



**Miami-Dade Transportation
Planning Organization**

ORIGIN-DESTINATION TRAFFIC STUDY

Northwest Quadrant of Miami-Dade County

March 2022

ORIGIN-DESTINATION TRAFFIC STUDY Northwest Quadrant of Miami-Dade County

March 2022

Prepared for Miami-Dade Transportation Planning Organization by Gannett Fleming & CTS

For complaints, questions or concerns about civil rights or nondiscrimination, or for special requests under the American with Disabilities Act, please contact: Elizabeth Rockwell, Chief Communications Officer, at (305) 375-1881 or elizabeth.rockwell@miamidademipo.org

The Miami-Dade TPO complies with the provisions of Title VI of the Civil Rights Act of 1964, which states: No person in the United States shall, on grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance. It is also the policy of the Miami-Dade MPO to comply with all of the requirements of the Americans with Disabilities Act. For materials in accessible format please call (305) 375-4507. The preparation of this report has been financed in part from the U.S. Department of Transportation (USDOT) through the Federal Highway Administration (FHWA) and/or the Federal Transit Administration (FTA), the State Planning and Research Program (Section 505 of Title 23, U.S. Code) and Miami-Dade County, Florida. The contents of this report do not necessarily reflect the official views or policy of the U.S. Department of Transportation.

Table of Contents

1. Introduction	1
1.1 Study Background	1
1.2 Study Area	2
1.3 Study Organization	5
2. Review of Current Conditions	6
2.1 Review of Previous Studies	6
2.2 Review of Programmed and Planned Improvements	10
2.3 Existing Infrastructure	16
2.4 Existing Zoning	18
3. Existing & Future Year Analysis	19
3.1 Existing Traffic Data and System Performance	19
3.1.1 Travel Demand model Southeast Regional Planning Model (SERPM) Comparison	19
3.1.2 Longitudinal Employer Household Dynamics (LEHD) Data Comparison for Workers and Work Trips	21
3.2 Socioeconomic Data Forecasts	26
3.2.1 Population	26
3.2.2 Employment	27
3.2.3 School Enrollment	28
3.2.4 Land-Use Maps	30
3.3 Year 2015 and Year 2045 Highway Network	32
3.3.1 Year 2015 Highway Network	32
3.3.2 Year 2045 Highway Network	35
4. NW 107th Avenue Extension Analysis	41
4.1 Programmed Projects Intersecting with NW 107 th Avenue	41
4.2 Segment Implementation Impact Assessment	43
5. List of Potential Projects	44
5.1 Types of Projects	44
5.1.1 Transit Projects	44
5.1.2 Micro-Mobility and Bike/Ped Connections	45
5.1.3 Roadway Projects	45
6. Summary of Findings	48
Appendices	49

List of Figures

Figure 1. Study Area Location	2
Figure 2. Northwest Transportation Planning Area Boundaries.	3
Figure 3. Municipalities in Northwest Transportation Planning Area	4
Figure 4. Distribution of Residents among Municipalities.	5
Figure 5. Northwest Transit Corridor (<i>Source: Northwest Transit Corridor Feasibility Study</i>).	8
Figure 6. TIP 2021/2022 – 2025/2026 Improvements – Locational Projects	10
Figure 7. TIP 2021/2022 – 2025/2026 Improvements – Facility Projects	11
Figure 8. LRTP 2045 Improvements – Locational Projects.	13
Figure 9. LRTP 2045 Improvements – Facility Projects	14
Figure 10. SIS Facilities	16
Figure 11. Year 2019 Transit Service.	17
Figure 12. Municipal and County Zoning.	18
Figure 13. SERPM Base Year 2015 Travel Patterns for All Trips	20
Figure 14. 2015 Employment Data Comparison by Age of Worker	21
Figure 15. 2015 Employment Data Comparison by Earning of Worker	22
Figure 16. 2015 Employment Data Comparison by Gender of Worker	22
Figure 17. 2015 Employment Data Comparison by Worker’s Educational Background	23
Figure 18. Year 2015 Work Trip Patterns in Northwest Transportation Planning Area	23
Figure 19. Year 2015 Work Travel Patterns to the Northwest Transportation Planning Area	24
Figure 20. Work Travel Patterns from the Northwest Transportation Planning Area	25
Figure 21. SERPM Population Annual Growth Rates by TAZ from 2015 to 2045	27
Figure 22. SERPM Employment Annual Growth Rates by TAZ from 2015 to 2045	28
Figure 23. SERPM School Enrollment Annual Growth Rates by TAZ from 2015 to 2045	29
Figure 24. Existing Land Use in Northwest Transportation Planning Area	30
Figure 25. Future Land Use Plan Northwest Transportation Planning Area	31
Figure 26. Year 2015 SERPM Number of Directional Lanes.	32
Figure 27. Year 2015 SERPM Directional Daily Volumes.	33
Figure 28. Year 2015 SERPM Level of Service (LOS)	34
Figure 29. Year 2045 SERPM Directional Lanes	35
Figure 30. Capacity Difference between the 2045 Build and 2015 network.	36
Figure 31. Year 2045 Directional Daily Volume	37
Figure 32. Directional Daily Volume Difference between 2015 and 2045	38
Figure 33. Year 2045 SERPM Level of Service.	39
Figure 34. Level of Service Difference between 2015 and 2045.	40
Figure 35. NW 107 th Avenue Project Analysis Link.	41
Figure 36. Year 2045 No Build vs. Build Daily Volume Comparison	42
Figure 37. List of Potential Projects	44
Figure 38. Medley On-Demand Service Area	45
Figure 39. Potential North-South connection	46
Figure 40. Potential East-West Connection	47

List of Tables

Table 1. Year 2019 Municipal Residents	5
Table 2. TIP Projects within 1-Mile Buffer from NW 107 th Avenue Extension.	12
Table 3. LRTP Projects within 1-Mile Buffer from NW 107 th Avenue Extension	15
Table 4. SERPM Base Year Trip Exchanges with Northwest Transportation Planning Area	20
Table 5. Population Forecasts	26
Table 6. Employment Forecasts	27
Table 7. School Enrollment Forecasts	28
Table 8. Year 2045 Travel Time and Distance Savings	43

List of Appendices

Appendix A – SERPM Network Refinements	49
Appendix B – 2015 Travel Pattern Comparison LBS, LEHD, and SERPM Data	51
Appendix C – 2015 LEHD Workers Profile and Comparison to SERPM Data	64
Appendix D – 2019 LEHD Data Travel Patterns	74
Appendix E – NW 107 th Avenue Select Link Analysis	78
Appendix F – List of Potential Projects	89

1. Introduction

Miami-Dade County is divided into seven well-defined geographic sections identified as Transportation Planning Areas. Each Transportation Planning area, identified by the Miami-Dade Transportation Planning Organization (TPO), is distinguished by its own characteristics, growth rates, needs, and transportation challenges. The Northwest Transportation Planning Area of Miami-Dade County plays a vital role in the economy of the Southeast Florida region. The area accommodates a significant amount of industrial land use due to its prime location, zoning, and excellent connections with Port Miami, Miami International Airport (MIA), and the region. With a growing economy, maintaining good connectivity and improving mobility in the Northwest Transportation Planning Area is important for the residents, businesses, and visitors within the Planning Area, Miami-Dade County, and the region.

This study examines the current and projected travel patterns in the northwest area of Miami-Dade County, providing insight into the effects of the projected growth and identified infrastructure improvements. In particular, it analyzes and documents the effect of extending NW 107th Avenue. The NW 107th Avenue project is currently listed in the Year 2045 Long Range Transportation Plan (LRTP) in Priority Period III which represents the period from 2031 to 2035 with an estimated project cost (2018\$) of \$10.5 Million.

Building upon the analysis conducted for this study, additional potential projects were identified that could improve the mobility within the area. Three types of potential improvements were identified, including a transit project, the identification of multiple areas where mobility could be improved through the use of micro-mobility, bicycle and pedestrian modes, and two roadway projects.

1.1 Study Background

During the Miami-Dade TPO Governing Board meeting of May 20, 2021, Resolution #20-2021 was approved authorizing the TPO to develop a scope of services and budget to study the travel patterns within the Northwest quadrant of Miami-Dade County. This project will provide a comprehensive understanding of transportation movements, effects, and the various impacts associated with such movements within the Northwest Transportation Planning Area which includes the City of Doral, the City of Hialeah, the City of Hialeah Gardens, the Town of Medley, the City of Miami Lakes, the City of Opa-Locka and the City of Sweetwater.

1.2 Study Area

As shown in Figure 1, the Northwest Transportation Planning Area, located in northwest Miami-Dade County (shown in orange), is bordered by Broward County to the north and Everglades National Park on the west.

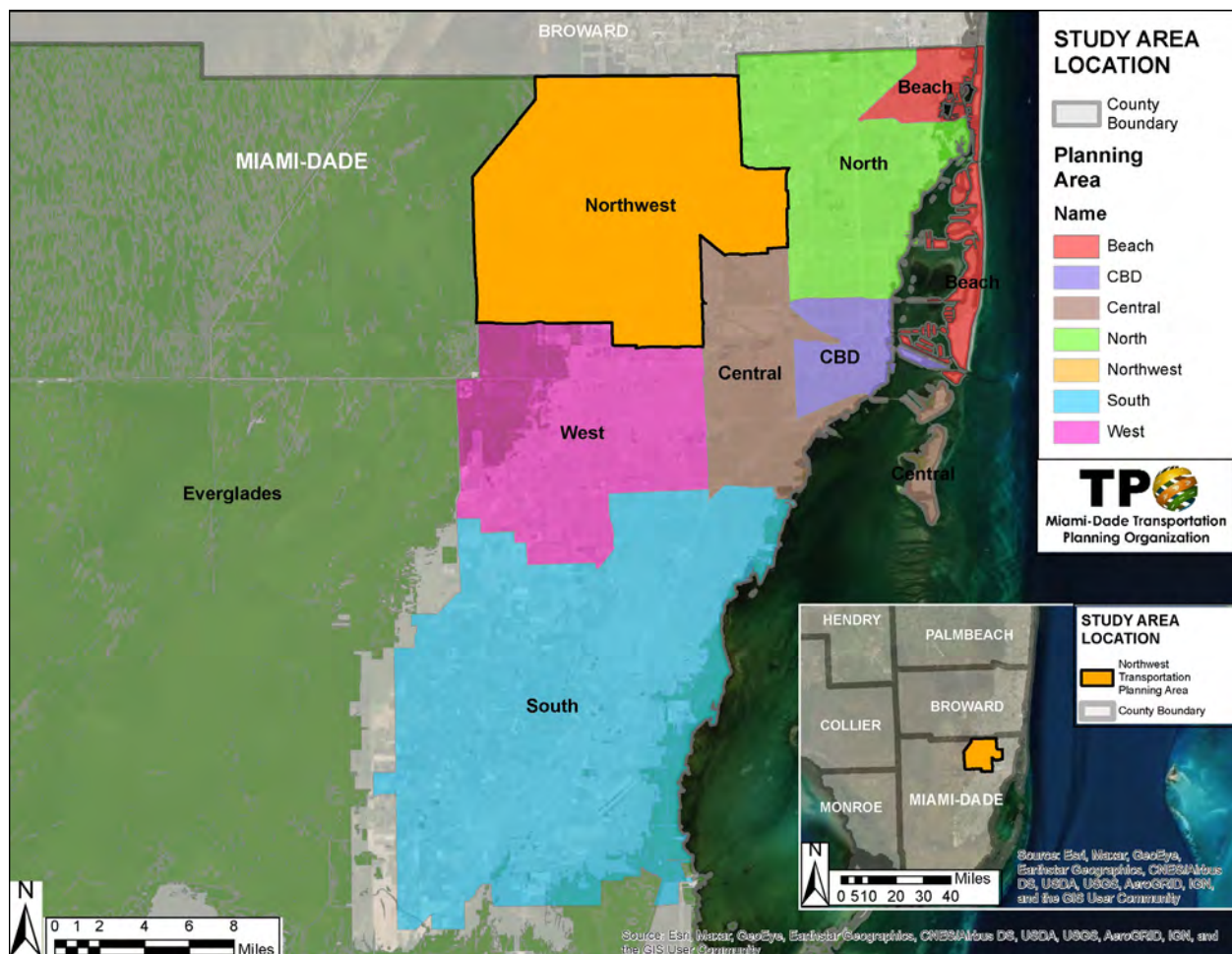


Figure 1. Study Area Location

The Northwest Transportation Planning Area boundaries are shown in Figure 2 are as follows:

- Northern boundary – Miami-Dade and Broward County Line or NW 202nd Street
- Western boundary – NW 147th Avenue, NW/SW 177th Avenue
- Southern boundary – NW 25th Street, and SR 836 (Dolphin Expressway)
- Eastern boundary – NW 57th Avenue, E 8th Avenue and SR 826 (Palmetto Expressway)

Figure 2 shows how the area is diagonally sliced by SR 25/US 27/W Okeechobee Road and the adjacent canal, as well as the Florida East Coast (FEC) railroad tracks. W Okeechobee Road (SR 25) provides direct access to the Homestead Extension of the Florida Turnpike (HEFT/SR 821), SR 826 and the Miami International Airport. SR 826 connects W Okeechobee Road with I-75 and I-95. The Planning Area is divided by the HEFT (SR 821) in the north-south direction providing additional access to I-75 as well as SR 836, which leads directly to Port Miami. As such, it is in a prime location providing excellent connections from the north and east to two major transport centers in the State: the Miami International Airport and Port Miami.

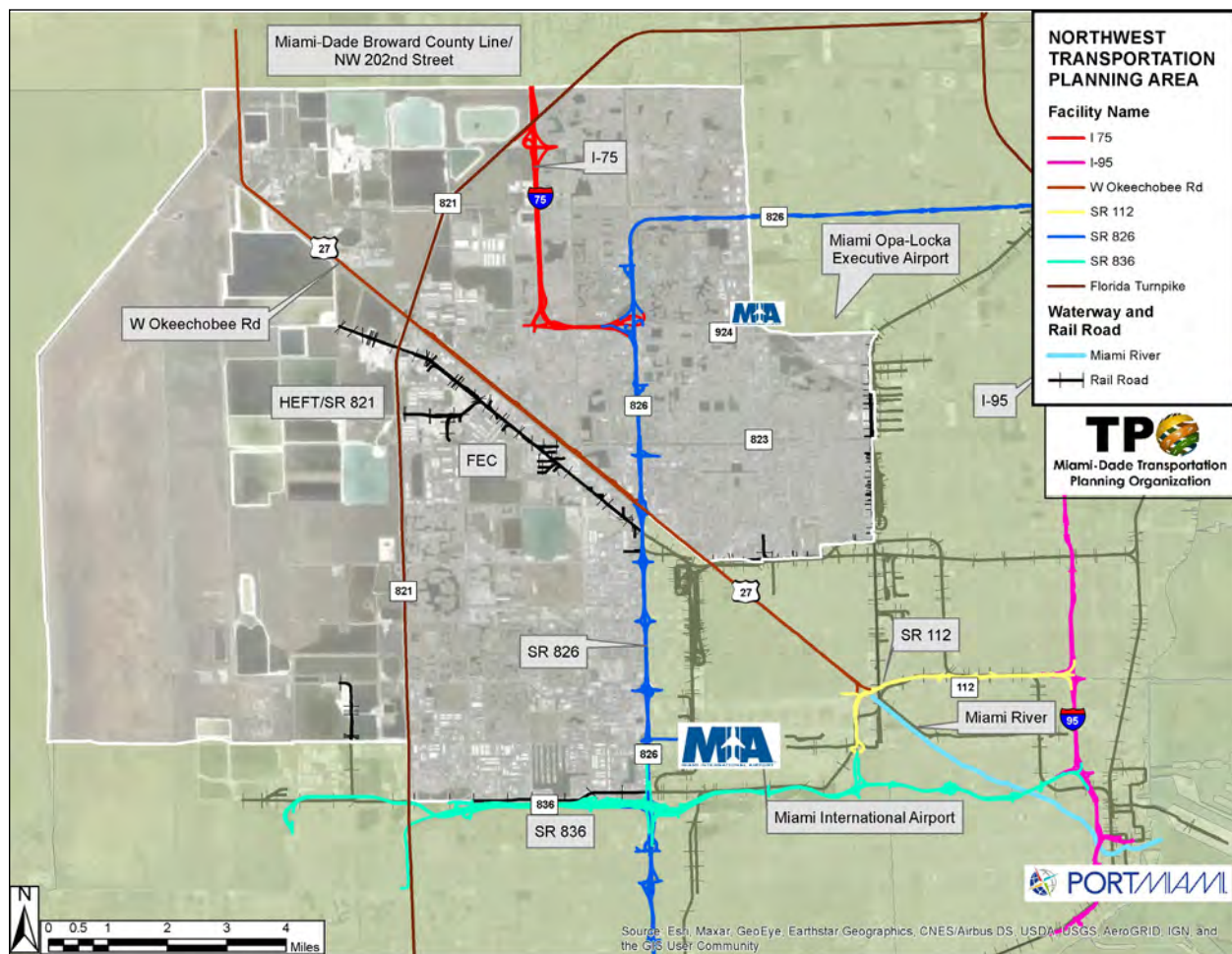


Figure 2. Northwest Transportation Planning Area Boundaries

There are seven municipalities either located or partially located within the Northwest Transportation Planning Area, as shown in Figure 3. The cities of Hialeah, Medley, Opa-Locka, and Sweetwater are not entirely located within the Planning Area.

The current population numbers for the seven municipalities are shown in **Table 1**. Hialeah is the largest municipality based on population, while the City of Medley is the smallest municipality based on this criterion.

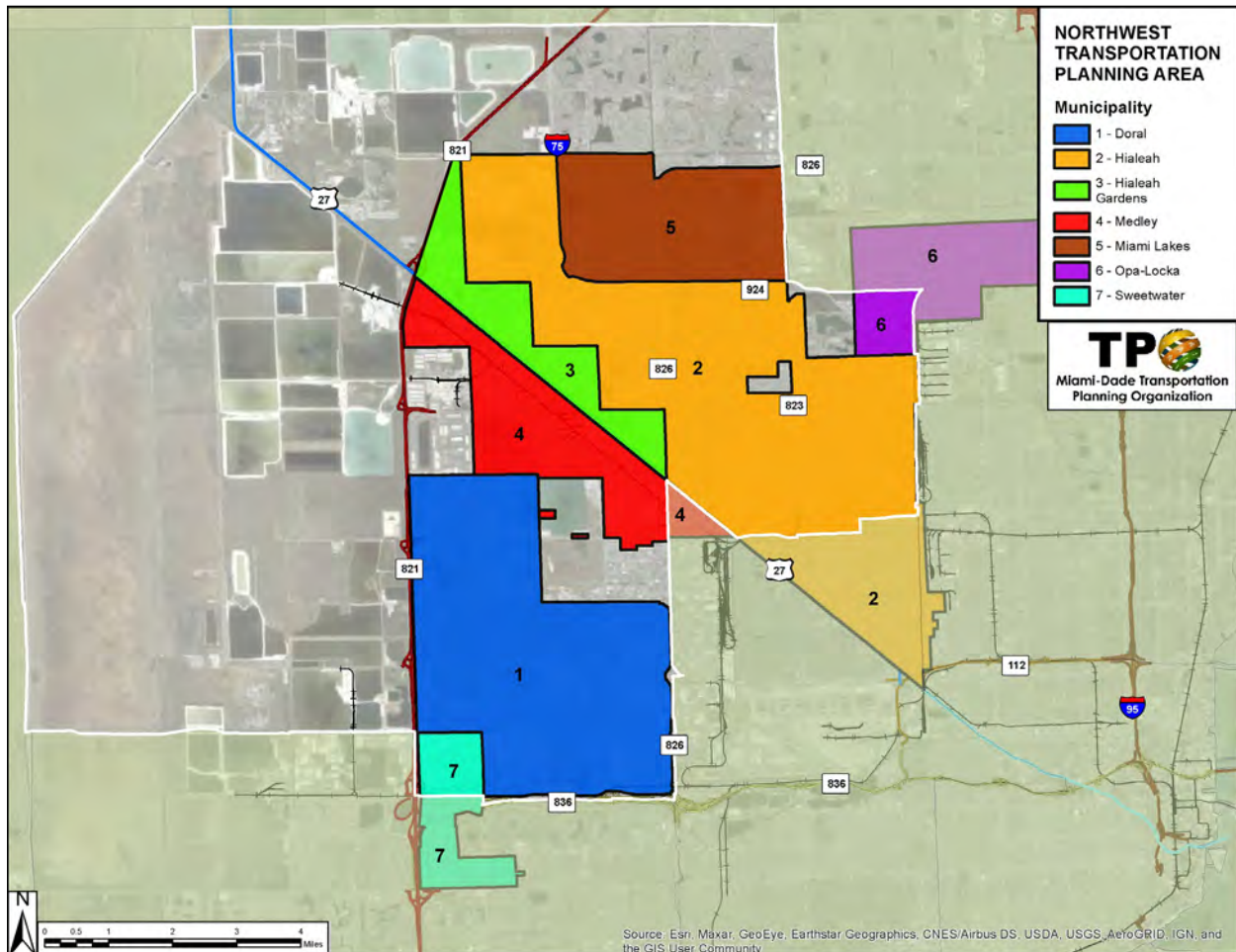


Figure 3. Municipalities in Northwest Transportation Planning Area

Table 1. Year 2019 Municipal Residents

Municipality	Year 2019 Residents ¹
Doral	70,420
Hialeah	239,722
Hialeah Gardens	23,633
Medley	847
Miami Lakes	31,523
Opa-Locka	18,143
Sweetwater	22,328

¹ https://www.behr.ufl.edu/sites/default/files/Research%20Reports/estimates_2020_0.pdf

Figure 4 provides a visual insight on the distribution of the residents for 2019.

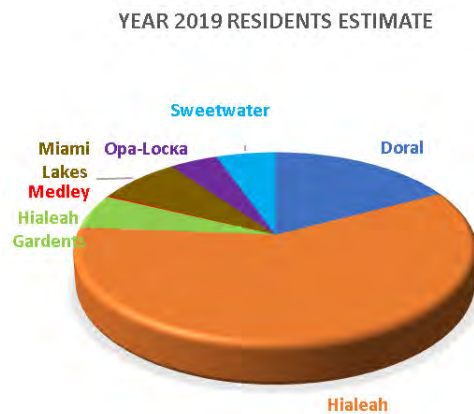


Figure 4. Distribution of Residents among Municipalities

1.3 Study Organization

This report is organized into six sections, summarized as follows:

- **Section 1. Introduction:** Describes the study background, study area, and report organization
- **Section 2. Current Studies and System:** Provides an overview of previous studies and discusses the programmed and planned improvements, and existing infrastructure and zoning
- **Section 3. Base Year Data Comparison & Future Year Analysis:** Details the socioeconomic growth patterns, and the current and projected travel patterns within the study area
- **Section 4. NW 107th Avenue Analysis:** Documents the impact of the NW 107th Avenue extension
- **Section 5. List of Potential Projects:** Describes the potential projects identified in the study area
- **Section 6. Summary of Findings:** Summarizes the findings of the analyses

2. Review of Current Conditions

This section starts with the recently conducted studies in the Northwest Transportation Planning Area of Miami-Dade County and the seven municipalities. Several freight studies have been conducted recently by Florida Department of Transportation (FDOT) District 6 as part of the Freight Mobility and Trade Plan (FMTP) initiative. These studies aim to advance the implementation of freight and logistics transportation systems by partnering with local communities and stakeholders through subarea freight plans. In the Northwest Transportation Planning Area, studies have been completed for the City of Doral, the Town of Medley, and the City of Opa-Locka, while the Freight Improvement Plans for the City of Hialeah and the City of Miami Gardens are ongoing.

Next, the proposed and planned projects within the Northwest Transportation Planning Area as listed in the Transportation Improvement Program (TIP) 2021/2022–2025/2026 and the Year 2045 Long-Range Transportation Plan (LRTP) are summarized. These two programs include the FDOT projects from the Five-Year Work Program, the transit projects as listed in the Transit Development Plan (TDP) of the Department of Transportation and Public Works (DTWP), and the Miami-Dade County Expressway Authority (MDX) projects from their Master Plan. The TIP also lists the major capital transportation projects from the Capital Improvement Programs of the municipalities.

The final discussion in this section will focus on the existing infrastructure and zoning in the study area.

2.1 Review of Previous Studies

In recent years, several studies have been conducted and reports published regarding the transportation patterns and needs in the Northwest Transportation Planning Area of Miami-Dade County. In this section the most recent studies have been summarized. Links to the full reports are listed and can be accessed by clicking on the title of the study.

[The Town of Medley Freight Mobility Improvement Plan \(FDOT-D6\)](#)

This study was completed in June 2017 and focused on the existing and planned transportation infrastructure in and around the Town of Medley with a focus on its effectiveness related to vehicular and truck traffic. The primary objectives of the study were¹:

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

Safety and connectivity were the major focus of the study. The plan developed a list of recommended short-term, mid-term, and long-term projects for implementation. Most of the short-term and mid-term improvements are operational in nature, while some of the mid-term and long-term improvements include widening roads, right-of-way purchase, and more capital-intensive improvements. The document also lists potential funding sources for the different improvement recommendations.

Recommendations directly affecting NW 107th Avenue were as follows:

- Acquire right-of-way and construct roadway – NW 122nd Street south to NW 106th Street (NW 107th Extension)
- Widen bridge of Miami Canal, re-time and improve signal coordination – US-27 to 1,000 feet north of W 122nd Street

[City of Opa-Locka Freight Implementation Plan \(FDOT-D6\)](#)

The City of Opa-Locka Freight Implementation Plan was one of the first plans in this series and was completed in November 2017. Only a small portion of the city is located in the western portion of the Northwest Transportation Planning Area (Figure 3) and the land use in this portion of the city is mostly warehousing. As with the previously listed freight implementation plans, this plan prioritizes improvements to the roadway system to better accommodate freight movement. None of those improvements are near the NW 107th Avenue extension project.

1. The Town of Medley Freight Mobility Improvement Plan, FDOT-D6, June 2017, page 5.

Miami River Freight Improvement Plan (FDOT-D6)

Completed in March 2018, this study focused on the infrastructure and operational needs of the marine shipping community and surrounding industrial areas with the aim of identifying improvements which would increase access, enhance safety, preserve the existing transportation system, and improve freight flow in the section of the Miami River between NW 22nd Avenue and NW 36th Street.

Five different freight growth scenarios were developed, and their impact analyzed on the infrastructure using the Southeast Regional Planning Model (SERPM). Next, projects were scored against the FDOT goals and objectives. The study identified 15 roadway projects, six transit/bicycle/pedestrian projects, three railroad projects, and seven marina/intermodal projects².

City of Doral Subarea Freight Mobility Improvement Plan (FDOT-D6)

Completed in April 2018, this study identified and analyzed freight corridors in the City of Doral area for the specific purpose of advancing project proposals from a planning phase to an environmental, design, and construction phase. According to the study this area houses one of the largest clusters of industrial warehousing and distribution center locations within the State of Florida. As such, it focused on mitigating the congestion impacts associated with future growth by identifying short-range, mid-range, and long-range needs.

Recommendations directly affecting NW 107th Avenue were as follows:

- Widen NW 107th Avenue from 4 to 6 lanes from NW 25th Street to NW 33rd Street
- NW 107th Avenue arterial capacity improvements from NW 25th Street to NW 41st Street
- Intersection and interchange improvements for the following intersections along NW 107th Avenue:
 - NW 12th Street
 - NW 25th Street
 - NW 33rd Street
 - NW 41st Street
 - NW 58th Street
 - NW 74th Street
 - SR 836 Access Ramp

Northwest Transit Corridor Feasibility Study (Miami-Dade TPO)

The Northwest Transit Corridor Feasibility Study was documented in June 2018. The study analyzed the implementation of a premium transit system between the planned Dolphin Park and Ride at NW 12th Street west of the Homestead Extension of the Florida's Turnpike and in the northwest area of Miami-Dade County near the Broward County line.

A major portion of the Northwest Transit Corridor falls within the Northwest Transportation Planning Area. The corridor is depicted in Figure 5. Besides the County, FDOT, Expressway Authority, and the Florida Turnpike, many other stakeholders were involved in the planning process including the municipalities of Doral, Hialeah, Hialeah Gardens, Miami Lakes, and Sweetwater as well as private developers.

2. Miami River freight Improvement Plan, FDOT -D6, March 2018, page 162.

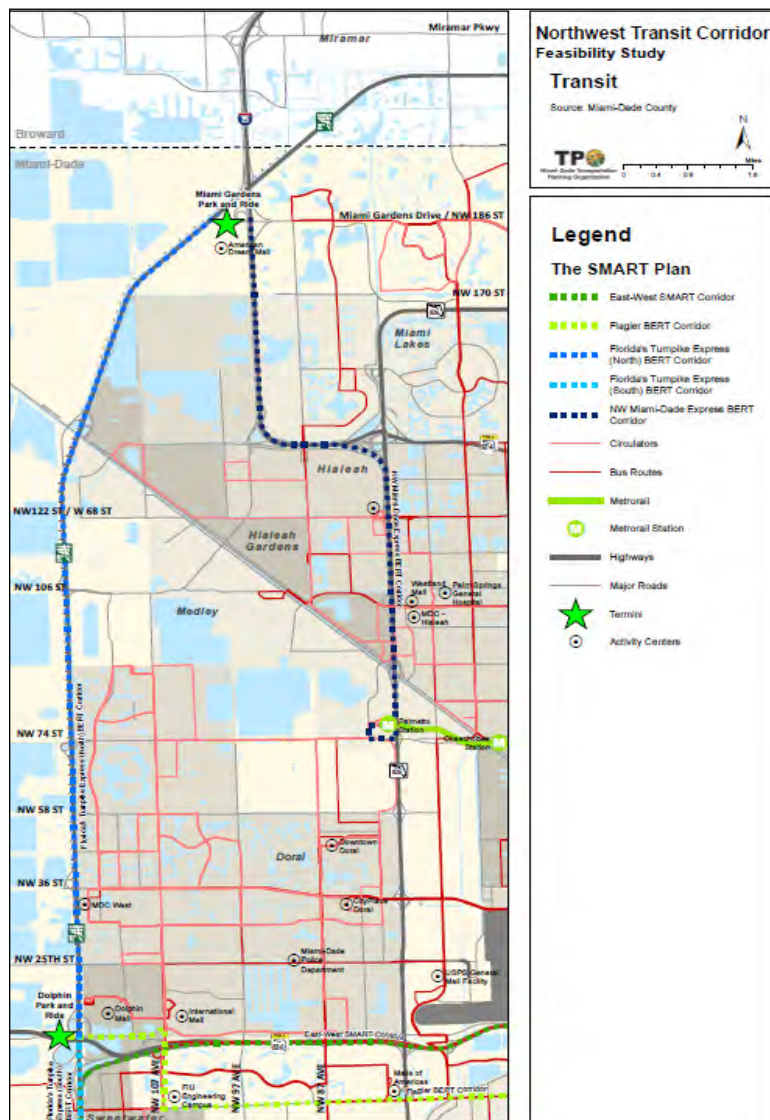


Figure 5. Northwest Transit Corridor (Source: Northwest Transit Corridor Feasibility Study)

The alternative analysis evaluated 12 parallel facilities on population and employment densities, transit propensity, origin, and destination patterns as well as household characteristics and right-of-way needs. The study ranked the different corridors and based on the findings recommended the NW 82nd/87th Avenue alignment as the preferred alternative.

The NW 107th Avenue was also considered as a possible corridor. However, it was established that this corridor would be more challenging than the NW 82nd/87th Avenue corridor. Several recommendations were put forward related to NW 107th Ave³:

- Implement a route on NW 107th Avenue in Doral starting at the Dolphin Station Park and Ride to NW 106th Street
- Encourage developers along the NW 107th Avenue to “reduce suburban typologies” and establish transit-oriented development communities through density bonuses and other incentives

3. Northwest Transit Corridor, Miami-Dade TPO, June 2018, page 83.

- Establish talks with Titan America cement plant owners to identify a time frame for the extension of NW 107th Avenue
- Coordinate with American Dream and Graham Properties developers to develop transit-oriented development hubs adjacent to the corridor

Assessment for Potential Truck Parking Locations within Miami-Dade County (FDOT-D6)

This study, completed in August 2018, focused on the need for additional truck parking in Miami-Dade County to accommodate the projected freight and truck traffic growth. The study points out that beyond the growth in freight, the change in federal law related to maximum continuous driving time also increased the need for parking. The Northwest quadrant contains a high percentage of industrial land uses and several parking sites were identified in the quadrant.

The study identified 19 locations based on many criterium such as location, ownership, land use, environmental impacts, noise, etc. The one feasible site identified in the study is located on NW 7th Street in the southeast quadrant of SR 826/Palmetto Expressway and SR 836/Dolphin Expressway interchange. This site is near the City of Doral's warehousing and industrial sector.

2.2 Review of Programmed and Planned Improvements

This section will present, through maps, the planned improvements in the Northwest Transportation Planning Area of Miami-Dade County by the different agencies. To move these planned projects toward implementation, the Miami-Dade TPO recommends for the FDOT to start the Efficient Transportation Decision Making (ETDM) process and for the County to start the project scoping process for the planned projects.

Transportation Improvement Program 2021/2022 – 2025/2026

The TIP lists the proposed transportation improvements to be implemented in Miami-Dade County over the next five years. This document is consistent with the LRTP and includes all transportation projects which are funded with federal funds and/or are of regional significance.

The projects listed in the TIP 2021/2022 - 2025/2026 within the Northwest Transportation Planning Area of Miami-Dade County are shown in two figures for better representation. Figure 6 shows the locational projects (e.g. intersections) and Figure 7 shows projects that involve the facility. Sixteen projects are planned within a one-mile radius of the NW 107th Avenue extension project. These are listed in Table 2. For a complete list of projects and improvements, please refer to the TIP 2021/2022 – 2025/2026

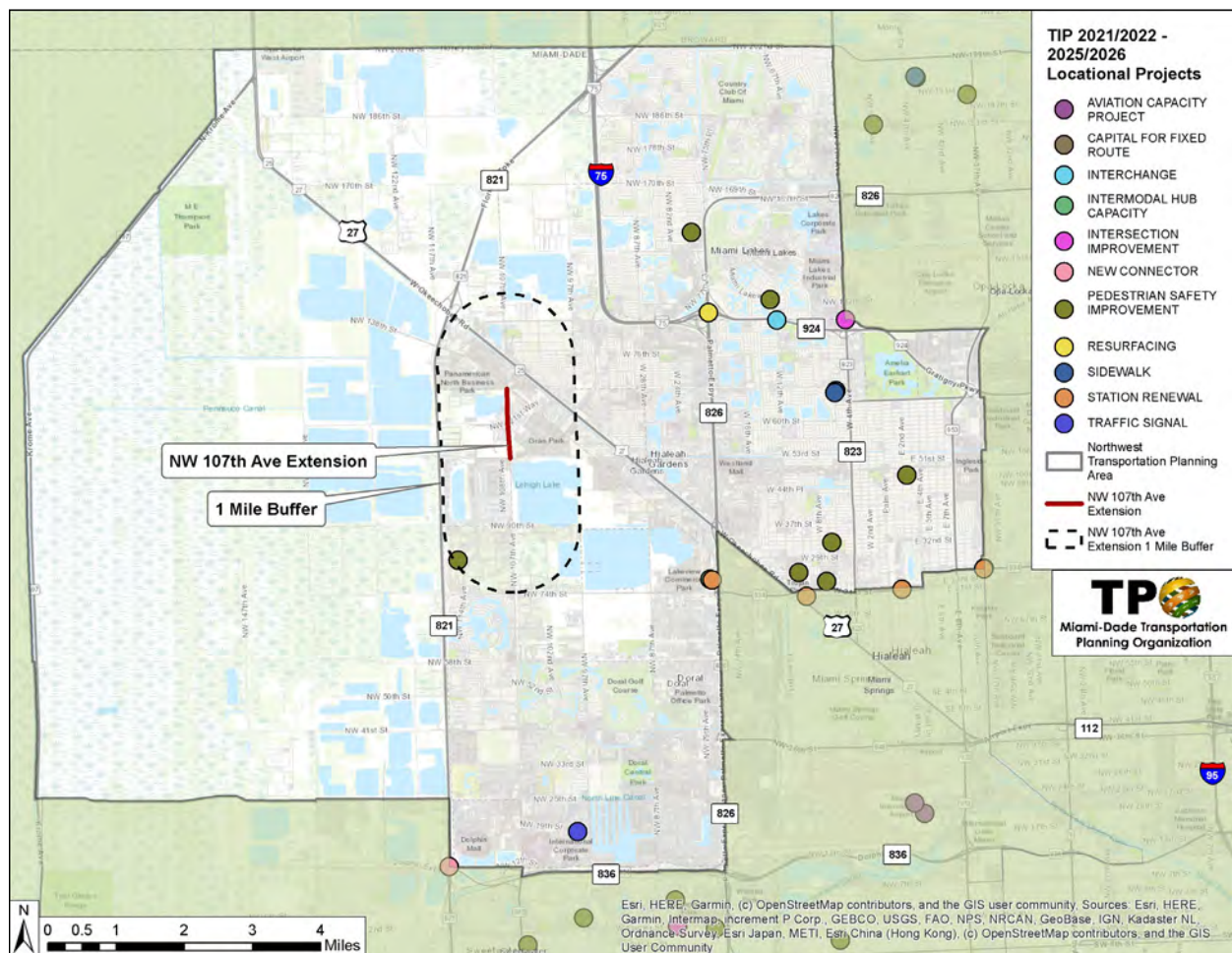


Figure 6. TIP 2021/2022 – 2025/2026 Improvements – Locational Projects

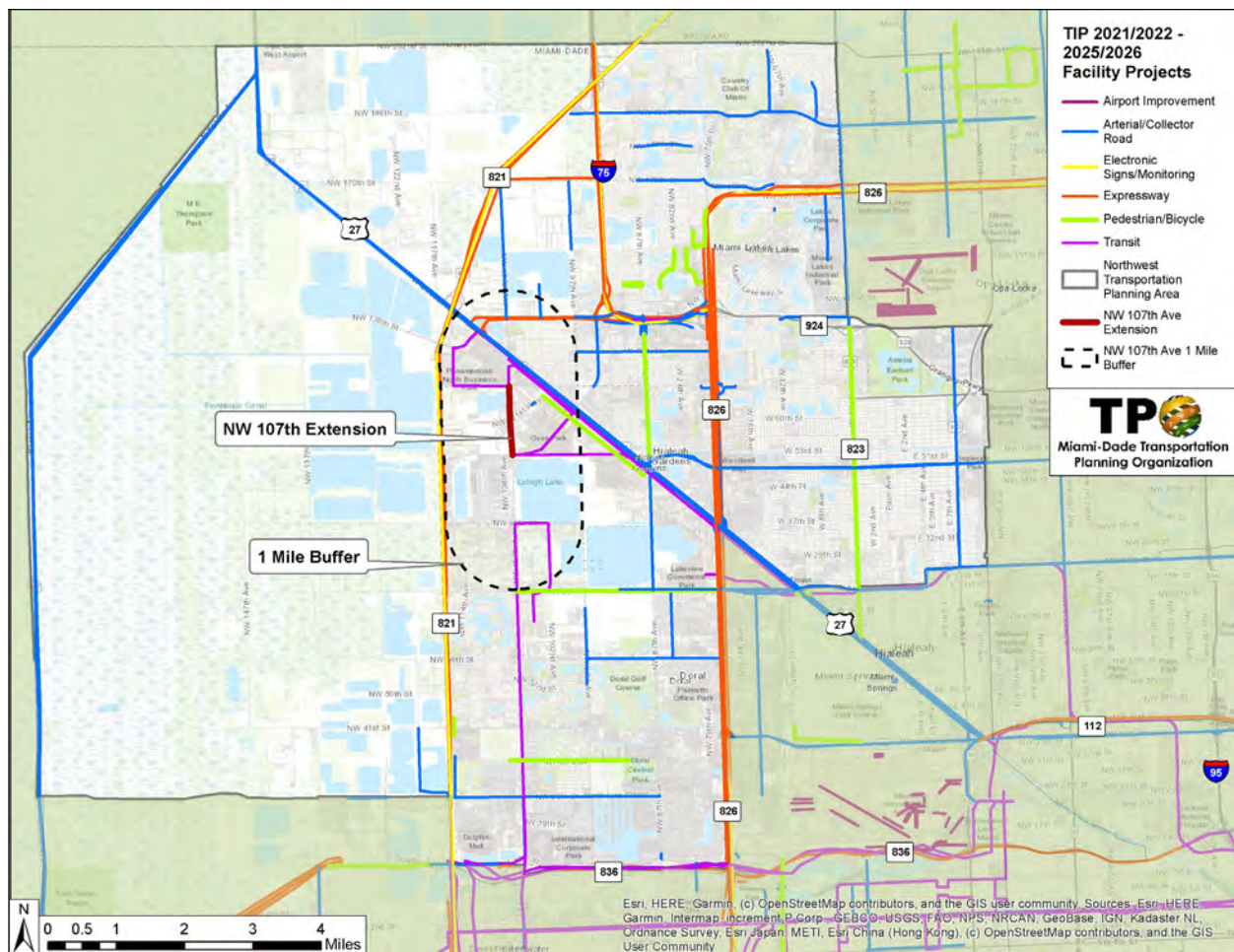


Figure 7. TIP 2021/2022 - 2025/2026 Improvements - Facility Projects

Table 2. TIP Project within 1-Mile Buffer from NW 107th Avenue Extension

TIP Project Name	From	To	Type of Work
SR 25 / Okeechobee Road	West of HEFT		Add Lanes and Reconstruct
SR 25 / Okeechobee Road	East of NW 107 Avenue	East of NW 116 Way (Concrete)	Add Lanes and Rehabilitate Pavement
SR 25 / Okeechobee Road	W of NW 138 Street		Add Lanes and Rehabilitate Pavement
SR 25 / Okeechobee Road	East of NW 117 Avenue		Add Lanes and Rehabilitate Pavement
Town of Medley	Sidewalk Master Plan		Bike Lane/Sidewalk
SR 25 / Okeechobee Road	At Miami/ Broward County Line		Emergency Operations/ Hurricane Irma
SR 924 / Gratigny Parkway West Extension	SR 826 / Palmetto Expressway & I-75	SR 821 / HEFT	Expressway Extension
City of Doral	NW 82 Street & NW 114 Avenue		Intersection Signalization/ Pedestrian Safety Improvement
Town of Medley	NW South River Drive Multimodal Corridor Study		Modal Systems Planning
NW 107 Avenue	NW 138 Street	NW 170 Street	New Lanes
SR 25 / Okeechobee Road	SR 997 / Krome Avenue		PD&E / EMO Study
SR 25 / Okeechobee Road	Corridor Review		Preliminary Engineering
NW 121 Way Railroad	At Railroad Crossing #272768V		Rail Safety Project
NW 102 Avenue	NW 138 Street		Roadway Improvements
City of Doral	FIU/Panther Station Trolley Route		Transit Service Demonstration
Town of Medley	Central Commuter Route		Transit Service Demonstration

Year 2045 Long-Range Transportation Plan

The LRTP lists the proposed transportation improvements to be implemented in Miami-Dade County by the Year 2045. The document includes all transportation projects which are funded with federal funds or are regionally significant.

The following two figures show the location and the type of projects within the Northwest Transportation Planning Area that are planned for beyond the 2025/2026 time frame. The projects listed in the LRTP within the Northwest Transportation Planning Area of Miami-Dade County are shown in these two figures for better representation. Figure 8 shows the locational projects (e.g. intersections) and Figure 9 shows projects that involve the facility. As shown in Figures 8 and 9 and listed in Table 2, 11 projects are planned for within the one-mile radius of the project.

