations

Item No.	*Facilities*	*Limits*	*Description*
1.	NW 121st Way	South River Drive to NW 102nd Road	Widen from 2 to 4 lanes
2.	NW 106th Street	South River Drive to NW 116th Way	Widen from 2 to 4 lanes
3.	NW 102nd Road	NW 116th Way to NW 121st Way	Widen from 2 to 4 lanes
4.	NW 100th Road	Existing western termini to NW 121 Way	Acquire Right-of-Way and construct roadway
5.	NW 90th Street	NW 87th Ave to NW 97th Avenue	Acquire Right-of-Way and construct roadway
6.	NW 97th Avenue	NW 74th Street north to NW 90th Street	Acquire Right-of-Way and construct roadway
7.	NW 97th Avenue	NW 90th Street north to NW 106th Street	Acquire Right-of-Way and construct roadway
8.	NW 107th Avenue	NW 122nd Street south to NW 106th Street	Acquire Right-of-Way and construct roadway
9.	NW S River Drive	NW 107 Avenue to NW 74 Avenue	Roadway and operational improvements; add dedicated left turn lane(s) that can accommodate truck movements
10.	NW 107 Avenue	US-27 to 1000 Feet north of W 122 Street	Widen Bridge over Miami Canal, re-time and improve signal coordination
11.	Palmetto Express Bus (East)	Palmetto Intermodal Terminal to Golden Glades Interchange Terminal	Implement express bus service on managed lanes between terminals
12.	Palmetto Express Bus (North)	Palmetto Intermodal Terminal to NW 138th Street / I-75 Interchange	Express commuter transit service

Mid and Long-Term Recommendations

Item No.	*Facilities*	*Limits*	*Description*
1.	SR-25 / Okeechobee Road	Along Corridor	Implement Active Arterial Management Techniques, including dynamic message sign system, CCTV coverage and detection systems that can collect traffic data
2.	Citywide		Implementation of a Virtual Freight Network (VFN) that identifies operational strategies using intelligent transportation technology to improve freight mobility within the area
3.	Citywide		Dynamic routing of freight vehicles

Long-Term Recommendations

Item No.	*Facilities*	*Limits*	*Description*
1.	US- 27 / Okeechobee Road	SR-826 to Palm Beach County Line	Build truck only lane
2.	Direct Ramps to Palmetto Intermodal Terminal	SR-826 Managed Lanes to Palmetto Intermodal Center	Direct access ramps for transit Coordinate with multimodal study
3.	Okeechobee Enhanced Bus Intermodal Terminal	SR-821 (HEFT) to Miami Intermodal Center	Implement limited stop enhanced bus service

Citywide Recommendations

Item No.	*Facilities*	*Limits*	*Description*
1.	At-Grade Railroad Crossings	Citywide	Monitor rail movements along the Florida East Coast (FEC) railroad corridor in the study area on an annual basis
2.	Multi-Modal projects (Per Multimodal Mobility Plan)	Citywide	Recommendations from the Town of Medley Mobility plan (including TDM strategies) that reduce the demand for local automobile travel, specifically for employees (i.e. bus circulator, bike/ped facilities)
3.	At-Grade Railroad Crossings	Citywide	Evaluate the need for rail grade separations at affected locations

Potential Funding Sources

Other than those recommended for US-27, Florida's Turnpike and SR-826, the Medley Fright Improvement Studies' recommendations are for off [state highway] system roadways. This is significant because, for the most part, this excludes state funding programs from being considered to fund the subsequent project phases for implementation (i.e. Design, Right of Way, Construction and Maintenance). A review of the available federal funding programs, however, did identify programs whose requirements are consistent (in some form) with the descriptions (or components thereof) of the off-system recommendations expressed herein. The recommendations expressed herein may in part, whole or combinations thereof be eligible for funding under the federal programs depending whether or not the facility is on the Federal-Aid System, National Highway System and/or on the particular roadway's functional classification.