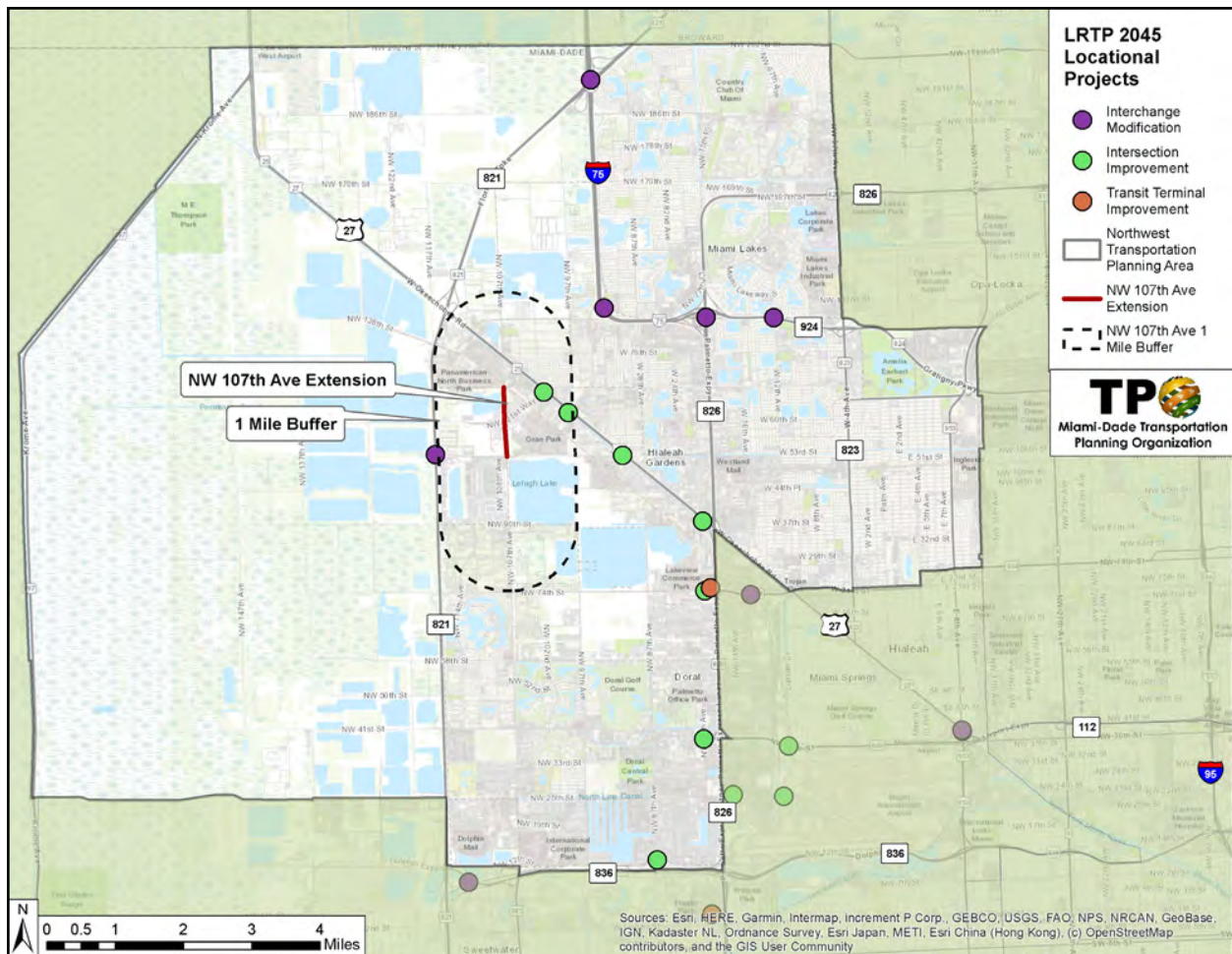


Figure 8. L RTP 2045 Improvements – Localational Projects

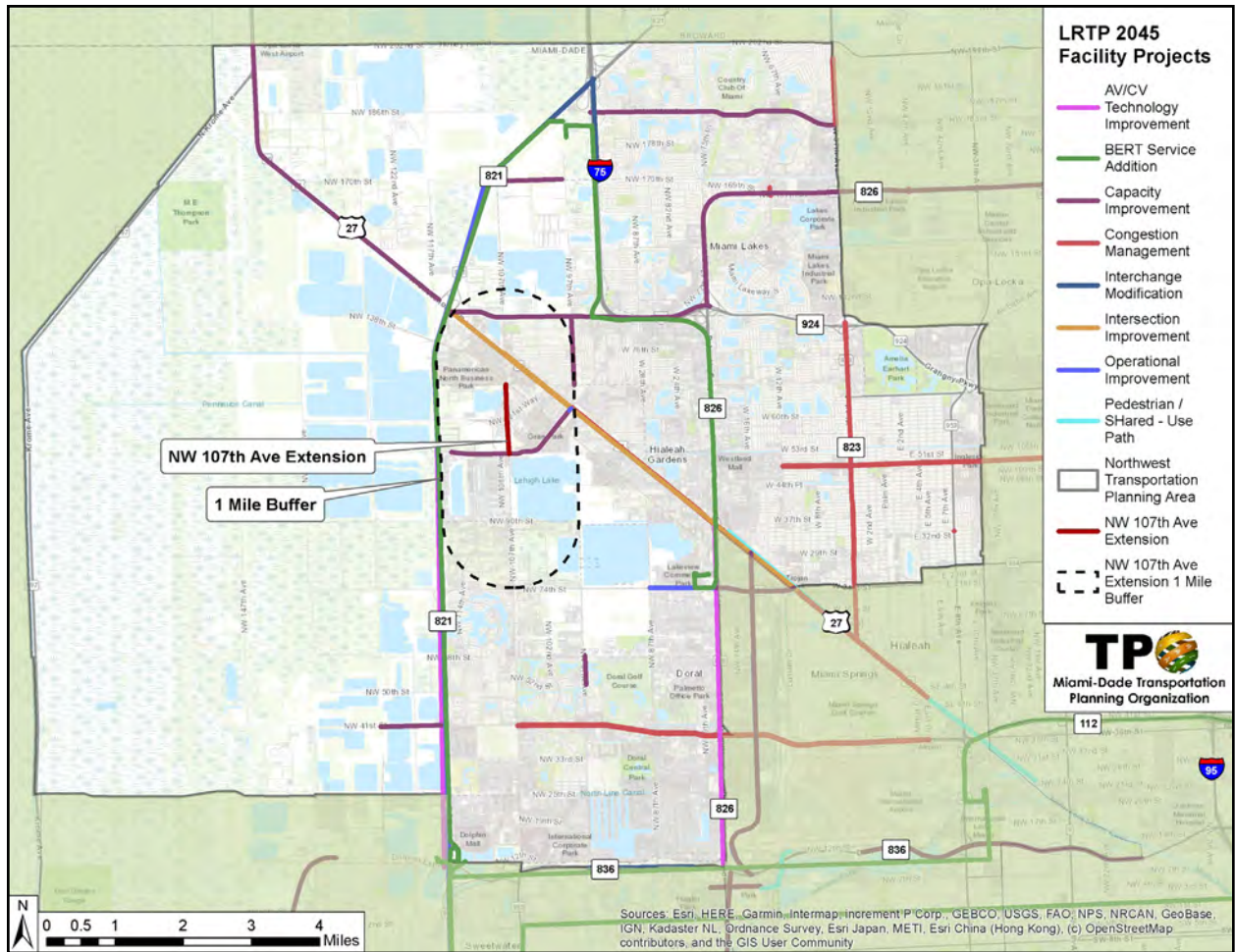


Figure 9. L RTP 2045 Improvements – Facility Projects

Table 3. LRTP Projects within 1 Mile Buffer from NW 107th Avenue Extension

TIP Project Name	From	To	Type of Work
NW 106 Street	Turnpike	Okeechobee Road	Capacity Improvement
NW 107 Avenue	NW 122 Street	NW 106 Street	Capacity Improvement
NW 138 Street	Okeechobee Road	Palmetto Expressway	Capacity Improvement
NW 97 Avenue	NW 138 Street	NW 122 Street	Capacity Improvement
Okeechobee Road	NW 107 Avenue	NW 97 Avenue	Intersection improvements
Okeechobee Road	Turnpike	NW 74 Street	Intersection improvements
Okeechobee Road	at NW 116 Way		Intersection improvements
Okeechobee Road	at NW 121 Way		Intersection improvements
Turnpike			Operational Improvement
Turnpike			BERT Service Addition
Turnpike	at NW 106 Street		Interchange Modification

2.3 Existing Infrastructure

As pointed out in the Introduction, the Northwest Transportation Planning Area is well connected through a variety of modes. Many of the facilities are part of the Strategic Intermodal System (SIS), a network of facilities of vital importance to the economy of the state. Figure 10 shows the SIS facilities in the Northwest Transportation Planning Area, including highway, rail, waterway, airports, freight, terminals, passenger terminals, and fixed guideway terminals. Good connections to the SIS, through local facilities specifically in areas of commerce, are important for economic growth. The extension of NW 107th Avenue is a project that provides an additional north-south connection in the NW Transportation Planning Area. This results in not only a decrease in travel time and travel distance but also alleviating traffic from parallel state facilities, thus freeing up capacity for other traffic.

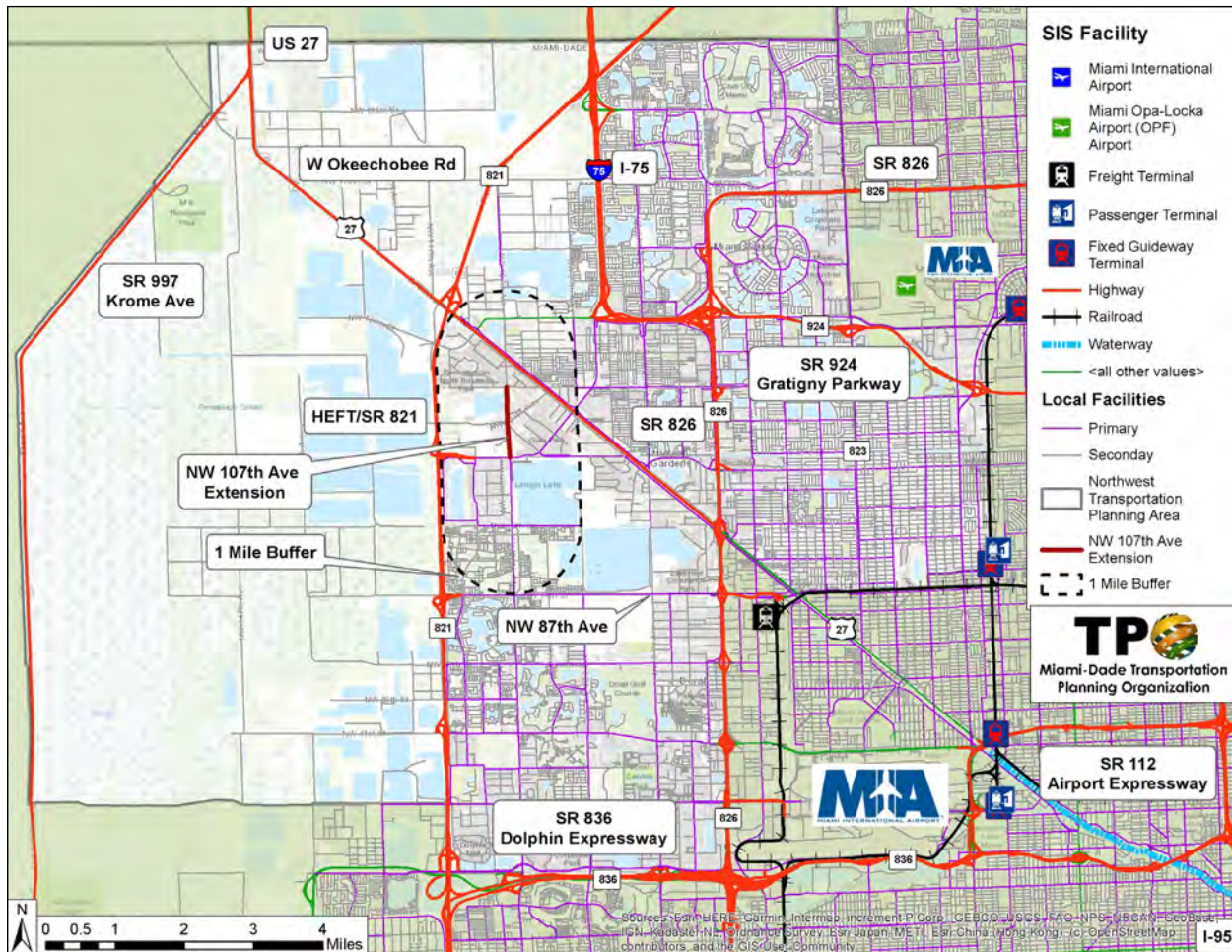


Figure 10. SIS Facilities

As shown in Figure 10 there is a robust local street grid network east of SR 826, however on the west side of SR 826 and south of W Okeechobee Road there is primarily NW 87th Avenue that provides a continues connection between SR 836 and W Okeechobee Road. The extension of NW 107th Avenue would add an important link to the network. Adding an additional north-south connection between these major SIS facilities will allow for better access to commercial and industrial land uses resulting in travel time savings and trip length reductions.

Figure 11 shows the current transit service in the Northwest Transportation Planning Area. As can be seen on the map, the extension of NW 107th Avenue could allow for additional transit service along the corridor proving a possible connection between the service in the City of Doral and the City of Hialeah.

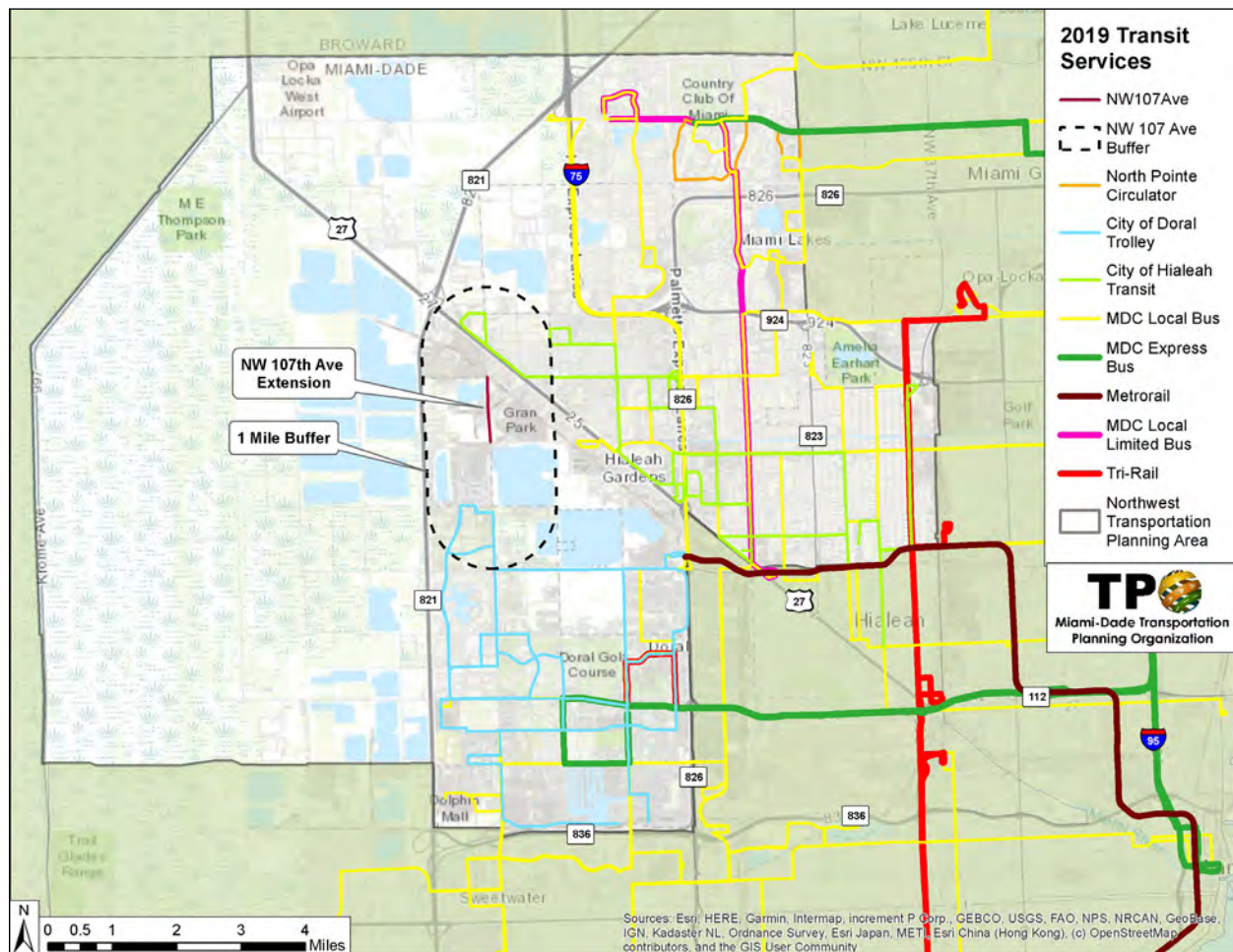


Figure 11. Year 2019 Transit Service

2.4 Existing Zoning

Figure 12 provides insight into the current zoning in the Northwest Transportation Planning Area. Most of the area to the west of the HEFT/SR 821 is zoned Interim District. This accounts for approximately 69% of the land in the Northwest Transportation Planning Area. The other two largest zoning categories are Residential and Industrial. The area northeast of W Okeechobee Road is primarily zoned residential, while the area to the southwest of W Okeechobee Road is dominated by industrial zoning. In total, approximately 18% of the land in the Northwest Transportation Planning Area is zoned Residential, while 8% of the land is zoned Industrial. The NW 107th Avenue extension is located in a predominately industrial area and will allow truck traffic to stay on NW 107th Avenue to reach the industrial land uses without having to either use the HEFT or W Okeechobee Road.

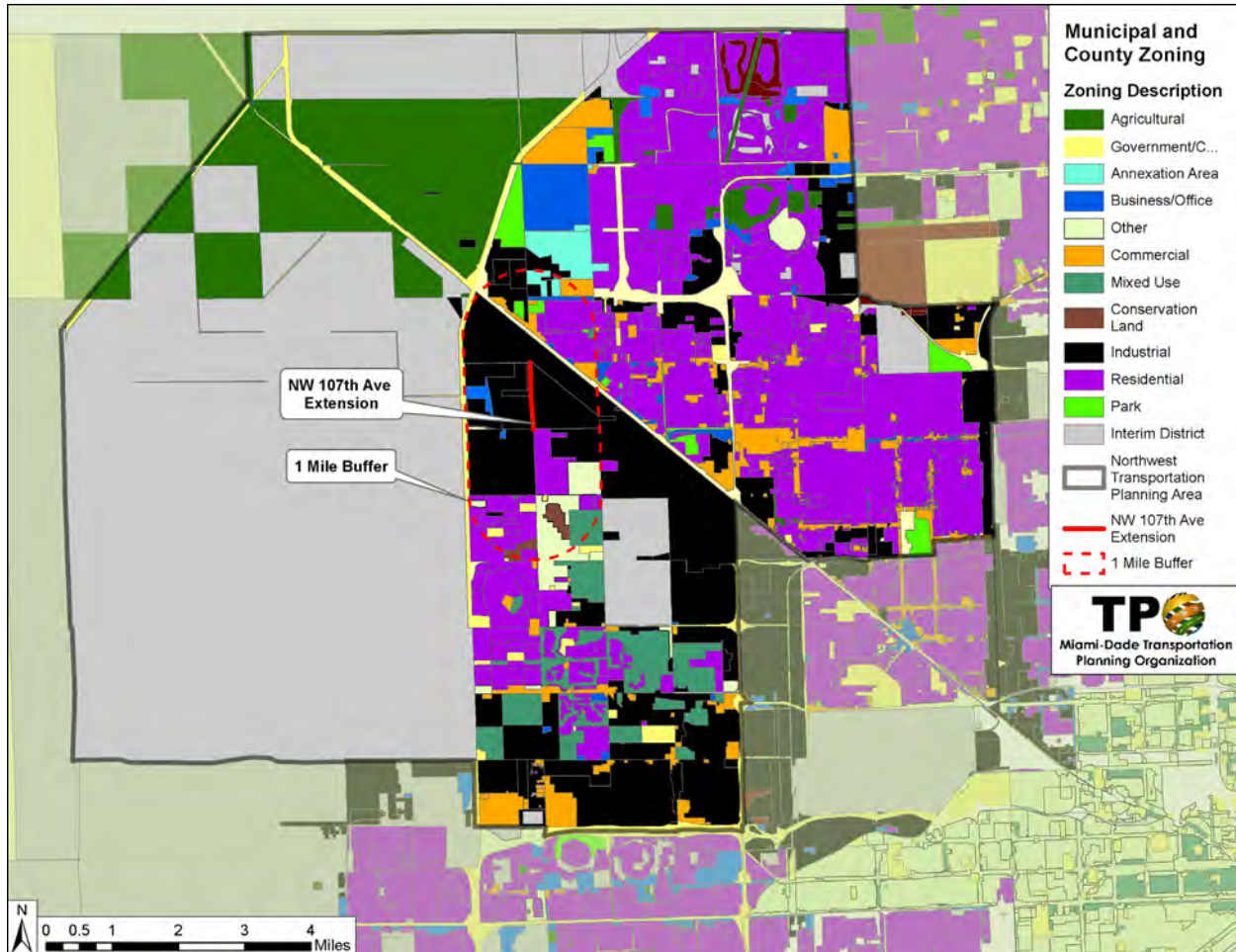


Figure 12. Municipal and County Zoning

3. Existing & Future Year Analysis

A travel demand estimation model, such as the SERPM, is the tool of choice to analyze the impact of socioeconomic or transportation network changes. The validity or accuracy of a travel demand model is based on how well it simulates the actual travel patterns in the base year of the model, which in the SERPM model is the year 2015. This check is conducted for the year 2015 scenario against actual year 2015 data sources, such as ridership numbers and traffic counts, and is conducted systemwide, which for the SERPM includes Broward, Miami-Dade, and Palm Beach counties, as it is a regional model.

For the NW 107th Avenue extension analysis, the year 2015 validation was verified within the Northwest Transportation Planning Area. This verification was conducted using two different year 2015 data sources. These were the Location Based Service (LBS) data and Longitudinal Employment Household Dynamics Data (LEHD). The LBS data is developed in the private sector and is based on smartphone data, while the LEHD program is part of the Center for Economic Studies at the U.S. Census Bureau.

This section briefly discusses the comparison between the 2015 data sources and discuss the future year projections of the socioeconomic data and the year 2045 highway projections. This comparison is made in order to establish the accuracy of the year 2015 validation.

3.1 Existing Traffic Data and System Performance

The comparison of the Northwest Transportation Planning Area origin and destination travel patterns for all trips between the LBS data and the SERPM is discussed below. Next, the SERPM employment data, workers' characteristics, and workers' travel patterns in the Northwest Transportation Planning Area are compared to the LEHD data.

3.1.1 Travel Demand Model (SERPM) Comparison

Base Year – Origin and Destination Comparison with LBS Data for All Trips

The LBS data is based on smartphone data. The sensors in the smartphone are counted and followed through the network. Next, the data is cleaned, analyzed, and transportation metrics identified. The method of validating the LBS data is not directly shared with the user. Based on discussions with the data provider, the number of trips reported in the metrics represent vehicle trips on an average day using the full week (Monday through Sunday). The LBS data used in this study contains information for Miami-Dade, Broward, Palm Beach, St. Lucie, and Martin counties.

The County data was disaggregated to the Transportation Planning Area and Transportation Area District (TAD), which are geographical subsets of the Planning Area, to analyze the origin and destination patterns. Since no information is available on the method of validation of the vehicle trips, the LBS data was compared with the vehicle trips from the SERPM as well as the person trips. It stands to reason that the LBS data would “fall” in between the total number of SERPM person trips and the total number of SERPM vehicle trips since there can be more than one smartphone in a vehicle and it is not clear how the total number of smartphones in a vehicle is reduced to a vehicle trip.

The Base Year 2015 scenario from the local regional planning model was used to evaluate the vehicle trips and person trips generated. Overall, the LBS data shows about 19.4 million vehicle trips, while the local regional travel model vehicle trips is about 13.5 million and the person trips about 21.0 million. When evaluating the ranking of top Planning Areas that produce or receive trips, the LBS data and the SERPM data are comparable. The five Planning Areas that generate the most trips are the Northwest Transportation Planning Area, the Central Transportation Planning Area, Broward County, the West Transportation Planning Area, and the North Transportation Planning Area. These are the same top five transportation planning areas in the SERPM model. The same Transportation Planning Areas were observed receiving similar trips in both data sources. Therefore, it was concluded that the SERPM data accurately reflects the trip movement between the different Transportation Planning Areas. Figure 13 shows the trip distribution of the SERPM model, while Table 4 lists the number and percentages per transportation planning area. As shown, most of the trips (42%) remain inside the Northwest Transportation Planning Area. The Central (13%), North (12%), West (10%) Transportation Planning Areas and Broward County (11%) fall in the next grouping. While the Central Business District (CBD), Beach and South Transportation Planning Areas have the least amount of trips exchanges with the Northwest Transportation Planning Area.

Table 4. SERPM Base Year Trip Exchanges with Northwest Transportation Planning Area

Transportation Planning Area & Other	Year 2015 Average Daily Vehicle Trips	Percentage of Total Trips
Beach	32,240	3%
CBD	51,550	5%
Central	129,220	13%
North	117,290	12%
Internal Northwest Area	433,700	42%
South	40,490	4%
West	105,440	10%
Broward County	112,960	11%

Additional data and origin and destination comparisons between the LBS and the SERPM data are listed in Appendix B.

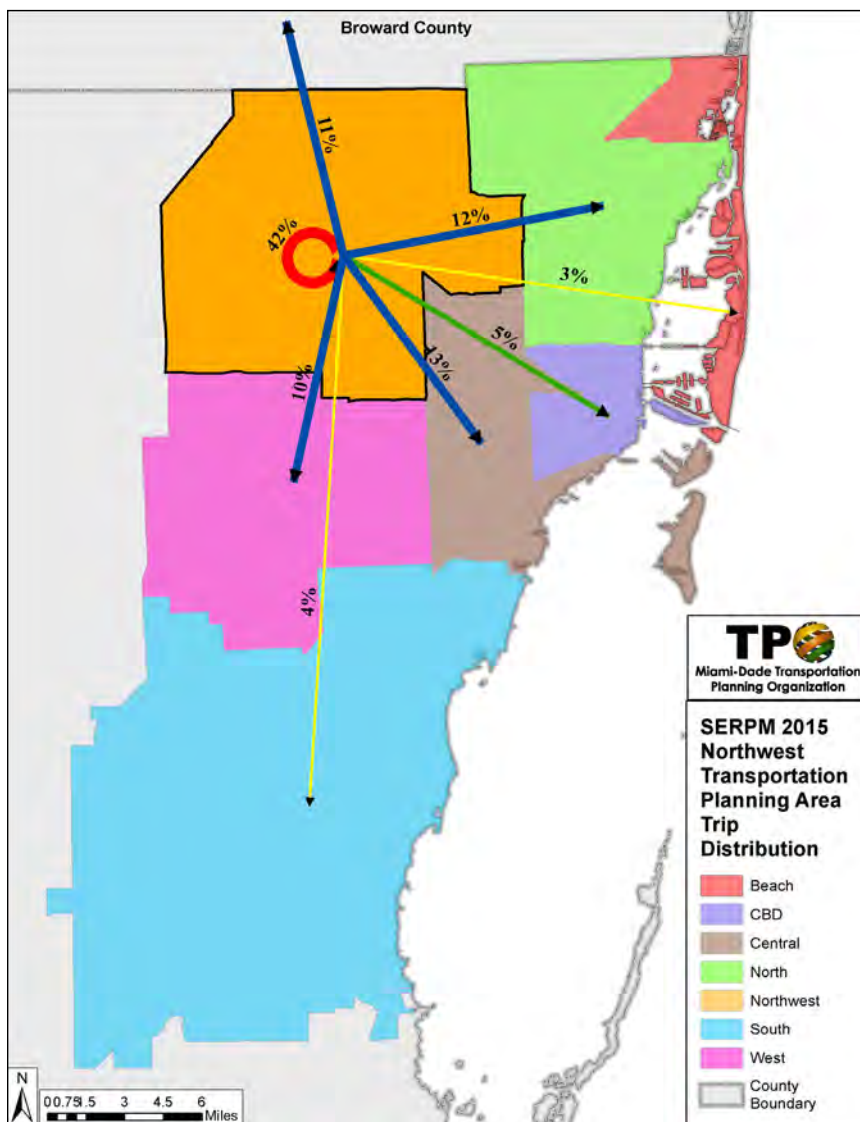


Figure 13. SERPM Base Year 2015 Travel Patterns for All Trips

3.1.2 LEHD Data Comparison for Workers and Work Trips

The LEHD employment data was summarized and analyzed on the characteristics of the employees such as worker age, earnings, gender, educational background, and the industrial sector they work in.

The SERPM 8.512 contains all these socio-economic characteristics as research has indicated that they influence travel behavior. In order to verify the accuracy of the data in the SERPM, the LEHD data was summarized and compared to the Northwest Transportation Planning Area as well as the entire region in the SERPM.

Figure 14 shows the comparison of employment data by age. The SERPM employment data matches the LEHD employment data within 6 percentage points of differences for each age group.

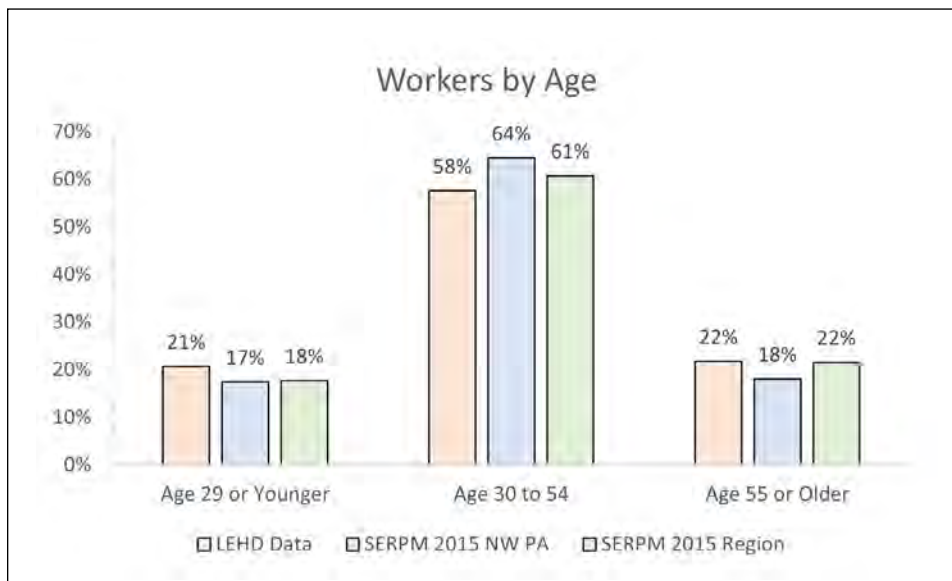


Figure 14. 2015 Employment Data Comparison by Age of Worker

Figure 15 shows the comparison of employment data by earnings. The LEHD employment data provides such information directly. The SERPM socio-economic data provides the household annual income instead. Therefore, the SERPM workers earning was calculated by dividing the household annual income by the number of workers in the household by 12 months. The SERPM employment data shows a lower percentage for the low-earning group and a higher percentage for the high-earning group.

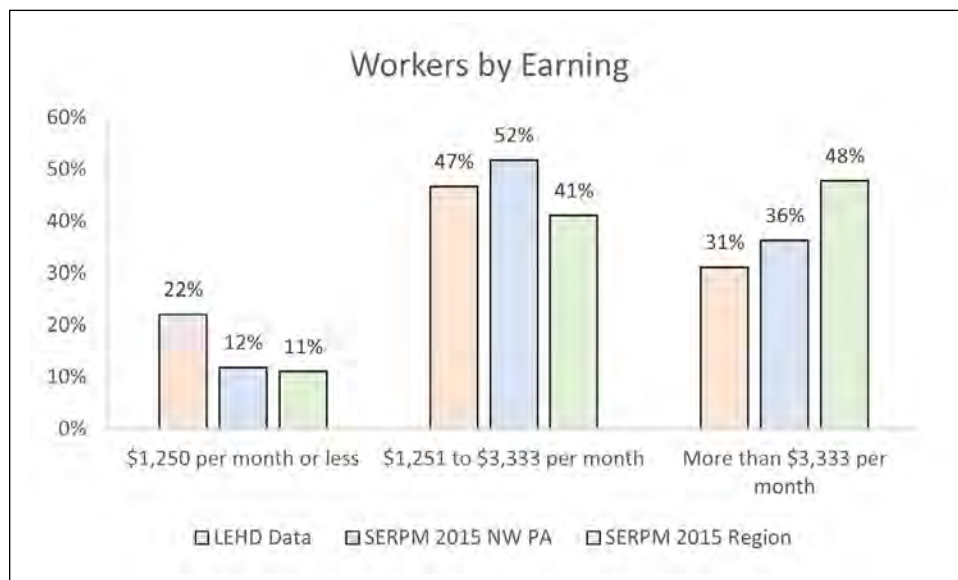


Figure 15. 2015 Employment Data Comparison by Earning of Worker

Figure 16 shows the comparison of employment data by gender. Both the LEHD employment data and the SERPM employment data shows a roughly equal split between male and female workers.

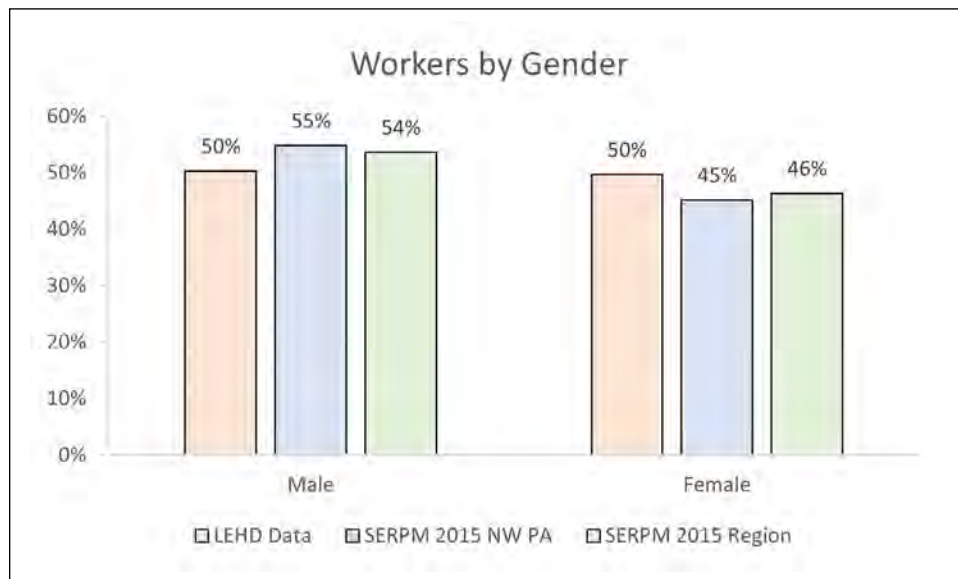


Figure 16. 2015 Employment Data Comparison by Gender of Worker

Figure 17 shows the comparison of employment data by educational background. The LEHD employment data provides the number of workers in the following educational background groups: less than high school, high school or equivalent, some college or associate degree, and bachelor's degree or advanced degree. The SERPM employment data has expanded groups and was summarized into the same groups as the LEHD employment data for comparison. The SERPM employment data shows a slightly lower percentage for less than high school group and slightly higher percentage for the high school or equivalent group and the bachelor's or advanced degree group.

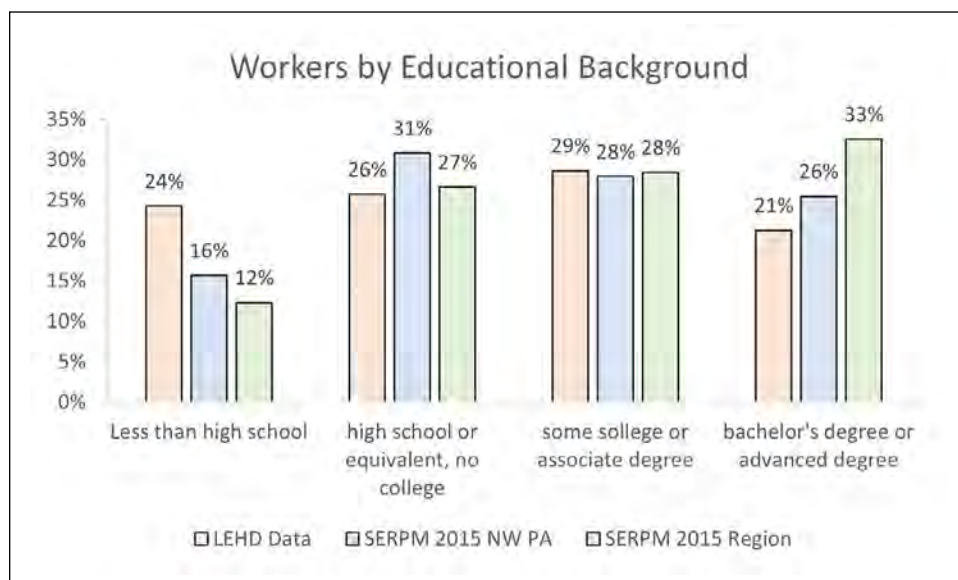


Figure 17. 2015 Employment Data Comparison by Worker's Educational Background

The LEHD data provides insight into the travel patterns of the workers within the NW Transportation Planning Area. Figure 18 shows that on an average day 163,233 workers come into the Northwest Transportation Planning Area to work, while 105,698 workers leave the area to go to work. There are 46,052 workers who live and work in the area.

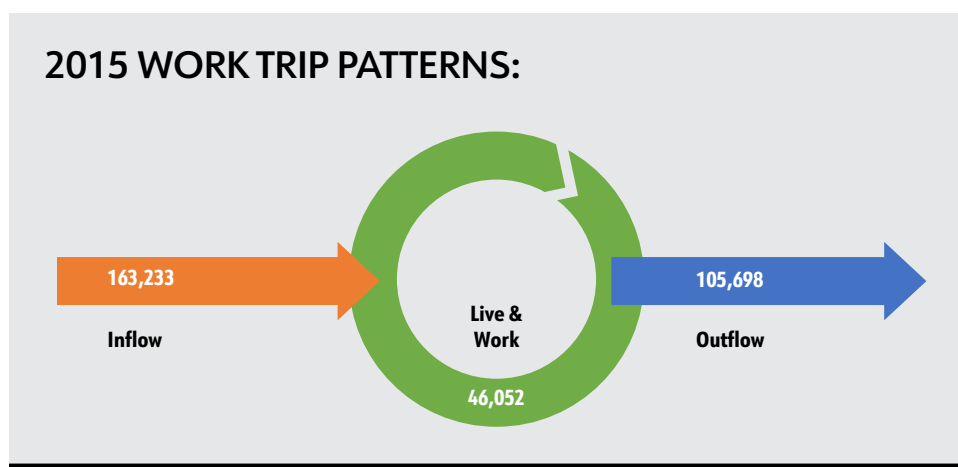


Figure 18. Year 2015 Work Trip Patterns in Northwest Transportation Planning Area

Figure 19 shows the work trip travel flow to the Northwest Transportation Planning area. The greatest percentage of work trips coming into the Northwest Transportation Planning Area, come from the West Transportation Planning Area (16%) and Broward County (16%). The lowest percentage (2%) from the Beach Transportation Planning Area.

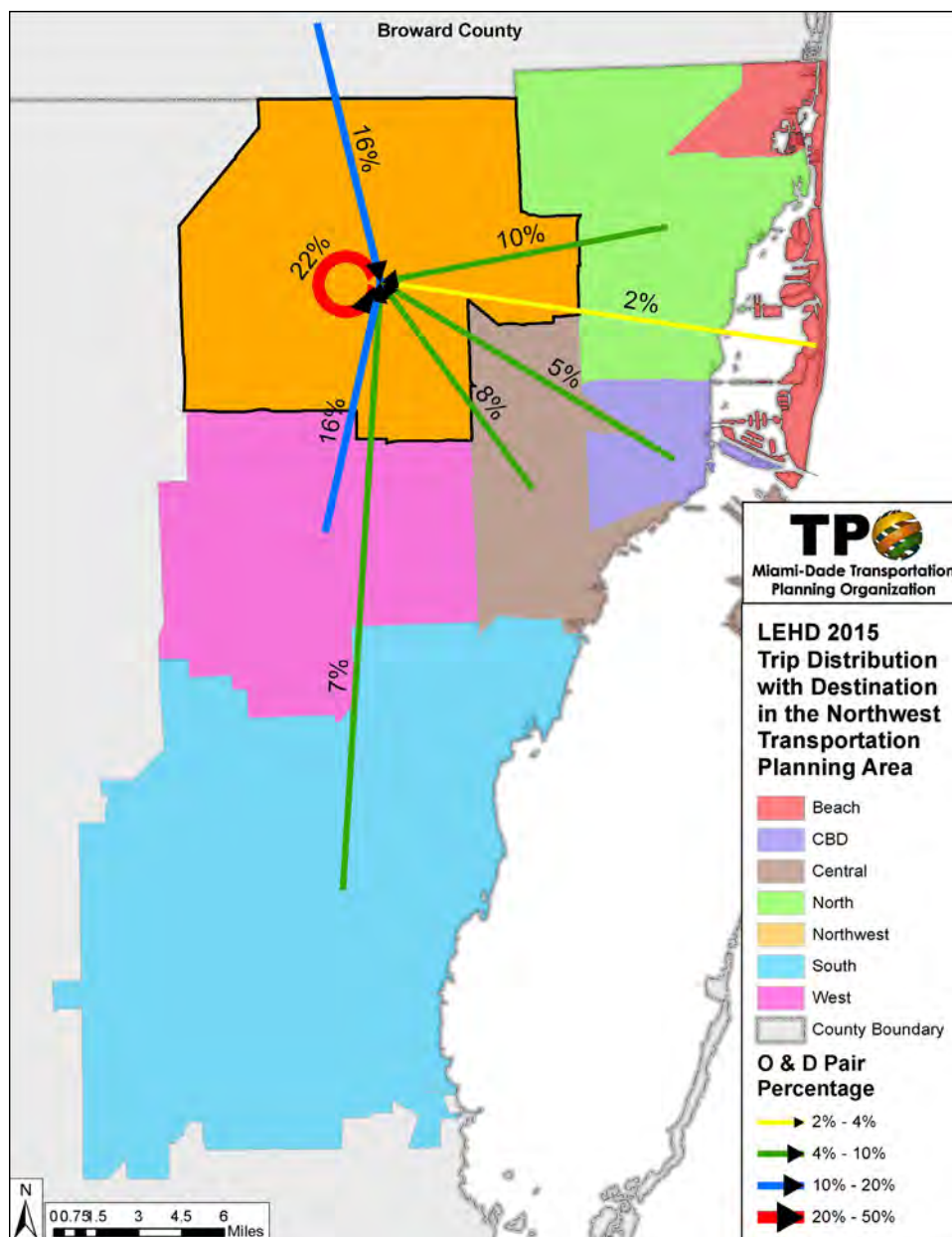


Figure 19. Year 2015 Work Travel Patterns to the Northwest Transportation Planning Area

Figure 20 shows that, of the trips leaving the Northwest Transportation Planning Area, the greatest percentage of work trips go to the Central Transportation Planning Area (15%) and Broward County (15%). The smallest percentage (2%) of trips go to the South Transportation Planning Area.

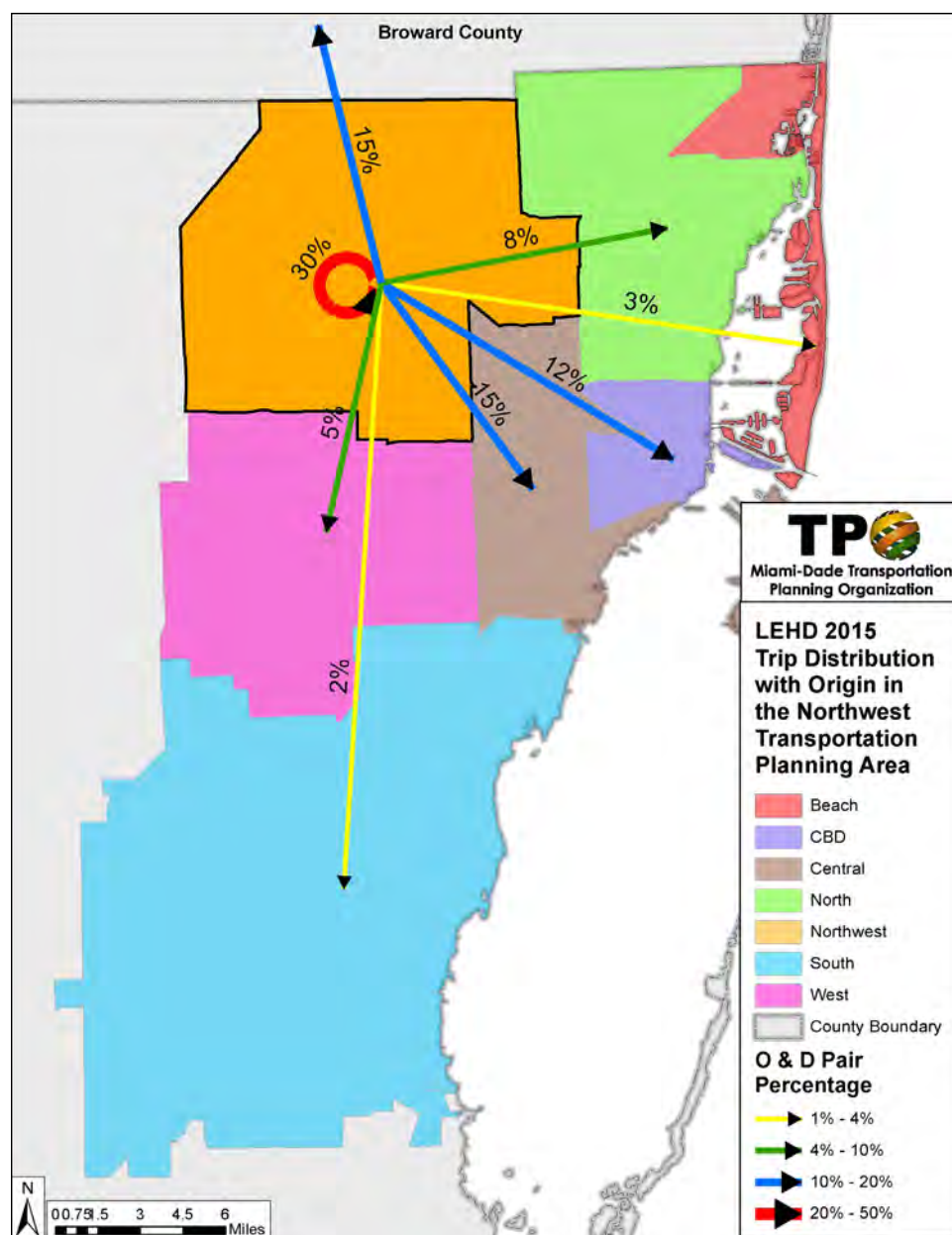


Figure 20. Work Travel Patterns from the Northwest Transportation Planning Area

Appendix B lists additional information related to the travel patterns of the work trip based on Planning Areas and TAD, while Appendix C contains additional workers profile information by the Northwest Transportation Planning Area and its TADs. Appendix C also lists additional comparisons between the LEHD data and the SERPM data. In Appendix D, the 2019 LEHD travel patterns are shown.

3.2 Socioeconomic Data Forecasts

The Base Year (2015) and future year (2045) socioeconomic data was developed as part of the LRTP and used in the regional planning model to measure the impact of the growth on the transportation system. This section discusses and compares the growth patterns associated with the population, employment, and school enrollment for the Northwest Transportation Planning Area, Miami-Dade County, and the region (Miami-Dade, Broward, and Palm Beach counties).

3.2.1 Population

Table 5 shows the population for the Year 2015 and the forecast for the Year 2045, for the Northwest Transportation Planning Area, Miami-Dade County, and the SERPM region. Annual linear growth rates were estimated for these specific areas and are shown below. The annual growth rate in the Northwest Transportation Planning area is slightly lower than the County as shown in Table 5.

Table 5. Population Forecasts

Area	Population		
	2015	2045	Annual Growth
Northwest Transportation Planning Area	375,543	477,861	0.9%
Miami-Dade County	2,629,861	3,532,976	1.1%
Region*	5,817,912	7,509,098	1.0%

**Includes Miami-Dade, Broward, and Palm Beach counties*

Figure 21 shows the LRTP population annual growth rates interpolated from the 2015 and 2045 data by traffic analysis zone (TAZ), which are geographical subsets of the regional planning model, within the Northwest Transportation Planning Area. The TAZs are depicted by average linear growth greater than or less than 2% by TAZ. The 2% margin was used to clearly identify those TAZs that deviate in growth rate from the average.

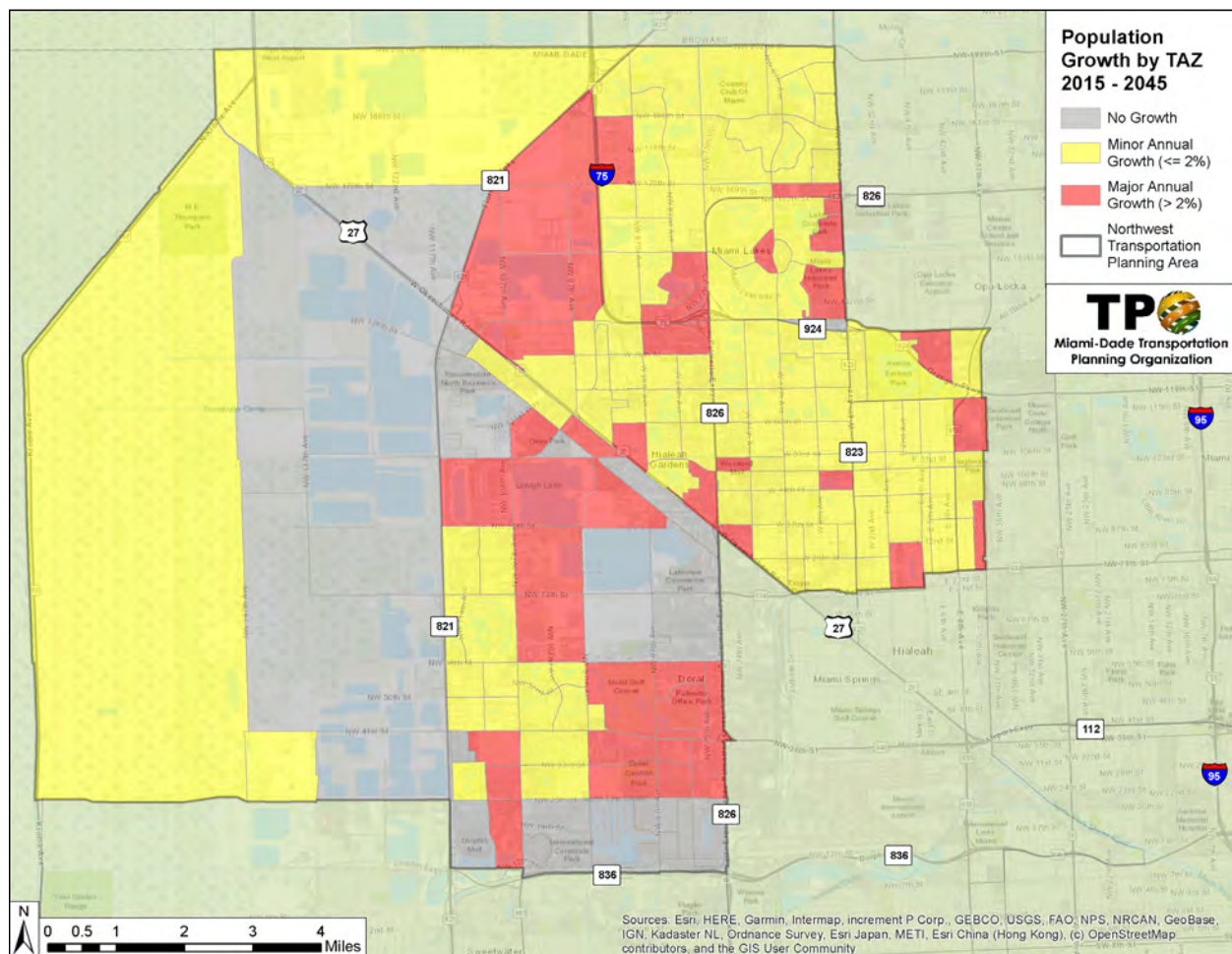


Figure 21. SERPM Population Annual Growth Rate by TAZ from 2015 to 2045

3.2.2 Employment

Table 6 shows employment for the Year 2015 and forecast for the Year 2045, for the Northwest Transportation Planning Area, Miami-Dade County, and the SERPM region. Annual linear growth rates were estimated for these specific areas and are shown below. The annual employment growth rate for the Northwest Transportation Planning Area is higher than for the county and the region.

Table 6. Employment Forecasts

Area	Employment		
	2015	2045	Annual Growth
Northwest Transportation Planning Area	266,347	388,970	1.5%
Miami-Dade County	1,318,040	1,813,709	1.3%
Region*	2,997,442	3,982,824	1.1%

*Includes Miami-Dade, Broward, and Palm Beach counties

Figure 22 shows the SERPM employment annual growth rates by TAZ, which are geographical subsets of the regional planning model, within the Northwest Transportation Planning Area. The TAZs are depicted by average linear growth greater than or less than 2% by TAZ. The 2% margin was used to clearly identify those TAZs that deviate in growth rate from the average.

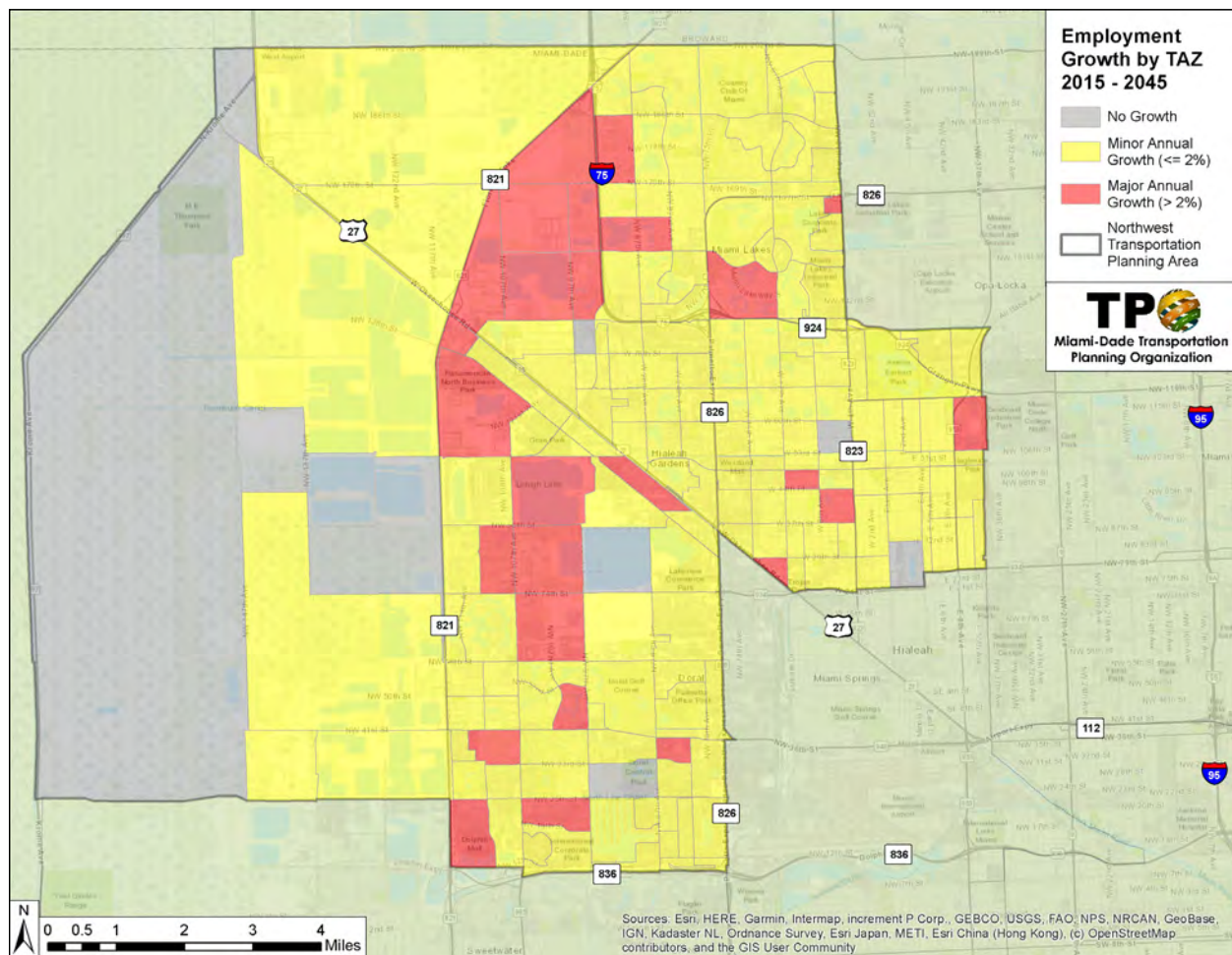


Figure 22. SERPM Employment Annual Growth Rates by TAZ from 2015 to 2045

3.2.3 School Enrollment

Table 7 shows the school enrollment (K-12) for the Year 2015 and the forecast for the Year 2045, for the Northwest Transportation Planning Area, Miami-Dade County, and the SERPM region. The annual linear growth rate is slightly less than the County as shown in Table 7.

Table 7. School Enrollment Forecasts

Area	School Enrollment		
	2015	2045	Annual Growth
Northwest Transportation Planning Area	70,664	84,436	0.6%
Miami-Dade County	394,853	476,843	0.7%
Region*	857,490	997,460	0.5%

*Includes Miami-Dade, Broward, and Palm Beach counties

Figure 23 shows the SERPM school enrollment annual growth rates by TAZ, which are geographical subsets of the regional planning model, within the Northwest Transportation Planning Area. The TAZ are depicted by average linear growth greater than or less than 2% by TAZ. The 2% margin was used to clearly identify those TAZ which deviate in growth rate from the average.

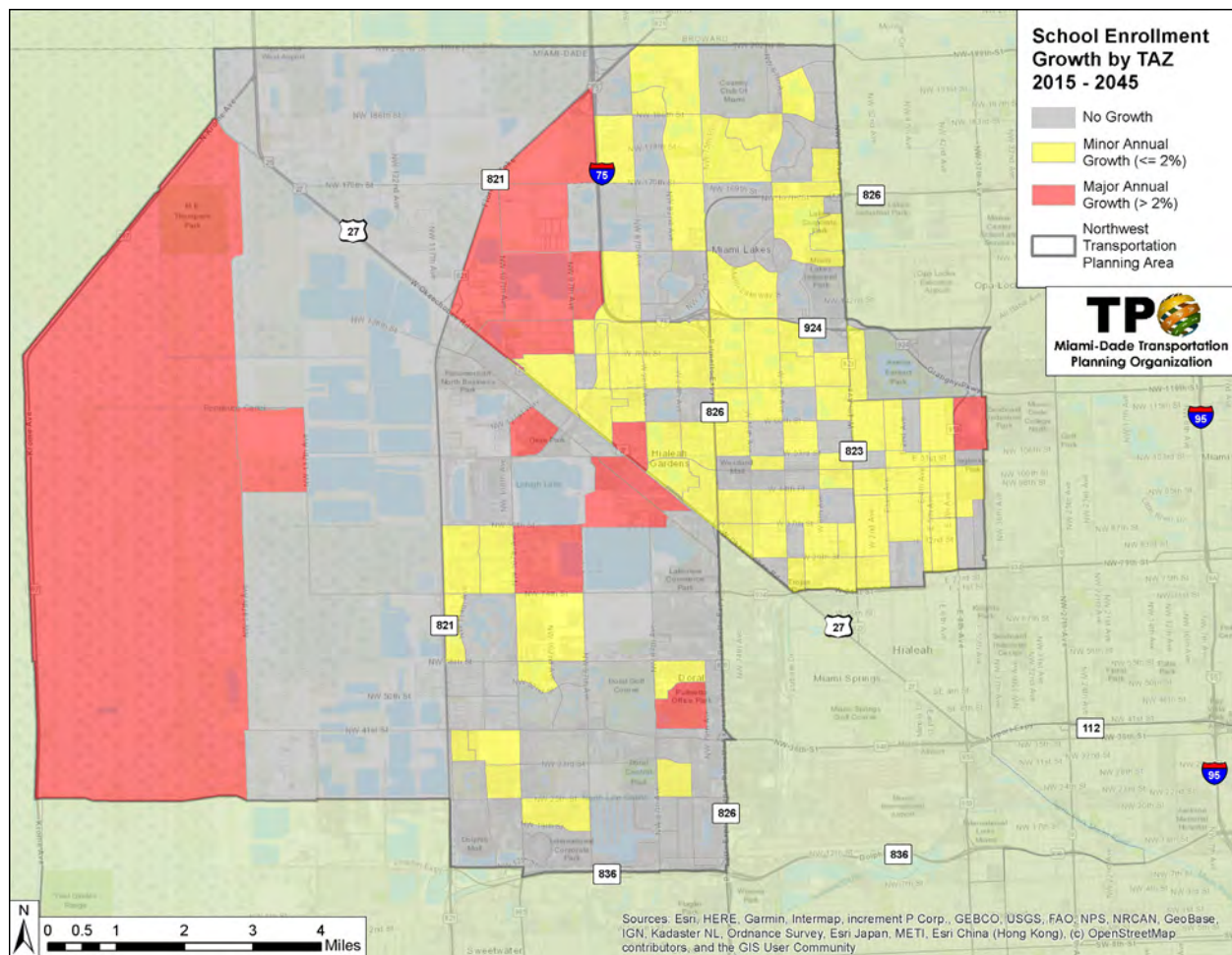


Figure 23. SERPM School Enrollment Annual Growth Rates by TAZ from 2015 to 2045

3.2.4 Land-Use Maps

The zoning categories prescribe what land uses and densities are allowed on a property. The following maps show the current land uses and the future land uses. The maps show very similar land uses which indicates that no major changes are expected in the land uses in this area.

Figure 24 shows the current land uses in the Northwest Transportation Planning Area. The map shows that south of W Okeechobee Road the land use is predominately industrial while north of W Okeechobee Road the land use is a mixture of commercial, business, and residential. This distribution of land use remains the same through 2040 as shown on the Future Land-Use Map in Figure 25.

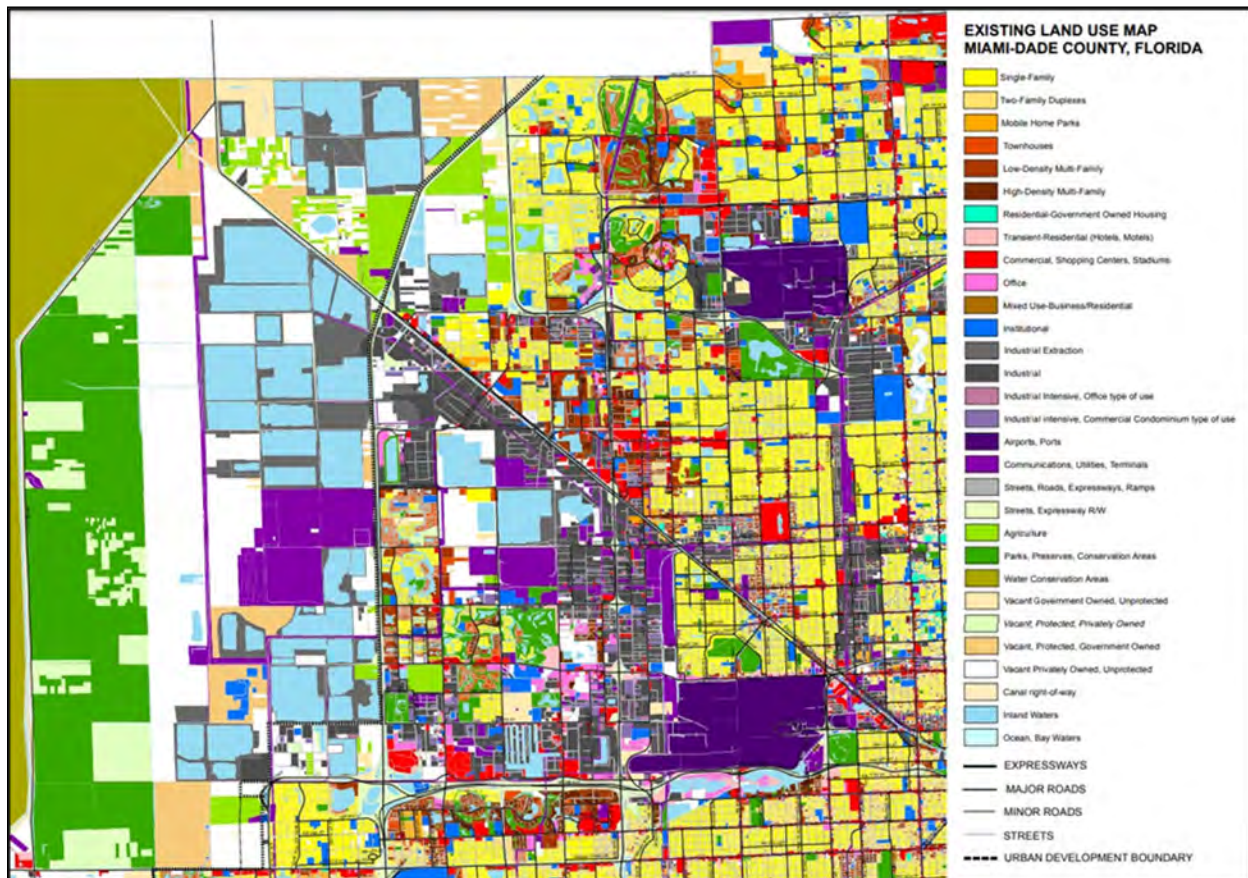


Figure 24. Existing Land Use in Northwest Transportation Planning Area
(source: <https://www.miamidade.gov/planning/library/maps/land-use.pdf>)

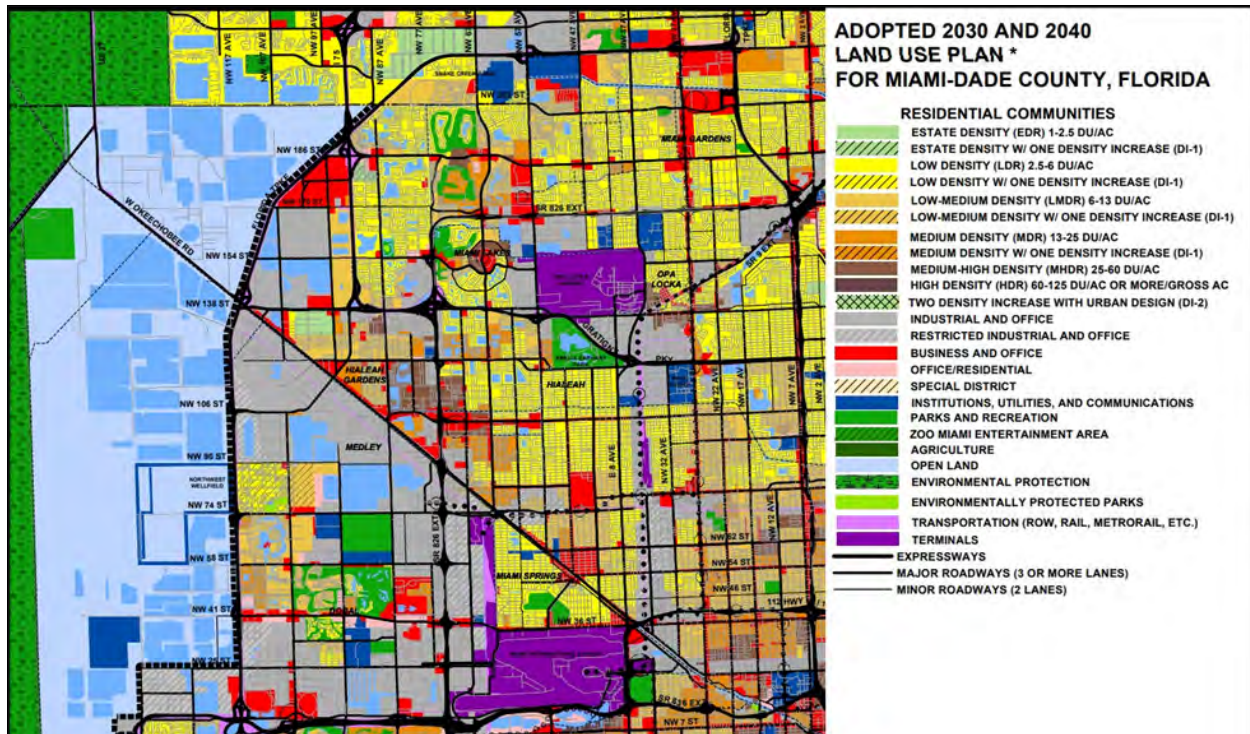


Figure 25. Future Land-Use Plan Northwest Transportation Planning Area

(source: <https://www.miamidade.gov/planning/library/reports/planning-documents/cdmp/cdmp-land-use-map-2030-2040.pdf>)

3.3 Year 2015 and Year 2045 Highway Network

This section describes the year 2015 and 2045 networks used for the NW 107th Avenue extension. The networks were developed for the Year 2045 LRTP and represent the Base Year and the Cost Feasible networks of that study.

3.3.1 Year 2015 Highway Network

The base year of the SERPM is the year 2015. Figure 26 shows the number of directional lanes in the Year 2015 SERPM in the Northwest Transportation Planning Area.

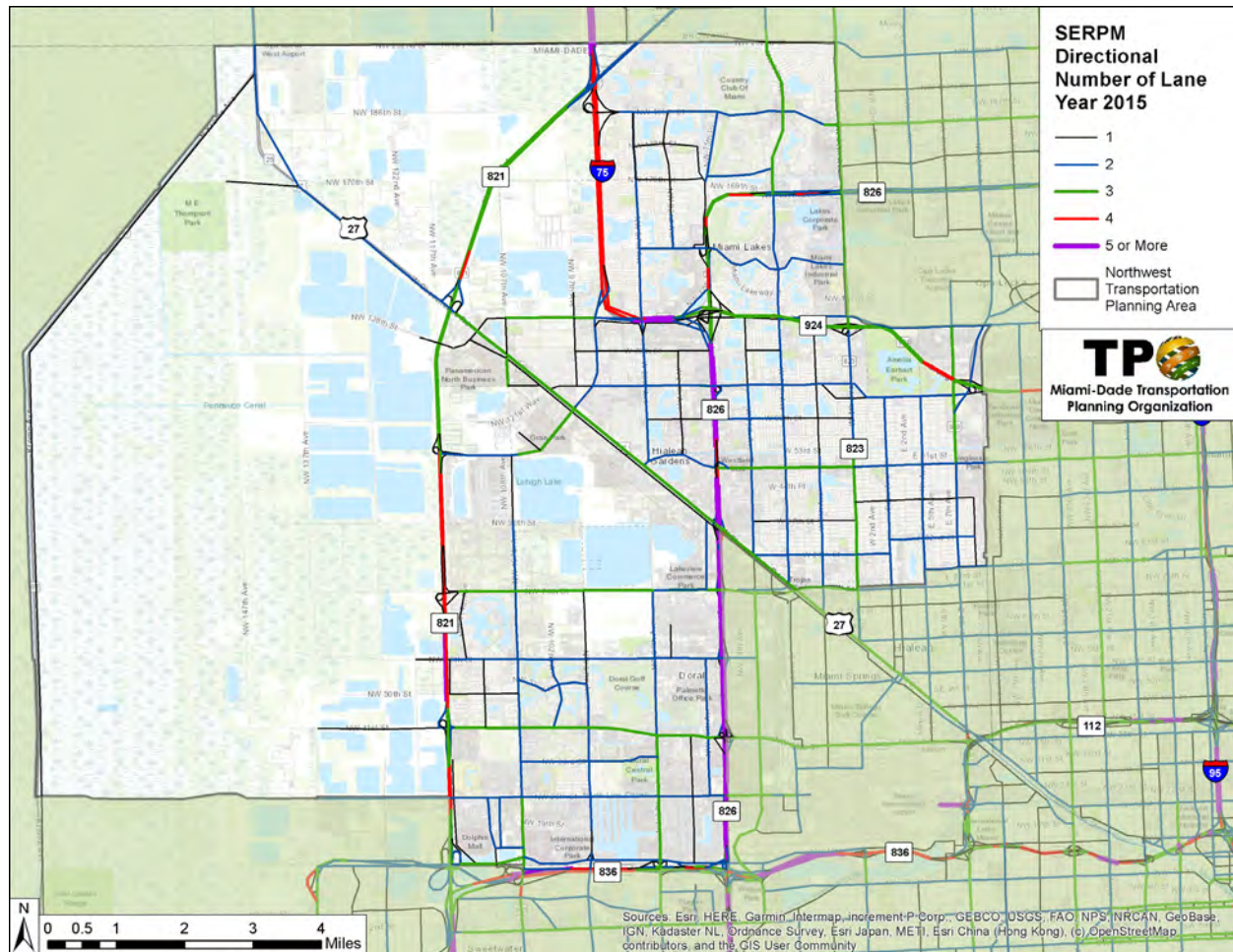


Figure 26. Year 2015 SERPM Number of Directional Lanes

The volume levels are shown in Figure 27, while the level of congestion is shown by level of service (LOS) in Figure 28.

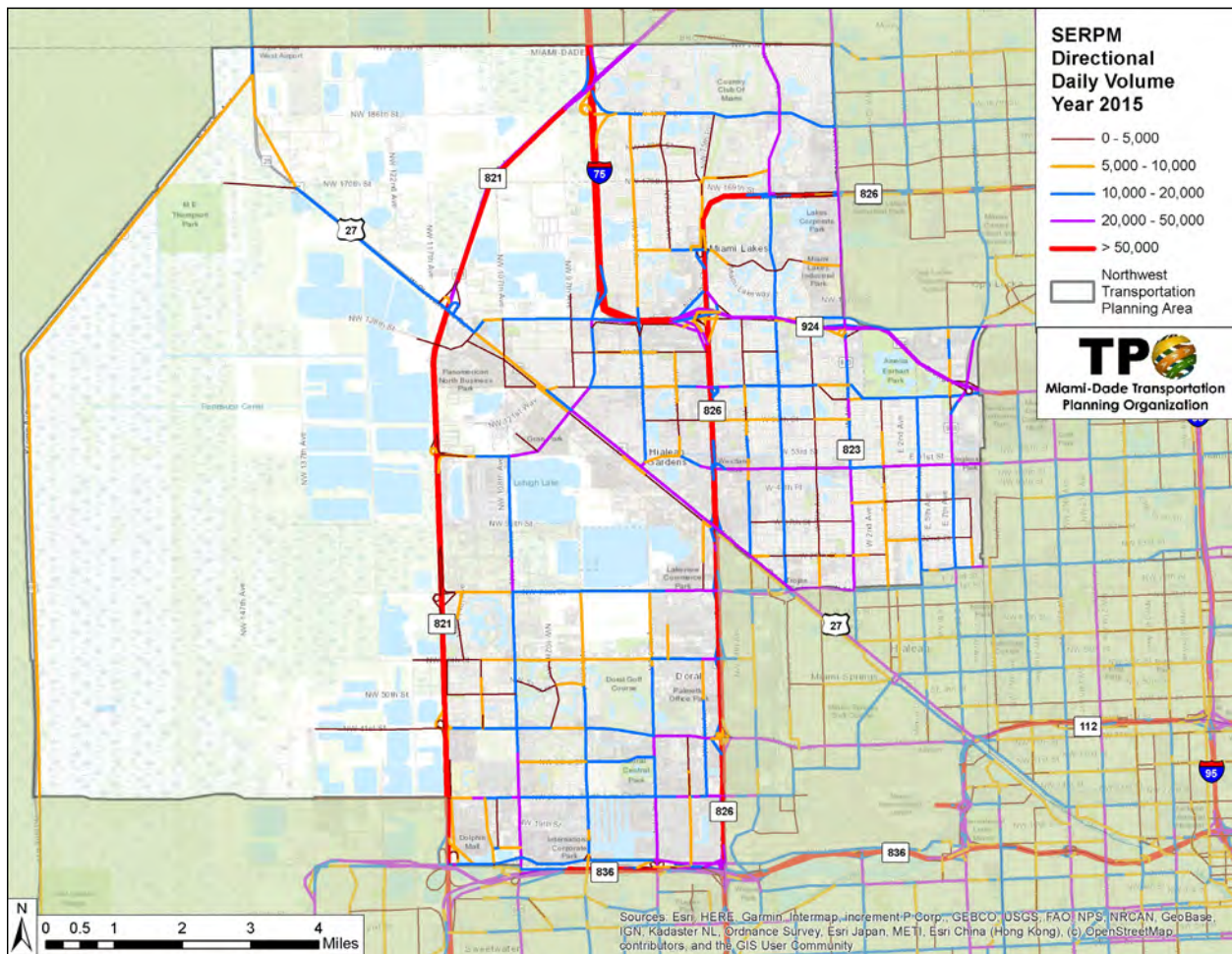


Figure 27. Year 2015 SERPM Directional Daily Volumes

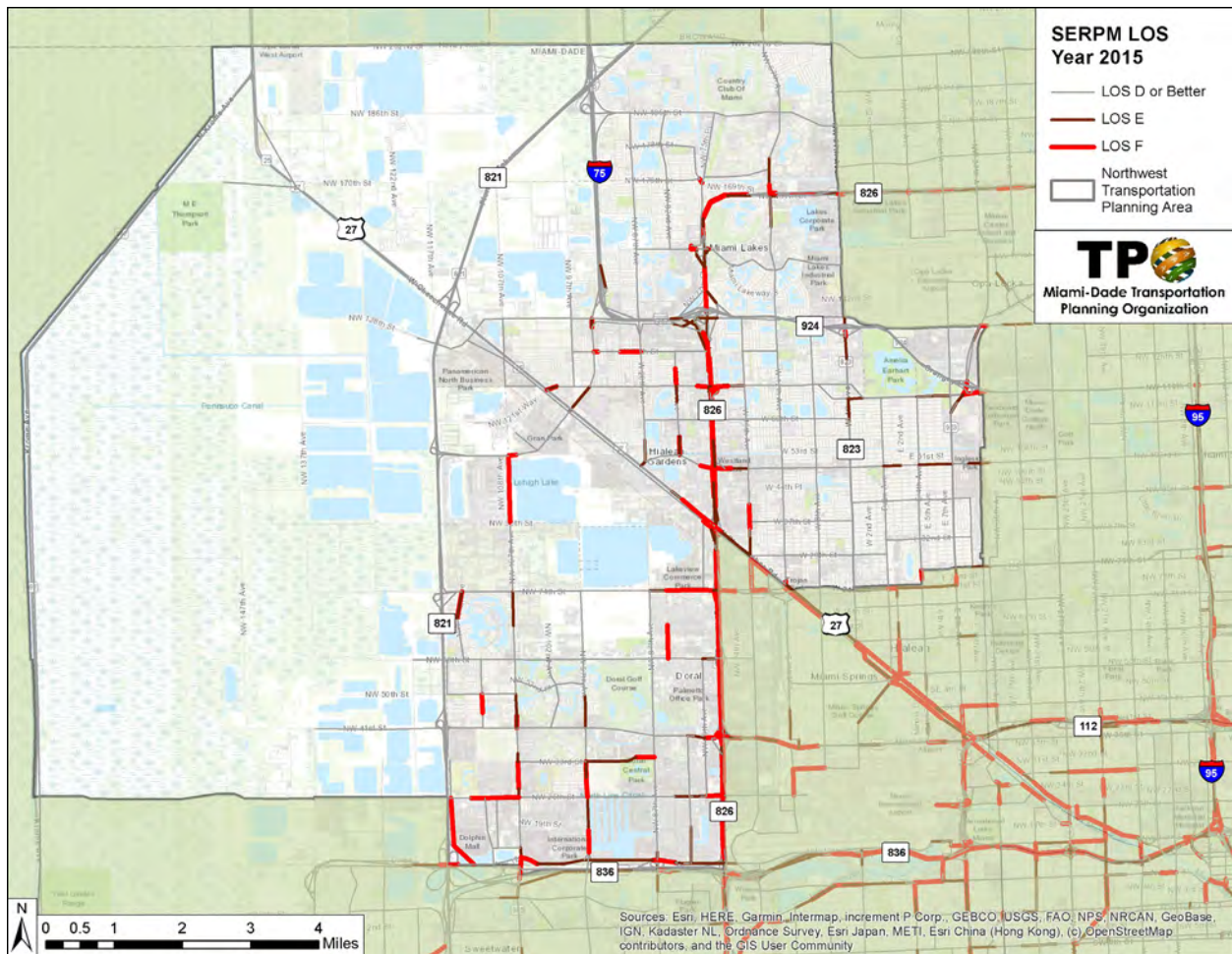


Figure 28. Year 2015 SERPM LOS

3.3.2 Year 2045 Highway Network

The Year 2045 network represents the Cost Feasible network of the Year 2045 LRTP. Figure 29 shows the number of lanes that are currently planned for in the Northwest Transportation Planning Area. This Cost Feasible network is referred to as the "Build" network, since the NW 107th Ave extension is included in this network. The project is listed in Priority Period III 2031-2035 of the LRTP with an estimated project cost (2018\$) of \$10.5 million.

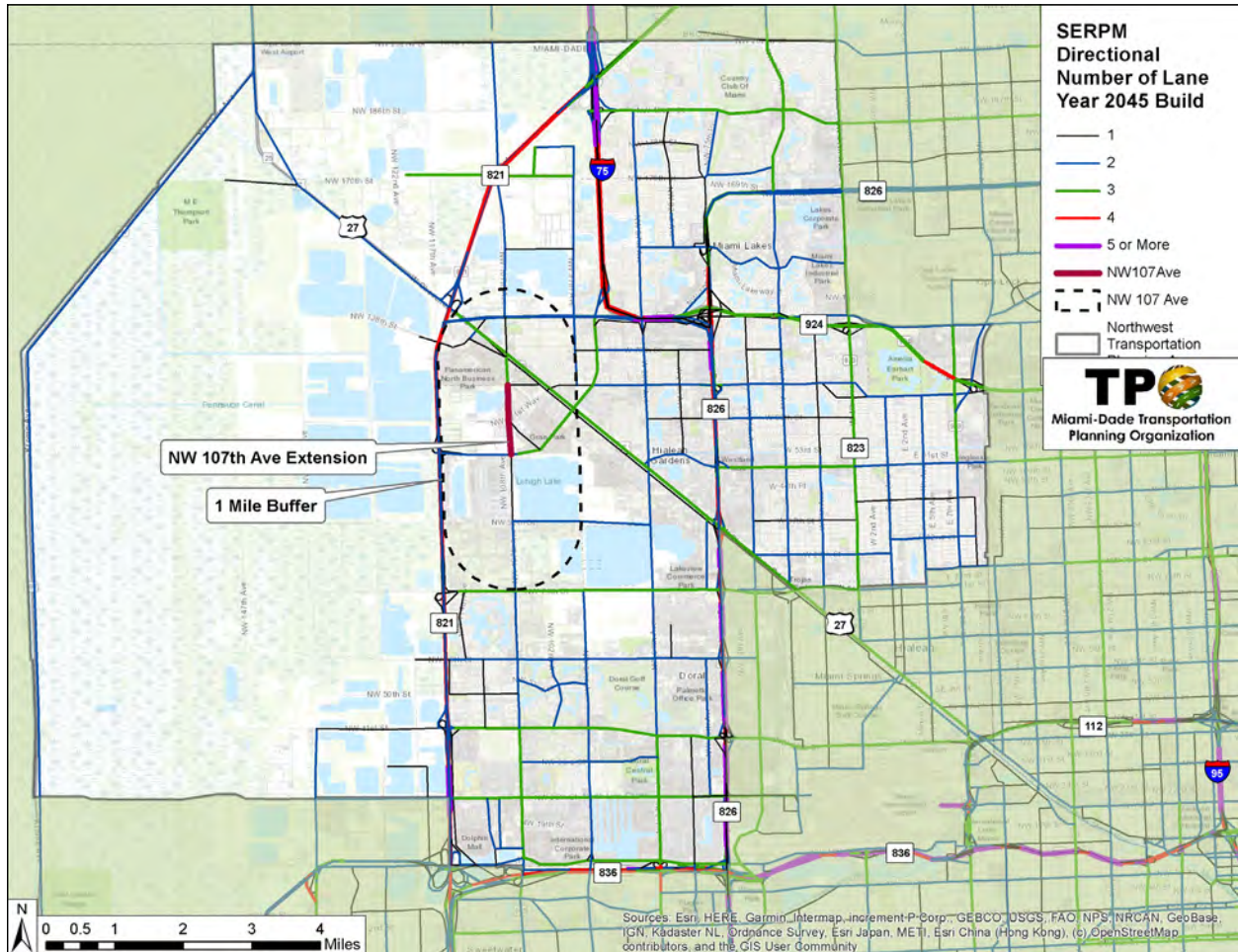


Figure 29. Year 2045 SERPM Directional Lanes

Figure 30 shows where capacity is planned to be added by the year 2045. The projects associated with this added capacity are listed in Section 2.2 of this report.

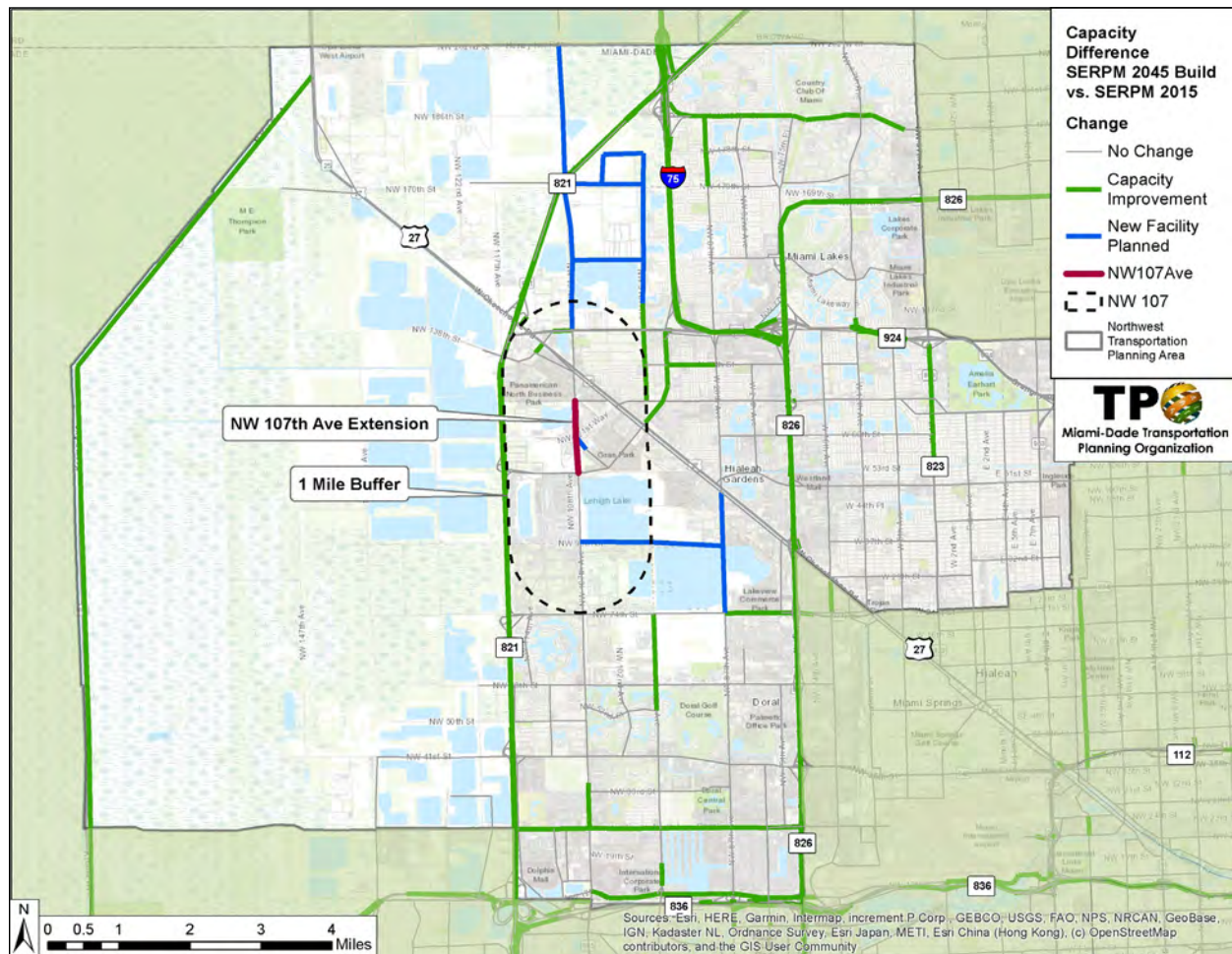


Figure 30. Capacity Difference between the 2045 Build and 2015 Network

Figure 31 shows the directional daily volumes for the year 2045, while Figure 32 shows the difference (increase) in volume between the year 2015 and 2045. Figure 33 shows the LOS in the year 2045, while Figure 34 shows the difference in LOS, where the LOS improves versus reduces, between the years 2015 and 2045.