A Major qualifier as to whether or not federal transportation program funds can be applied to a particular roadway improvement project is the roadway's federal functional classification, a requirement of FHWA. The principal purpose of roadway classification is to establish the relative importance of a roadway in the overall hierarchy of roadways. The five functional classifications categories are as follows:

- Principal Arterial (Urban/Rural)
- Minor Arterial (Urban/Rural)
- Major Collector (Urban/Rural)
- Minor Collector (Urban/Rural)
- Local Road (Urban/Rural)

The implementing agency(ies) should coordinate with FDOT's District 6 Work Program Office and Miami-Dade TPO to verify the most recent requirements and selection criteria of each program listed below as they are subject to change based on the prevailing legislative action/authority and available resources in addition to FDOT's District and MPO discretion when applicable.*

*Transportation Infrastructure Finance and Innovation Act (TIFIA) Public-Private Partnerships (P3s) and State Infrastructure Bank (SIB) funding are not addressed in this section.

NATIONAL HIGHWAY PERFORMANCE PROGRAM

This program (among other things) intends to provide support for the condition and performance of the NHS and for the construction of new facilities on the NHS. Funds should support meeting performance targets established in the State's asset management plan for the NHS and be consistent with Metropolitan and statewide planning requirements.

Allowable expenditures under this program include (but are not limited to) the following:

- Construction, reconstruction, resurfacing, restoration, rehabilitation, preservation, or operational improvements of NHS segments
- Construction, replacement (including replacement with fill material), rehabilitation, preservation, and protection (including scour countermeasures, seismic retrofits, impact protection measures, security countermeasures, and protection against extreme events) of NHS bridges and tunnels, and for bridges not on the NHS but still on the Federal Aid Highway System.
- Bridge and tunnel inspection and evaluation on the NHS and inspection and evaluation of other NHS and non-NHS highway infrastructure assets, as long as they are on the Federal Aid Highway System.
- Construction, reconstruction, resurfacing, restoration, rehabilitation, and preservation of, and operational improvements for, a federal-aid highway not on the NHS, and construction of a transit project eligible for assistance under Chapter 53, Title 49, if the project is in the same corridor and in proximity to a fully access-controlled NHS route
- Bicycle transportation and pedestrian walkways
- Highway safety improvements on the NHS
- Capital and operating costs for traffic and traveler information, monitoring, management, and control facilities and programs
- Infrastructure-based Intelligent Transportation System (ITS) capital improvements
- Environmental restoration and pollution abatement
- Control of noxious weeds and establishment of native species
- Environmental mitigation related to NHPP projects
- Construction of publicly owned intracity or intercity bus terminals servicing the NHS

SURFACE TRANSPORTATION BLOCK GRANT PROGRAM

This program (among other things) intends to provide flexible funding that may be used by states and municipalities for projects to preserve and improve the conditions and performance on any federal-aid highway, bridge and tunnel projects on any public road, pedestrian and bicycle infrastructure, and transit capital projects, including intercity bus terminals.

Allowable expenditures under this program include (but are not limited to) the following:

- Construction, reconstruction, rehabilitation, resurfacing, restoration, preservation, or operational improvements for highways

- Replacement, rehabilitation, preservation and protection for bridges and tunnels on any public road, including construction or reconstruction necessary to accommodate other modes
- Construction of new bridges and tunnels on a federal-aid highway
- Capital costs for transit projects eligible for assistance under Chapter 53, Title 49, including vehicles and facilities used to provide intercity passenger bus service
- Carpool projects, fringe and corridor parking facilities and programs**,** including electric and natural gas vehicle charging infrastructure, bicycle transportation and pedestrian walkways, and ADA sidewalk modification
- Highway and transit safety infrastructure improvements and programs**,** installation of safety barriers and nets on bridges, hazard eliminations, mitigation of hazards caused by wildlife, railway-highway grade crossings
- Capital and operating costs for traffic monitoring, management and control facilities and programs, including advanced truck stop electrification
- Transportation control measures
- Environmental mitigation efforts
- Infrastructure-based ITS capital improvements
- Environmental restoration and pollution abatement
- Control of noxious weeds and establishment of native species
- Congestion pricing projects and strategies, including electric toll collection and travel demand management strategies and programs
- Truck parking facilities
- Construction and operational improvements for a minor collector in the same corridor and in proximity to an NHS route if the improvement is more cost-effective than an NHS improvement and will enhance NHS level of service and regional traffic flow

HIGHWAY SAFETY IMPROVEMENT PROGRAM

This program (among other things) intends to assist in achieving a significant reduction in traffic fatalities and serious injuries on all public roads. The HSIP requires a data-driven, strategic approach to improving highway safety on all public roads. Projects must correct or improve hazardous road locations or features or address highway safety problems.