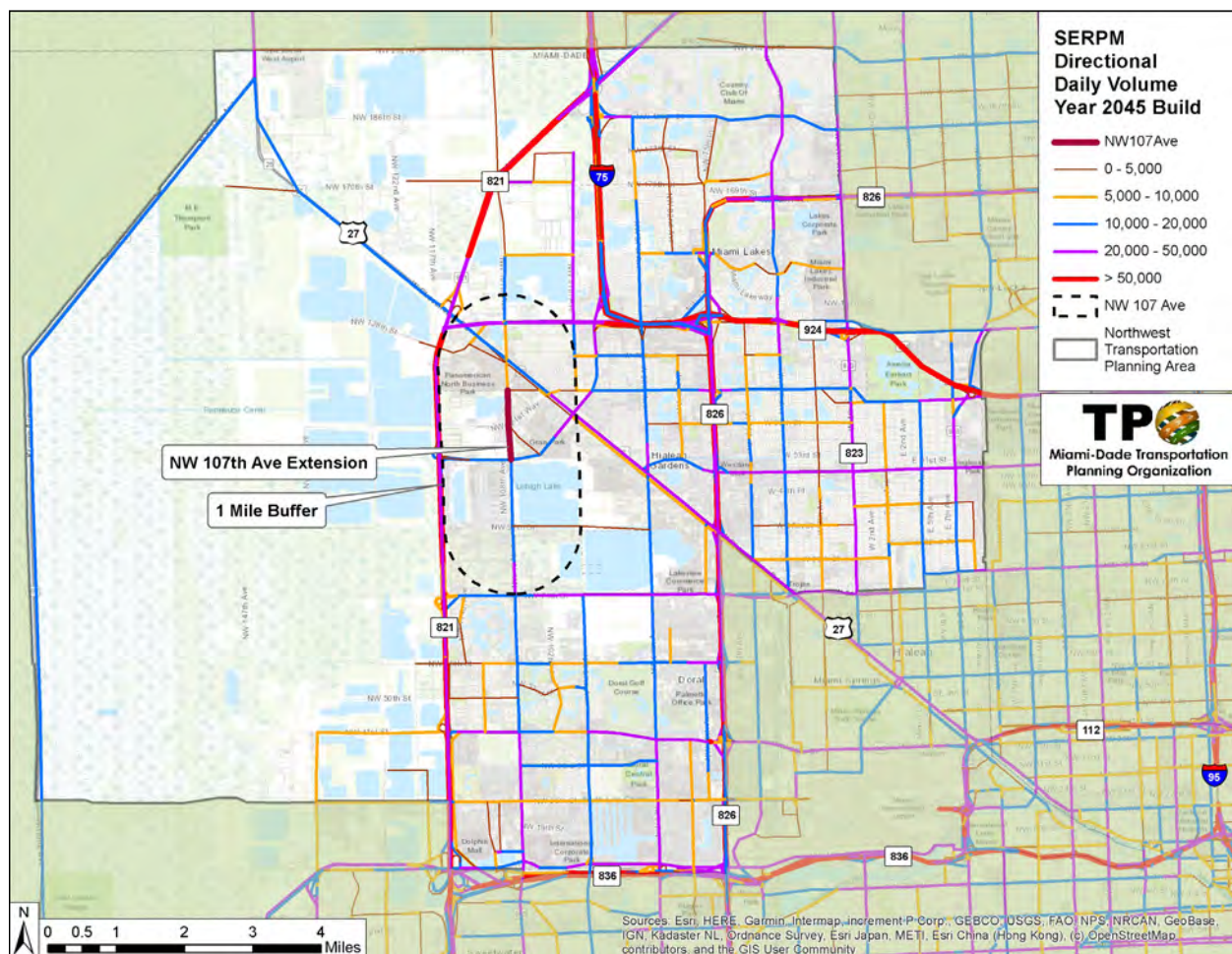


Figure 31. Year 2045 Directional Daily Volume

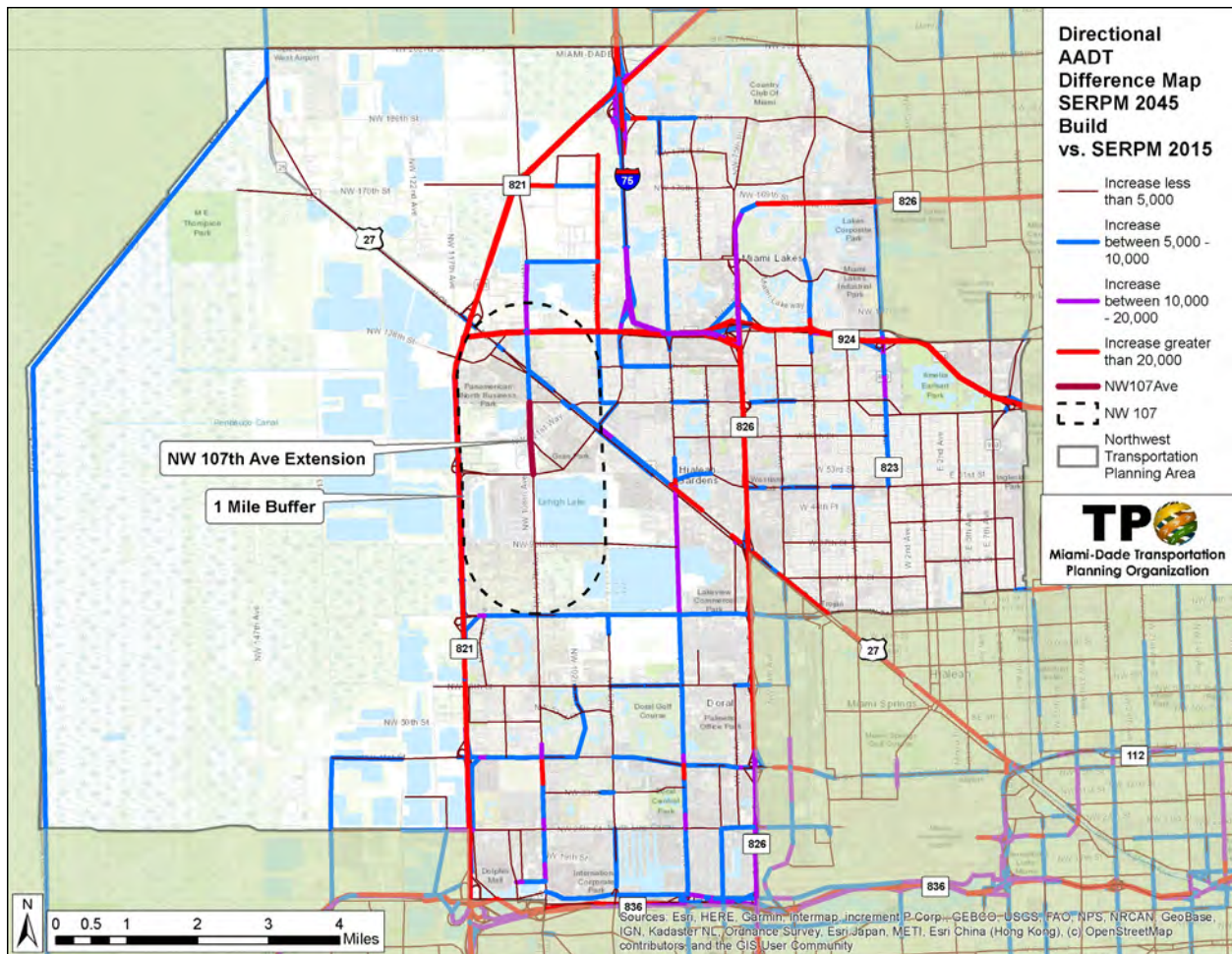
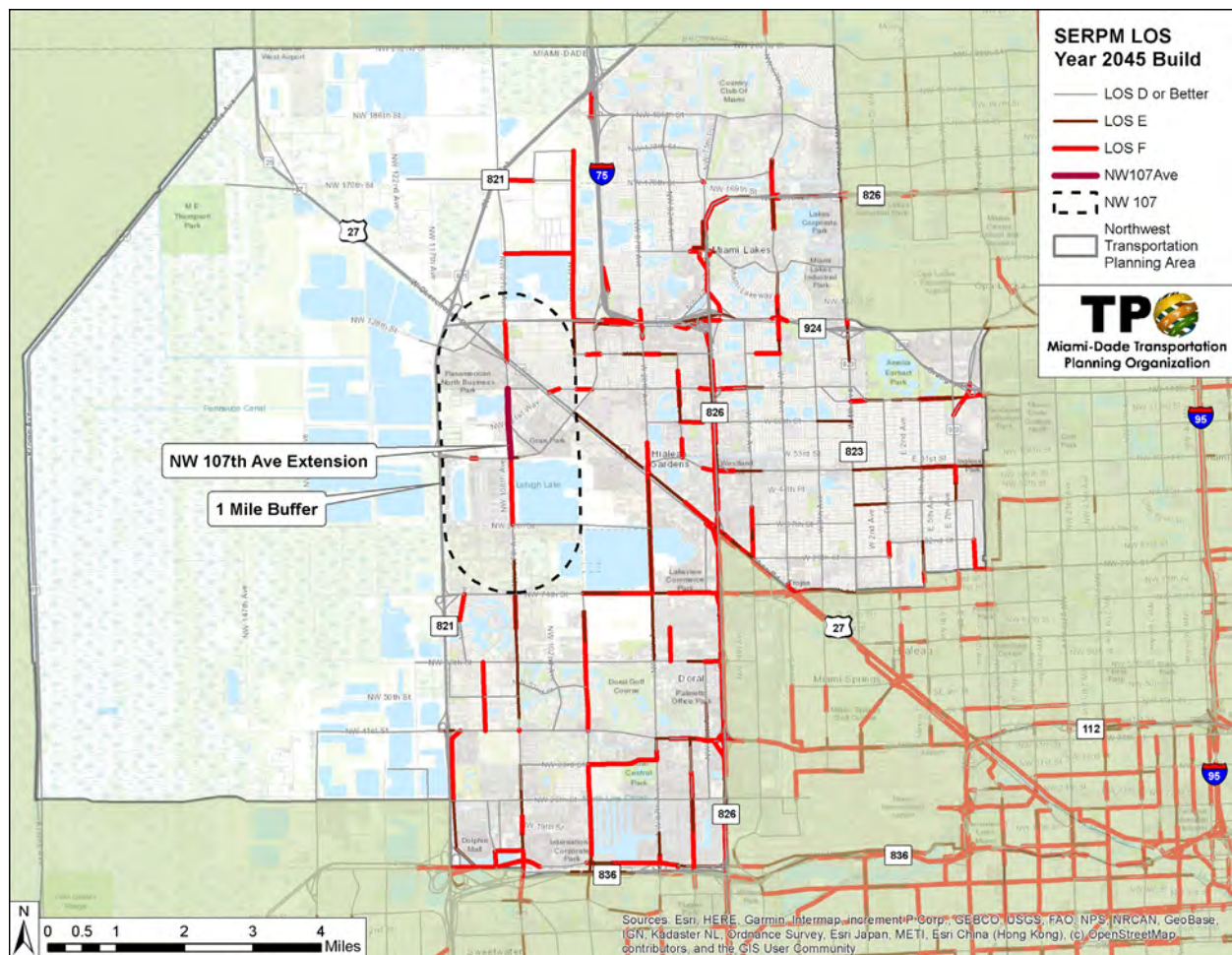


Figure 32. Directional Daily Volume Difference between 2015 and 2045



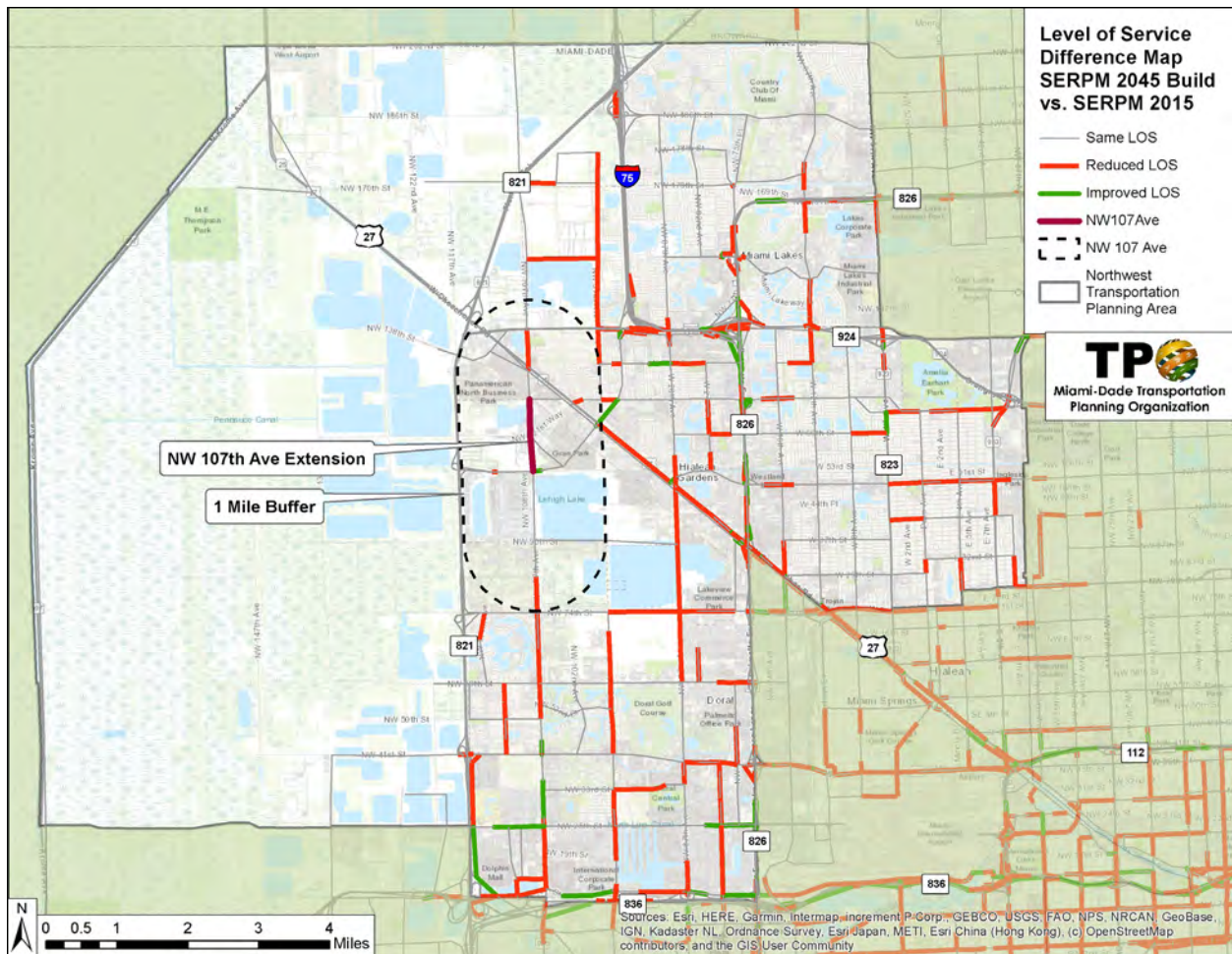


Figure 34. LOS Difference between 2015 and 2045

4. NW 107th Avenue Extension Analysis

This section describes the analysis conducted to measure the impact of the 107th Avenue extension on the travel time and trip lengths in the Northwest Transportation Planning Area.

4.1 Programmed Projects Intersecting with NW 107th Ave

The missing link was added to the network to connect NW 107th Avenue to the existing segments of the roadway as shown in Figure 35. The network was analyzed with and without the NW 107th Avenue extension to identify the differences in the travel patterns caused by this change in the Northwest Transportation Planning Area.

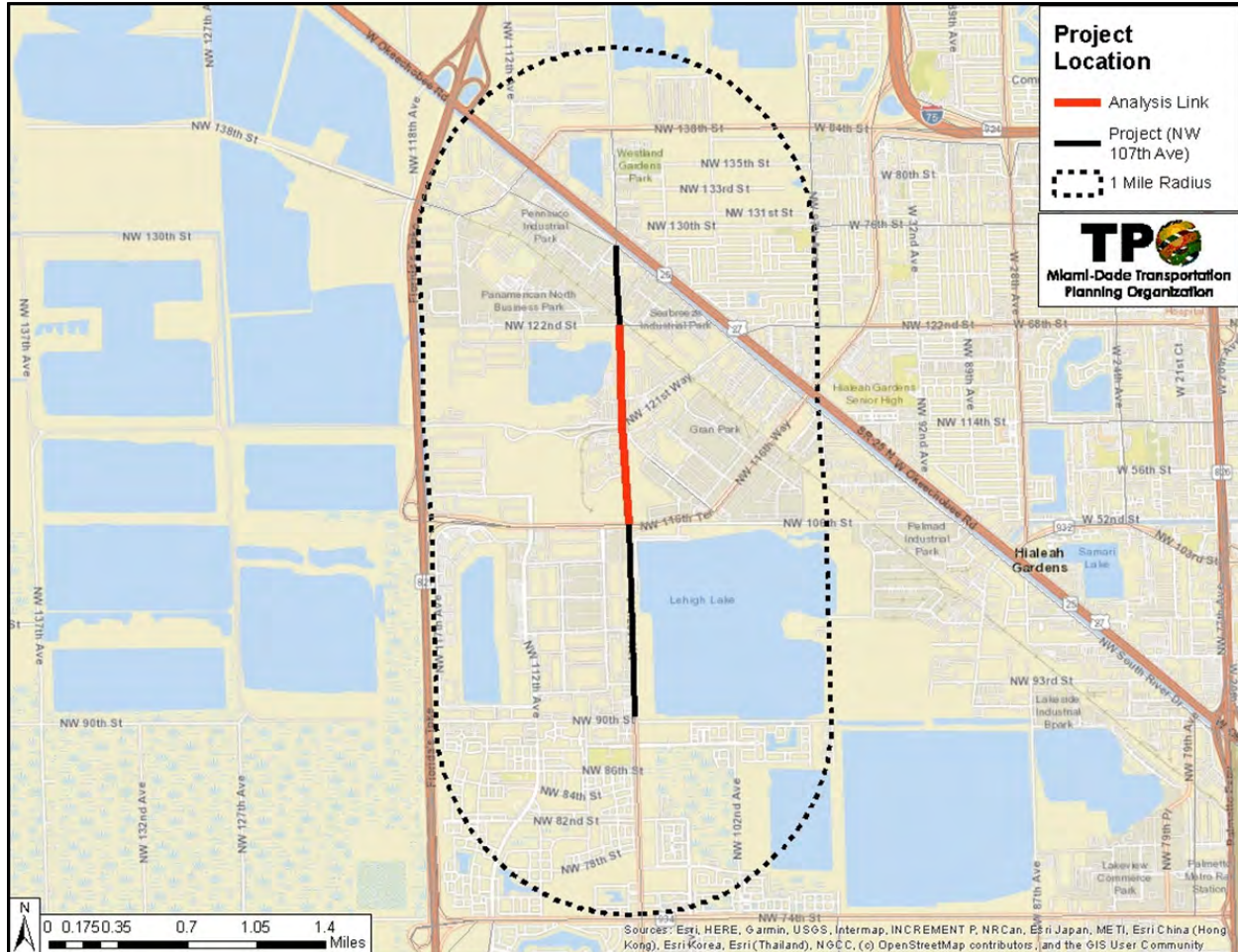


Figure 35. 107th Avenue Project Analysis Link

Figure 36 shows the difference in average daily directional traffic on the different roadways between the year 2045 No Build (without the NW 107th Avenue extension) and the Build (with the NW 107th Avenue extension) scenarios. There is a better distribution of trips in the area with the NW 107th Avenue extension. Another benefit of the project will be that truck traffic will be able to access the industrial land uses along NW 107th Ave without necessarily using Okeechobee Road and/or the HEFT.

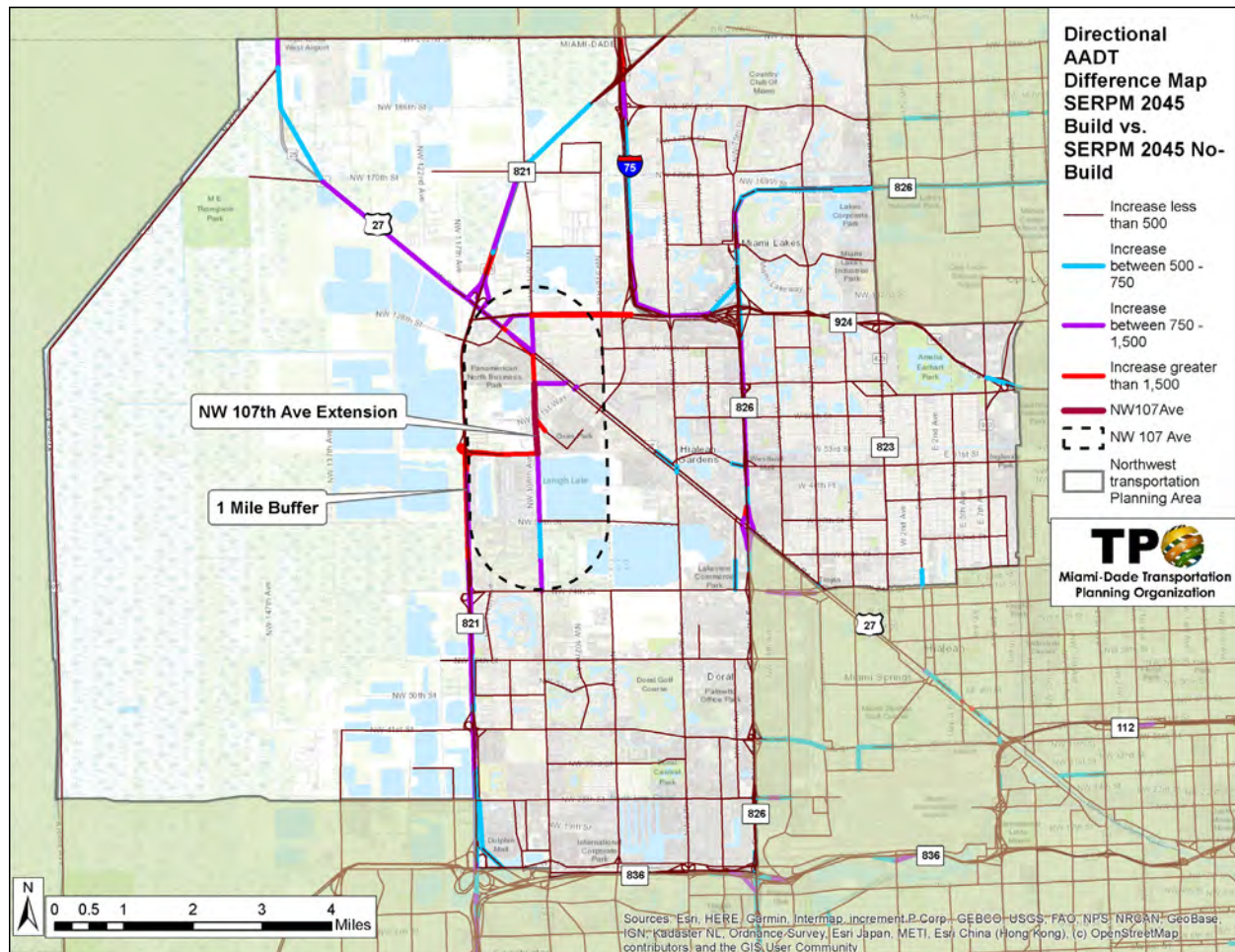


Figure 36. Year 2045 No Build vs. Build Daily Volume Comparison

4.2 Segment Implementation Impact Assessment

The top ten origins and destinations using the NW 107th Avenue extension were identified. By analyzing the top ten origins and destinations of the trips using the new NW 107th Avenue extension, a comparison could be made on how those trips traveled prior to the NW 107th Avenue extension. The difference in travel time and travel distance for those trips was summarized. It was assumed that these top ten origins and destinations represent the total number of trips using the new NW 107th Avenue extension, and the travel time savings and travel miles reductions follow a normal distribution. The average and 68% confidence interval (average \pm standard deviation) were estimated and applied to the average daily volume on the NW 107th Avenue extension which is estimated to be 19,635 average daily vehicles based on the year 2045 regional travel demand model. This approximation of actual travel patterns results in the outcomes as listed in Table 8.

Table 8. Year 2045 Travel Time and Distance Savings

Trip Basis:
0.7 to 4.0 Minutes (Average of 2.32 Minutes) of Travel Time Savings
Up to 1.1 Miles (Average of 0.55 Miles) of Travel Reduction
Daily Basis:
230 to 1,300 Hours (Average of 760 Hours) of Travel Time Savings
Up to 22,000 Miles (Average of 10,800 Miles) of Travel Reduction

As shown in Table 8, more than half of the trips could have a travel time savings of approximately 0.7 minutes to 4.0 minutes with an average of 2.32 minutes and a travel mile reduction of approximately 0 miles to 1.1 miles with an average of 0.55 miles. On a daily basis, the estimated travel time savings range from 230 hours to 1,300 hours and the estimated travel miles reductions range from 0 miles to 22,000 miles.

In Appendix E, additional information is provided on the travel paths between the top ten origin and destination pairs and the calculations related to the total time savings.

5. List of Potential Projects

The next step in the study was to identify additional potential projects that could improve the mobility within the Northwest Transportation Planning Area. Special attention was given to the areas with higher-than-average population and employment growth rates, which are portrayed in Figure 21 and Figure 22 respectively. The focus of the analysis was to improve the mobility within the Northwest Transportation Planning Area, by creating additional north-south, east-west connections, as well as providing improved connections between the different land uses and modes.

5.1 Types of Projects

Three different types of mobility modes were identified. The types of modes were either transit, micro-mobility/bicycle/pedestrian, or roadway. Figure 37 provides a general overview of the location of the different potential projects, while Appendix F provides more detailed information, particularly about the potential locations for micro mobility, bicycle/pedestrian mode improvements.

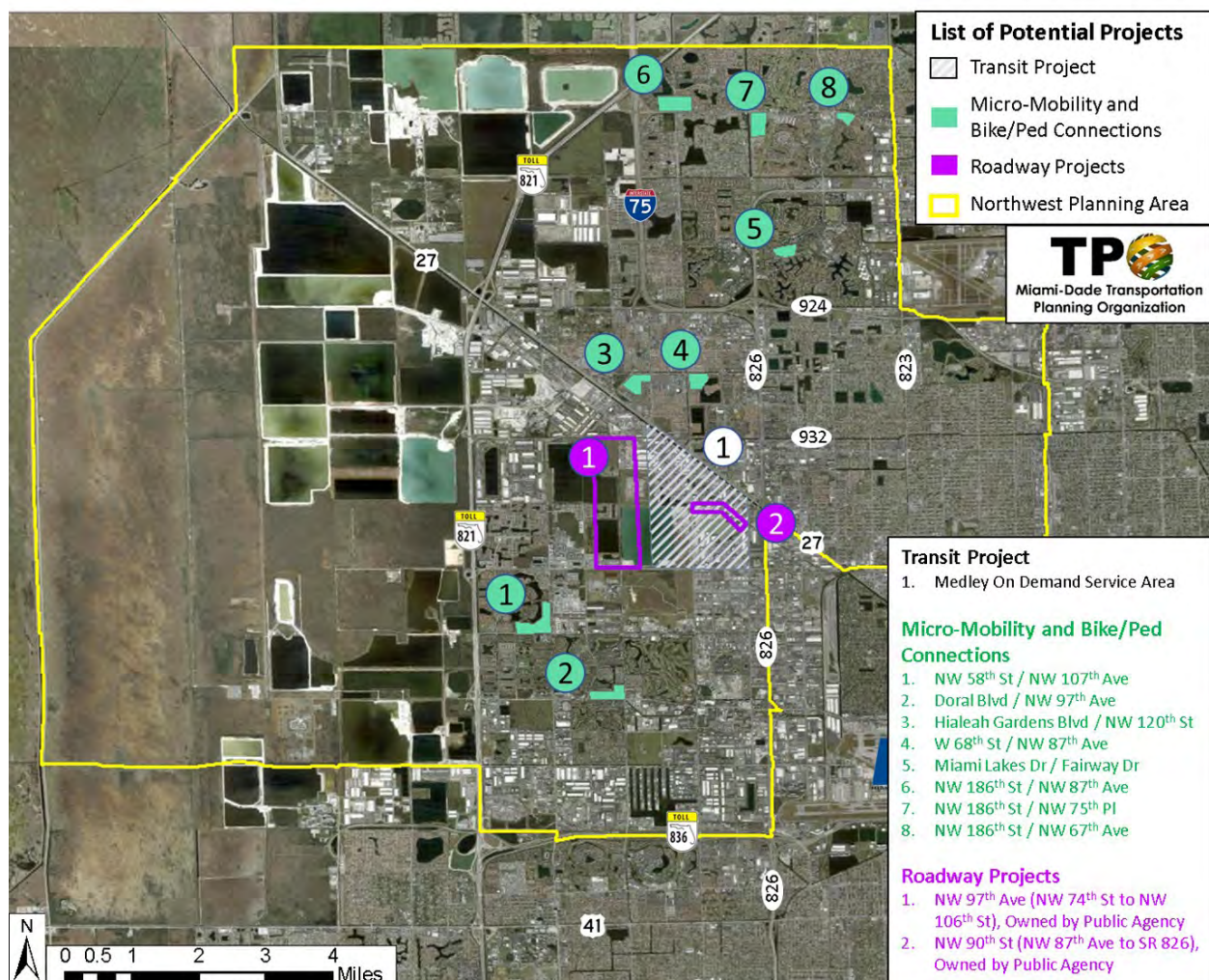


Figure 37. List of Potential Projects

5.1.1 Transit Projects

The Medley On-Demand Service Area shown in Figure 38 would enhance the mobility and the connection between the residential and commercial land uses and the Metrorail Palmetto Station.

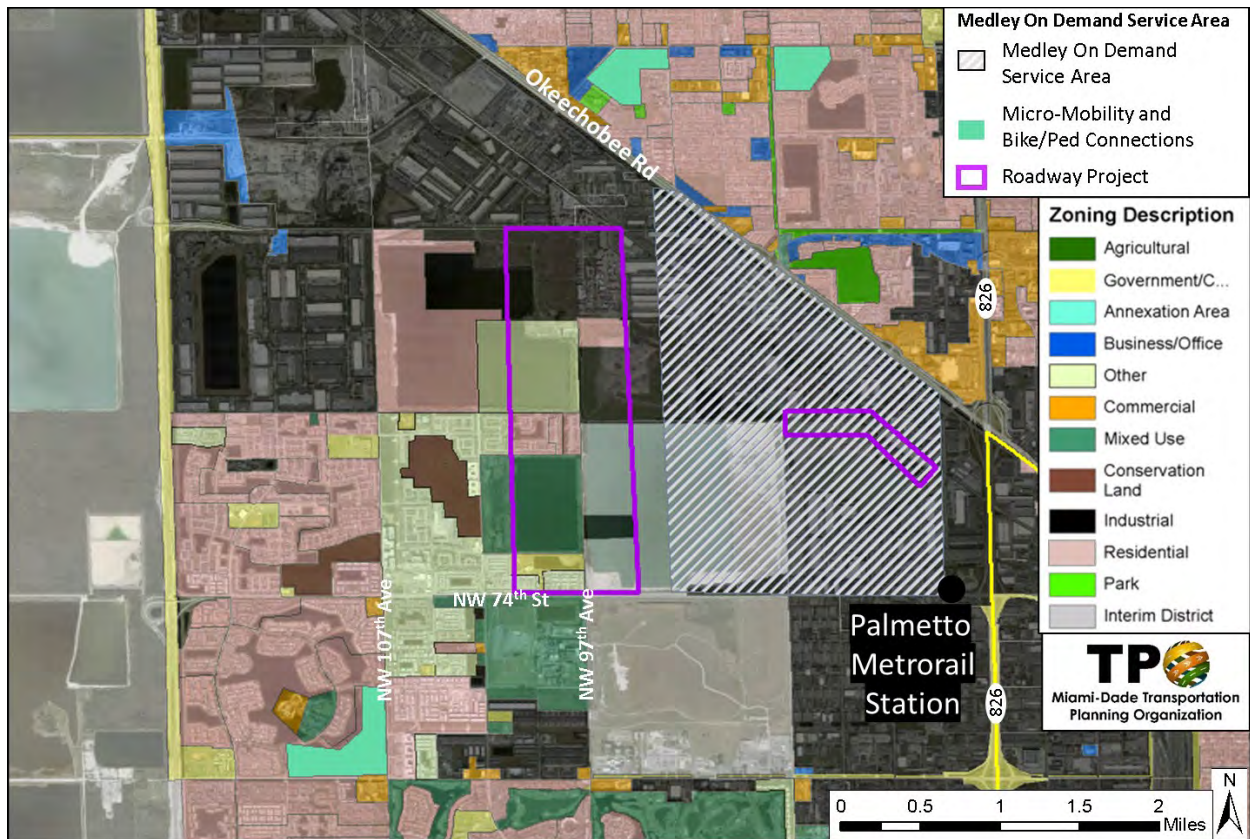


Figure 38. Medley On-Demand Service Area

5.1.2 Micro-Mobility and Bike/Ped Connections

In this part of the study, eight areas were identified that could benefit from micro-mobility and bicycle/pedestrian connections based on their land uses and development patterns. Additional connectivity will improve the access between different land uses and create the possibility to use different modes. In order to implement these insights, close coordination with municipalities will be needed. These areas are portrayed in green on Figure 37.

5.1.3 Roadway Projects

In analyzing the roadway network, emphasis was placed on the completion of the grid. This analysis provided the insight to add a possible north-south and east-west connection as portrayed in Figures 39 and 40.

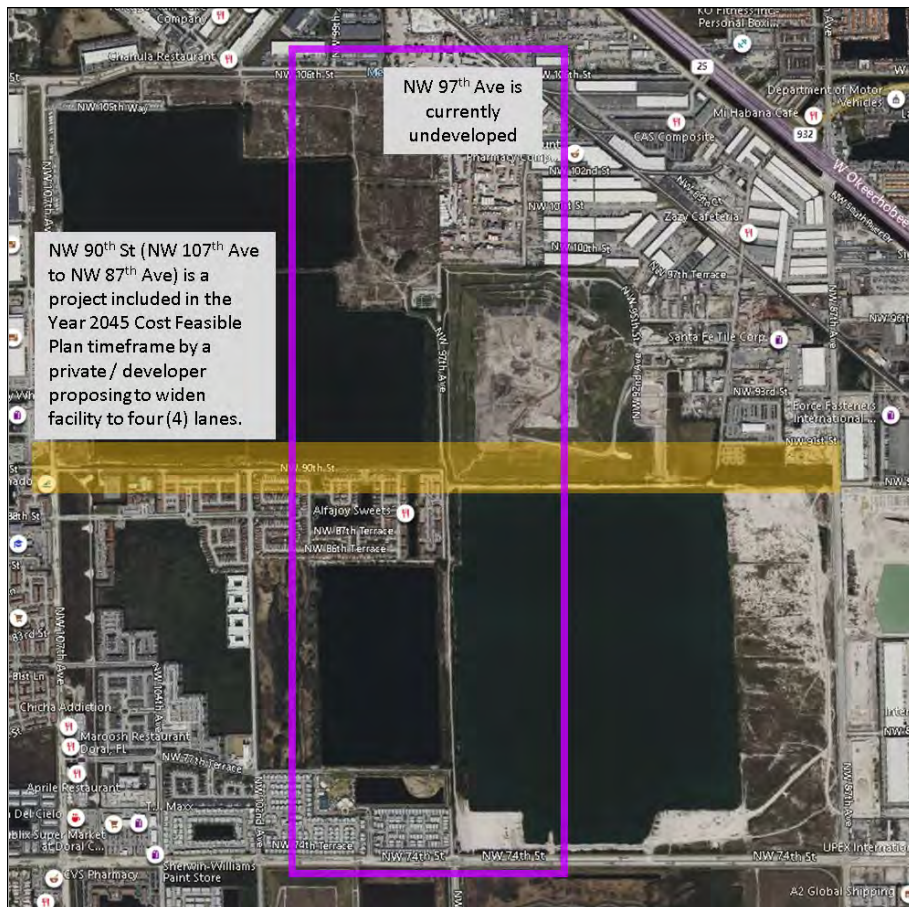


Figure 39. Potential North-South Connection

Currently, NW 90th Street is proposed to be widened to 4 lanes from NW 107th Avenue to NW 87th Avenue by a private developer (as referred to in the Year 2045 LRTP page 07-60).

A possible east-west connection could be created by connecting NW 90th Street to NW 81st Road. The potential connection is portrayed in Figure 40.



Figure 40. Potential East-West Connection

6. Summary of Findings

The Northwest Transportation Planning Area accommodates a significant amount of the industrial land uses due to its prime location, zoning, and excellent connections with Port Miami, Miami International Airport (MIA), and the Southeast Florida region. Its employment growth is slightly higher than the region and its population growth is estimated to be equal to the rest of the region. With a growing economy, maintaining good connectivity and additional mobility choices in the Northwest Transportation Planning Area are important for the residents, businesses, and visitors within the Planning Area, Miami-Dade County, and the Southeast Florida region.

The NW 107th Avenue extension will provide a better and more direct access to the destinations south of W Okeechobee Road. It will also provide relief to W Okeechobee Road and the Florida's Turnpike HEFT as the extension will reduce the need to use those roads to access destinations in the area south of W Okeechobee Road. The direct access will result in a significant amount of travel time and travel miles saved.

The potential projects that have been identified in this study, will improve mobility choices and traffic flow in the area. Allowing for additional mode choice and better connections to the different modes and land uses.

Appendix A – SERPM Network Refinements

Year 2045 Network Improvements

Highway

The SERPM base year 2015 and future year 2045 highway networks were reviewed. The centroid connectors were reviewed to ensure that trips are loaded and distributed simulating the underlying local roadway system as much as possible. The centroid connectors were compared against the local roadway system. The following table lists the centroid connector updates and the corresponding involved TAZs.

Centroid Connector Updates for the SERPM Highway Network

Centroid Connector Updates	Involved TAZs
Remove the redundant connector	2902, 2916, 3205, 3216, 3590, 3619, 3731
Adjust the existing connection based on aerial	2923, 2927, 2935, 3205, 3209, 3570
Adjust the existing connection for transit stop	3593
Add new connector	2924, 2926, 2928, 2932, 3058, 3208, 3211, 3212, 3223, 3590, 3619, 3620, 3621, 3622, 3625, 3626, 3640, 3643, 3644

The SERPM network was compared against the Cost Feasible Project List in the Year 2045 adopted LRTP. The following table lists the highway changes made to the SERPM highway network.

SERPM Highway Network Updates

Project Name	Project Limits	Updates
NW 202 nd Street	NW 67 th Avenue to NW 57 th Avenue	2045 coded 4L should be revised to 2L
NW 202 nd Street	S Flamingo Rd to NW 77 th Court	2045 should be coded the same as 2015
Turnpike	NB Exit to NW 74 th Street SB Entry from NW 74 th Street	2045 coded 4L should be revised to 2L
NW 118 th Avenue	NW 2 nd Street to NW 120 th Avenue	2045 coded 4L should be revised to 2L
NW 77 th Court and Extension	NW 170 th Street to NW 202 nd Street	2045 coded 2L should be deleted
NW 90 th Street	NW 87 th Avenue to NW 97 th Avenue	2045 coded 4L should be deleted
NW 97 th Avenue	NW 74 th Street to NW 90 th Street	2045 coded 4L should be deleted
NW 97 th Avenue Extension	NW 170 th Street to NW 186 th Street	2045 coded 4L & 6L should be deleted
NW 102 nd Avenue Extension		
NW 102 nd Avenue Extension	NW 102 nd Avenue to NW 186 th Street	2045 should be connected by transit link

Transit

The SERPM transit network was reviewed and compared against the Cost Feasible Project List in the Year 2045 adopted LRTP. The following table lists the transit changes made to the SERPM transit network.

SERPM Transit Network Updates

Project Name	Updates
Transit Routes BERTC and BERTE2	Adjust the stop location so that they can get transfers with local buses at the east side of I-75 / NW 186 th Street interchange

Appendix B – 2015 Travel Pattern Comparison LBS, LEHD, and SERPM Data

Origin Destination Analysis

The following table show the vehicle trips by Planning Area from the LBS data. The LBS data reflects average daily vehicle trips from Monday through Sunday, however, no information was giving on how the LBS data is validated with the actual vehicle trips on the network.

LBS Data – Number of Vehicle Trips by Planning Area

Plan Area	Beach	Broward	CBD	Central	Martin and St. Lucie	North	Northwest	Palm Beach	South	West	Total
Beach	924,261	166,695	122,191	57,670	806	151,201	26,200	11,714	9,469	12,617	1,482,824
Broward	170,041	5,104,783	54,941	46,584	7,376	92,870	95,385	295,454	15,401	21,328	5,904,163
CBD	124,109	52,493	507,040	219,730	602	80,846	40,863	7,035	27,228	35,429	1,095,375
Central	56,527	45,447	214,026	875,904	750	34,106	113,622	6,032	150,629	136,330	1,633,373
Martin and St.Lucie	812	6,830	610	784	512,713	510	545	55,279	440	372	578,895
North	151,098	94,789	77,804	38,013	547	396,139	49,659	5,335	6,190	7,645	827,219
Northwest	23,932	93,669	41,313	108,657	630	50,051	675,387	3,757	30,860	95,119	1,123,375
Palm Beach	11,535	295,280	7,453	6,467	54,562	5,293	3,990	4,290,783	2,176	1,962	4,679,501
South	9,531	15,240	30,703	158,293	452	6,476	32,346	2,085	601,863	123,758	980,747
West	11,840	20,535	38,742	141,075	386	7,713	89,946	1,932	132,480	629,641	1,074,290
Total	1,483,686	5,895,761	1,094,823	1,653,177	578,824	825,205	1,127,943	4,679,406	976,736	1,064,201	19,379,762

The following two tables show the work trips from and to the Northwest Transportation Planning Area from the LEHD data for year 2015 and 2019, respectively. These data reflect average daily vehicle trips from Monday through Sunday.

LEHD 2015 Data – Number of Work Trips by Planning Area

Plan Area	Beach	Broward	CBD	Central	Other Location	North	Northwest	Palm Beach	South	West	Total
Beach							4,237				
Broward							34,295				
CBD							10,572				
Central							16,623				
Other Location							20,762				
North							20,517				
Northwest	4,307	22,799	18,465	23,084	10,906	11,623	45,313	4,144	3,485	7,624	151,750
Palm Beach							6,553				
South							15,153				
West							34,384				
Total							208,409				

LEHD 2019 Data – Number of Work Trips by Planning Area

Plan Area	Beach	Broward	CBD	Central	Other Location	North	Northwest	Palm Beach	South	West	Total
Beach							4,765				
Broward							40,872				
CBD							11,587				
Central							17,368				
Other Location							25,971				
North							23,515				
Northwest	4,445	24,017	19,673	23,390	13,155	12,510	49,169	4,385	4,153	8,510	163,407
Palm Beach							7,868				
South							18,147				
West							36,603				
Total							235,865				

The following two tables show the vehicle trips and person trips, respectively, by Planning Area from SERPM 8.512. These data reflect average daily vehicle trips from Monday through Sunday.

SERPM 8.512 Data – Number of Vehicle Trips by Planning Area

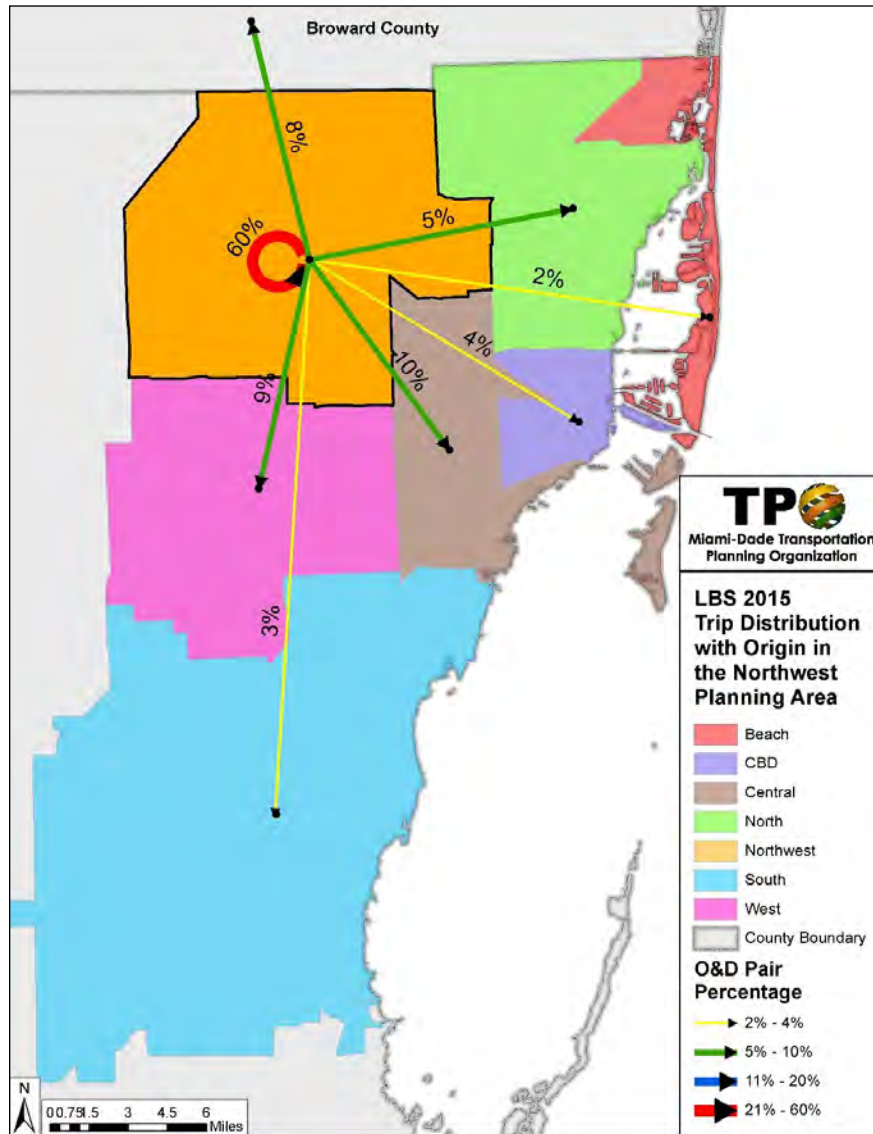
Plan Area	Beach	Broward	CBD	Central	Martin and St. Lucie	North	Northwest	Palm Beach	South	West	Total
Beach	208,557	98,781	47,130	32,946	0	100,761	31,718	3,310	9,079	11,317	543,598
Broward	97,583	3,693,924	32,587	35,781	0	159,300	111,586	250,951	9,942	19,547	4,411,200
CBD	47,656	32,581	216,240	136,663	0	76,665	52,167	2,419	26,628	40,775	631,794
Central	33,248	36,261	135,121	353,231	0	69,933	129,649	2,608	99,163	135,157	994,370
Martin and St. Lucie	0	0	0	0	0	0	0	0	0	0	0
North	99,971	158,618	76,653	70,475	0	279,966	117,646	4,089	13,669	20,220	841,306
Northwest	32,240	112,962	51,545	129,217	0	116,932	433,693	3,789	40,488	105,442	1,026,308
Palm Beach	3,098	249,453	2,509	2,606	0	4,285	3,845	3,064,853	1,307	1,521	3,333,478
South	9,291	9,960	27,048	95,417	0	13,535	41,144	1,283	510,057	142,386	850,121
West	11,625	19,585	40,845	134,011	0	20,612	103,750	1,361	142,010	378,149	851,948
Total	543,268	4,412,124	629,678	990,346	0	841,988	1,025,198	3,334,664	852,343	854,514	13,484,122

SERPM 8.512 Data – Person Trips by Planning Area

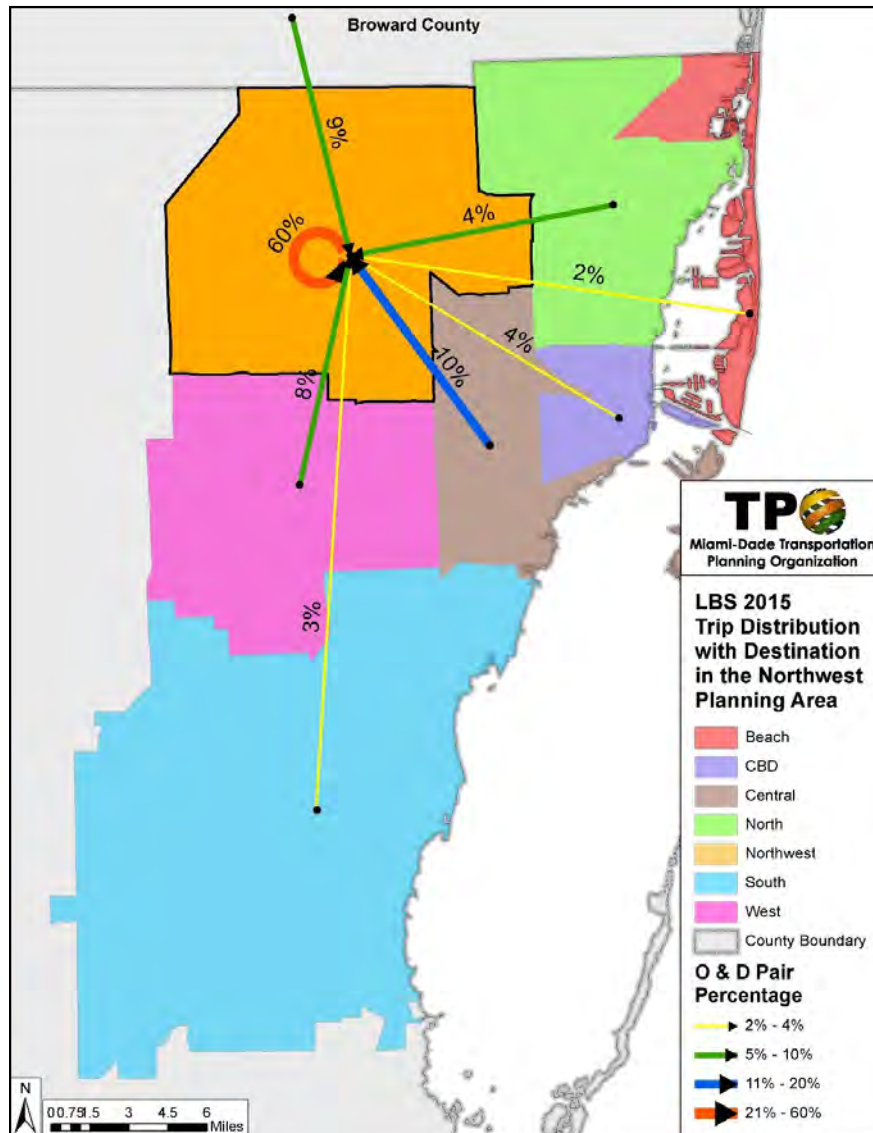
Plan Area	Beach	Broward	CBD	Central	Martin and St. Lucie	North	Northwest	Palm Beach	South	West	Total
Beach	454,844	134,068	72,088	40,452	0	161,156	43,916	4,392	13,060	16,360	940,336
Broward	132,516	5,663,476	40,888	41,752	0	225,448	151,196	317,692	12,752	21,668	6,607,388
CBD	72,808	40,444	507,292	206,612	0	129,696	79,212	3,260	41,972	64,964	1,146,260
Central	40,340	41,556	205,084	532,068	0	97,948	176,568	3,528	135,288	192,124	1,424,504
Martin and St. Lucie	0	0	0	0	0	0	0	0	0	0	0
North	160,740	224,800	130,268	98,716	0	563,616	186,580	5,328	20,308	28,592	1,418,948
Northwest	44,548	151,668	78,336	176,484	0	185,708	769,248	4,800	53,796	157,516	1,622,104
Palm Beach	4,248	316,584	3,576	3,608	0	5,752	4,972	4,607,260	2,080	1,848	4,949,928
South	13,512	12,856	43,036	131,868	0	20,352	55,120	2,064	966,392	226,068	1,471,268
West	16,768	21,784	65,640	192,972	0	29,408	155,516	1,648	225,504	728,520	1,437,760
Total	940,324	6,607,236	1,146,208	1,424,532	0	1,419,084	1,622,328	4,949,972	1,471,152	1,437,660	21,018,496

The following figures show the travel pattern and trip distribution by planning area, including percentage of trips from the Northwest Transportation Planning Area to the other planning areas, and vice versa, from the LBS data and from SERPM.

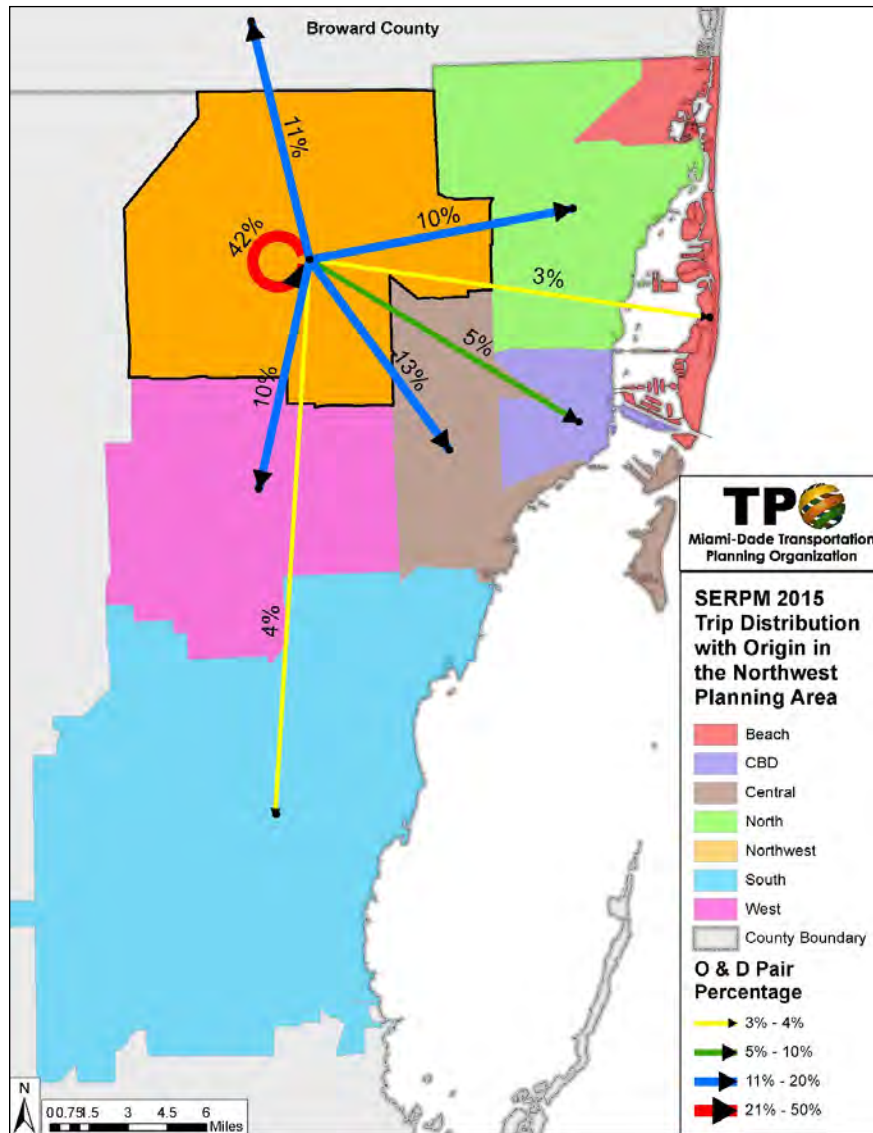
Travel Pattern for LBS 2015 Data – From Northwest Transportation Planning Area



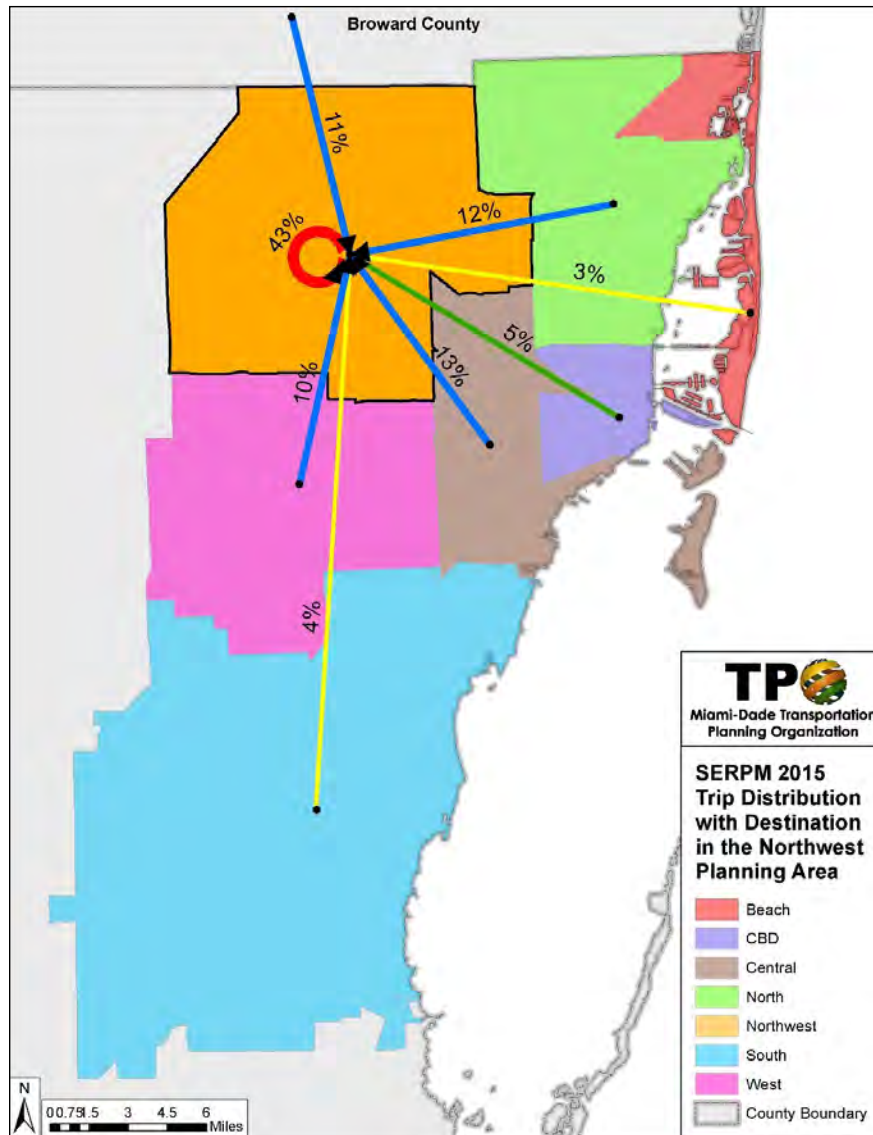
Travel Pattern for LBS 2015 Data – To Northwest Transportation Planning Area



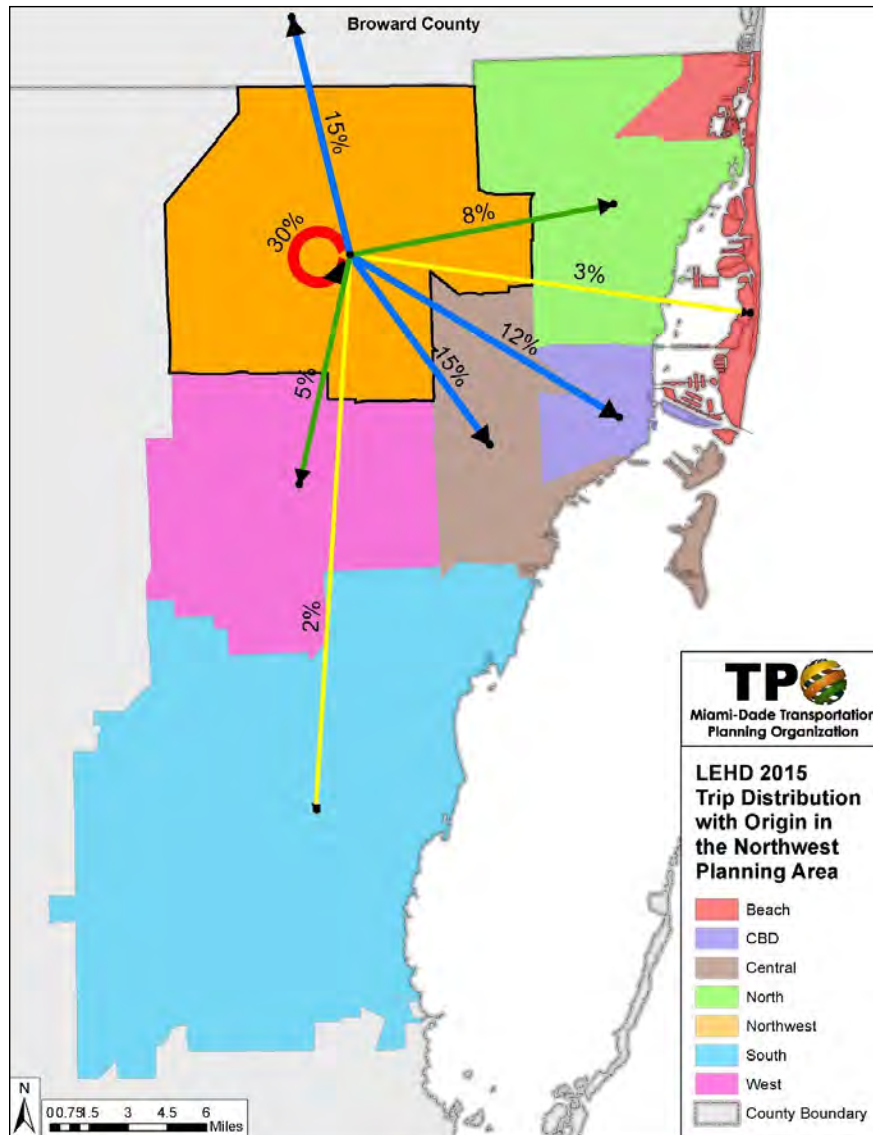
Travel Pattern for SERPM 2015 Data – From Northwest Transportation Planning Area



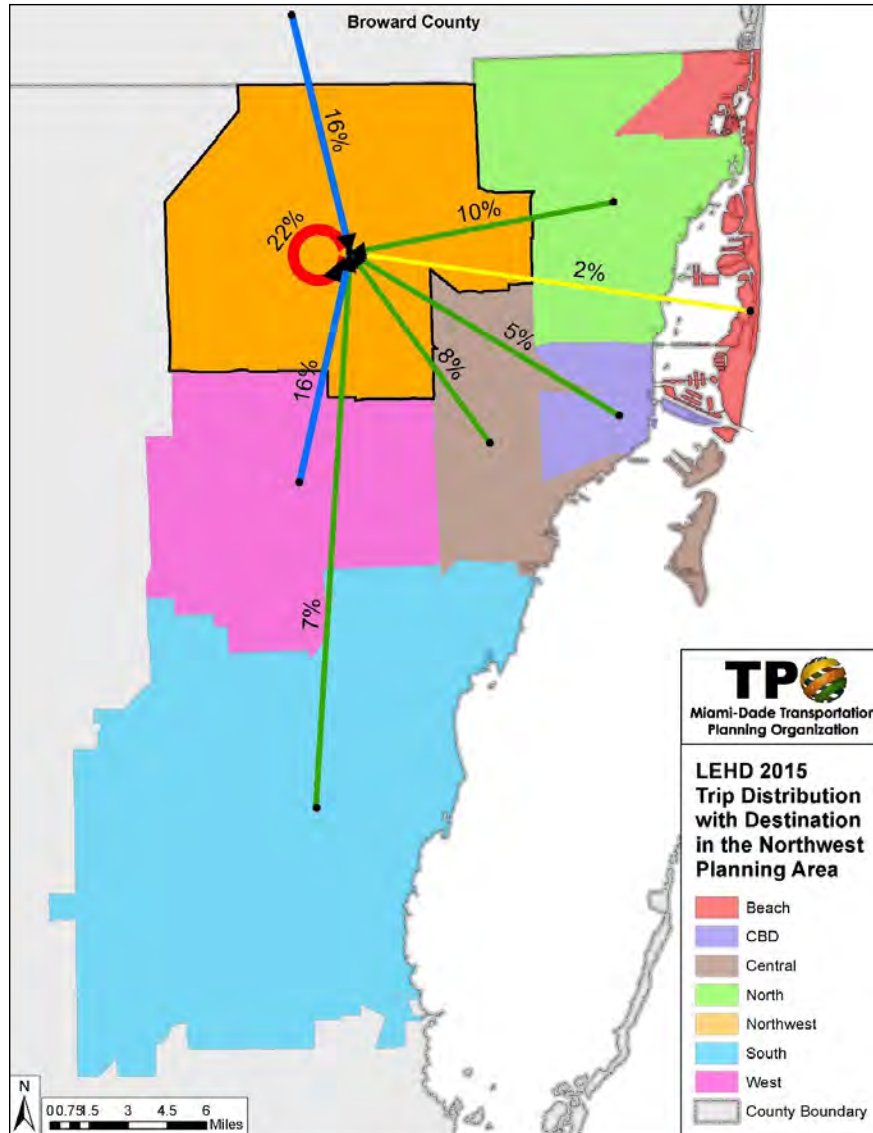
Travel Pattern for SERPM 2015 Data – To Northwest Transportation Planning Area



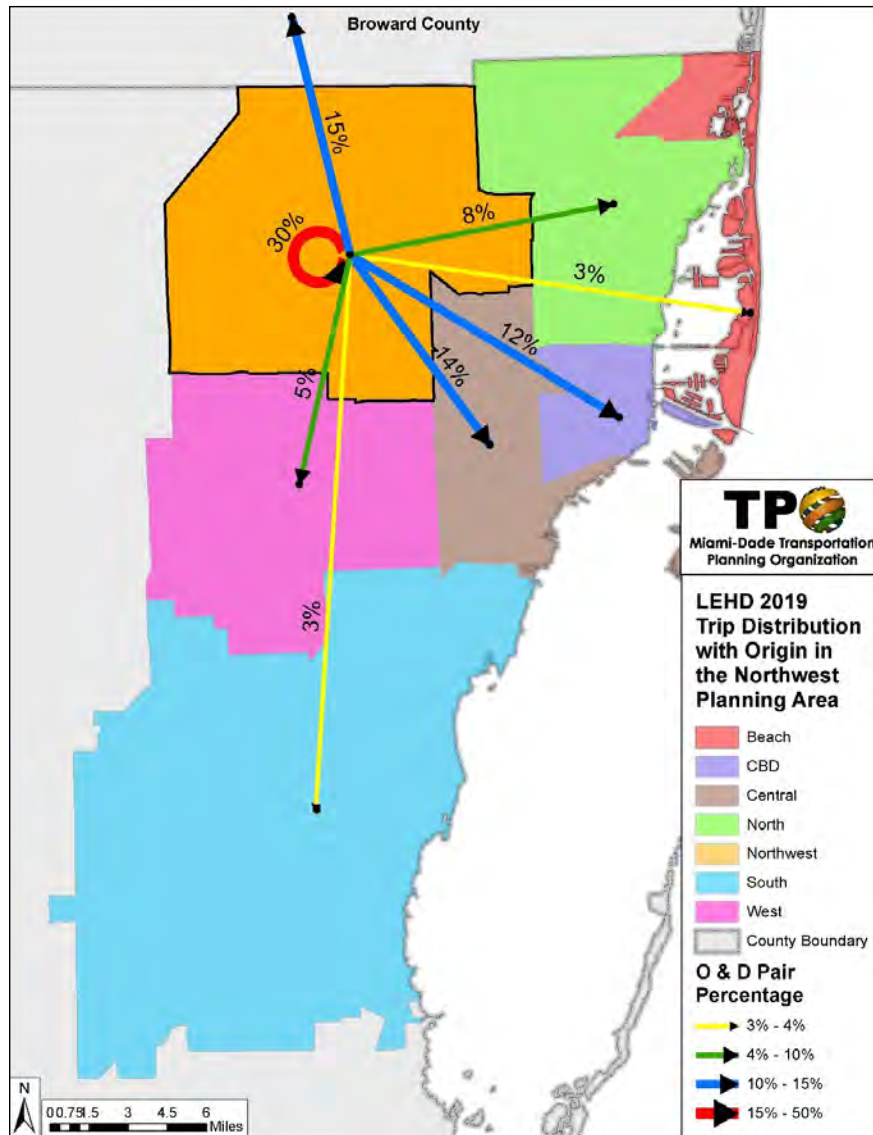
Travel Pattern for LEHD 2015 Data – From Northwest Transportation Planning Area



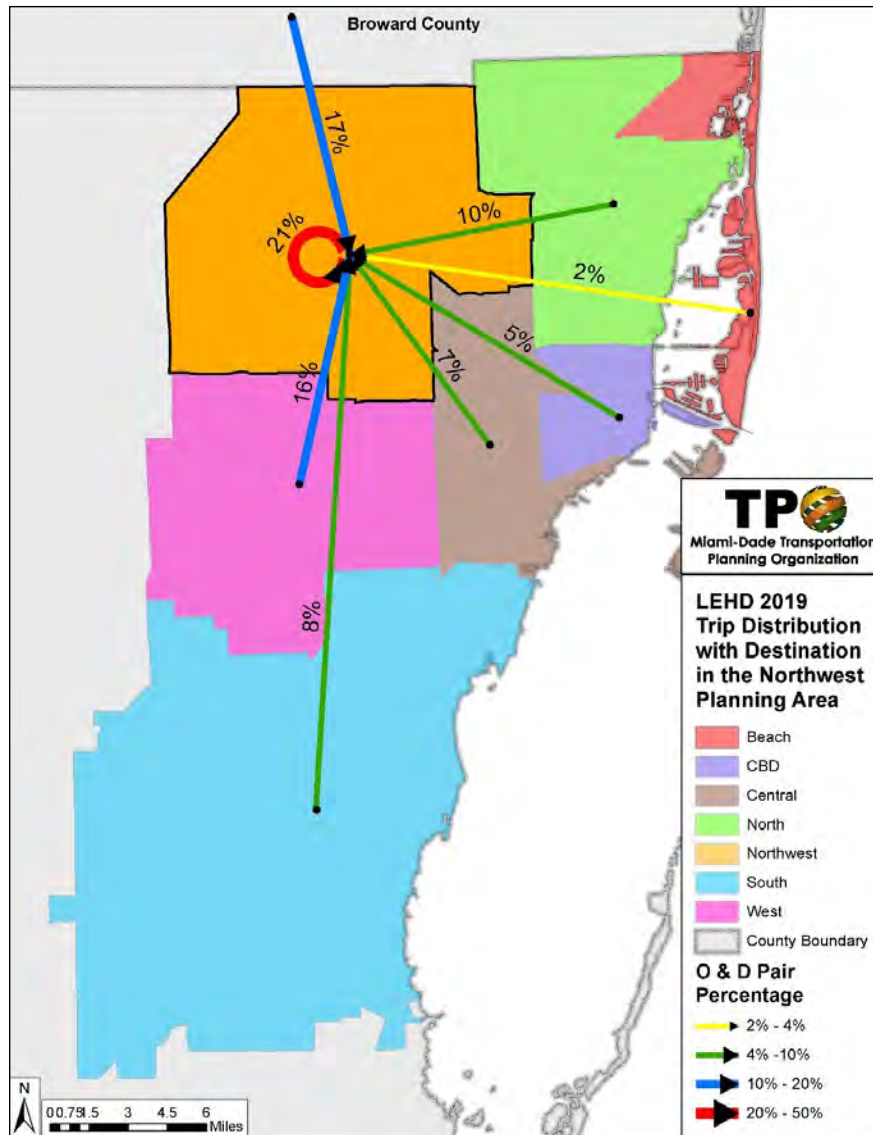
Travel Pattern for LEHD 2015 Data – To Northwest Transportation Planning Area



Travel Pattern for LEHD 2019 Data – From Northwest Transportation Planning Area

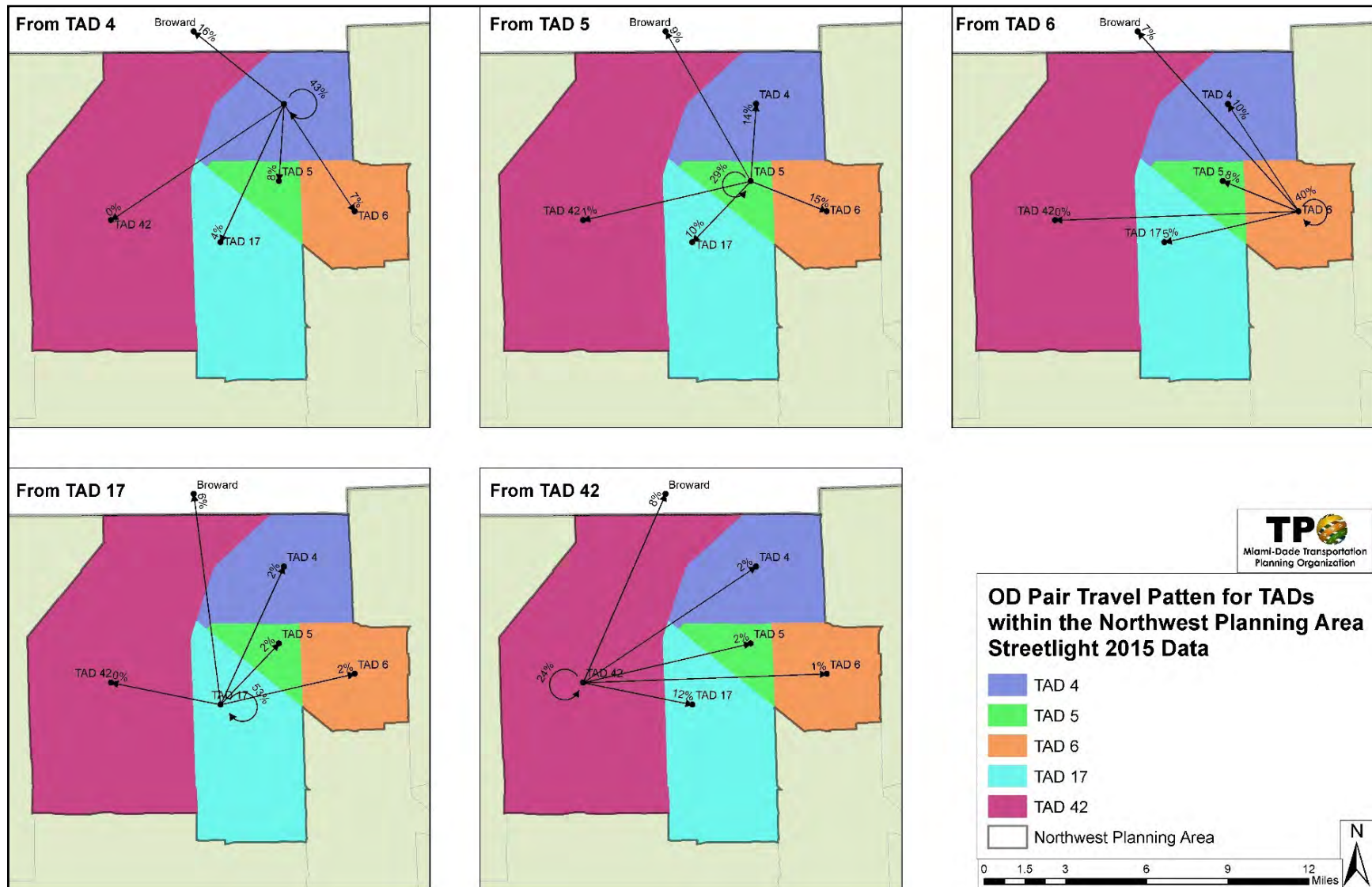


Travel Pattern for LEHD 2019 Data – To Northwest Transportation Planning Area

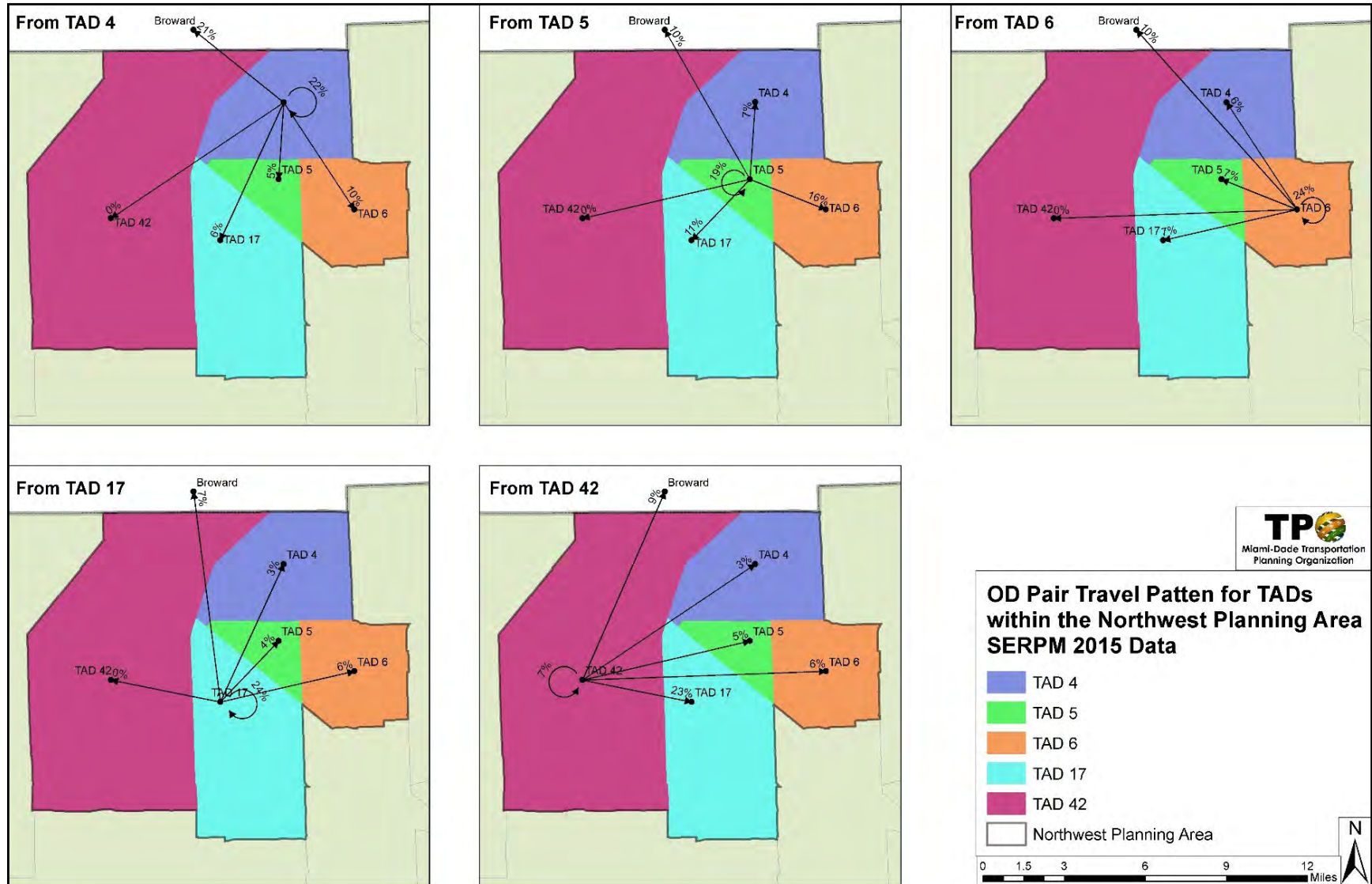


The following figures show the travel pattern and trip distribution by TAD within the Northwest Transportation Planning Area, including percentage of trips travel between different TADs, for the LBS data and the SERPM.

Travel Pattern for LBS 2015 Data – by TAD within Northwest Transportation Planning Area



Travel Pattern for SERPM 2015 Data – by TAD within Northwest Transportation Planning Area



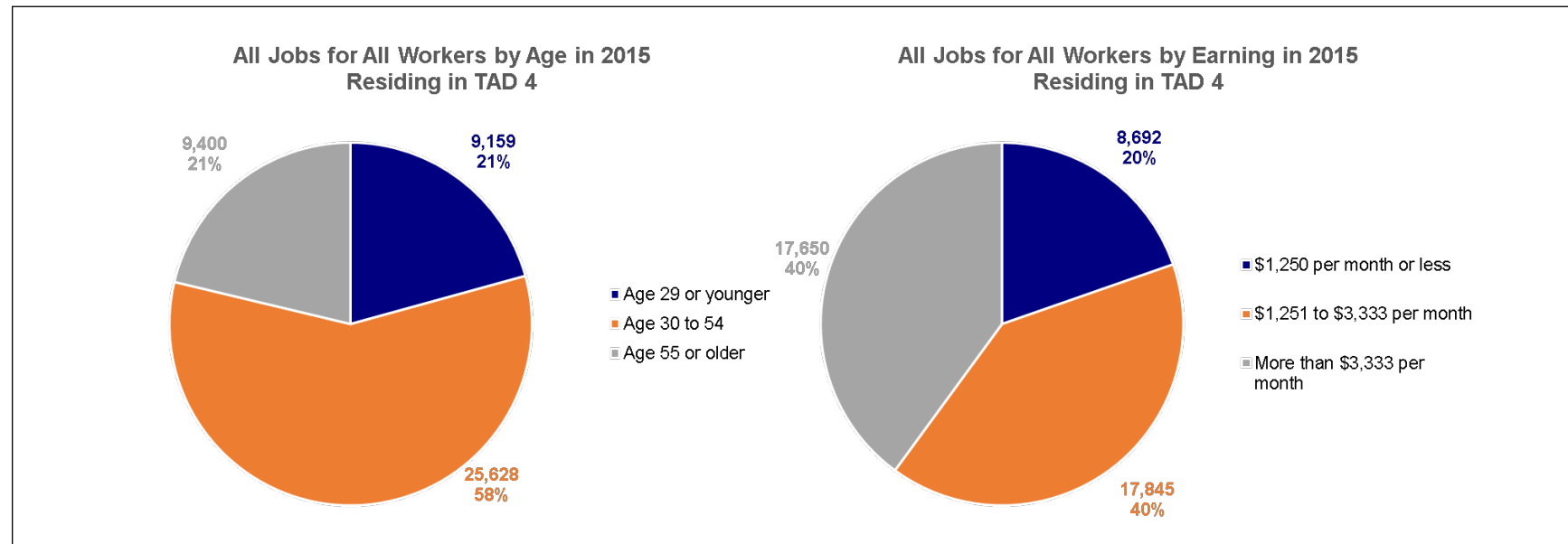
Appendix C – 2015 LEHD Workers Profile and Comparison to SERPM Data

For base year 2015, the LEHD data provides the work trip flow with respect to the Northwest Transportation Planning Area. The following table shows the number and percentage of work trips with an origin or a destination in the Northwest Transportation Planning Area. Of all trips related to the Northwest Transportation Planning Area, about half are inflow into the Northwest Transportation Planning Area from other areas and about 15% are internal within the Northwest Transportation Planning Area. The SERPM year 2015 data shows a slight difference, with 40% inflow and 20% internal. The future year SERPM 2045 estimates are about 40% inflow and 20% internal. With a lot of industrial land use, the Northwest Transportation Planning Area is expected to attract a majority of work trip.

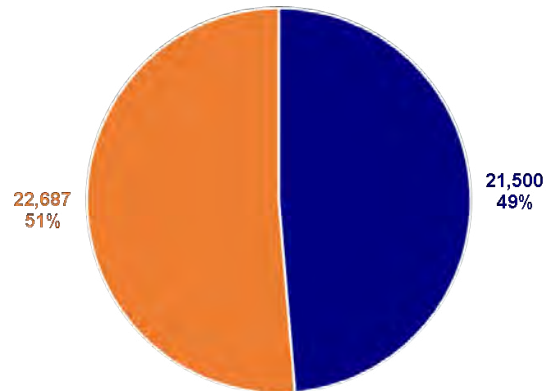
Work Trip Flow with Respect to the Northwest Transportation Planning Area

Work Trip Flow	LEHD		SERPM 2015		SERPM 2045	
Inflow to Northwest Transportation Planning Area	163,233	51.8%	88,207	40.4%	117,891	39.7%
Internal Northwest Transportation Planning Area	46,052	14.6%	41,678	19.1%	61,199	20.6%
Outflow from Northwest Transportation Planning Area	105,698	33.6%	88,207	40.4%	117,891	39.7%

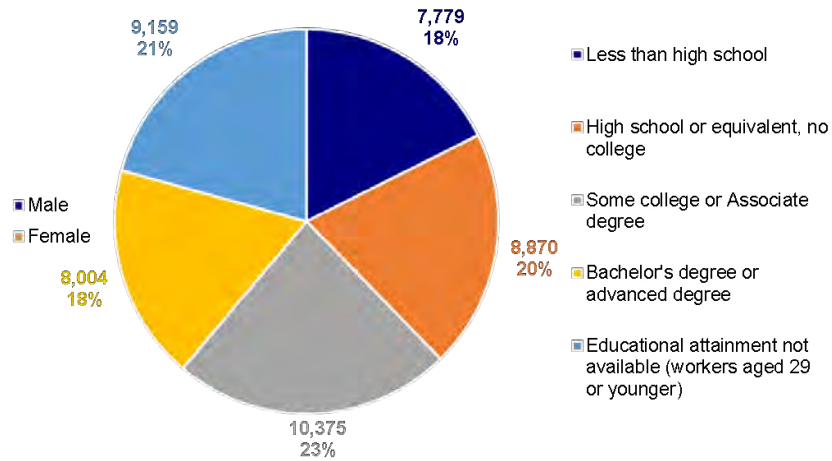
The following figures show the additional LEHD data by TAD within the Northwest Transportation Planning Area, including the number of workers by age, earning, gender, and educational background, residing in each of the TADs and working in each of the TADs, respectively.



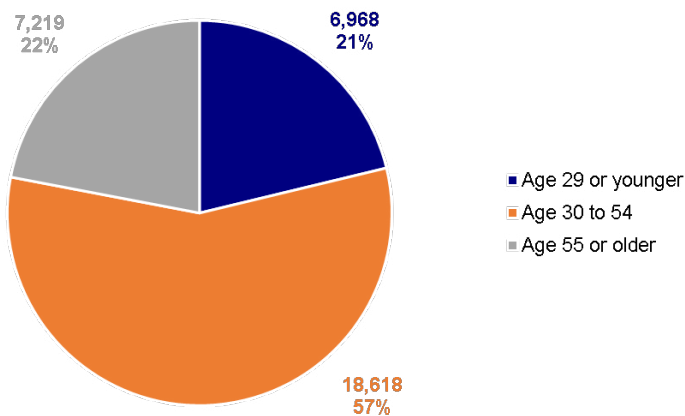
**All Jobs for All Workers by Worker Sex in 2015
Residing in TAD 4**



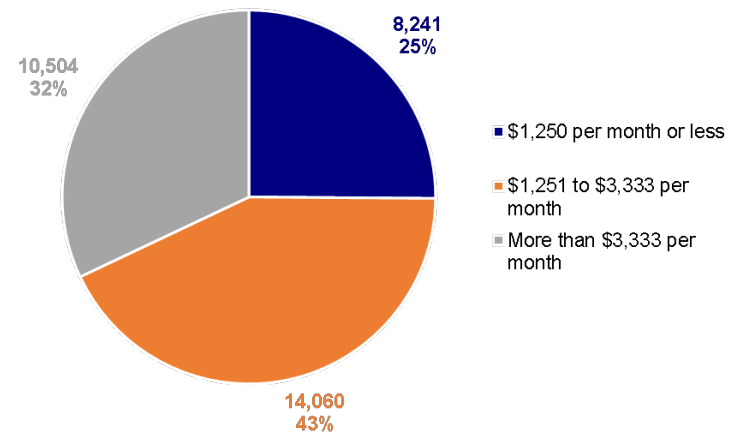
**All Jobs for All Workers by Worker Education in 2015
Residing in TAD 4**



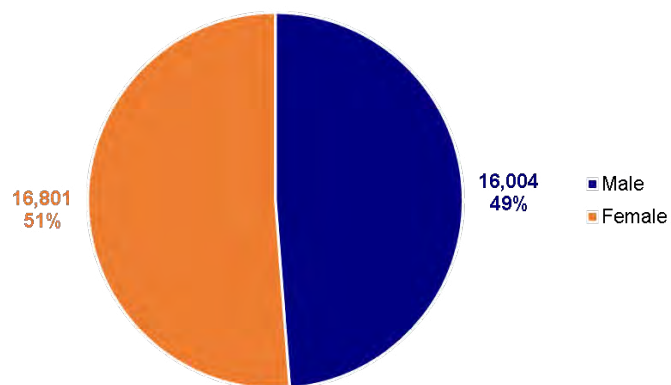
**All Jobs for All Workers by Age in 2015
Employed in TAD 4**



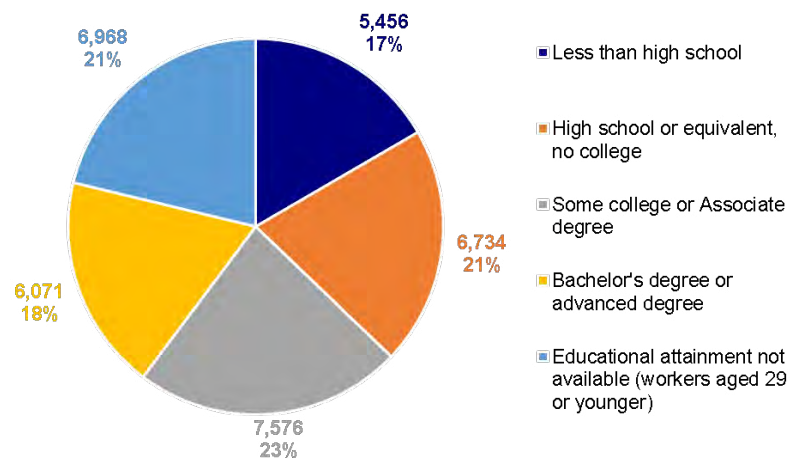
**All Jobs for All Workers by Earning in 2015
Employed in TAD 4**



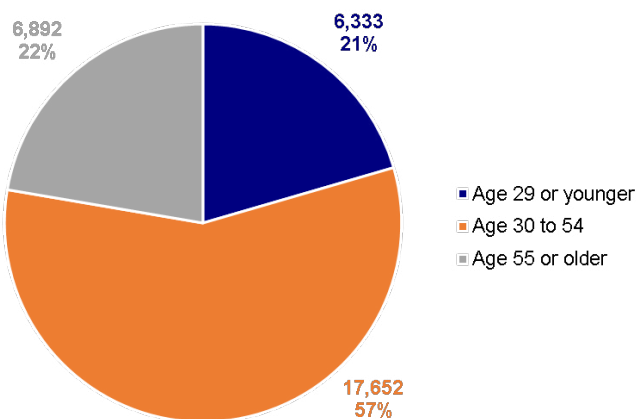
**All Jobs for All Workers by Worker Sex in 2015
Employed in TAD 4**



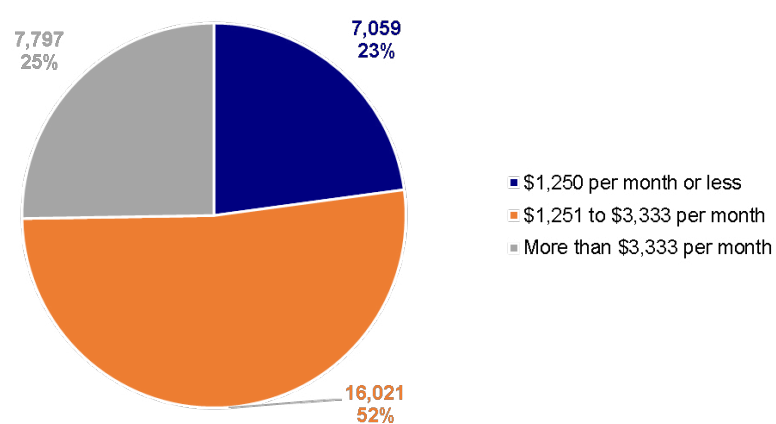
**All Jobs for All Workers by Worker Education in 2015
Employed in TAD 4**



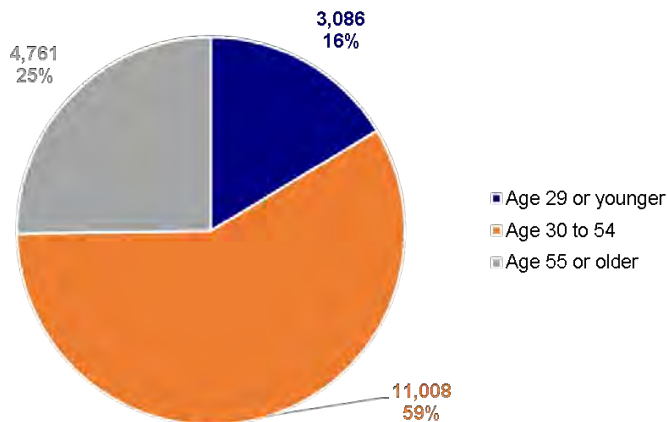
**All Jobs for All Workers by Age in 2015
Residing in TAD 5**