The types of projects that are eligible for funding under this program include (but are not limited to) the following:

- Intersection safety improvement
- Pavement and shoulder widening (including addition of a passing lane to remedy an unsafe condition)
- Installation of rumble strips or another warning device
- Installation of a skid-resistant surface at an intersection or other location with a high frequency of crashes
- Improvements for pedestrian or bicyclist safety or safety of people with disabilities
- Construction and improvement of a railway-highway grade crossing safety feature
- Traffic calming features

- Elimination of a roadside hazards
- Installation, replacement, and other improvement of highway signage and pavement markings, or a project to maintain minimum levels of retroreflectivity, that addresses a highway safety problem consistent with a State strategic highway safety plan
- Installation of a priority control system for emergency vehicles at signalized intersections
- Installation of a traffic control or other warning device at a location with high crash potential
- Installation of guardrails, barriers and crash attenuators.
- The addition or retrofitting of structures or other measures to eliminate or reduce crashes involving vehicles and wildlife.
- Installation of yellow-green signs and signals at pedestrian and bicycle crossings and in school zones
- Geometric improvements to a road for safety purposes
- Roadway safety infrastructure improvements consistent with the recommendations included in the publication of the Federal Highway Administration entitled "Highway Design Handbook for Older Drivers and Pedestrians" (FHWA–RD–01–103), dated May 2001 or as subsequently revised and updated
- Truck parking facilities eligible for funding under section 1401 of the MAP–21.
- Systemic safety improvements
- Installation of vehicle-to-infrastructure communication equipment
- Pedestrian hybrid beacons
- Roadway improvement that provide separation between pedestrian and motor vehicles, including medians and pedestrian crossing islands

NATIONAL HIGHWAY FREIGHT PROGRAM

This program (among other things) intends to facilitate the construction of infrastructure projects that are difficult to complete solely using existing federal, state, local, and private funds. Projects supported by this program will reduce the impact of congestion, generate national and regional economic benefits, and facilitate the efficient movement of freight by improving the National Highway Freight Network.

Allowable expenditures under this program include (but are not limited to) the following:

- Construction, reconstruction, rehabilitation, acquisition of real property (including land relating to the project and improvements to land), construction contingencies, acquisition of equipment, and operational improvements directly relating to improving system performance
- Intelligent transportation systems and other technology to improve the flow of freight, including intelligent freight transportation systems
- Efforts to reduce the environmental impacts of freight movement
- Environmental and community mitigation for freight movement
- Railway-highway grade separation
- Geometric improvements to interchanges and ramps

- Truck-only lanes
- Climbing and runaway truck lanes
- Adding or widening of shoulders
- Truck parking facilities eligible for funding under Section 1401 of MAP–21 (23 U.S.C. 137)
- Real-time traffic, truck parking, roadway condition, and multimodal transportation information systems
- Traffic signal optimization, including synchronized and adaptive signals
- Work zone management and information systems
- Highway ramp metering
- Additional road capacity to address highway freight bottlenecks
- Physical separation of passenger vehicles from commercial motor vehicles
- Enhancement of the resiliency of critical highway infrastructure, including highway infrastructure that supports national energy security, to improve the flow of freight
- A highway or bridge project to improve the flow of freight on the National Highway Freight Network
- Any other surface transportation project to improve the flow of freight into and out of a public or private freight rail or water facility (including ports)

TRANSPORTATION ALTERNATIVES (*FAST Act* Set-Aside)

This program (among other things) merges certain previously existing programs including transportation enhancements, recreational trails, safe routes to school, and several other discretionary programs into a single funding source. Miami-Dade TPO, through a competitive process, selects the projects in consultation with FDOT for implementation.

Funds allocated under this program may be used for activities that are related to surface transportation and fall within the described definition of "Transportation Alternatives." Eligible expenditures include the following:

- Construction, planning, and design of on-road and off-road trail facilities for pedestrians, bicyclists, and other nonmotorized forms of transportation
- Construction, planning, and design of infrastructure-related projects and systems that will provide safe routes for non-drivers, including children, older adults, and individuals with disabilities to access daily needs
- Conversion and use of abandoned railroad corridors for trails for pedestrians, bicyclists, or other nonmotorized transportation users
- Any environmental mitigation activity, including pollution prevention and pollution abatement activities and mitigation
- Safe routes to school projects as described under §1404 of SAFETEA–LU
- Boulevards - A boulevard is defined as a walkable, low-speed (35 mph or less) divided arterial thoroughfare in urban environments designed to carry both through and local traffic, pedestrians and bicyclists