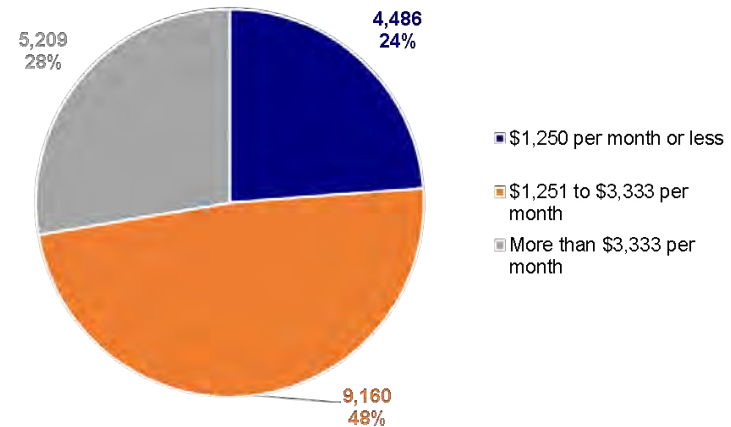
**All Jobs for All Workers by Earning in 2015
Residing in TAD 5**



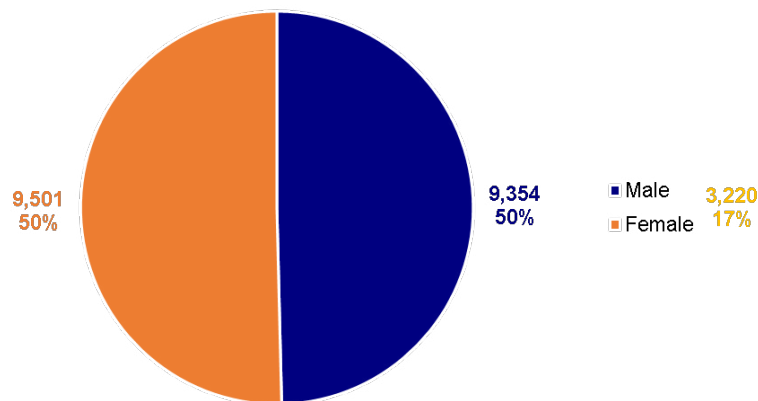
**All Jobs for All Workers by Age in 2015
Employed in TAD 5**



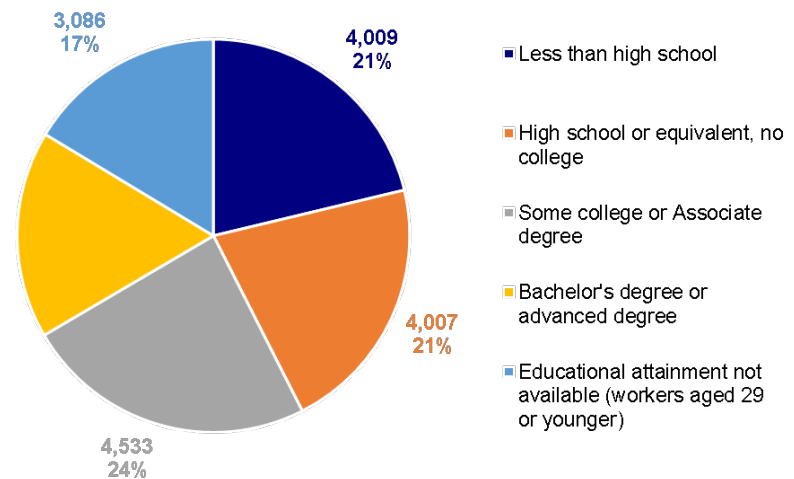
**All Jobs for All Workers by Earning in 2015
Employed in TAD 5**



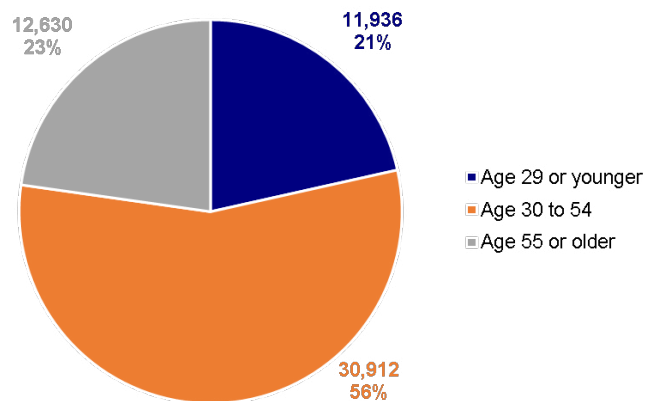
**All Jobs for All Workers by Worker Sex in 2015
Employed in TAD 5**



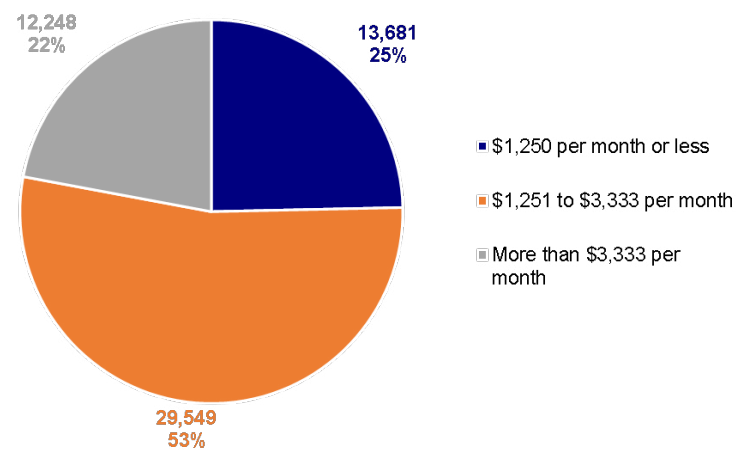
**All Jobs for All Workers by Worker Education in 2015
Employed in TAD 5**



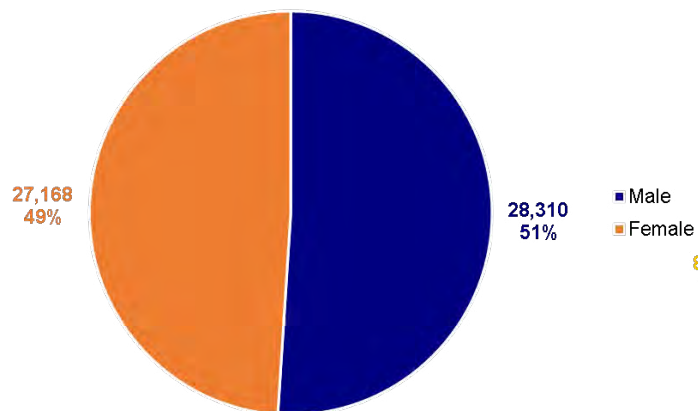
**All Jobs for All Workers by Age in 2015
Residing in TAD 6**



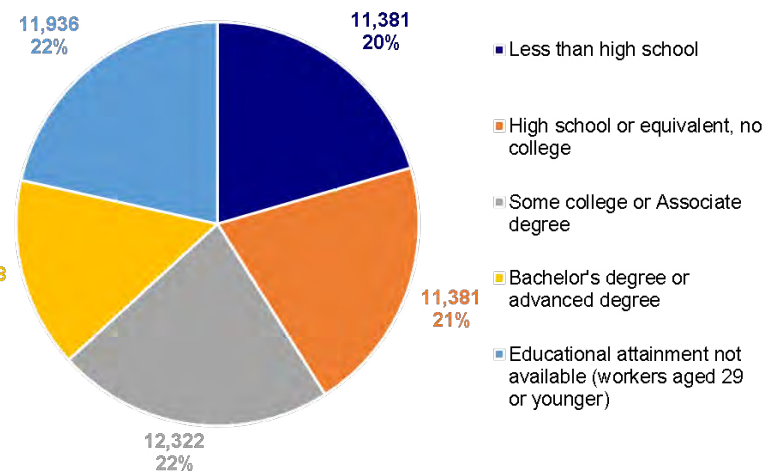
**All Jobs for All Workers by Earning in 2015
Residing in TAD 6**



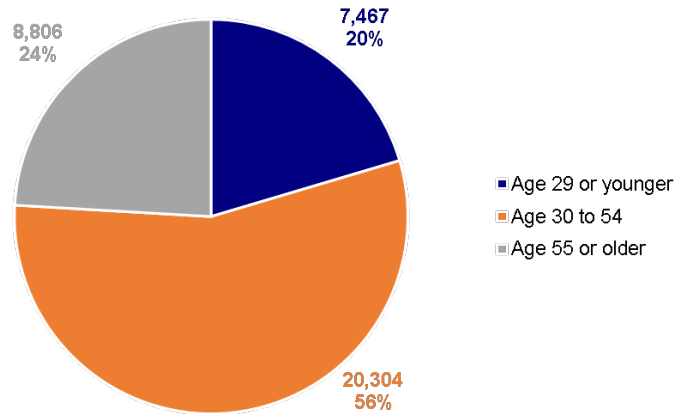
**All Jobs for All Workers by Worker Sex in 2015
Residing in TAD 6**



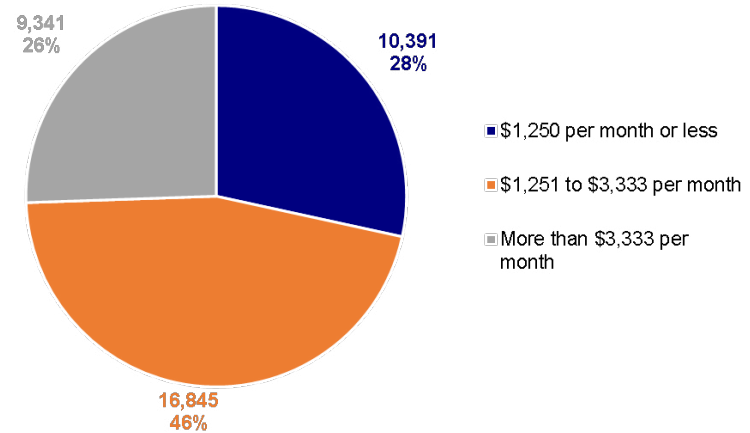
**All Jobs for All Workers by Worker Education in 2015
Residing in TAD 6**



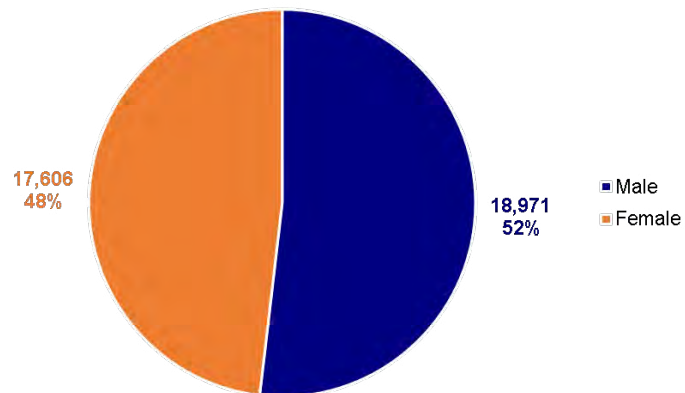
**All Jobs for All Workers by Age in 2015
Employed in TAD 6**



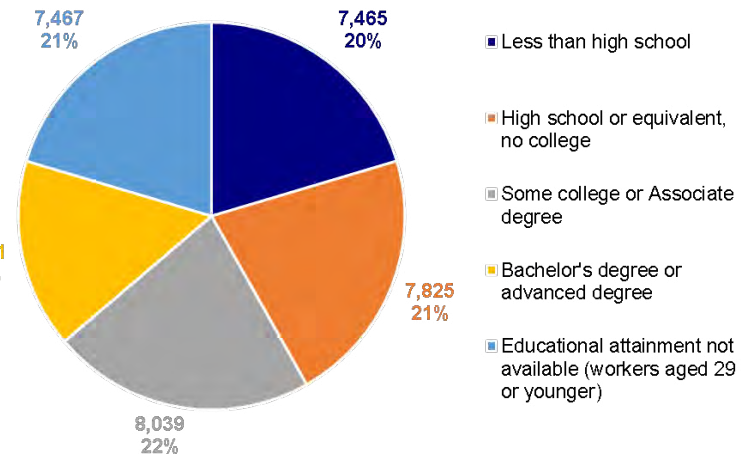
**All Jobs for All Workers by Earning in 2015
Employed in TAD 6**



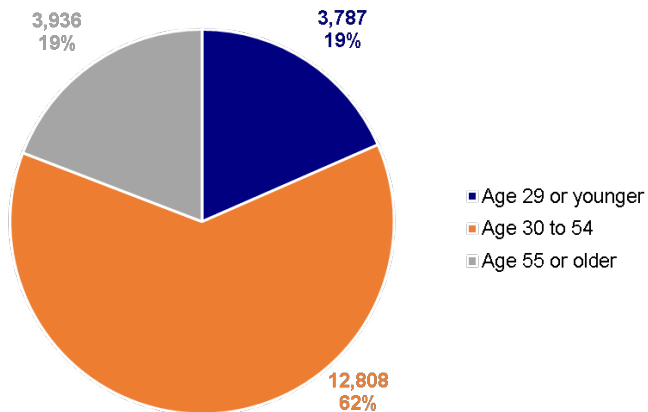
**All Jobs for All Workers by Worker Sex in 2015
Employed in TAD 6**



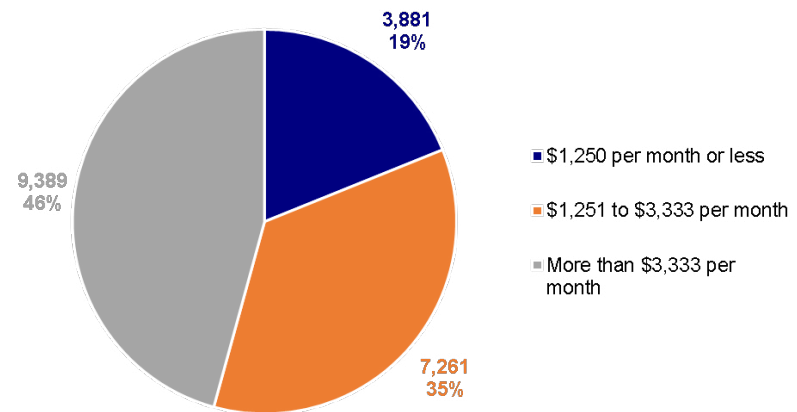
**All Jobs for All Workers by Worker Education in 2015
Employed in TAD 6**



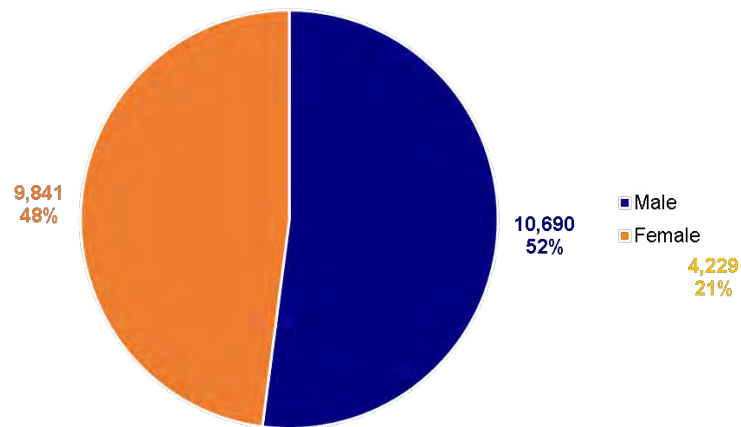
**All Jobs for All Workers by Age in 2015
Residing in TAD 17**



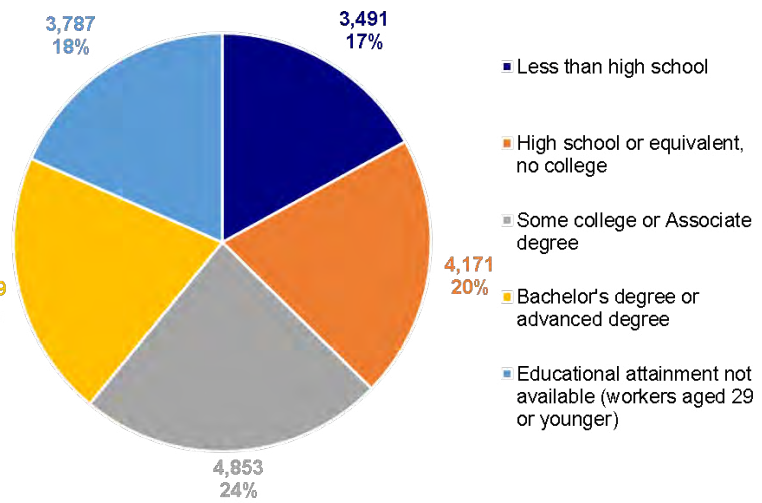
**All Jobs for All Workers by Earning in 2015
Residing in TAD 17**



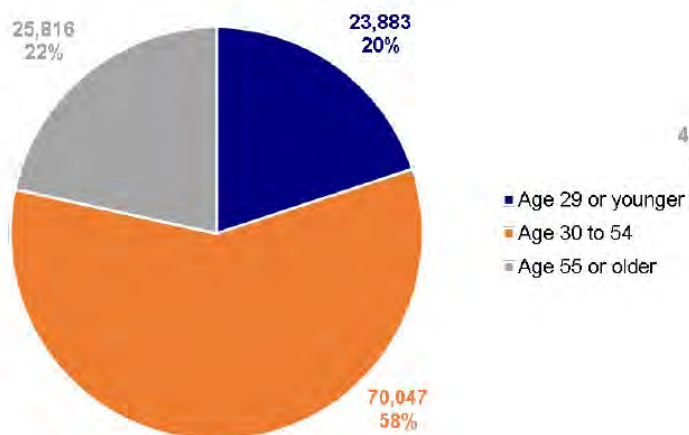
**All Jobs for All Workers by Worker Sex in 2015
Residing in TAD 17**



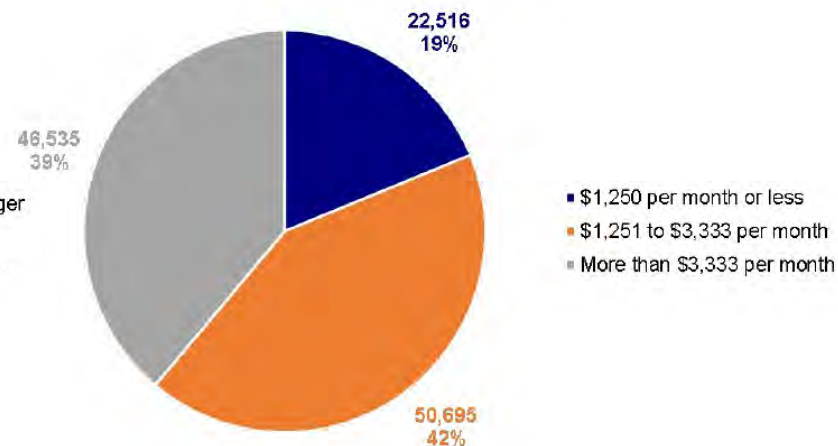
**All Jobs for All Workers by Worker Education in 2015
Residing in TAD 17**



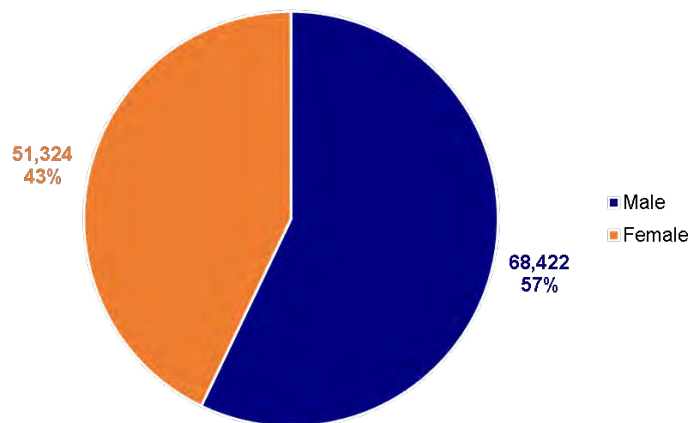
**All Jobs for All Workers by Age in 2015
Employed in TAD 17**



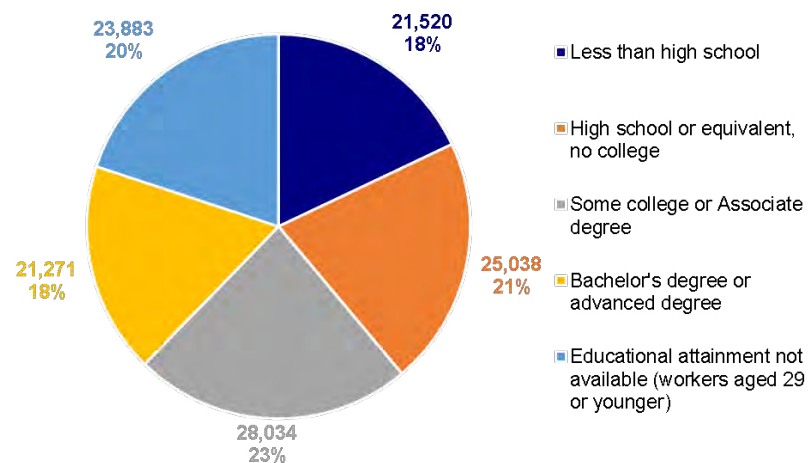
**All Jobs for All Workers by Earning in 2015
Employed in TAD 17**



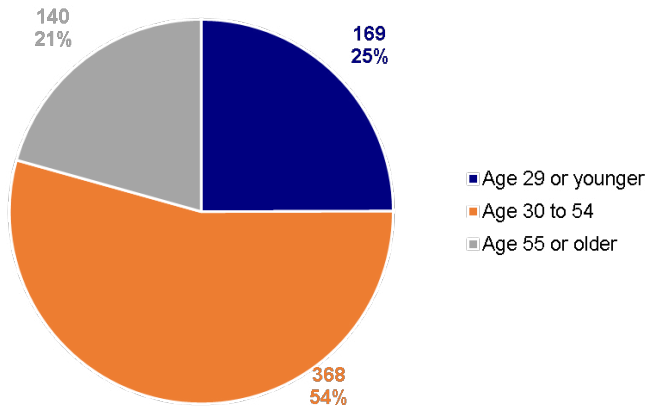
**All Jobs for All Workers by Worker Sex in 2015
Employed in TAD 17**



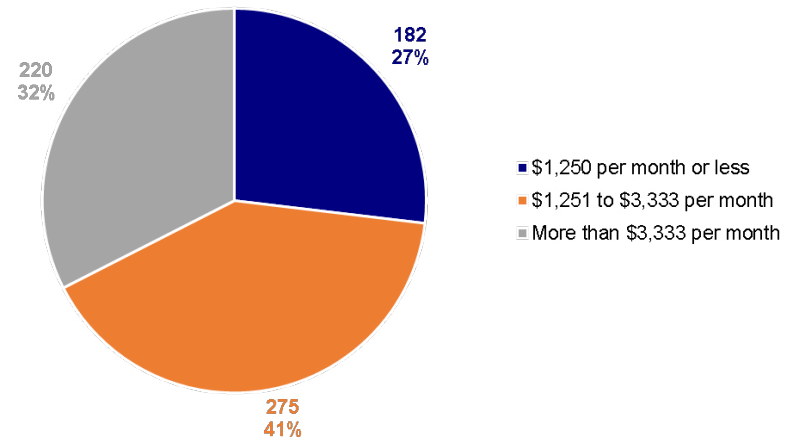
**All Jobs for All Workers by Worker Education in 2015
Employed in TAD 17**



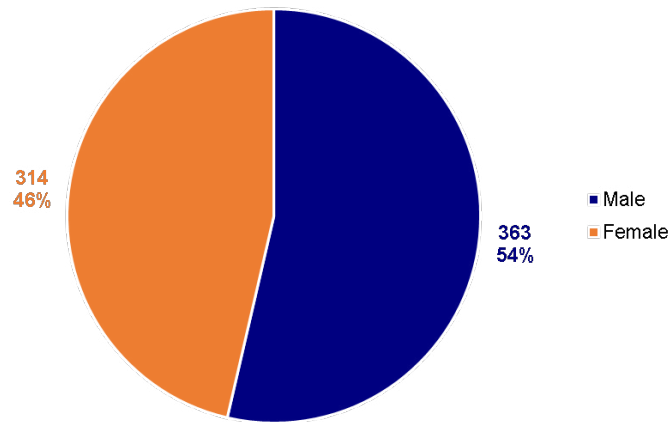
**All Jobs for All Workers by Age in 2015
Residing in TAD 42**



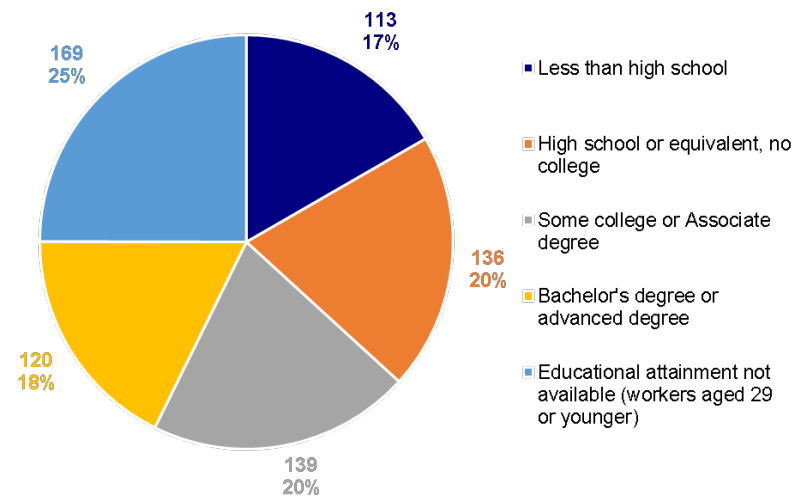
**All Jobs for All Workers by Earning in 2015
Residing in TAD 42**



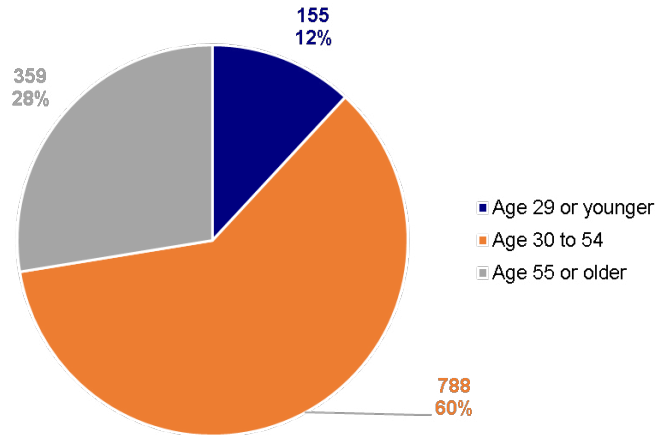
**All Jobs for All Workers by Worker Sex in 2015
Residing in TAD 42**



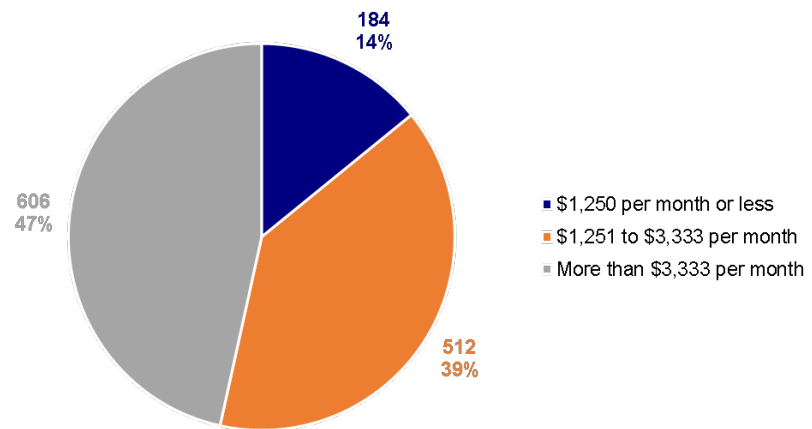
**All Jobs for All Workers by Worker Education in 2015
Residing in TAD 42**



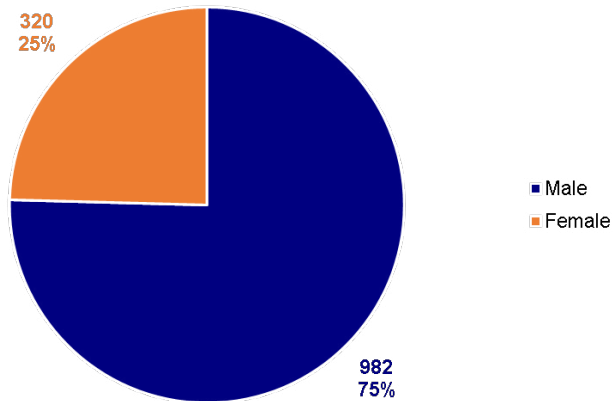
**All Jobs for All Workers by Age in 2015
Employed in TAD 42**



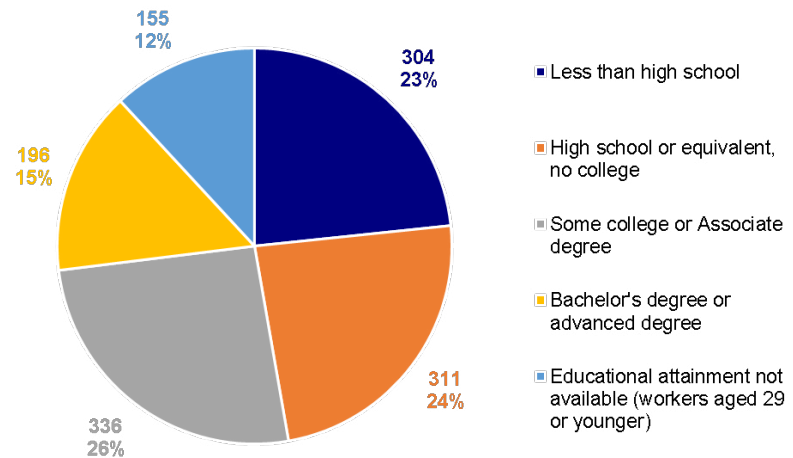
**All Jobs for All Workers by Earning in 2015
Employed in TAD 42**



**All Jobs for All Workers by Worker Sex in 2015
Employed in TAD 42**



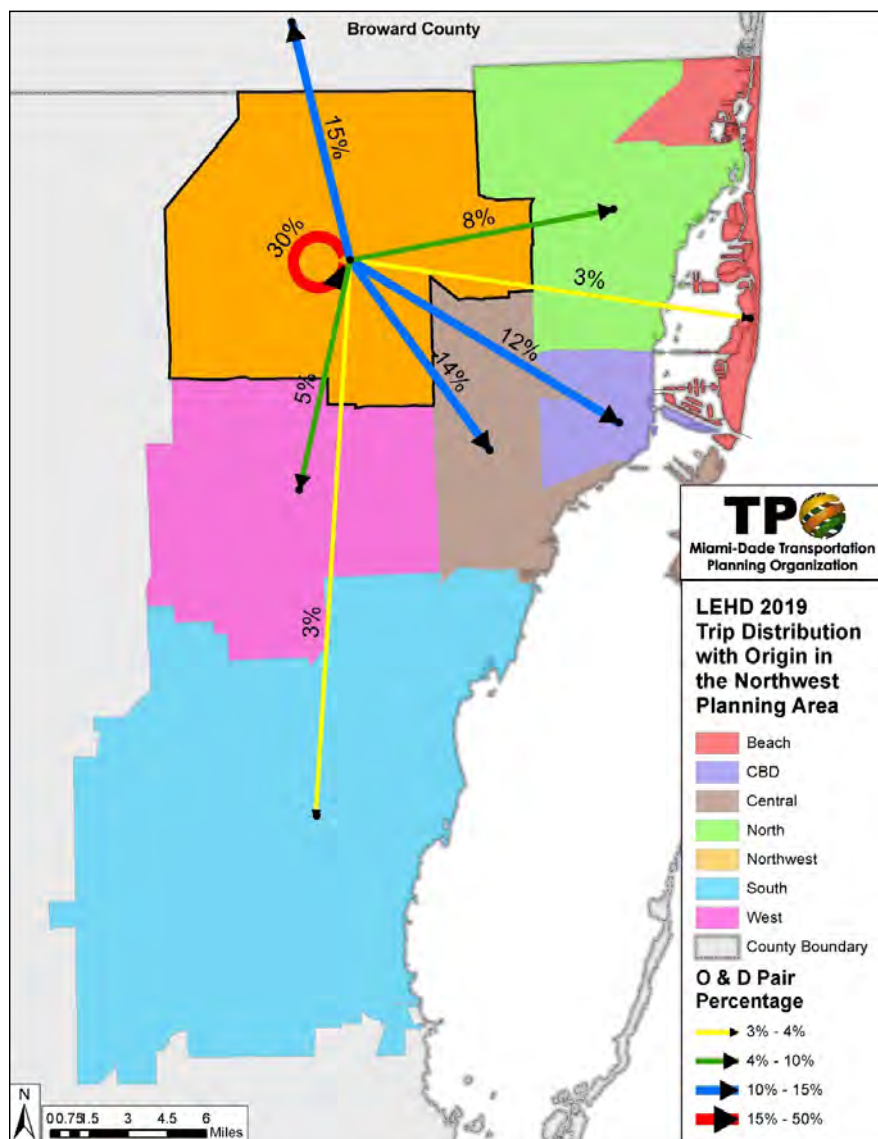
**All Jobs for All Workers by Worker Education in 2015
Employed in TAD 42**

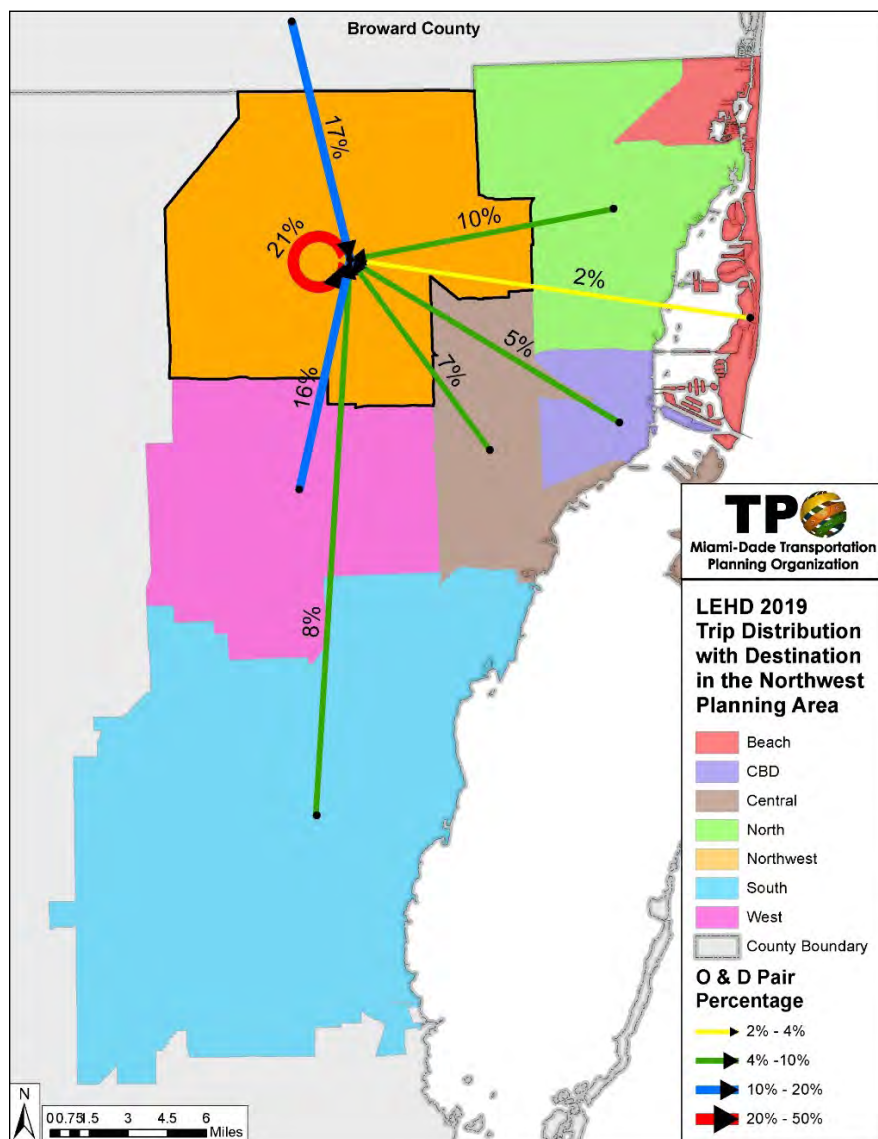


Appendix D – 2019 LEHD Data Travel Patterns

Work Trip for NW Planning Area in 2019







Planning Area	Year 2019 LEHD			
	From NW		To NW	
Beach	4,450	3%	4,770	2%
CBD	19,670	12%	11,590	5%
Central	23,390	14%	17,370	7%
North	12,510	8%	23,520	10%
Internal	49,170	30%	50,140	21%
South	4,150	3%	18,150	8%
West	8,510	5%	36,600	16%
Broward	24,020	15%	40,870	17%
Other	17,540	10%	33,840	14%

Appendix E – NW 107th Avenue Select Link Analysis

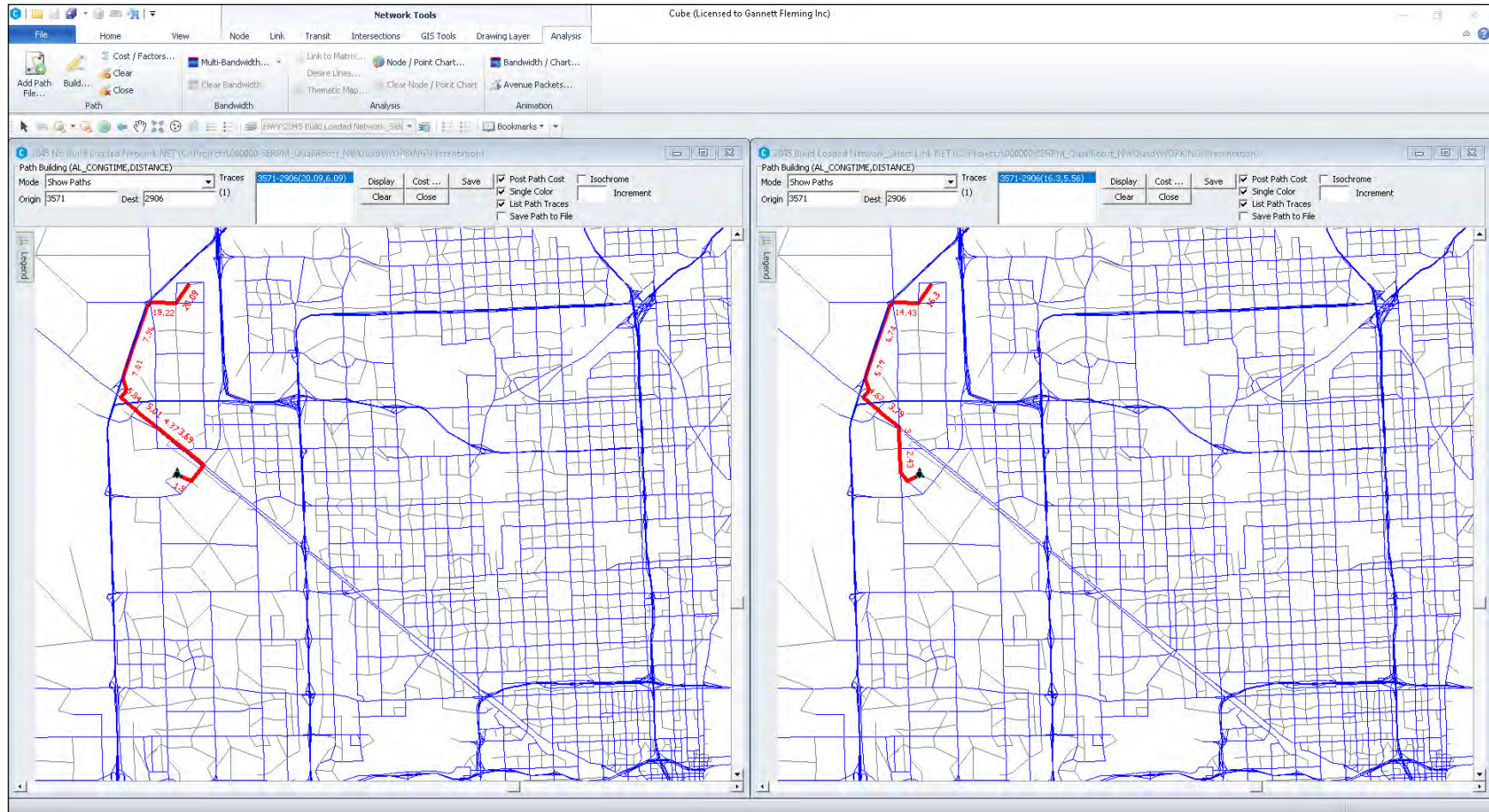
The top 10 origin-destination pairs that using the NW 107th Avenue were evaluated. Travel time and distance for the path of these origin-destination pairs were compared between the 2045 No-Build alternative and the 2045 Build alternative. For the Build alternative, there is time saving for these 10 origin-destination pairs with an average time saving of about 2.32 minute or 13%. The travel distance for the Build alternative for these 5 origin-destination pairs is about 0.55 mile or 7% less compared to the No-Build alternative. The following table lists the time savings and distance differences for these 10 origin-destination pairs.

Time and Distance Savings for the Top Origin-Destination Pairs using the NW 107th Ave between the 2045 No-Build and Build Alternatives

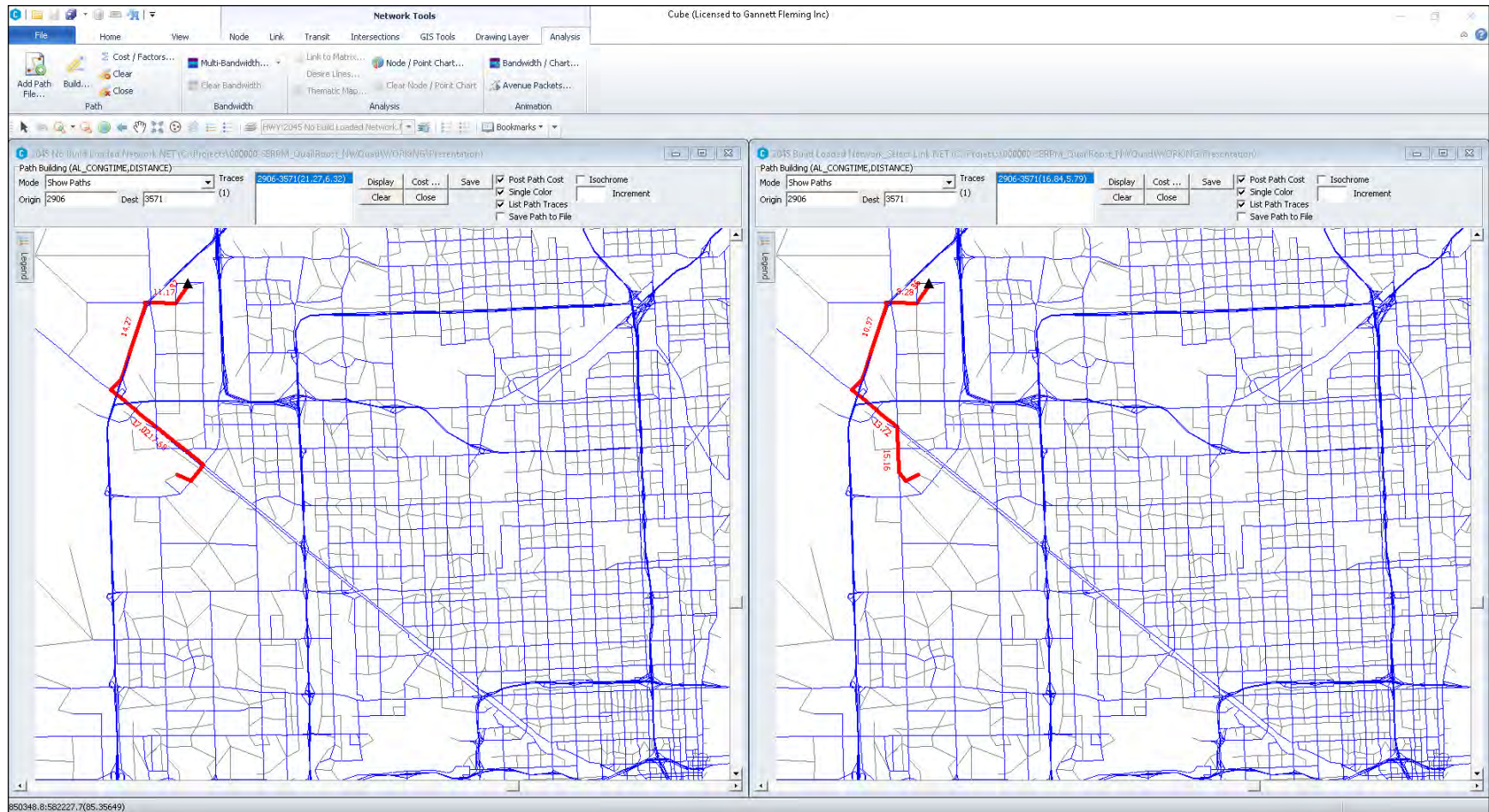
TAZ		Time (min)				Distance (mi)			
From	To	2045 No Build	2045 Build	Savings		2045 No Build	2045 Build	Difference	
3571	2906	20.09	16.30	3.79	18.9%	6.09	5.56	(0.53)	-8.7%
2906	3571	21.27	16.84	4.43	20.8%	6.32	5.79	(0.53)	-8.4%
3569	3731	15.80	15.11	0.69	4.4%	10.07	8.70	(1.37)	-13.6%
3577	3569	9.51	6.93	2.58	27.1%	3.74	2.51	(1.23)	-32.9%
3586	2906	22.43	19.93	2.50	11.1%	8.95	8.95	-	0.0%
3570	3731	14.50	14.74	(0.24)	-1.7%	9.77	9.77	-	0.0%
3587	2906	24.06	21.56	2.50	10.4%	9.29	9.29	-	0.0%
3216	3731	15.49	15.66	(0.17)	-1.1%	10.10	10.10	-	0.0%
3569	3577	9.34	6.77	2.57	27.5%	3.74	2.51	(1.23)	-32.9%
2906	3586	23.40	20.20	3.20	13.7%	9.49	9.49	-	0.0%

The following figures show the shortest path for these 10 origin-destination pairs between the 2045 No-Build alternative and the 2045 Build alternative.

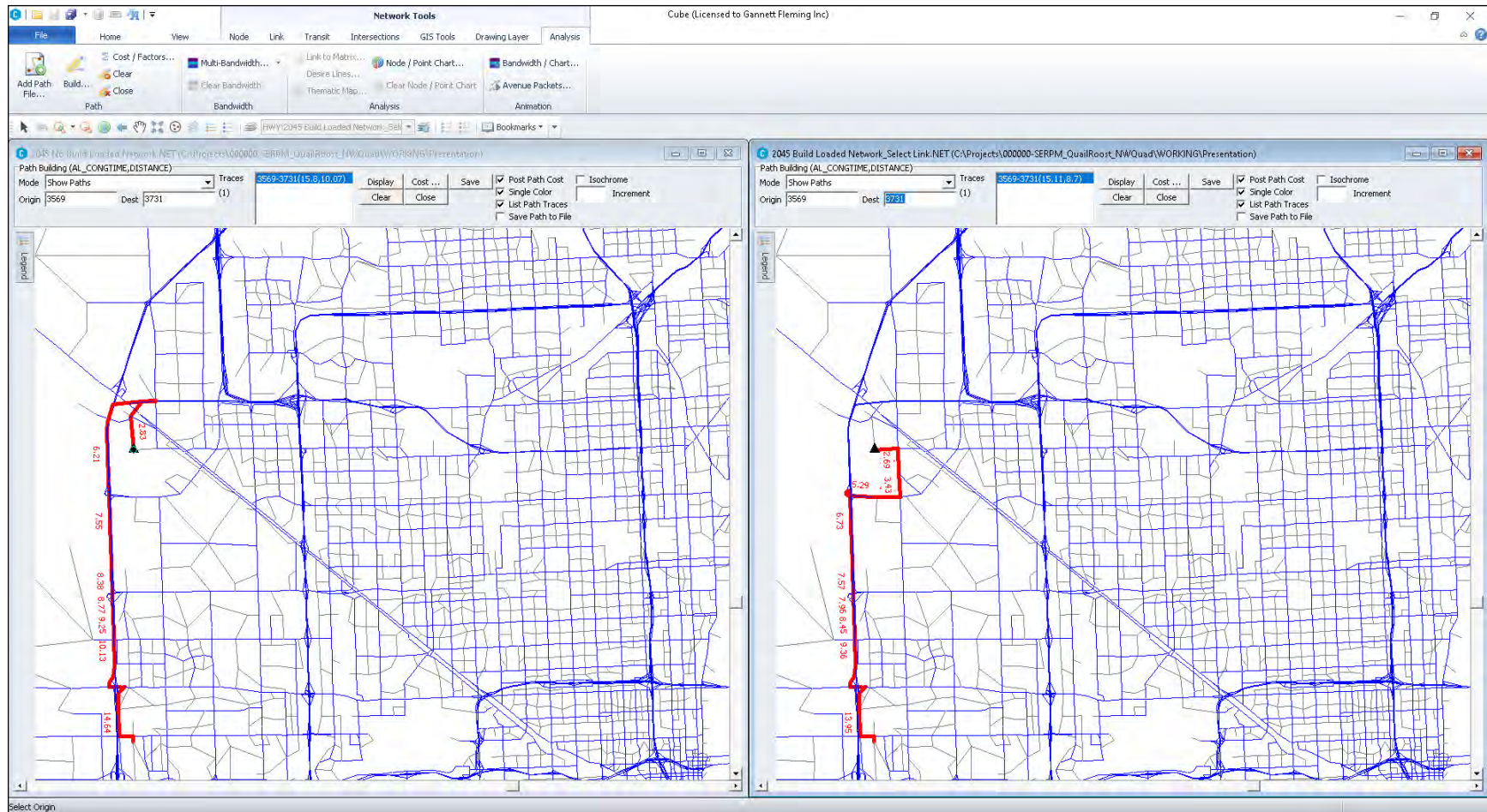
Origin-Destination Pair 3571-2906 Path for the 2045 No-Build Alternative and the 2045 Build Alternative



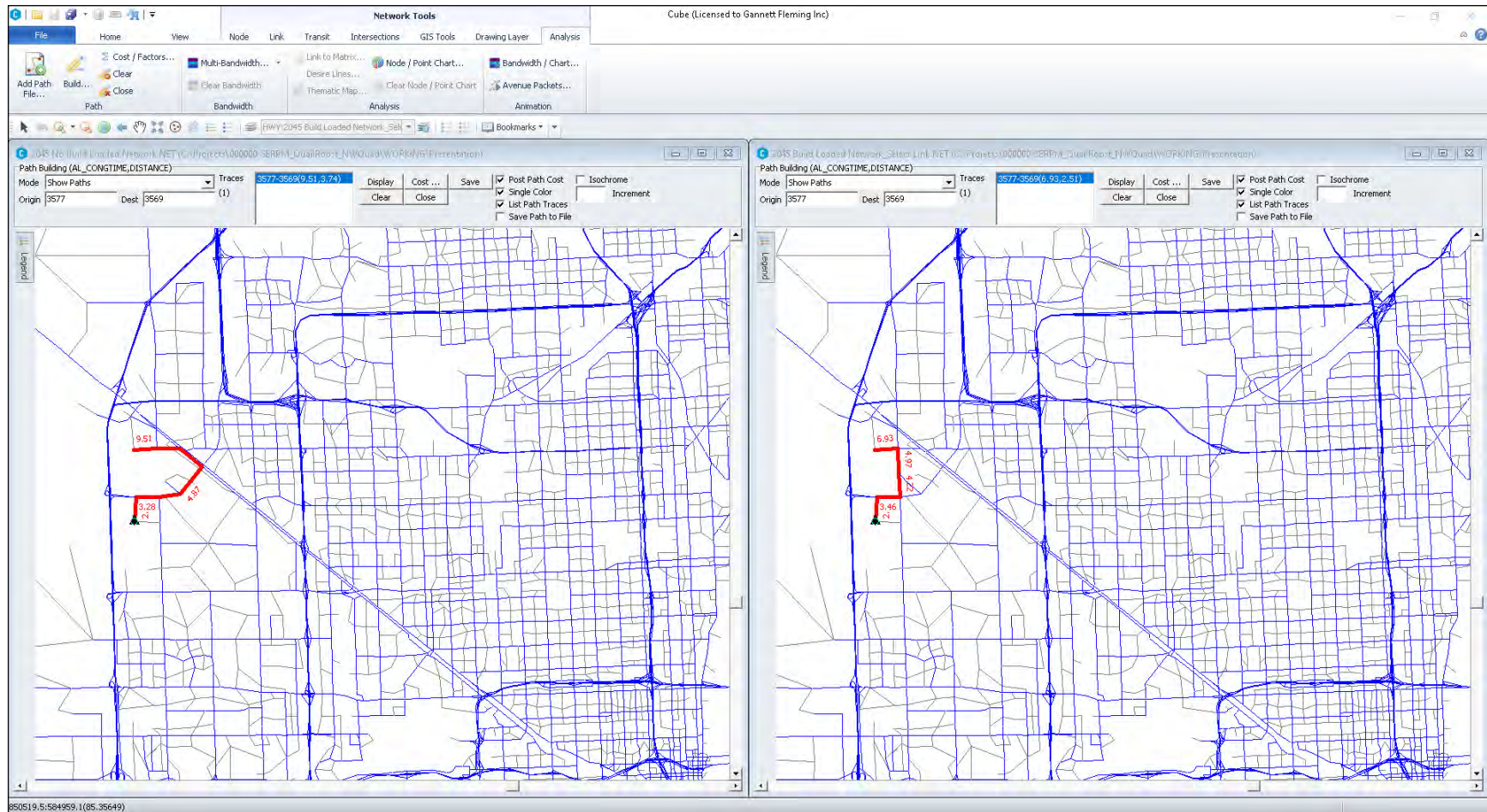
Origin-Destination Pair 2906-3571 Path for the 2045 No-Build Alternative and the 2045 Build Alternative



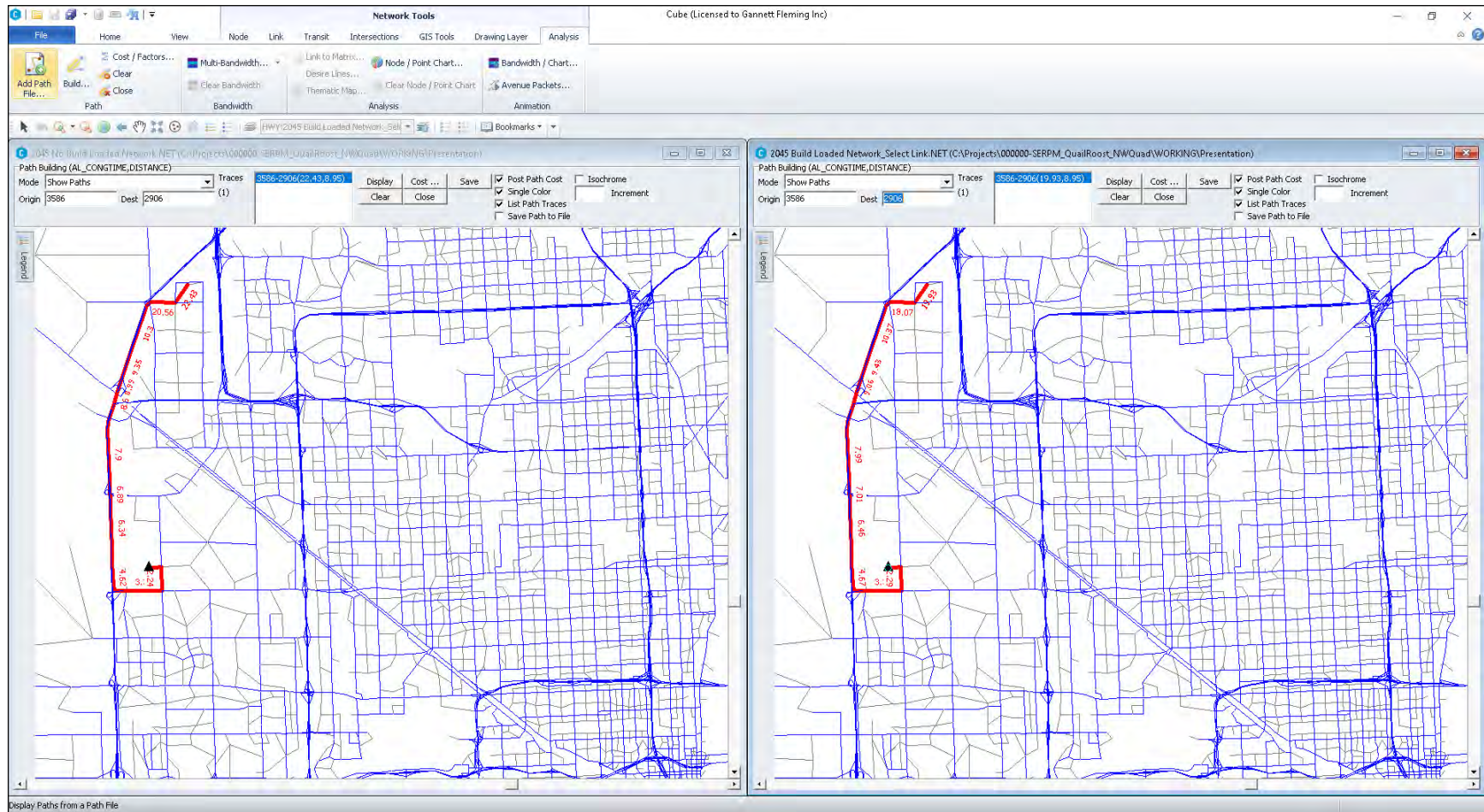
Origin-Destination Pair 3569-3731 Path for the 2045 No-Build Alternative and the 2045 Build Alternative



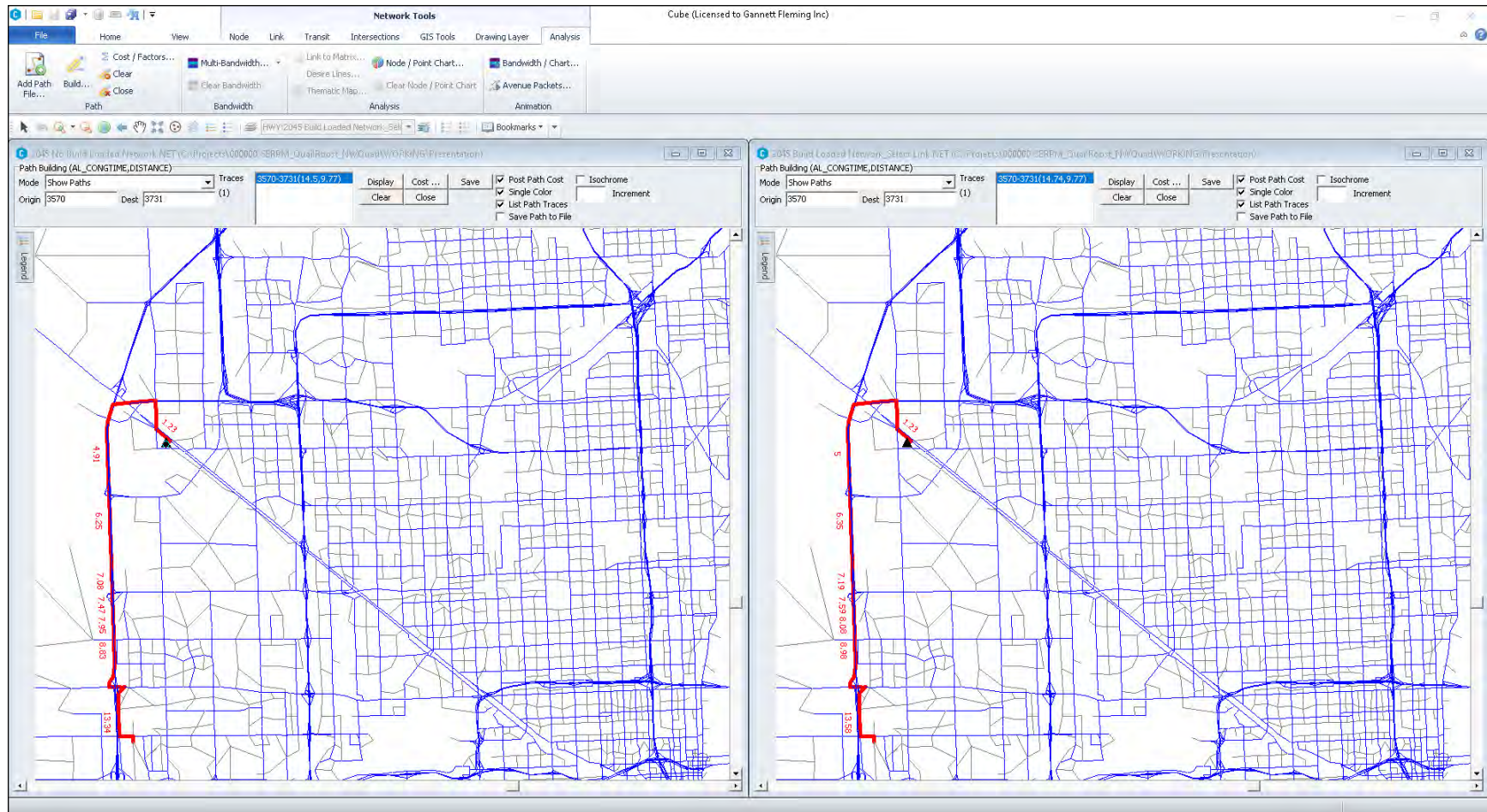
Origin-Destination Pair 3577-3569 Path for the 2045 No-Build Alternative and the 2045 Build Alternative



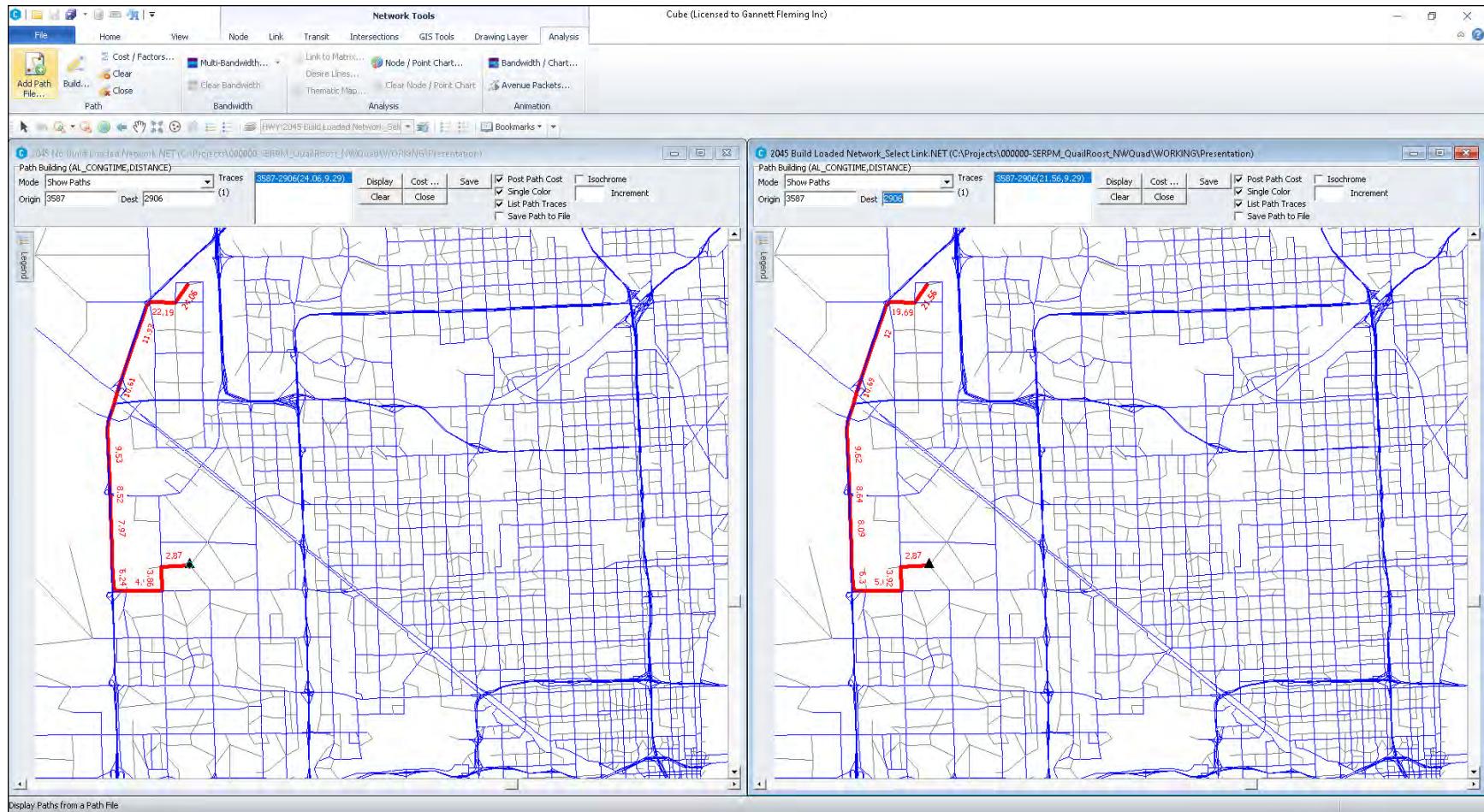
Origin-Destination Pair 3586-2906 Path for the 2045 No-Build Alternative and the 2045 Build Alternative



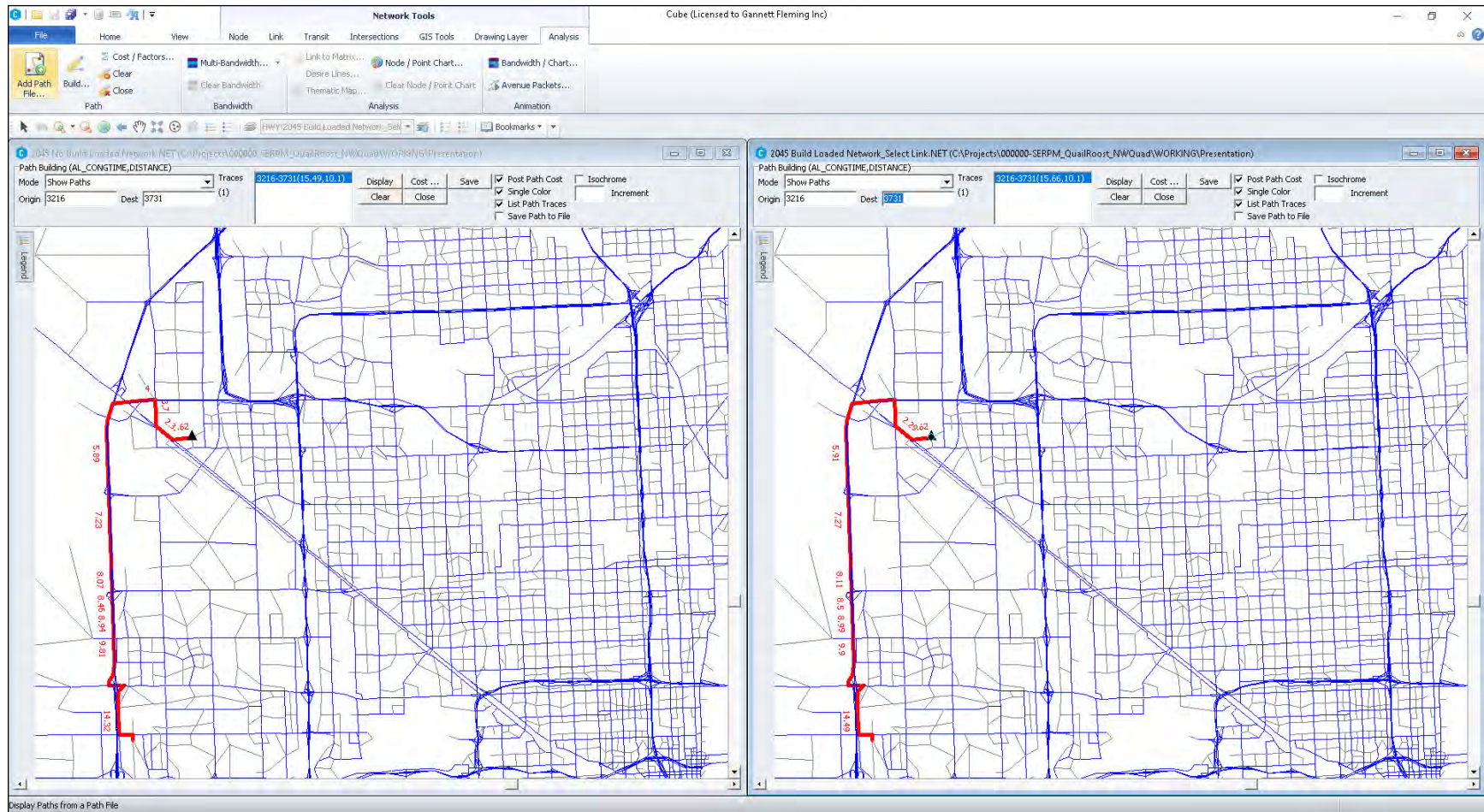
Origin-Destination Pair 3570-3731 Path for the 2045 No-Build Alternative and the 2045 Build Alternative



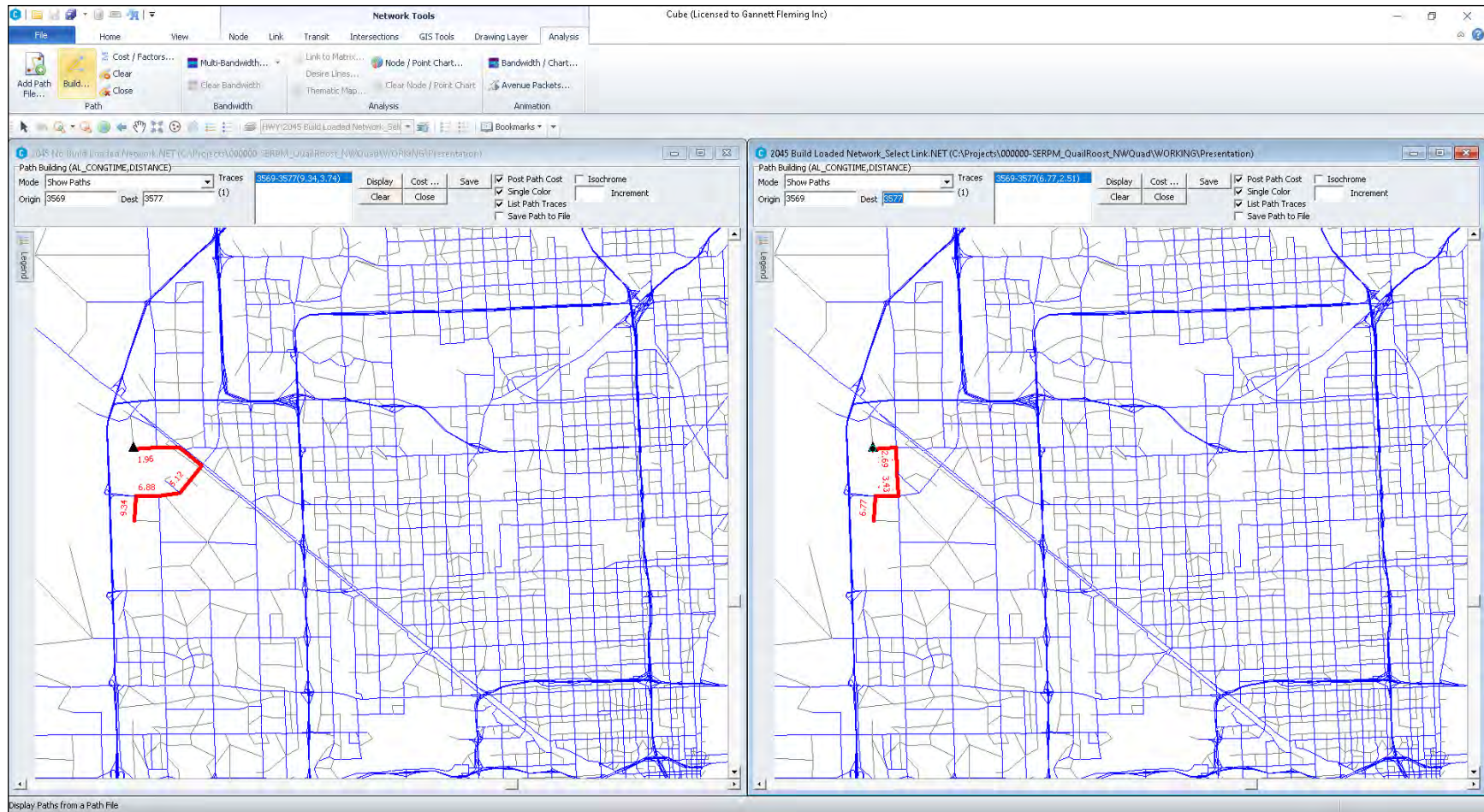
Origin-Destination Pair 3587-2906 Path for the 2045 No-Build Alternative and the 2045 Build Alternative



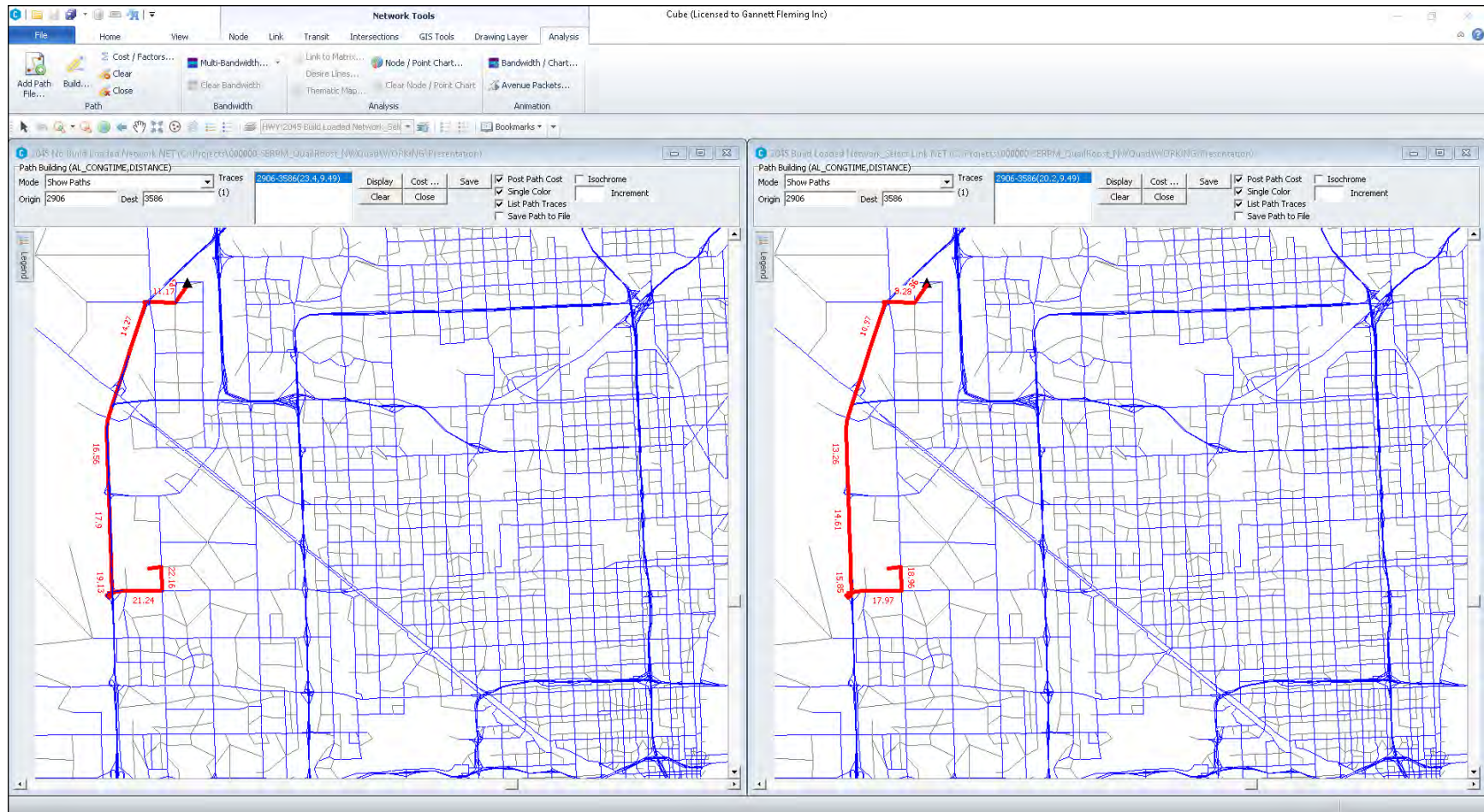
Origin-Destination Pair 3216-3731 Path for the 2045 No-Build Alternative and the 2045 Build Alternative



Origin-Destination Pair 3569-3577 Path for the 2045 No-Build Alternative and the 2045 Build Alternative



Origin-Destination Pair 2906-3586 Path for the 2045 No-Build Alternative and the 2045 Build Alternative

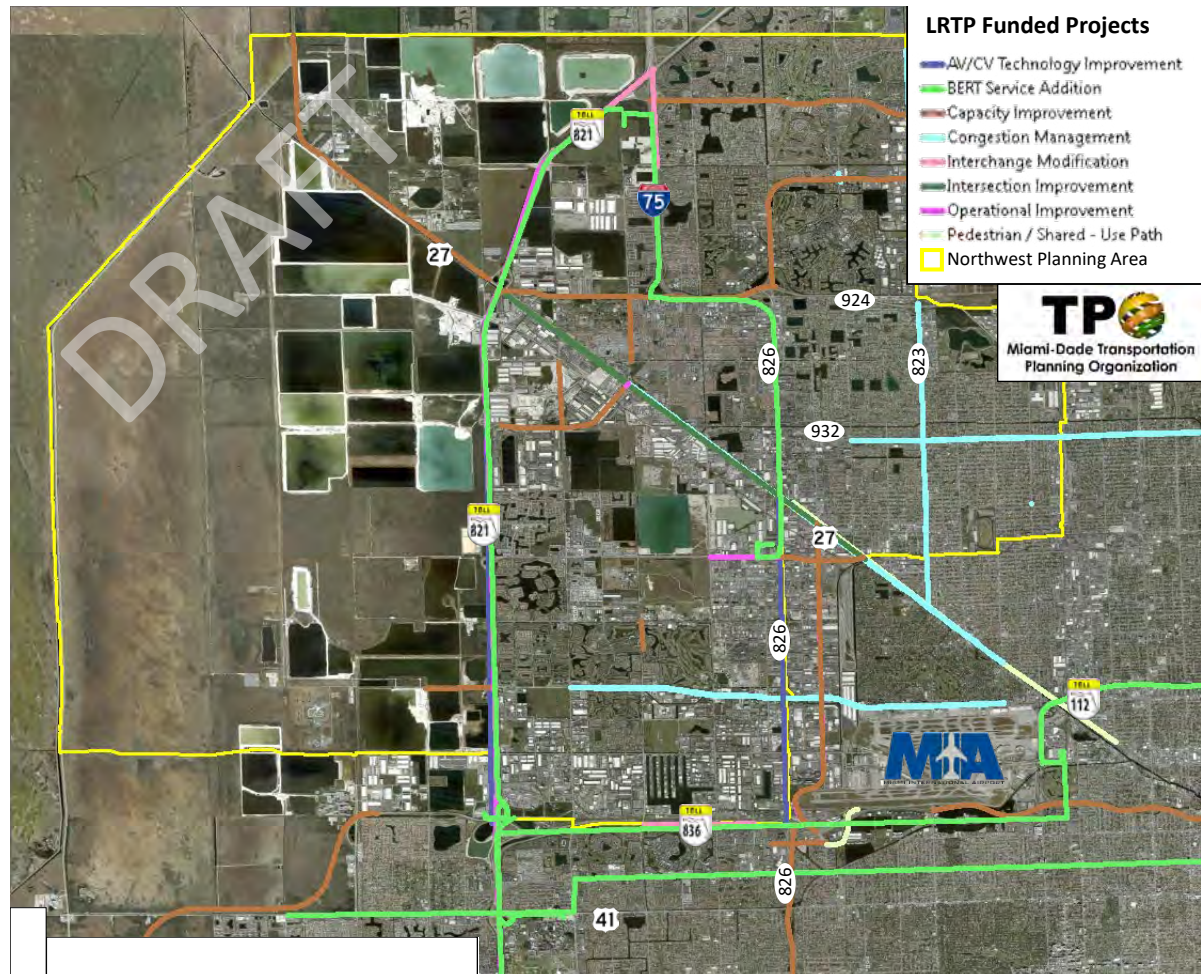


Appendix F – List of Potential Projects within the Northwest Quadrant of Miami-Dade

List of planned projects within the NW Planning Area

- **LRTP Funded Projects**

- AV/CV Technology Improvement
- BERT Service Addition
- Capacity Improvement
- Congestion Management
- Interchange Modification
- Intersection Improvement
- Operational Improvement
- Pedestrian / Shared-Use Path



List of planned projects within the NW Planning Area*

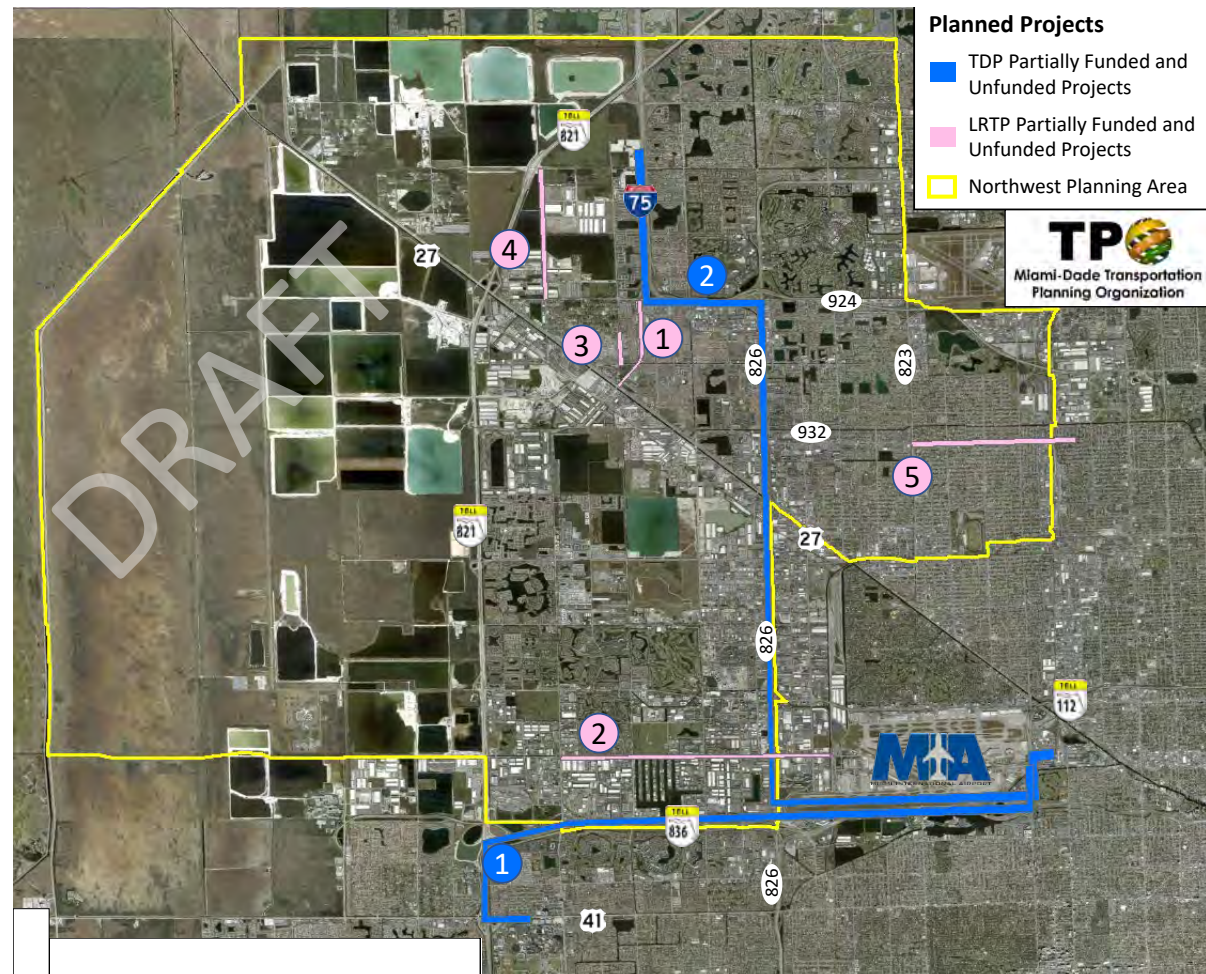
- **TDP Partially Funded and Unfunded Projects**

1. East-West Corridor
2. Express Bus from Miami Gardens to MIC

- **LRTP Partially Funded and Unfunded Projects**

1. Hialeah Gardens Blvd Widening
2. NW 25th St Viaduct Extension
3. NW 97th Ave from NW 122nd St to NW 130th St Widening
4. NW 107th Ave from NW 138th St to NW 170th St New Construction
5. NW 103rd St from NW 57th Ave to NW 34th Ave Widening

*Miami-Dade TPO recommends for the FDOT to start the ETDM process and for the County to start the project scoping process.