NATIONALLY SIGNIFICANT FREIGHT AND HIGHWAY PROJECTS PROGRAM

This is a discretionary program for freight-related highway, rail and intermodal improvements for projects that support one or more of the following program goals:

- Improve the safety, efficiency, and reliability of the movement of freight and people
- Generate national or regional economic benefits and an increase in global economic competitiveness of the U.S
- Reduce highway congestion and bottlenecks
- Improve connectivity between modes of freight transportation
- Enhance the resiliency of critical highway infrastructure and help protect the environment
- Improve roadways vital to national energy security
- Address the impact of population growth and the movement of people and freight

Minimum project size is $25 million. Exceptions can be made for certain projects requiring a minimum grant size for "small projects" of at least $5 million.

Consideration for funding is given to projects that:

- Generate national or regional economic, mobility, or safety benefits
- Are cost effective
- Are based on the results of preliminary engineering
- Identify one or more stable and dependable sources of matching funds (including contingency funding) as-needed to construct, maintain, and operate the project
- Cannot be easily and efficiently completed without other Federal funding or financial assistance available to the project sponsor
- Is reasonably expected to begin construction not later than 18 months after the date of obligation of funds for the project

Allowable expenditures under this program include (but are not limited to) construction, reconstruction, rehabilitation, acquisition of real property (including land related to the project and improvements to the land), environmental mitigation, construction contingencies, acquisition of equipment, and operational improvements directly related to improving system performance.

CONGESTION MITIGATION AND AIR QUALITY (CMAQ) IMPROVEMENT PROGRAM

The CMAQ program provides flexible funding for transportation projects and programs to help meet the requirements of the Clean Air Act. Funding is available to reduce congestion and improve air quality for areas that do not meet the National Ambient Air Quality Standards for ozone, carbon monoxide, or particulate matter (nonattainment areas) and for former nonattainment areas that are now in compliance (maintenance areas).

Allowable expenditures under this program include (but are not limited to) the following:

- Establishment or operation of a traffic monitoring, management, and control facility, including advanced truck stop electrification systems
- Projects that improve traffic flow, including projects to improve signalization, construct HOV lanes, improve intersections, add turning lanes, improve transportation systems management and operations that mitigate congestion and improve air quality, and implement ITS and other
- Projects to improve incident and emergency response or improve mobility, such as real-time traffic, transit, and multimodal traveler information
- Projects that shift traffic demand to nonpeak hours or other transportation modes, increase vehicle occupancy rates, or otherwise reduce demand
- Facilities serving electric or natural gas-fueled vehicles (except where this conflicts with prohibition on rest area commercialization) are explicitly eligible
- Certain transit operations

Note: States without a nonattainment or maintenance area may use their CMAQ funds for any CMAQ- or STP-eligible project. Florida has no nonattainment or maintenance areas.

Efficient Transportation Decision Making (ETDM)

Recommendations made in this report are expected to ultimately be subject to the Department's Efficient Transportation Decision Making (ETDM) screening in order to be considered for implementation by the Department. FDOT describes ETDM as Florida's procedure for reviewing qualifying transportation projects to consider potential environmental impacts in the Planning phase. This process provides stakeholders the opportunity for early input, involvement, and coordination. ETDM provides for the early identification of potential project effects and informs the development of scopes for projects advancing to the Project Development and Environment (PD&E) phase. FDOT's ETDM public website goes on to say that the ETDM process connects the Planning and PD&E phases by carrying forward planning products, previous analyses, and decisions supporting transportation project implementation during subsequent project development phases.

ETDM involves two screening activities. Projects/concerns that are candidates for addition in a major planning documents (i.e. LRTP) and planning studies typically receive an ETDM Planning Screening. Projects that are candidates for funding in FDOT's Work Program, the TPO's TIP or to be the subject of a PD&E study receive a Programming Screen. Both activities involve entering the projects into FDOT's electronic Environment Screening Tool (EST).

In addition to entering individual projects into the EST, FDOT also has the ability to use the EST to support planning studies as a whole. This method follows identifying and analyzing people, places and natural resources within a defined "Area of Interest." In this case, the area of interest was defined as the Town of Medley study area. The AOI analysis performed as a part of this study found no major issues that would prevent the study's recommendations from being implemented. The summary report of the *AOI Analysis* can be found in Appendix Q.