List of potential projects within the NW Planning Area

- **Transit Project**

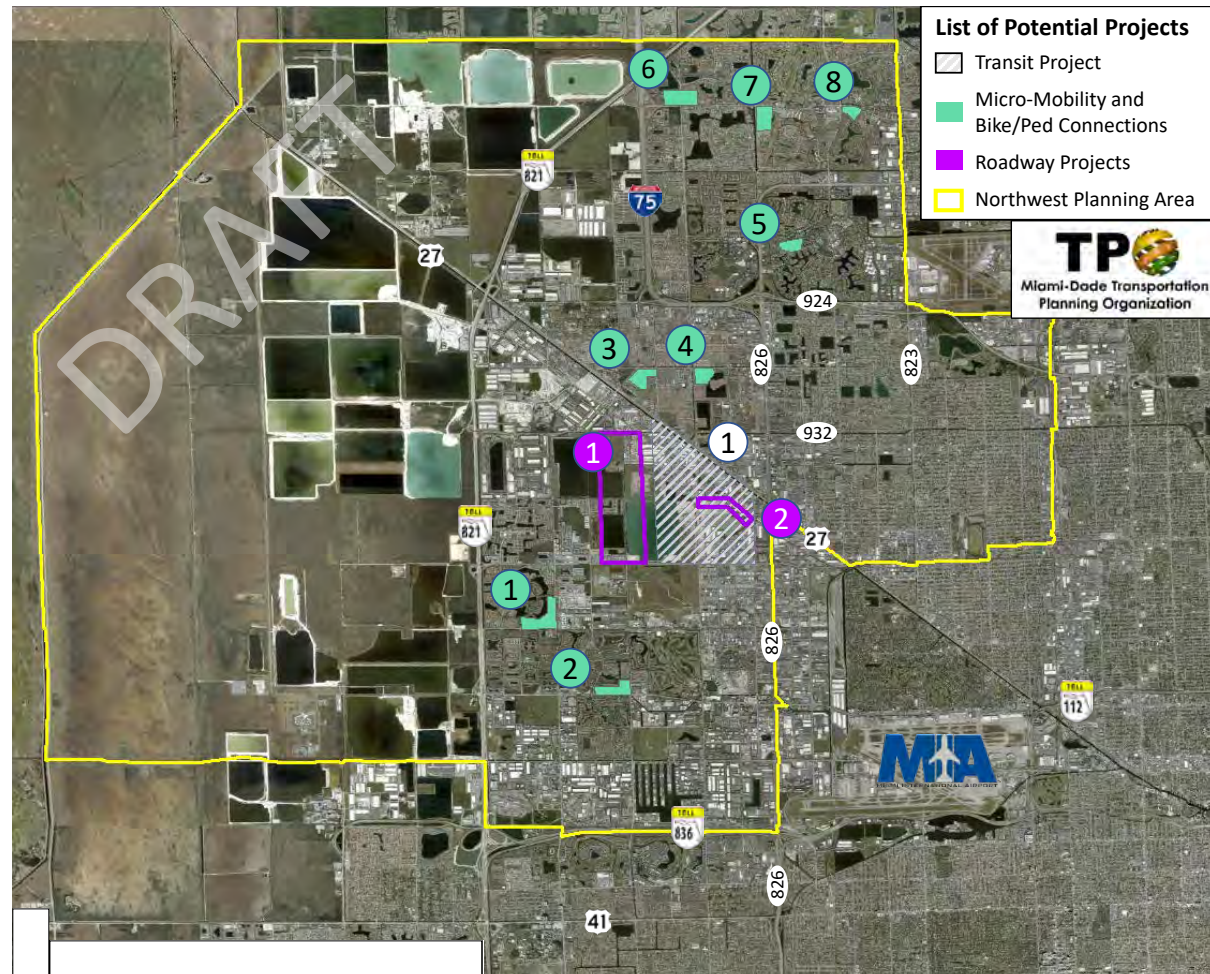
1. Medley On Demand Service Area

- **Micro-Mobility and Bike/Ped Connections**

1. NW 58th St / NW 107th Ave
2. Doral Blvd / NW 97th Ave
3. Hialeah Gardens Blvd / NW 120th St
4. W 68th St / NW 87th Ave
5. Miami Lakes Dr / Fairway Dr
6. NW 186th St / NW 87th Ave
7. NW 186th St / NW 75th Pl
8. NW 186th St / NW 67th Ave

- **Roadway Projects**

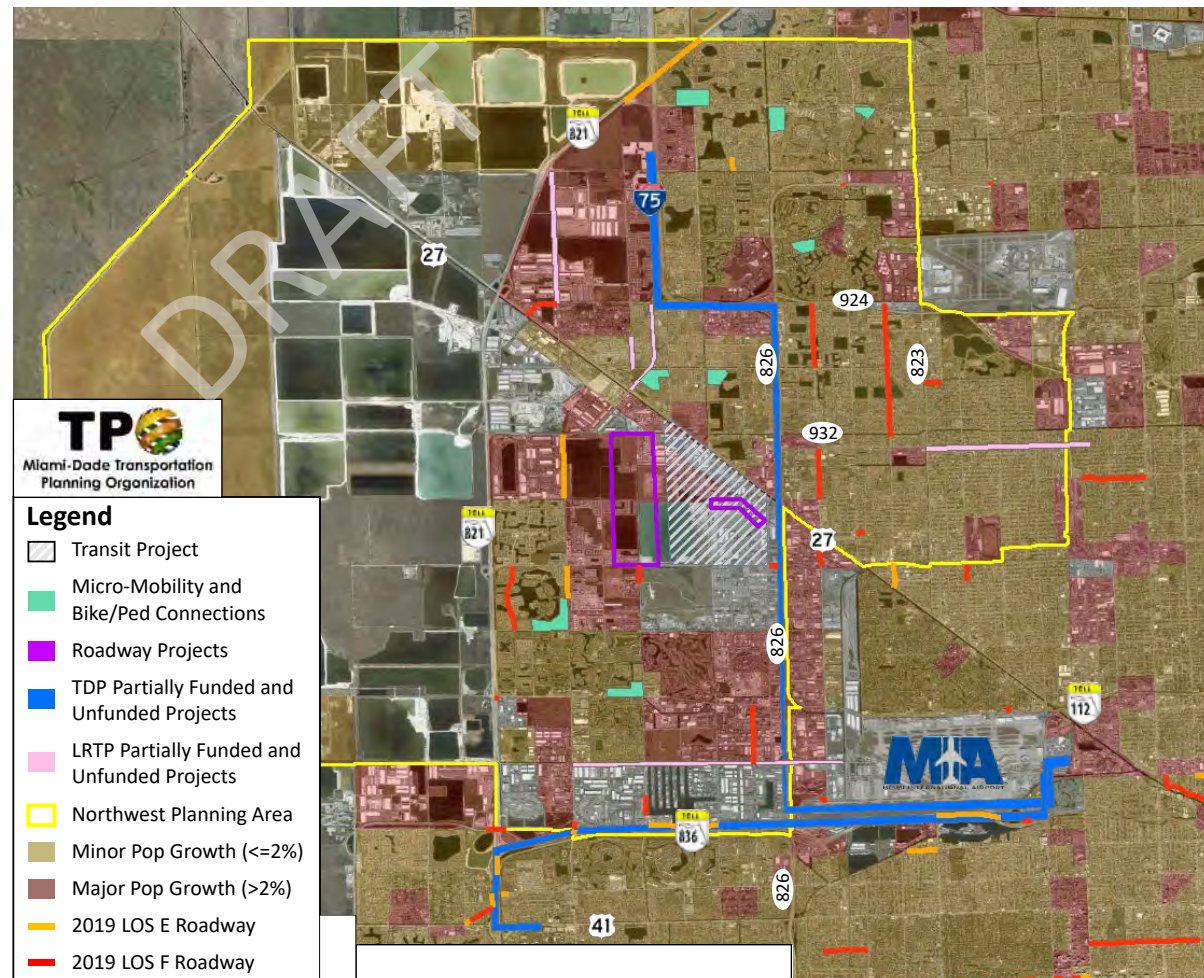
1. NW 97th Ave (NW 74th St to NW 106th St), Owned by Public Agency
2. NW 90th St (NW 87th Ave to SR 826), Owned by Public Agency



Population Growth (2015 – 2045)

The map also shows:

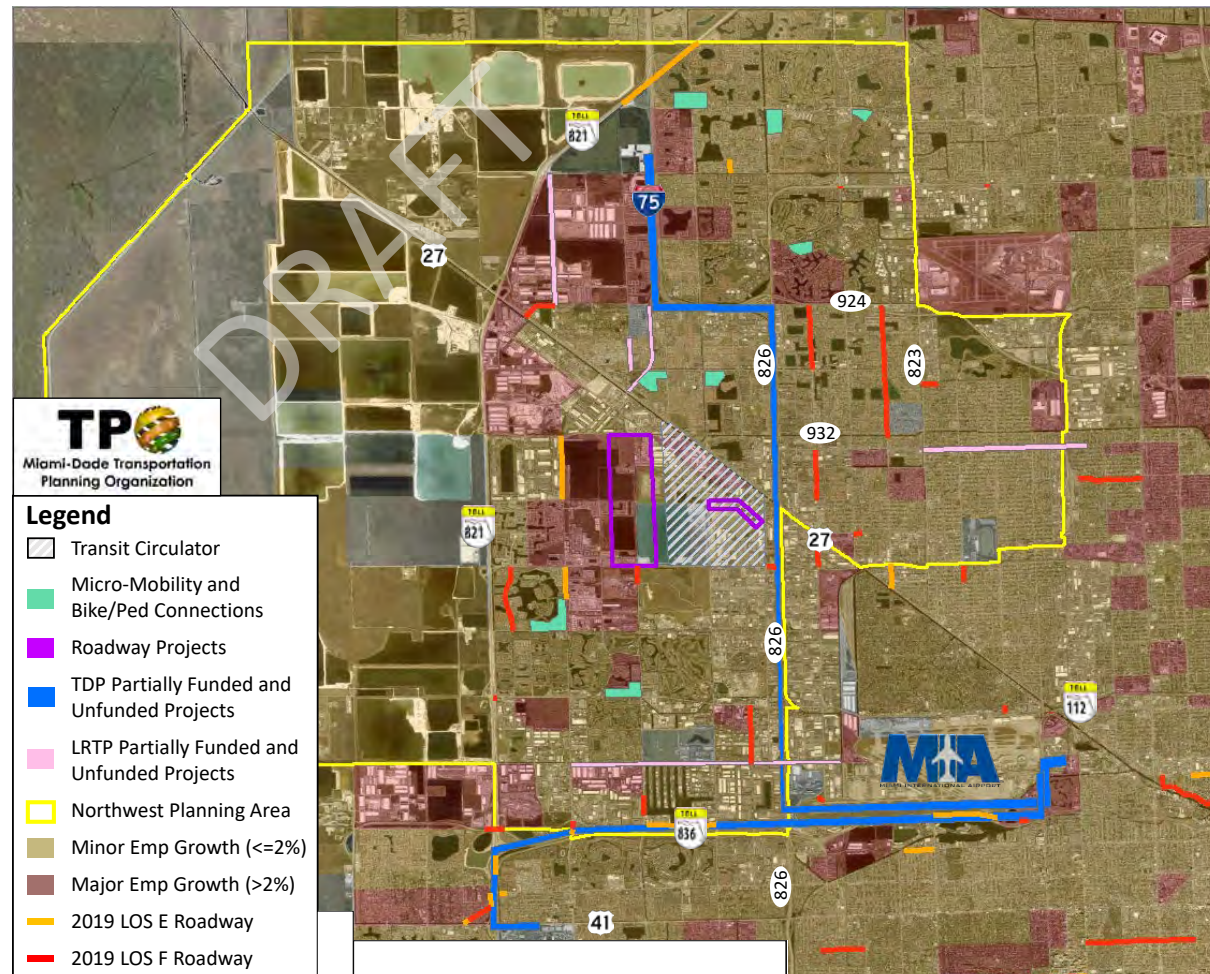
- List of potential projects and planned projects
- 2019 Roadway Level of Service (LOS)



Employment Growth (2015 – 2045)

The map also shows:

- List of potential projects and planned projects
- 2019 Roadway Level of Service (LOS)



List of potential projects within the NW Planning Area

- **Transit Project**

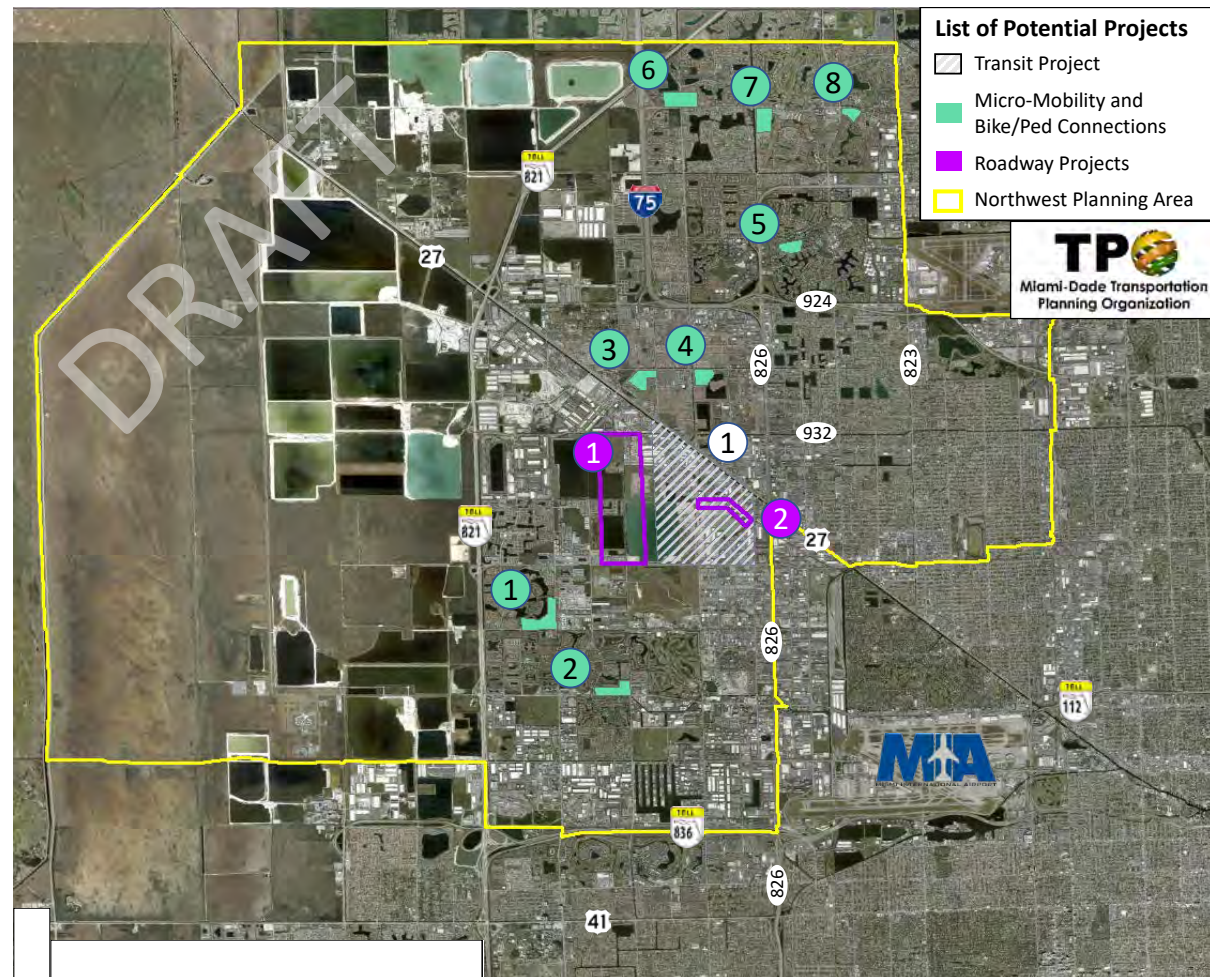
1. Medley Central Commuter Route

- **Micro-Mobility and Bike/Ped Connections**

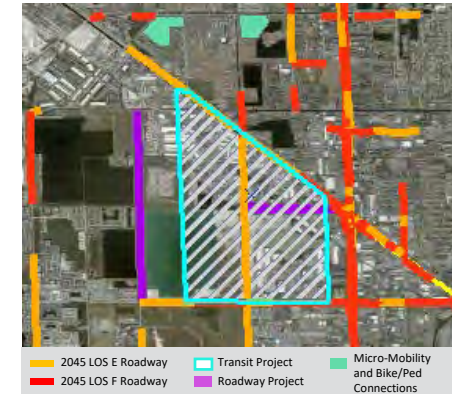
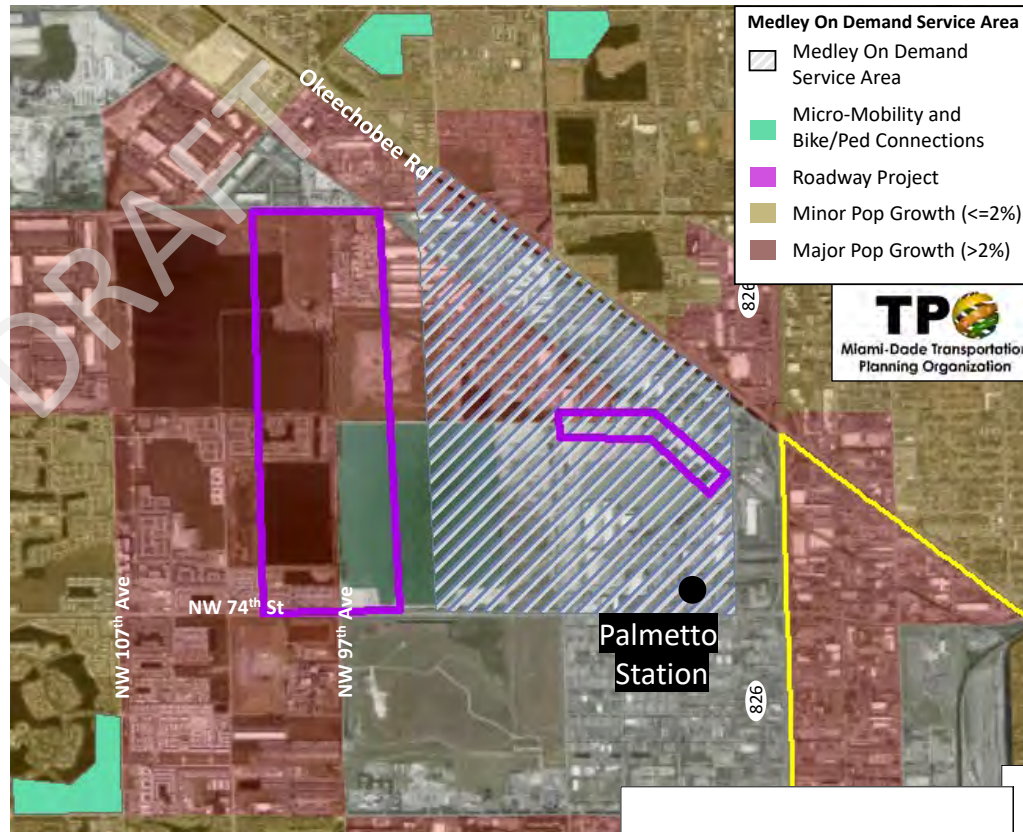
1. NW 58th St / NW 107th Ave
2. Doral Blvd / NW 97th Ave
3. Hialeah Gardens Blvd / NW 120th St
4. W 68th St / NW 87th Ave
5. Miami Lakes Dr / Fairway Dr
6. NW 186th St / NW 87th Ave
7. NW 186th St / NW 75th Pl
8. NW 186th St / NW 67th Ave

- **Roadway Projects**

1. NW 97th Ave (NW 74th St to NW 106th St), Owned by Public Agency
2. NW 90th St (NW 87th Ave to SR 826), Owned by Public Agency



① Medley On Demand Service Area



The Medley On Demand Service Area will serve Palmetto Station and the adjacent area, including the moderate to high population growth areas in the vicinity of Palmetto Station.

The Medley On Demand Service Area would need to be coordinated with the Miami-Dade County and the Municipalities.

List of potential projects within the NW Planning Area

- **Transit Projects**

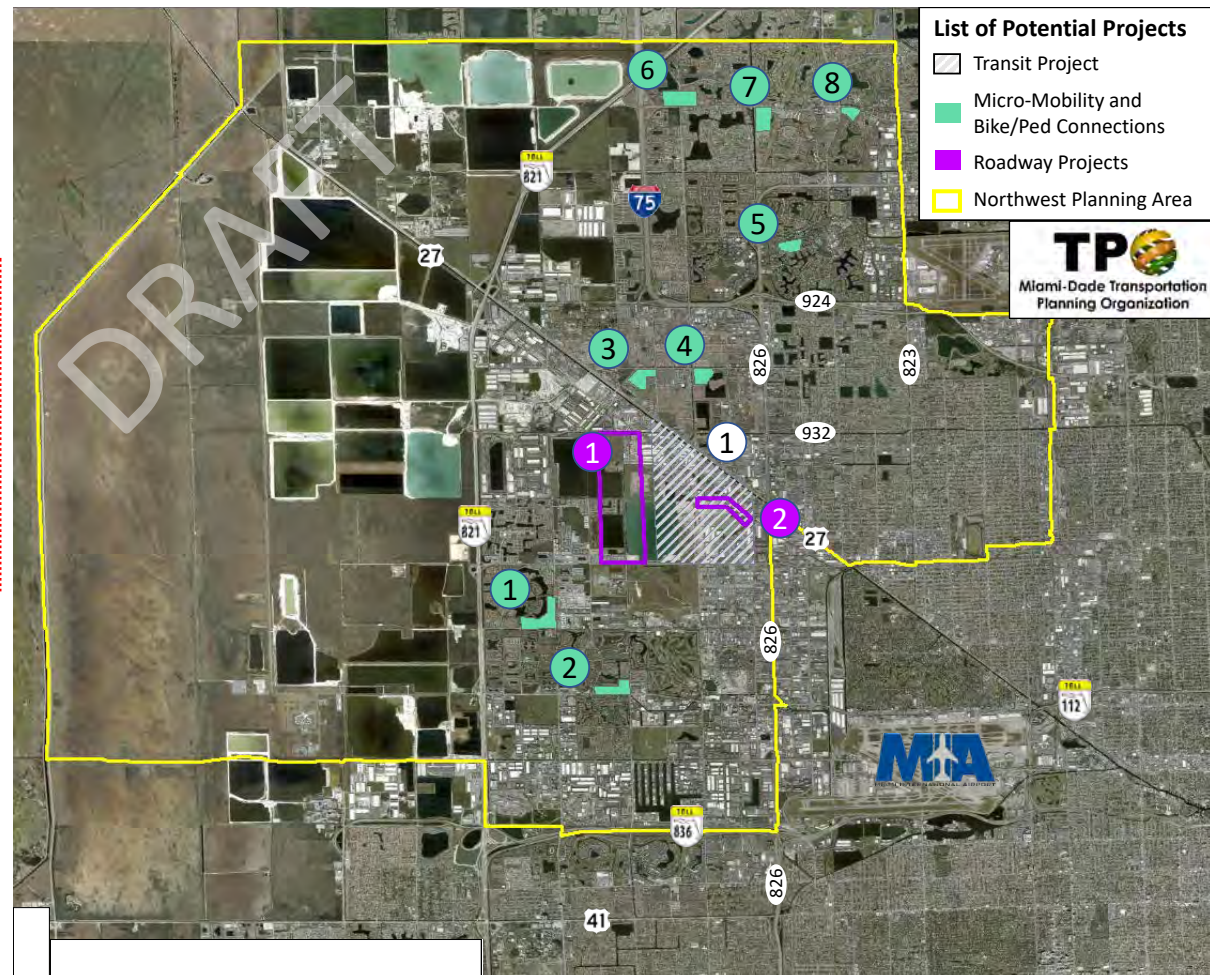
1. Medley Central Commuter Route

- **Micro-Mobility and Bike/Ped Connections**

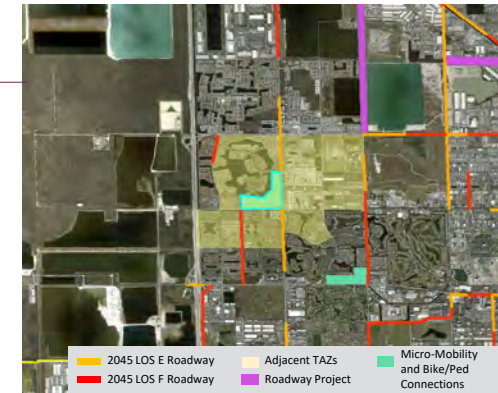
1. NW 58th St / NW 107th Ave
2. Doral Blvd / NW 97th Ave
3. Hialeah Gardens Blvd / NW 120th St
4. W 68th St / NW 87th Ave
5. Miami Lakes Dr / Fairway Dr
6. NW 186th St / NW 87th Ave
7. NW 186th St / NW 75th Pl
8. NW 186th St / NW 67th Ave

- **Roadway Projects**

1. NW 97th Ave (NW 74th St to NW 106th St), Owned by Public Agency
2. NW 90th St (NW 87th Ave to SR 826), Owned by Public Agency



① NW 58th St / NW 107th Ave



The shopping plaza at the NW 58th St / NW 107th Ave includes Publix, UPS, and several food and other services.

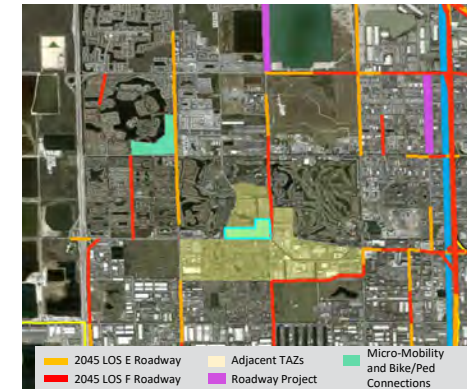
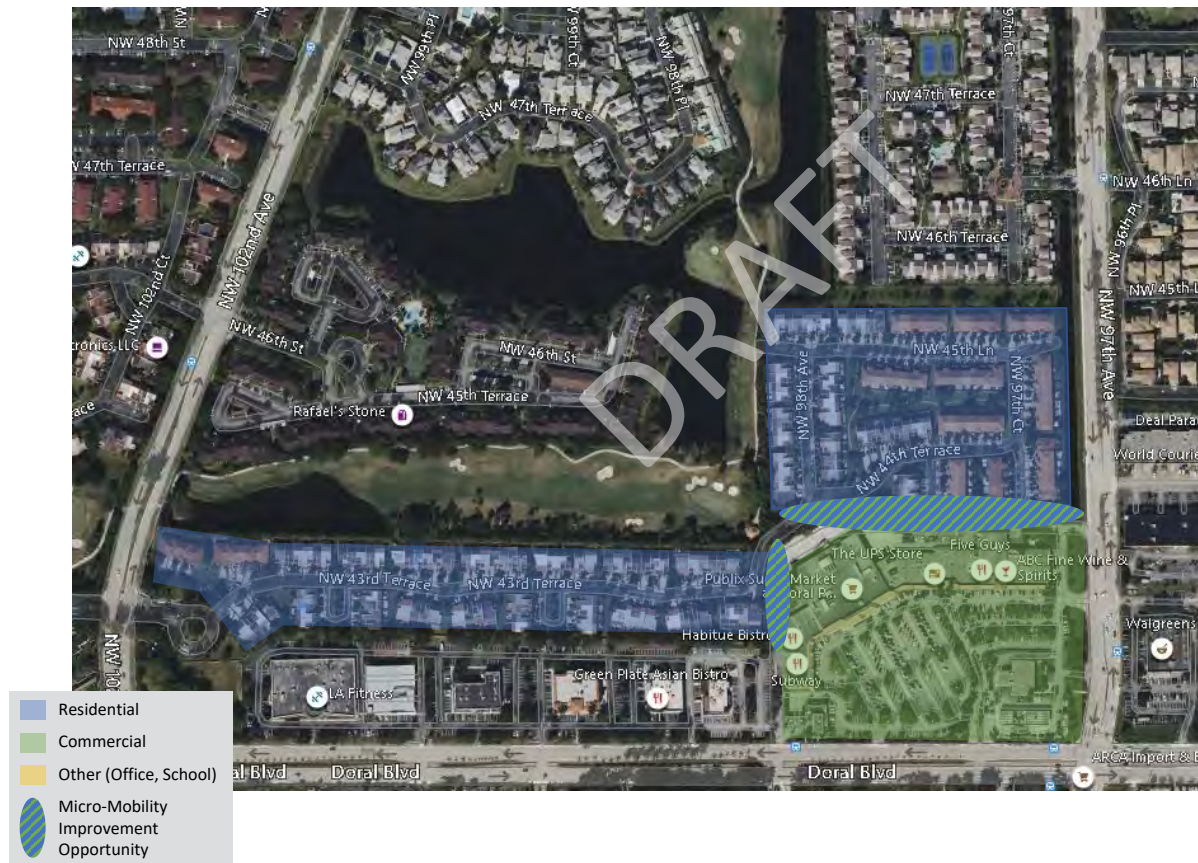
Improve micro-mobility and bike/ped mobility by providing connectivity between the different land uses.

SE data Growth rates for adjacent TAZs

Growth	2015	2045	Annual Growth
Population	16,399	22,271	1.2%
Employment	4,737	7,133	1.7%

The improvement decisions will be up to the private owners.

2 Doral Blvd / NW 97th Ave



The shopping plaza at the Doral Blvd / NW 97th Ave includes Publix, UPS, and several food and other services.

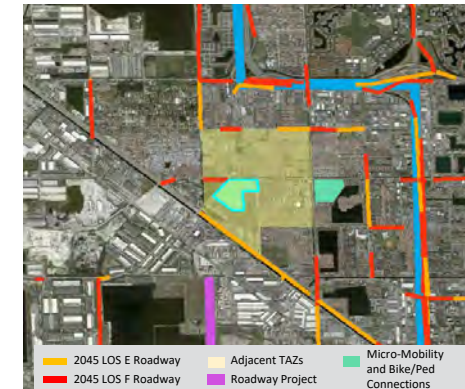
Improve micro-mobility and bike/ped mobility by providing connectivity between the different land uses.

SE data Growth rates for adjacent TAZs

Growth	2015	2045	Annual Growth
Population	5,518	7,705	1.3%
Employment	10,470	14,257	1.2%

The improvement decisions will be up to the private owners.

③ Hialeah Gardens Blvd / NW 120th St



It is recommended to study the accessibility to the schools to improve access for bicyclists and pedestrians from residential.

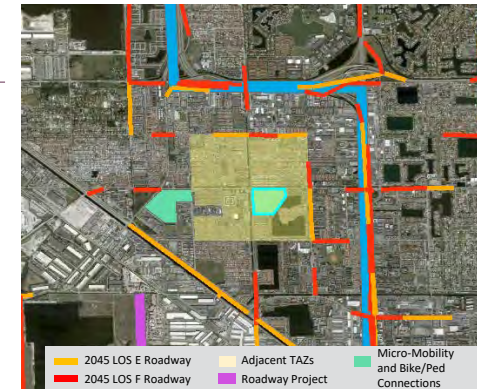
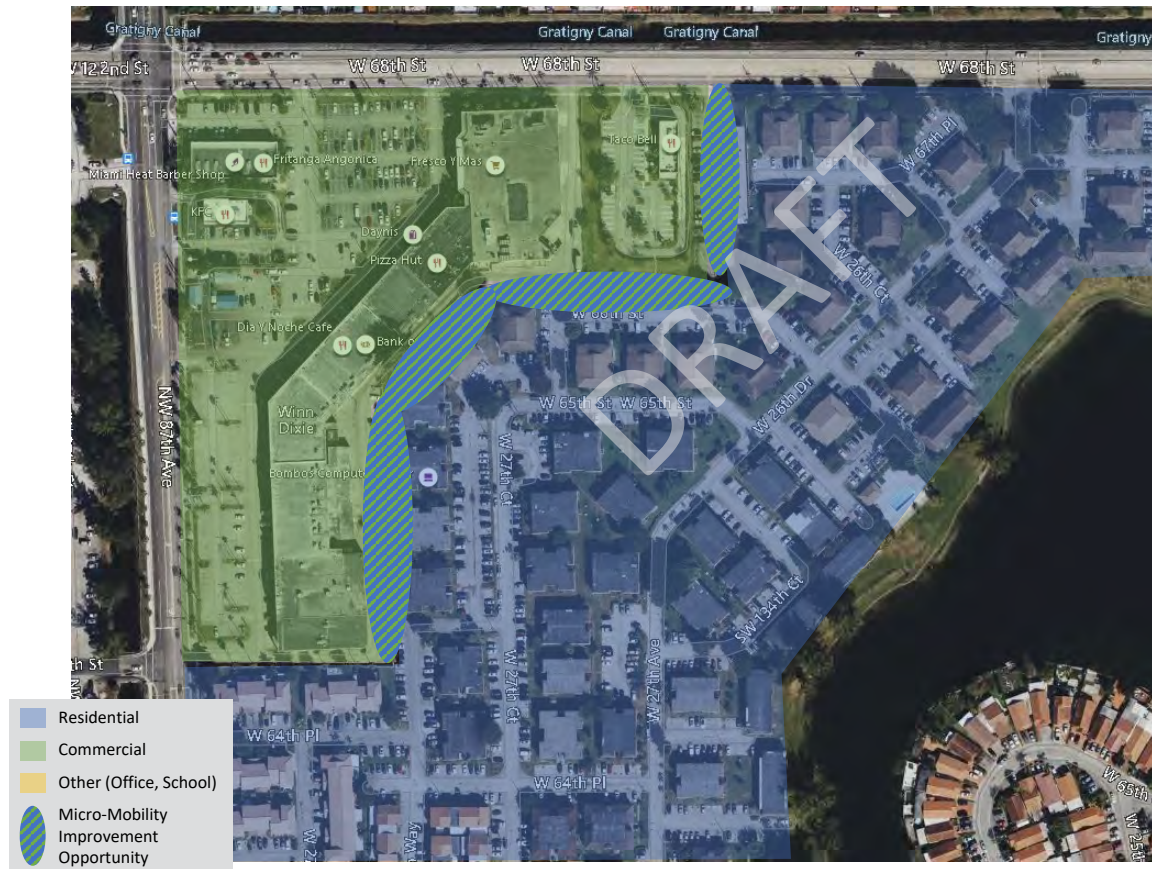
In addition, the shopping plaza at the Hialeah Gardens Blvd / NW 120th St includes Walmart Neighborhood Market, and other services. Improve micro-mobility and bike/ped mobility by providing connectivity between the different land uses.

SE data Growth rates for adjacent TAZs

Growth	2015	2045	Annual Growth
Population	17,153	19,443	0.4%
Employment	1,996	2,647	1.1%

The improvement decisions will be up to the private owners.

4 W 68th St / NW 87th Ave



The shopping plaza at the W 68th St / NW 87th Ave includes Fresco Mas, Las Mercedes Clinic, and several food and other services.

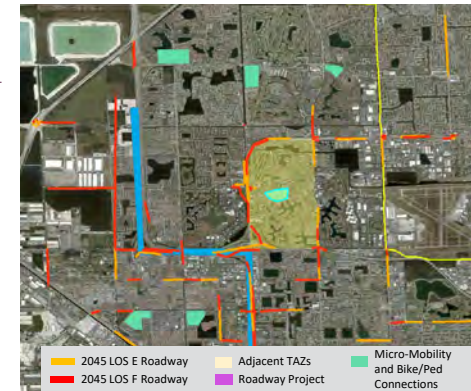
Improve micro-mobility and bike/ped mobility by providing connectivity between the different land uses.

SE data Growth rates for adjacent TAZs

Growth	2015	2045	Annual Growth
Population	18,832	20,832	0.4%
Employment	1,837	2,383	1.0%

The improvement decisions will be up to the private owners.

5 Miami Lakes Dr / Fairway Dr



The shopping plaza at the Miami Lakes Dr / Fairway Dr includes several small businesses providing food and other services.

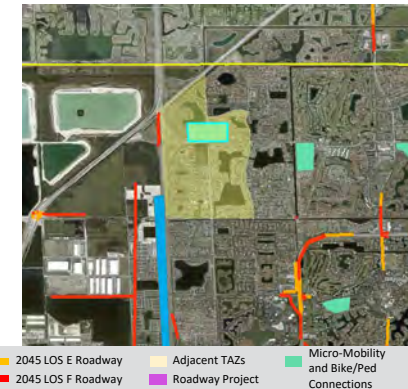
Improve micro-mobility and bike/ped mobility by providing connectivity between the different land uses.

SE data Growth rates for adjacent TAZs

Growth	2015	2045	Annual Growth
Population	8,550	12,628	1.6%
Employment	4,470	6,453	1.5%

The improvement decisions will be up to the private owners.

6 NW 186th St / NW 87th Ave



The two shopping plazas at the NW 186th St / NW 87th Ave includes Sedano's Supermarket, Publix, CVS Pharmacy, Bank of America, TD Bank, and several food and other services.

Improve micro-mobility and bike/ped mobility by providing connectivity between the different land uses.

SE data Growth rates for adjacent TAZs

Growth	2015	2045	Annual Growth
Population	9,886	12,463	0.9%
Employment	1,235	2,295	2.9%

The improvement decisions will be up to the private owners.

7 NW 186th St / NW 75th PI



The shopping plaza at the NW 186th St / NW 75th PI includes several small businesses providing food and other services.

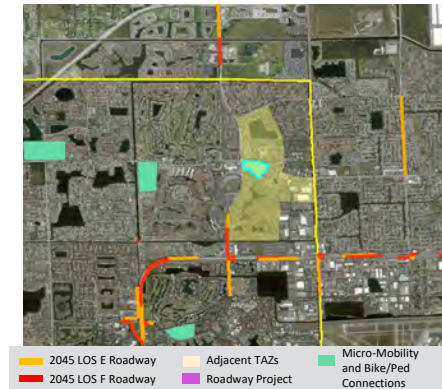
Improve micro-mobility and bike/ped mobility by providing connectivity between the different land uses.

SE data Growth rates for adjacent TAZs

Growth	2015	2045	Annual Growth
Population	18,877	20,416	0.3%
Employment	964	1,133	0.6%

The improvement decisions will be up to the private owners.

8 NW 186th St / NW 67th Ave



The shopping plaza at the NW 186th St / NW 67th Ave includes Sedano's Supermarket, CVS Pharmacy, and several food and other services.

Improve micro-mobility and bike/ped mobility by providing connectivity between the different land uses.

SE data Growth rates for adjacent TAZs

Growth	2015	2045	Annual Growth
Population	8,177	10,253	0.8%
Employment	1,900	2,449	1.0%

The improvement decisions will be up to the private owners.

List of potential projects within the NW Planning Area

- **Transit Projects**

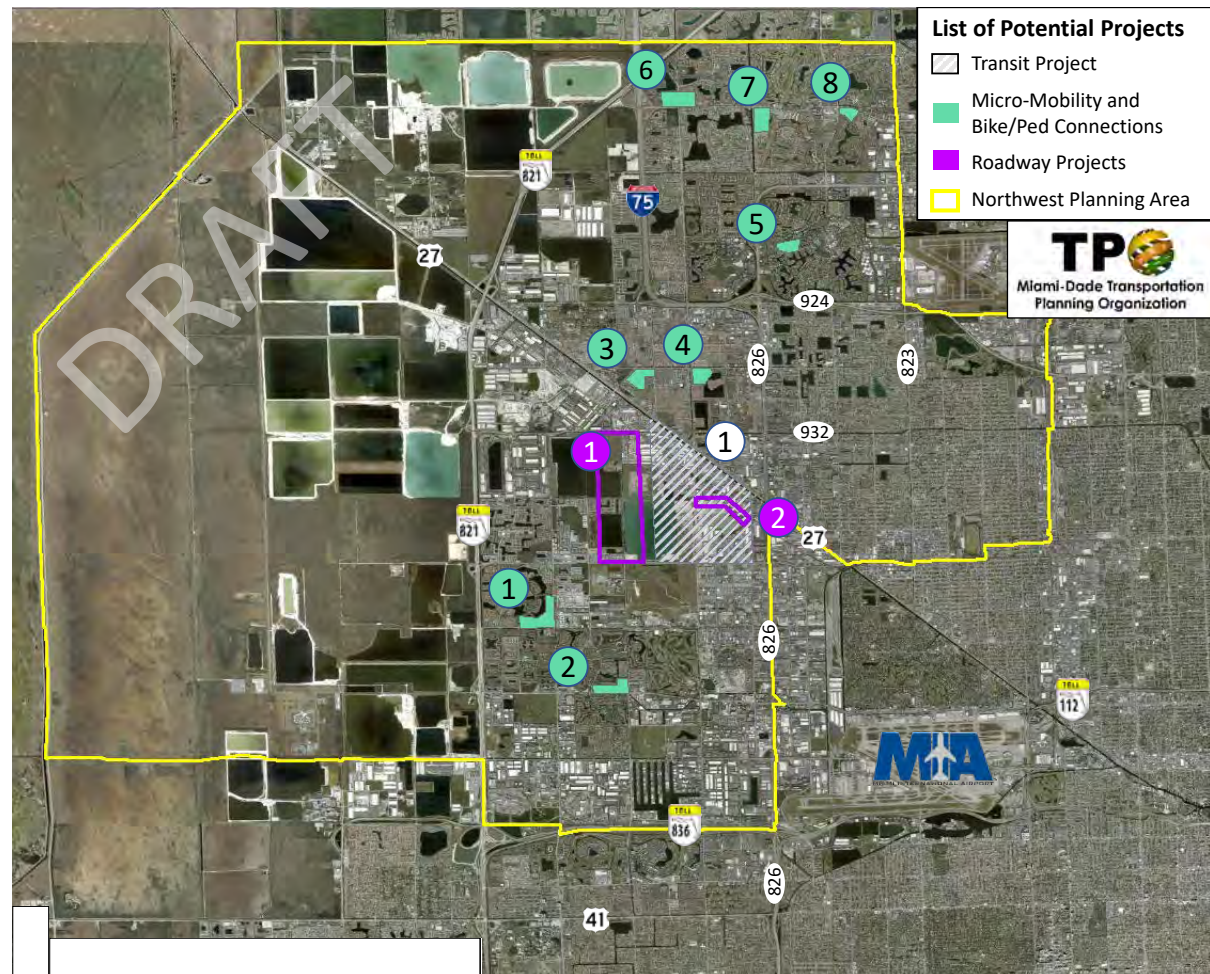
1. Medley Central Commuter Route

- **Micro-Mobility and Bike/Ped Connections**

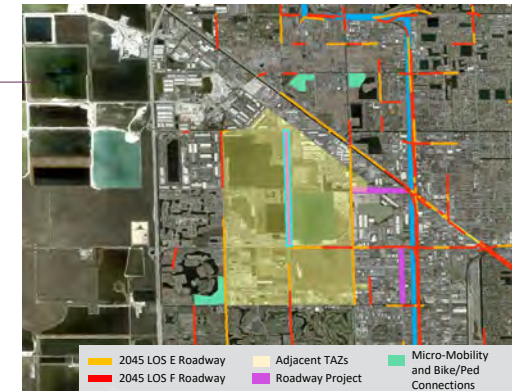
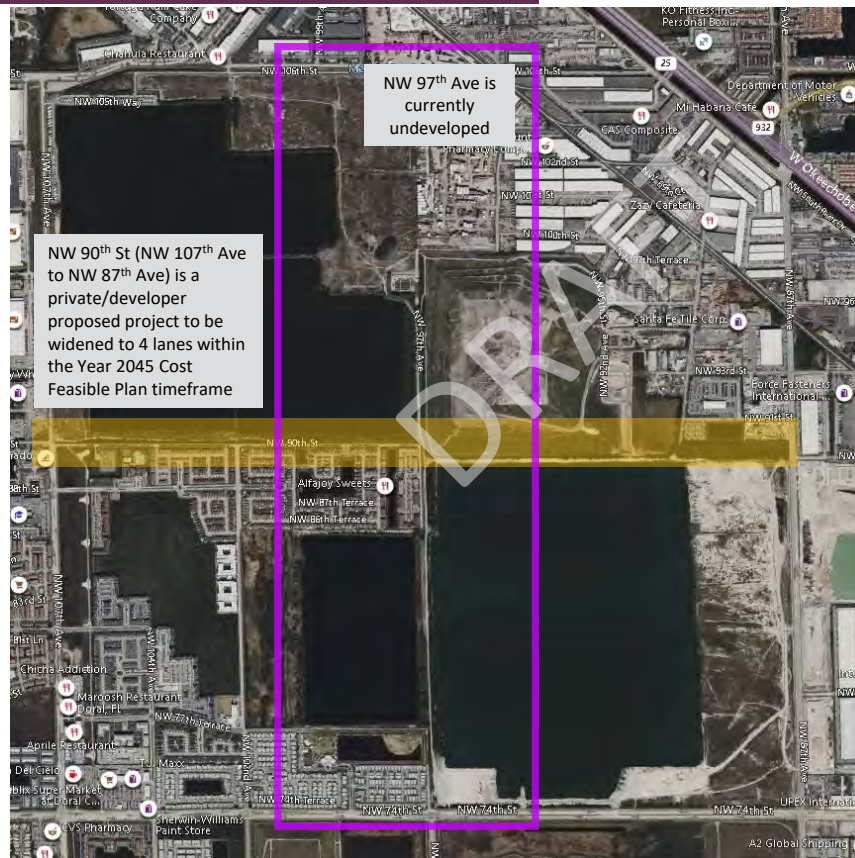
1. NW 58th St / NW 107th Ave
2. Doral Blvd / NW 97th Ave
3. Hialeah Gardens Blvd / NW 120th St
4. W 68th St / NW 87th Ave
5. Miami Lakes Dr / Fairway Dr
6. NW 186th St / NW 87th Ave
7. NW 186th St / NW 75th Pl
8. NW 186th St / NW 67th Ave

- **Roadway Projects**

1. NW 97th Ave (NW 74th St to NW 106th St), Owned by Public Agency
2. NW 90th St (NW 87th Ave to SR 826), Owned by Public Agency



1 NW 97th Ave from NW 74th St to NW 106th St



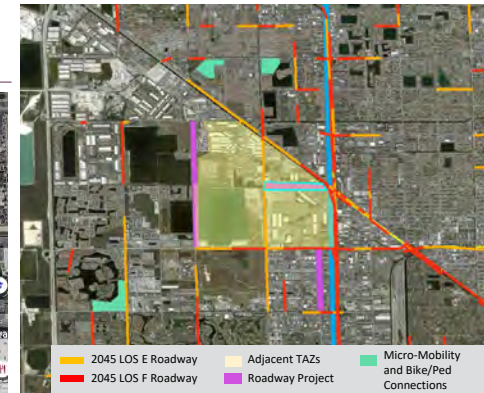
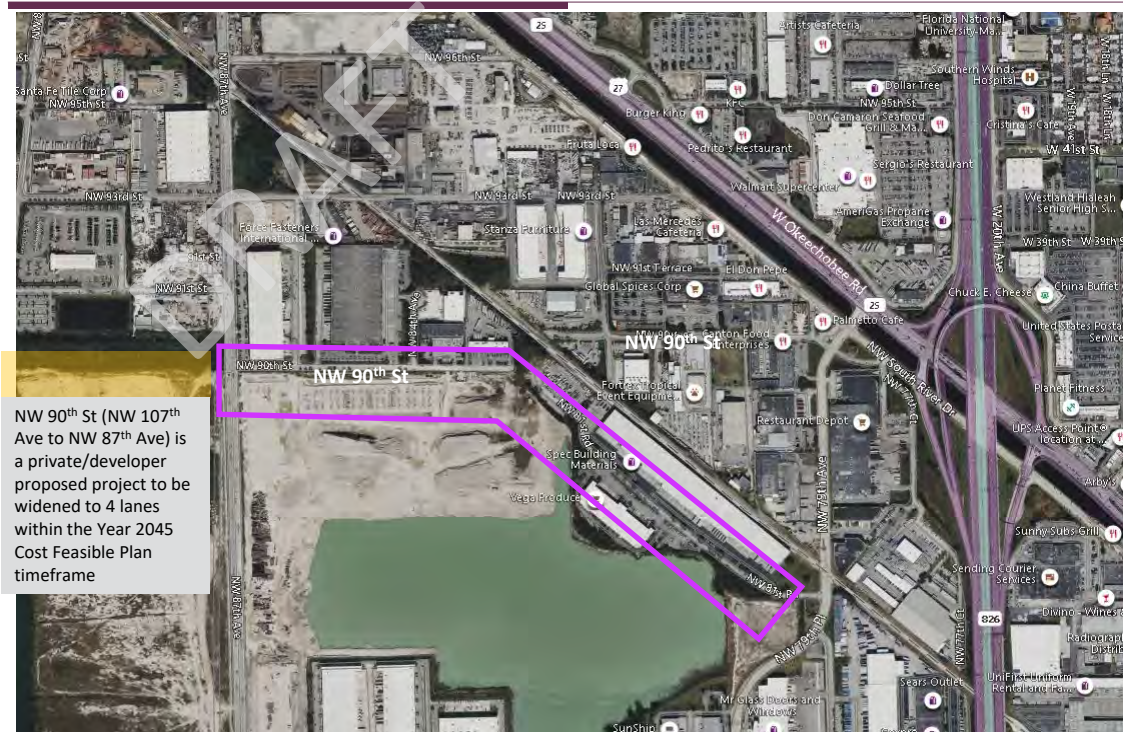
Providing an additional connection between NW 74th St and NW 106th St will improve the north-south distribution within this area.

SE data Growth rates for adjacent TAZs

Growth	2015	2045	Annual Growth
Population	4,192	13,112	7.1%
Employment	6,747	11,228	2.2%

NW 90th St (NW 107th Ave to NW 87th Ave) is a private/developer proposed project to be widened to 4 lanes within the Year 2045 Cost Feasible Plan timeframe

2 NW 90th St from NW 87th Ave to SR 826



Connecting the NW 90th St to NW 81st Rd will improve the east-west roadway connectivity in this area.

SE data Growth rates for adjacent TAZs

Growth	2015	2045	Annual Growth
Population	2	6	6.7%
Employment	10,329	15,935	1.8%

NW 90th St (NW 107th Ave to NW 87th Ave) is a private/developer proposed project to be widened to 4 lanes within the Year 2045 Cost Feasible Plan timeframe